MONEY IN THE WESTERN LEGAL TRADITION

MIDDLE AGES TO BRETTON WOODS

EDITED BY
DAVID FOX
WOLFGANG ERNST

OXFORD

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at conferences supported by the Gerda Henkel Stiftung

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David Fox
Wolfgang Ernst

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List of Abbreviations

AAA	Agricultural Adjustment Act
ABGB	Allgemeines Bürgerliches Gesetzbuch von Österreich
AC	Appeal Cases
Ad. & E.	Adolphus & Ellis' Queen's Bench Reports (1834–40)
ad v.	*ad verbum*
All ER	All England Law Reports
App.	Appendix
aut.	Authenticum
B. & A.	Barnewell & Alderson's English King's Bench Reports (1817–22)
B. & Ad.	Barnewall & Adolphus' English King's Bench Reports (1830–34)
B. & C.	Barnewall & Cresswell's English King's Bench Reports (1822–30)
BEA	Bill of Exchange Act 1882
Benloe	Benloe English King's Bench Reports and Common Pleas
BGB	Bürgerliches Gesetzbuch, German Civil Code
BGBl	Bundesgesetzblatt
BGHZ	Entscheidungen des Bundesgerichtshofs in Zivilsachen, Federal Court (Germany) Reports, Civil Law Cases
BH	General Archives of the Realm, Great Council of Mechlin, Brussels—Appeals from Holland
Bing.	Bingham's English Common Pleas Reports
Bing. N.C.	Bingham's New Cases
Black. W.	William Blackstone's English King's Bench Reports (1746–80)
Bligh	Bligh's House of Lord Reports
Bligh N.S.	Bligh's House of Lords Reports New Series (1827–37)
BoG	Board of Governors
Bos. & Pul.	Bosanquet & Puller's English Common Pleas Reports
Burr.	Burrow, English King's Bench Reports *tempore* Lord Mansfield
BVerwG	Bundesverwaltungsgericht, German Federal Administrative Court
BVerwGE	Entscheidungen Bundesverwaltungsgericht, Reports of the German Federal Administrative Court
BWS	Bretton Woods System
c.	canon
c.	*circa*
C.	Codex Iustinianus
C. & P.	Carrington & Payne's Nisi Prius Reports (1823–41)
Camp.	Campbell's Nisi Prius Cases (1808–16)
cap.	capitulum
CAP	Common Agricultural Policy
cart.	*cartulario*
Cas. t. H.	Cases *tempore* Hardwicke
CB	central bank
CB	English Common Bench Reports (1840–56)
CB NS	Common Bench Reports, New Series (1856–65)
C. M. & R.	Crompton, Meeson & Roscoe's Exchequer Reports (1834–35)
Clem	*Constitutiones Clementis V* (promulgated 25 October 1317)
CLR	Commonwealth Law Reports
Co. Litt.	Coke upon Littleton
Co. Rep.	Coke's English King's Bench Reports (1572–1616)
Cobb. St. Tr.	Cobbett's (Howell's) State Trials (1163–1820)
Comb	Comberbach's King's Bench Reports (1724)
Comp.	*compilatio*

Cons.	*Consilium*
Cow.	Cowen's New York Reports (1823–29)
Cox	Cox's English Chancery Reports (1783–96)
Cranch	Cranch's United States Supreme Court Reports
Cro. Car.	Croke's English King's Bench Reports *tempore* Charles I
Cro. Eliz.	Croke's English King's Bench Reports *tempore* Elizabeth
Cro. Jac.	Croke's English King's Bench Reports *tempore* James (Jacobus)
C. Th.	Codex Theodosiansus
Cth	Commonwealth
d.	Lat. *denarius* or penny (smallest unit in the *libra* system of counting money)
d.	died (with dates)
D.	Digesta Iustiniani
Davis	Davis Irish King's Bench Reports
Dict.	*Dictum*
DLR	Dominion Law Reports (Canada)
Doug.	Douglas' English King's Bench Reports (1778–85)
DRW	Deutsches Rechtswörterbuch
dsm	dollars silver money
Dyer	Dyer's English King's Bench Reports
East	East's King's Bench Reports
ed./eds	editor(s), edited by
edn	edition
EA	General Archives of the Realm, Great Council of Mechlin, Brussels—First-instance proceedings
ECB	European Central Bank
ESCB	European System of Central Banks
EEC	European Economic Community
ELA	emergency liquidity assistance
ER	English Reports (1220–1865)
Esp.	Espinasse's English Nisi Prius Reports (1793–1807)
Exch.	Exchequer Reports (1847–56)
F.C.	Faculty of Advocates Reports (1738–1841)
FCA	Fürstlich-Castellsches Archiv
FDIC	Federal Deposit Insurance Corporation
Fitz. Abr.	Fitzherbert's Abridgement
fo.	Folio
G./Gai	Gaius, Institutiones
GBC	government budget constraint
GCM	General Archives of the Realm, Great Council of Mechlin
GDP	gross domestic product
GNP	gross national product
Godb.	Godbolt's English King's Bench Reports
H. & N.	Hurlstone and Norman's Exchequer (1856–1862)
H. Bl.	Henry Blackstone's Common Pleas Reports
Hardres	Hardres' English Exchequer Reports
HCA	High Court of Australia
Hil.	Hilary Term
HL	House of Lords
HLC	Clark's House of Lords Cases
HMSO	Her Majesty's Stationery Office
Holt KB	Holt's English King's Bench
HPM	high powered money
ICU	International Clearing Union
i.f.	Lat. *in fine*
IMC	International Monetary Conference

IMF	International Monetary Fund
Inst.	Institutiones (Iustiniani)
ISG Ffm RKG	Institute for the History of the City, Frankfurt am Main, Reichskammergericht
ITELR	International Trust and Estate Law Reports
JK	Ph. Jaffé, *Regesta pontificorum romanorum*, 2nd edn, curaverunt F. Kaltenbrunner and P. Ewald (Leipzig, 1885; repr. Graz, 1956) an.?–590
JL	Ph. Jaffé, *Regesta pontificorum romanorum*, 2nd edn, curaverunt S. Loewenfeld and P. Ewald (Leipzig, 1885; repr. Graz, 1956) an.882–1198
Keble	Keble's King's Bench Reports (1661–79)
l.	Lat. *libra* or pound, sometimes written £ (largest unit in the *libra* system of counting money)
Latch	Latch's King's Bench Reports (1625–28)
Ld. Raym.	Lord Raymond's King's Bench and Common Pleas Reports (1694–1732)
Leach	Leach's Crown Cases (1730–1815)
Leo.	Leonard's King's Bench Reports (1540–1615)
Leon.	Leonard's King's Bench, Common Pleas Exchequer Reports
Lev.	Levinz's King's Bench & Common Pleas Reports (1660–97)
LMU	Latin Monetary Union
LNTS	League of Nations Treaty Series
LR	Law Reports (First Series) (1865–75)
Lutwyche	Lutwyche's Entries & Reports, Common Pleas (1682–1704)
M. & Rob.	Moody and Robinson's Nisi Prius Reports (1830–44)
M. & W.	Meeson and Welsby's Exchequer Reports (1836–47)
Mich.	Michaelmas Term
MMT	modern money theory
Mod.	English King's Bench Modern Reports
Moore (KB)	Moore's English King's Bench Reports (1512–1621)
Mor.	Morison's Dictionary of Decisions (1540–1808)
NBER	National Bureau of Economic Research
NEP	New Economic Policy
NIRA	National Industrial Recovery Act
Noy	Noy's King's Bench Reports (1559–1649)
n.s.	new style
NSW	New South Wales
NZ	New Zealand
NZLR	New Zealand Law Reports
OR	Schweizerisches Obligationenrecht
Owen	Owen's King's Bench Reports (1556–1615)
Palmer	Palmer's King's Bench Reports (1619–29)
Pas.	Paschal (Easter) Term
Paton App. Cas.	Paton's Scotch Appeals, House of Lords (1726–1821)
Peake	Peake's Nisi Prius Reports (1790–94)
Peake Add. Cas.	Peake's Additional Cases at Nisi Prius (1795–1812)
pl.	placitum/placita
Po.	A. Potthast, *Regesta pontificum romanorum inde ab anno post Christum natum MCXVIII ad annum MCCCIV*. Vol. 1 (Berlin, 1874; repr. Graz, 1957); Vol. 2 (Berlin, 1875; repr. Graz, 1957)
pr.	principium / proœmium
PRO MINT	Public Record Office Catalogue, Records of the Royal Mint
P. Rylands III	Roberts, C. H., *Catalogue of the Greek and Latin Papyri in the John Rylands Library, Manchester*. Vol. III: *Theological and Literary Texts* (Manchester, 1938)
PWA	Public Works Administration
P. Wms	Peere Williams' Chancery and King's Bench Reports (1695–1736)
QB	Queen's Bench

QBD	Law Reports, Queen's Bench Division (1875–90)
r	recto
RFC	Reconstruction Finance Corporation
RG	Reichsgericht
RGBl.	Reichsgesetzblatt, Imperial Law Gazette (Germany)
RGZ	Entscheidungen des Reichsgerichts in Zivilsachen, Imperial Court (Germany) Reports, Civil Law Cases
Ridg. t. H.	Ridgeway's Reports *tempore* Hardwicke, Chancery & King's Bench
ROHG	Entscheidungen des Reichs-Oberhandelsgerichts, Decisions of the Imperial Court of Commerce
Rolle	Rolle's English King's Bench Reports, 2 vols (1614–25)
RSC	Royal Society of Canada
s.	Lat. *solidus* or shilling (middle unit in the *libra* system of counting money)
s./ss	section(s)
Salk.	Salkeld's King's Bench Reports
S.C.	Reports of the Cape Supreme Court (South Africa)
SCC	Supreme Court of Canada
SCLR	Scottish Council of Law Reporting
SCR	Supreme Court Reports (Canada)
SDR	special drawing right
ser.	series
Sjt	serjeant
Skin.	Skinner's King's Bench Reports (1681–98)
SLR	Scottish Law Reporter
SLT	Scots Law Times (1893–)
SMP	securities market programme
Spel. Rep.	Spelman's Reports, Manuscripts, and English King's Bench
SR	State Reports
SSHRCC	Social Science and Humanities Research Council of Canada
Str.	Strange's King's Bench Reports (1716–49)
sub nom.	*sub nomine*
sub v.	*sub verbo*
TARP	Troubled Asset Relief Program
Taunt.	Taunton's English Common Pleas Reports
TFEU	Treaty on the Functioning of the European Union
TLR	Times Law Reports
TR	Term Reports (by Dunford & East)
trans.	translated by
Trin.	Trinity Term
TVA	Tennessee Valley Authority
UCC	Uniform Commercial Code
UN	United Nations
v	verso
Vaugh.	Vaughan's English Common Pleas Reports
Vent.	Ventris' English King's Bench Reports
Ves. Jun.	Vesey, Jr Chancery Reports
VI	*Liber Sextus Decretalium Bonifatii Sexti* (promulgated 3 March 1298)
Vic.	Victoria
WPA	Works Progress Administration
X	Liber Extra / *Decretales Gregorii noni (Liber extravagantium Gregorii noni*, promulgated 5 September 1234)
YB	Year Book(s)
Y. & C. Ex.	Younge & Coyller Exchequer Equity Reports (1834–42)
Yelv.	Yelverton's King's Bench Reports (1603–13)

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INTRODUCTION

1

Monetary History between Law and Economics

David Fox, François R. Velde, and Wolfgang Ernst

I. The Scope of this Book

1. Time Span and Countries Covered

We have endeavoured to write a book that gives a connected history of some of the main topics in monetary law at the different stages of its development over the past 800 years. Although each chapter is written by a specialist author, we have sought to avoid presenting the book as a collection of essays, each written independently of the others. The topics were allocated to the authors with a view to ensuring that important legal controversies or developments in each period were addressed. Our main aim has been to rediscover and connect whole bodies of monetary law and writing that have been largely forgotten by lawyers and untouched by historians, and to set them alongside other better-known topics in financial history that have influenced their development. We would like to open new ground that other scholars can explore in greater detail.

We have chosen the period from high medieval Europe through to the international monetary settlements established at Bretton Woods in 1944. We do not address the story of money in antiquity. While the concept of coins, the names for nominals, and legal sources dealing with monetary issues were carried over, perhaps in a crude way, from late Roman and Byzantine antiquity into the Western European Middle Ages, distinctly new ways of handling coins and other monetary phenomena emerged from the High Middle Ages on. What was preserved of Roman monetary law by Justinian's compilation of the *Corpus Iuris Civilis*,[1] was elucidated, after the Western revival of Roman law, by the then flowering of civilian legal scholarship which engaged with the new monetary environment of medieval Europe.[2] The English common law of money which we present in this book has a later and less obvious starting point in the late thirteenth century. The evidence of English monetary practice before then has to be gathered from predominantly numismatic sources rather than from documentary records with a distinctively 'legal' character to them. More so than for the civil law of continental Europe, it is particularly hard to fix a starting point

[1] See T. Rüfner, Chapter 6.

[2] For the main accounts of the European civil and canon law of the pre-modern period, see W. Ernst, Chapter 7; A. Thier, Chapter 8; H. Dondorp, Chapter 13; and W. Decock, Chapter 14.

for investigating English monetary law. That law, such as it was, was simply an emanation of the sovereign's practical control over coinage and bullion flows, and of the common law system of pleading and remedies.[3]

We take the Bretton Woods Agreement as the end of our period. The 1944 conference instituted the International Monetary Fund and negotiated an agreement for a new exchange rate and international payments policy.[4] This marks the first attempt to put monetary arrangements on a firm footing established in public international law. Until then, questions of monetary law had mainly been settled by jurists, courts, and governments within their own territories, although with some systematic coordination between nations which had little or no legal basis to it.[5] By taking the post-Second World War system as the end point of our study, we can include the proliferation of legal activity devoted to the huge monetary dislocations of the 1920s and 1930s. The hyperinflation of central Europe after the First World War challenged and led to the collapse of received private law doctrines where money and debts were at issue. It called into question the proper constitutional function of the courts in adjudicating on private disputes.[6] The collapse of domestic and international prices in the Great Depression gave governments the opportunity to test their sovereign powers over their monetary systems.[7] Some countries came to realize that they enjoyed a full monetary sovereignty that they had no need to assert in former, more settled, times.[8]

Unavoidably, our coverage is incomplete and there are some breaks in continuity across the 800 years spanned by the book. We hope these gaps can be forgiven. The contributors to the book have a great range of specialisms between them, across many different periods and jurisdictions. If other experts exist who can fill the gaps, it has not been easy to find them, or include their contributions in a project of this scale. Given that among the continental countries the Kingdom of France can be seen as leading the way towards a centrally governed currency system, we particularly regret that we have been unable to enlist a colleague willing to cover more of the French developments. A similar regret pertains to the North-Italian city-states, whose currencies dominated the European world in its revival from the High Middle Ages onwards.

Despite its length, this book is not an encyclopaedia. An encyclopaedia would have to restate the development of monetary law for all countries and all ages. The story told here draws together chapters devoted to specific countries. While similar chapters could have been sought to tell parallel stories for other countries, we hope that typical facets of the development can be helpfully illustrated by looking into the story as told for one country. We have, however, tried to match a civil law and a common law jurisdiction, wherever possible.

2. Topical Limitations

This books attempts to explain some of the main historical topics in the monetary law of the civil law and common law systems from the Middle Ages until the Bretton Woods

[3] For the medieval and early modern monetary law of England, see D. Fox, Chapter 11; and for its Anglo-Saxon origins, see C. Desan, Chapter 2.

[4] See P. Kugler, Chapter 28.

[5] For international co-ordination of monetary systems on the gold standard during the nineteenth and twentieth centuries, see M. Bordo and A. Redish, Chapter 27.

[6] For the respective roles of the judiciary and the legislature in responding to the German hyperinflation of the 1920s, see J. Thiessen, Chapter 33. For an economic analysis of the hyperinflations of central Europe, see F. Velde, Chapter 30.

[7] For the United States, see R. Kreitner, Chapter 31.

[8] For the gradual assertion of monetary sovereignty by Australia and New Zealand, see D. Fox, Chapter 32.

agreements of 1944. A comprehensive history of Western monetary law has not been undertaken before, although there are many histories of money and finance.[9] In one way, the omission is surprising. Money is one half of nearly every legal transaction, and monetary law is essential to the functioning of public and private transactions, and to international dealings by the state. We might therefore expect legal historians to have written more about it. But in another way, this omission is less surprising. A proper understanding of monetary law depends on a combined knowledge of numismatics, economic theory, public and private banking, as well as on the technical rules governing payments and the discharge of debts. All these subjects have as their background a more general commercial and political history which punctuates the story of monetary law. The main obstacle to writing a history of monetary law is the sheer breadth of the disciplines that need to be engaged with if the meaning of the law is to be understood.

There is a great spectrum of topics that might broadly be called 'monetary law' which could be looked into from a historical perspective. This volume does not cover all of them. The main focus is on money as a means of private law transactions. The following two aspects of the story have therefore been largely cut out. (1) Coins and later banknotes have always been tampered with and were in turn protected by the invention of currency-related crimes, counterfeiting being but the most prominent one. Import or export restrictions for coins have often been implemented using the criminal law. Abuses of bank giro systems have eventual criminal law aspects, too. We see these phenomena, although historically they may have played a great role, as ancillary to the functioning of money. We have thus not tried to fully incorporate the criminal law aspects. (2) If the terms primary and secondary market were used with regard to money, we would say that our focus is on the secondary market. We are mainly, though not exclusively, interested, from a historical perspective, in the functioning of money within the private law world, that is, as a means of designing and carrying out economic transactions in the private sector. There have not been, in the time span we cover, monetary phenomena which have not, at some point or another, been regulated by the respective state, be it that the state issued coins on its own behalf, be it that it regulated privately issued means of payment. We shall have to return to this aspect later. The phenomena called money cannot be adequately understood if the role of the state were to be ignored altogether. Given the great role minting played for a long time for the financing of the state, we were afraid, however, that if we were to fully expand this aspect we would be heading for a full-fledged history of state financing through the ages. In order to avoid overreaching we tried to focus more on how the law dealt with the private sector's using and shaping of monetary instruments. Of course, given the interconnectedness of aspects, frequently 'primary market' aspects have indeed been dealt with,

[9] On banking and finance in medieval times, see, e.g., R. de Roover, *Money, Banking and Credit in Medieval Bruges* (1948); V. Piergiovanni (ed.), *The Growth of the Bank as Institution and the Development of Money-Business Law* (1993); F. C. Lane and R. C. Mueller, *Money and Banking in Medieval and Renaissance Venice.* Vol. 1: *Coins and Moneys of Account* (1985); and on the emergence of modern deposit banking in continental Europe and in the Anglo-American jurisdictions, see C. Rist, *Histoire des doctrines relatives au crédit et à la monnaie depuis John Law jusqu'à nos jours* (1938); M. N. Rothbard, *A History of Money and Banking in the United States: The Colonial Era to World War II* (2002); and M. Collins, *Money and Banking in the UK: A History* (1988). On the history of currencies, see P. Vilar, *History of Gold and Money: 1450–1922* (1969, 1976); J. W. Hurst, *A Legal History of Money in the United States, 1774–1970* (1973); J. D. Gould, *The Great Debasement: Currency and the Economy in Mid-Tudor England* (1970); C. E. Challis, *The Tudor Coinage* (1978); P. Spufford, *Money and its Use in Medieval Europe* (1988); N. Mayhew, *Sterling: The History of a Currency* (2000); T. Sargent and F. Velde, *The Big Problem of Small Change* (2002); A. Redish, *Bimetallism: An Economic and Historical Analysis* (2000); M. Allen, *Mints and Money in Medieval England* (2012); J. H. Monroe (ed.), *Money in the Pre-Industrial World: Bullion, Debasements and Coin Substitutes* (2012); J. Bolton, *Money in the Medieval English Economy 973–1489* (2012).

most notably in the chapters dealing with the rise of money transfers under banking auspices.[10] We are aware, however, that a reader looking, for example, for an exhaustive history of minting prerogatives in European history, may turn away disappointed. It is needless to say that this is not a comprehensive (legal) history of the whole ambit of financial institutions at large, although some chapters will shed light on the legal development with regard to certain core banking activities.

From medieval times on, coins were issued for specific territories, yet have always—in different degrees—circulated beyond the boundaries of their territory of origin. The topic thus has an inevitable international law aspect, both private and public. Our coverage of the public international aspects of monetary law is mainly focussed on the nineteenth and twentieth centuries, since the formation and break-up of international monetary systems was a special feature of that period. In general, we have tried to write about the law as it was generated by the main doctrinal and financial controversies of each period.

Another strand which this volume touches on only occasionally is the development of monetary theory. The development of money has been accompanied, since the days of Aristotle, by attempts to evaluate money philosophically. This strand of literature as such is of no primary concern to us. Civilian doctrine, however, emanating from the world of scholastic thought, has proved to be more susceptible, if compared with the English legal world, to doctrines of Christian thinkers. Thus chapters on Thomas Aquinas (Wittreck, Chapter 4) and Gabriel Biel (Kötz, Chapter 5) are meant to at least give glimpses of this aspect of the story.[11] The reader will be aware that a whole book, and not a small volume at that, could be written addressing money as reflected in intellectual history at large.[12]

Each part of the book begins with one or more chapters which describe some main features of the monetary environment in which legal doctrines developed. The law governing money makes very little sense if it is treated in isolation from its practical or theoretical context. Although legal doctrines deserve to be seen as having a systematic integrity of their own, they respond to numismatic, banking, or financial pressures arising outside the legal system and learned legal writing. Thus a proper understanding of pre-modern monetary law depends on knowledge of the system of minting and coin valuation.[13] The legal treatment of new forms of money and payment systems requires an understanding of how banks created transferable credits from a heterogeneous base of illiquid assets.[14]

3. Money Seen from the Legal Point of View

The focus of the book is to present a distinctively legal history of money. Most of the chapters are therefore concerned with points of legal doctrine. Their range of coverage varies. In some the material is rich enough to allow us to present a broad view of the relevant doctrine, developed from many different sources and over a long period. This is true, for example, of our accounts of the civil, canon, and common law on money from the medieval and early modern periods, and the operation of payment orders in continental

[10] See Chapters 17 and 22 by W. Roberds and F. Velde and Chapter 23 by H. Siekmann.

[11] For economic monetary theory as it related to the dematerialization of money in the twentieth century, see R. Wray, Chapter 29.

[12] J. Marchal and J. Lecaillon, *Les Flux monétaires. Histoire de théories monétaires* (1967).

[13] See M. Allen, Chapter 3; and W. Ernst, Chapter 7.

[14] For the creation of transferable credits by early public banks in continental Europe, see W. Roberds and F. Velde, Chapter 17.

Europe during the Middle Ages.[15] The coverage in other chapters is narrower since we recognize that, on some occasions, particular writers or judicial decisions loomed large in developing the monetary law of their period.[16] The chapters on these topics therefore aim to provide a detailed analysis of the relevant reasoning rather than describe the whole monetary law of the period. Other chapters concentrate on actual disputes in the application of monetary law. We see these as more than mere case studies. Their importance lies in demonstrating that monetary law was 'real', in the sense that the doctrines expounded by jurists were the subject of actual legal advice and applied in judicial decisions,[17] or sometimes adapted by special legislation.[18] At least in cases where the sums at stake were high enough, we can be reasonably sure that the law 'in the books' was actually applied in practice.

It becomes apparent from the following chapters in this book that jurists, legislators, and learned writers in the continental European and common law systems have generally avoided trying to formulate a legal definition of money. The monetary law of the last 800 years has taken shape without any sustained consideration of the legal institution which lies at its core. Thus the medieval and early modern jurists who wrote in such detail on the discharge of debts by the payment of coins did not articulate a general conception of money, which might have enabled them to cut through the legal minutiae confronting them. This section considers some possible reasons for their omission.

Such attempts as there were in the pre-modern period to develop more general concepts of money tended to come from outside the secular law. They were made by the canon lawyers, who drew their views from the writings of scholastic philosophers founded on the relevant chapters of Aristotle's *Nicomachean Ethics* and *Politics*.[19] These described money in terms of its functions as a standard of value, a medium of exchange, and a store of value. These texts supported the view that law was essential if monetary values were to serve as means of measurement. Another key text relied on by the canonists, which was preserved in Justinian's *Corpus Iuris Civilis*, was the description by the Roman jurist Paul of the evolution of sale from barter.[20] Paul explained how the stamping of metal as money transformed it from a mere weight of bullion and enabled it to pass in exchange according to a publicly defined valuation. Either of these formulations from Aristotle or Paul might have been worked up by sustained juristic exposition into a legal definition of money, but lawyers seemed not to attempt that task. They seemed to leave it to the canonists and the theologians to theorize about such generalities.

Another reason for lawyers' failure to attempt a definition of money is revealed by the text from Paul on the emergence of money from barter. It was intended simply to explain the difference between barter and sale. Different actions lay to enforce the rights under each

[15] See, e.g., the chapters in this volume on the European civil and canon law of the pre-modern period by W. Ernst, Chapter 7; A. Thier, Chapter 8; and H. Dondorp, Chapter 13. For the common law, see D. Fox, Chapter 11, and for the use of payment orders in medieval Europe, see B. Geva, Chapter 20.

[16] See, e.g., the discussion of the leading common law case explaining the principle of monetary nominalism (D. Fox, Chapter 12); the key Scottish case explaining the negotiability of banknotes in terms of civil law principles (K. Reid, Chapter 25); and the nineteenth-century cases on the Austrian railway investment contracts which are authorities for identification of the *lex monetae* in contracts (R. Vrbaski, Chapter 26).

[17] See the discussion of the *wipper* and *kipper* inflation of the 1620s in the Holy Roman Empire by C. Schott, Chapter 15, and A. Amend-Traut, Chapter 16. For the monetary organization within the Holy Roman Empire during this period, see M. North, Chapter 10.

[18] See, e.g., the legislative measures governing the repayment of long-term rent contracts after the currency revaluation of the Low Countries in the late fifteenth century in A. Wijffels, Chapter 9.

[19] See F. Wittreck, Chapter 4.

[20] D. 18.1.1 pr, discussed by T. Rüfner, Chapter 6.

form of contract, so the distinction between monetary exchange and exchange of goods was vital to the procedure by which a plaintiff pursued his claim against the counter-party.[21]

Here lies the gist of lawyers' failure to engage directly with the meaning of money, and why their understanding of it was formed obliquely. For lawyers, money has tended to be a secondary concept, the meaning of which is constructed out of their answers given to other primary questions of a technical legal nature. So in the text by Paul, the primary legal category he had in mind was the distinction between the contracts of sale and of barter. His description of monetary functions only needed to be good enough to mark the division between them: if coins issued by the state were given in return for goods, then the exchange was a sale and not a barter.

Similarly, when medieval lawyers developed the distinction between the intrinsic value of coins (*valor intrinsecus*) and their legal value decreed by the sovereign (*valor impositus*), their primary concern was to satisfy the legal requirements for repaying a loan for use (*mutuum*).[22] The rule was that the debtor had to restore property of the same quantity and quality as he had first received, which raised a problem when the coins advanced by the lender were subsequently debased or abolished, or their official legal valuation was changed by proclamation.[23] The substantive requirements of the contract defined the framework within which jurists developed their understanding of the money owed by the debtor. Since the contract was the primary category for analysis, learning which had developed to explain loans of non-money fungibles became relevant to the jurists' view of money when it was the subject of a loan. Thus, the received legal learning on loans of wine became relevant to explaining loans of money. According to a modern view of monetary nominalism, the jurists would seem to be making a category mistake by linking two fundamentally different kinds of property: the fungibility of wine is explained by its physical substance and the fungibility of money by the abstract units of monetary value embodied by it. But such a view is anachronistic and overlooks the distinctive reasoning processes by which medieval lawyers analogized between the cases for which they already had authority and the new cases for which they wanted to find solutions. By this process of analogy, they developed the rule that monetary debts were generally valued according to the intrinsic value of the coinage when the debts were first contracted. This determined obliquely the lawyers' understanding of what money was. Money became for them a special kind of bullion, the weight and fineness of which was certified by the sovereign. Money debts were obligations for the delivery of a quantity of bullion paid in the form of money.

When in the early modern period jurists did come closer to defining a general conception of money, their motive was to argue for a different result to a technical legal problem. So when Charles Dumoulin wrote in 1546 that 'the form and substance of money, as money, is not its matter of physical appearance' but the sovereign's 'imposed value' (*valor impositus*), he was arguing against the *communis opinio* for a different technical rule governing the discharge of *mutuum* contracts.[24] This view might nowadays be identified with a nominalist conception of money. But Dumoulin's argument was secondary to the primary, legal, question at issue concerning contractual discharge. Other parts of his writings show that he would not have accepted a thoroughgoing theory of monetary nominalism.[25] His writings cannot be read as supporting a 'chartalist' theory of money

[21] D. 18.1.1.1, Gai Inst. 3.144. [22] See W. Ernst, Chapter 7. [23] See ibid.
[24] See H. Dondorp, Chapter 13. [25] See ibid.

where money could simply be created by the issue of tokens carrying a legally assigned value, regardless of their intrinsic substance.[26]

Although jurists and legislators have tended to avoid general definitions, they have recognized that certain things may be treated as money. Again, their main interest has been whether the thing in question satisfies some other primary test of a technical legal nature. These definitions developed incrementally and might only have been relevant to the particular context where they applied. Thus a broad view might be taken of the word 'money' when interpreting a last will, since it was a matter of construing the testator's intentions as to the range of assets comprising his estate.[27] For the purposes of repaying a loan of coins, it was recognized that coined money might be a generically different kind of property from uncoined bullion.[28] But it did not follow that all coins were the same, even if commercial actors treated the great variety of coins circulating in their own countries as being, in some sense, all species of money. As a matter of law, coins were not all equally acceptable in the discharge of debts. They were not necessarily interchangeable, according to some intrinsically determined rate. Jurists and legislators distinguished between foreign coin and that issued by the sovereign authority in their own state. They either recognized a custom that debts denominated in foreign currency could be discharged by payment of the local sovereign's coin,[29] or enforced this practice as a matter of positive law.[30] England, which had the advantage of being an island state with a strong centralized system of government, enforced a system where either foreign coins were banned from circulation, or they were adopted into the local monetary system at fixed rates set by the King.[31] The formula 'lawful money of England' which commonly appeared in the payment clauses of transactional documents during the early modern period indicated that the debtor could only get his discharge by tendering coins lawfully issued or adopted by the English sovereign.[32] Foreign coins might have been money but that made no difference to whether the debtor had made a legally compliant tender of coins, which would ensure him a defence to the creditor's action on the debt. The concept of 'legal tender money' thus developed, literally, from the private law rules on the performance of debts.

II. An Evolutionary Story

The book is divided into five sections, each corresponding to a main stage in the development of monetary law. We have called these: 'The High Middle Ages: Coins and the Law'; 'Money in the Early Modern Period: the Triumph of Nominalism'; 'The Evolution of Cashless Payment: Bank Money'; 'The Eighteenth and Nineteenth Centuries: the Emergence of Paper Money'; and 'The Twentieth Century: Fiat Money'. The chapters describe a general transition from a monetary system consisting of intrinsically valuable coins to one where the value—or indeed the existence—of some material substance is no longer relevant to the status and value of a thing as money. The principle of monetary nominalism is reached when the value of money in payment depends on the direct equivalence between the number of monetary units ascribed to it by law and the units in which the debt is denominated. Changes in the material value of the 'money thing' or its general purchasing power become irrelevant.

[26] The modern-day theory of chartalism and its opposition to metallist explanations of money are discussed by R. Wray in Chapter 29.

[27] See T. Rüfner, Chapter 6, Section III.2(e). [28] See W. Ernst, Chapter 7.

[29] See ibid. (civil law); A. Thier, Chapter 8 (canon law).

[30] This was the common law rule in England: see D. Fox, Chapter 11.

[31] See ibid. [32] See ibid.

The chapters in the book cover a period which has seen a gradual dematerialization of money through the emergence of bank money, paper money, and currencies de-linked from any substratum in precious metals. This is not to say, however, that this transition is obvious as a continuous thread running through all the chapters of the book. The legal controversies of each period were resolved incrementally rather than with an eye to any larger transition of which, with hindsight, we might now see they were a part. Other monetary crises developed along the way, such as the 1920s hyperinflations of central Europe, which needed a legal response in their own right.[33] Nor would it be right to think that each stage in the development corresponds to a self-contained historical period. Thus forms of cashless payment were developing at the same time as continental jurists and canonists were still formulating the rules governing payments of coin.[34] Similarly, although we identify the emergence of paper money as a development of the eighteenth century, it was building on the practices of medieval merchants in establishing cashless payment systems and early modern public banks in creating transferable ledger credits.[35]

We find two main strands in Western monetary law which developed independently of each other. The first is the body of doctrine which developed to explain the tender of coins in the discharge of debts. It is mainly explained in the first two parts of this book. The second concerns the creation and transfer of monetary value without the use of metallic coins. The main topics here are the operation of payment orders, and the financial innovations that allowed paper instruments or ledger credits to serve as substitutes for metallic coin. They are explained in the third, fourth, and fifth parts of this book.

Although these two strands of monetary law were developing at about the same time, they seem to have grown up without much reference to each other. Continental civil and canon lawyers lavished enormous scholarly attention on intricate questions involving coins and debts.[36] In contrast, they left commercial practitioners and bankers to devise the structures which allowed substitutes to be used for coin and for the physical delivery of specie in the discharge of debts. It was only in the eighteenth and nineteenth centuries that these two strands of learning came together. During that period Western countries granted legal tender status to certain categories of publicly issued banknotes,[37] which put them on the same legal footing as sovereign-issued coins. Sovereign governments assumed control over the issue and supply of all payment media which passed as legal tender. The former sovereign prerogative over the issue of coins evolved into a more general privilege to determine which forms of payment media had the status of legal tender. This practice was recognized in the written constitutions of those countries which explicitly provided for the sovereign power to issue money.[38] This legal equivalence between coin and banknotes was made possible since the legal debates of the previous half millennium had reached the view that money should be valued in nominal terms. Coins and banknotes circulated at a value fixed by law, despite the obvious differences in the value of their material substance.

[33] For the legal treatment of the hyperinflation in Germany, see J. Thiessen, Chapter 33.

[34] For the civil law and canon law on coin payments, see W. Ernst, Chapter 7; A. Thier, Chapter 8; and for the development of the medieval payment order, see B. Geva, Chapter 20.

[35] For the development of the English and Scots law governing banknotes, see J. S. Rogers, Chapter 24 and K. Reid, Chapter 25; and for earlier payment and banking practices in continental Europe, see B. Geva, Chapter 20; and W. Roberds and F. Velde, Chapter 17.

[36] As evidenced by the material in W. Ernst, Chapter 7; A. Thier, Chapter 8; H. Dondorp, Chapter 13; and W. Decock, Chapter 14.

[37] For surveys of note issue by public banks in continental Europe and England, see W. Roberds and F. Velde, Chapter 22; and H. Siekmann, Chapter 23.

[38] For the United States Constitution, see R. Kreitner, Chapter 31; and for the exercise of the powers to issue money in the Australian Constitution, see D. Fox, Chapter 32.

At least in the form which it took in continental Europe, the law governing coins developed by the elucidation of the texts of classical Roman law preserved in Justinian's *Corpus Iuris Civilis*.[39] Its analogue in the canon law developed by the ordering and explanation of decretals. The jurists of the civil law worked in a tradition where the legal issues and forms of analysis were shaped by their predecessors' discussion of certain stock topics concerning the discharge of payment obligations. This retrospective focus on the development of an existing legal tradition may explain why these jurists seem not to have written on the innovations in monetary and payment media. The corresponding common law rules had an autochthonous English origin, deriving from the courts' recognition and implementation of the King's sovereign prerogative over coinage.[40] But again questions of new monetary and payment media do not seem to have impinged upon it.

Alongside this first strand of monetary law, medieval merchants, their bankers, and their agents developed complex payment networks which allowed monetary value to be remitted from place to place without the delivery of metallic coin.[41] From the fifteenth century onwards, various European cities established public banks with liabilities consisting in transferable ledger balances.[42] The balances were denominated in fungible monetary units. They were highly liquid whereas the assets they were based on were variable in their composition, their soundness, and their convertibility to ready cash. The experience of England and Scotland during the seventeenth and eighteenth centuries provides an example of how private and public institutions innovated in the development of fiduciary money by the issue of convertible banknotes and debt instruments.[43]

These innovations seem to have been driven by commercial practice rather than by lawyers seeking to extend existing legal structures to new uses. The commercial actors responsible for developing them seem to have given very little thought to how they should be analysed or enforced according to received legal doctrine. The role of legal doctrine was reactive. Jurists had to do their best to fit these new structures into the traditional doctrinal categories of contract and property. Innovations in monetary practice sometimes made a poor fit. Thus a payment order given by a debtor to his bank had to be explained as something like a Roman *cessio*, since this seemed the best legal approximation to what the debtor was actually doing when he issued his instruction. There were, however, significant technical differences between the operation of the instruction and a proper form of *cessio*.[44] Similarly, there was a fundamental difficulty about explaining the contract by which a bank's customer held the sum credited to his account. Functionally his position seemed analogous to that of a depositor under the Roman contract of *depositum*. But there were fundamental differences in the two kinds of relationship: the account holder did not remain the owner of the funds deposited, and there might never have been a physical act of delivery to create the contract in his favour.[45] The traditional categories of property and contract borrowed from the Roman juristic tradition are best viewed as models against which new monetary forms were compared. Generally, legal doctrine struggled to provide a complete explanation for them.[46]

[39] See T. Rüfner, Chapter 6.
[40] See D. Fox, Chapter 11.
[41] See B. Geva, Chapter 20.
[42] See W. Roberds and F. Velde, Chapter 17.
[43] For the development of banknotes in England, see J. S. Rogers, Chapter 24; and in Scotland, see K. Reid, Chapter 25.
[44] See B. Geva, Chapter 20.
[45] See S. Meder, Chapter 21.
[46] For the attempts by writers of the nineteenth and twentieth centuries to fit the practice of giro payment systems within traditional doctrinal categories, see, generally, ibid.

If the development of monetary law presented in this book seems uneven at some points then that partly reflects the legal preoccupations at each stage of its history. Certain economic problems presented themselves more acutely at some periods than at others. For example, the complexity of the late medieval and early modern law governing payments by coin follows partly from the elaborate coin-rating systems that were in use at the time, the frequency of fiscally motivated debasements, and the easy movement of coins across what would nowadays be considered as international borders.[47] Once those conditions settled, the law on the discharge of monetary debts became fairly static. We therefore say very little about the principle of monetary nominalism in the later chapters of this book. Similarly, the proliferation of case law in the nineteenth and twentieth centuries concerned with identifying the monetary system governing long-term investment contracts resulted from the growth of cross-border investment during that period and the break-up of existing currency systems.[48] Some rudimentary law on these kinds of disputes already existed, but it was the pressure of contemporary economic conditions that forced the courts to develop the law to a higher degree of sophistication. Sometimes the economic problems were the same but the legal responses to them were so different as to be almost unrecognizable in their connection. We might mention, for example, the currency devaluations practised by governments across the entire period of this book, usually by reducing the intrinsic metal content in terms of the monetary unit of account. During the Middle Ages, the legitimacy of such devaluations was treated as a matter of personal conscience, as articulated in the canon law of the Roman Church. It affected a prince's prospects of salvation in the afterlife.[49] But once governments bound themselves to secular constitutions, their power to change the monetary standard instead became an issue of constitutional authority and was determined in the regular courts.[50] The church's former domination of economic thought had by that stage faded from legal relevance. Constitutionalism took its place.

Evolutionary stories focus on the survivors. There have been plenty of ideas and experiments which eventually did not take off to create a legally stabilized monetary system or subsystem. We are reminded of Silvio Gesell and his ideas of 'shrinking money' or 'Freigeld' ('free money')[51] and of Irving Fisher and his ideas to link the value of money to index figures.[52] Insofar as lawyers tend to be preoccupied with the legal aspect of substantive real-world affairs, these concepts do not seem to have triggered legal dealings which could be fodder for today's legal historians. This is not to say that such concepts would not deserve to be recognized and analysed from a legal point of view, too.

III. The Role of the State

It is a hotly debated issue, perhaps more so among money theorists than among historians, whether the evolution and use of money can or cannot be explained as spontaneous social

[47] For the medieval monetary environment and coin valuation systems, see M. Allen, Chapter 3; and W. Ernst, Chapter 7.

[48] For the effect on long-term contracts denominated in former currencies extinguished by the formation of the German Empire in 1871, see R. Vrbaski, Chapter 26; and for the monetary consequences of the break-up of the nineteenth and twentieth century sterling monetary union, see D. Fox, Chapter 32.

[49] For canon law limitations on the sovereign's power to alter the monetary standard, see A. Thier, Chapter 8; S. Kötz, Chapter 5.

[50] For the authority of the United States government to devalue the dollar in 1933, see R. Kreitner, Chapter 31.

[51] Cf. W. Onken, 'The Political Economy of Silvio Gesell: A Century of Activism', (2000) 59 *American Journal of Economics and Sociology* 615.

[52] On Fisher's concept, see J. Benes and M. Kumhof, 'The Chicago Plan Revisited', IMF Working Paper WP/12/202, available at https://www.imf.org/external/pubs/ft/wp/2012/wp12202.pdf.

facts as opposed to a top-down implementation by the ruling powers, typically by way of law-making.[53] A more modern discussion along these lines involves a consideration of 'chartalist' monetary theories. This volume is not concerned with the earliest history of coins and hence we have nothing to say regarding the initial 'invention' of coined money. For the period covered here, we find little or no support for the view that people simply happened upon the use of money, and adopted it for their own convenience. Lawyers consistently recognized since medieval times that the ascription of monetary status to a certain kind of asset was an act of sovereign power. If textual authority had to be found for this practice, it was in the explanations of Aristotle and Paul for the evolution of sale from barter.[54] Paul in particular speaks of the use of a thing 'minted in the form approved by the state' and having a 'publically attested and permanent value'.[55]

These texts provided a foundation for the legal rule that the minting and valuation of money were the prerogative of the sovereign.[56] To that extent the study of legal history supports a 'state' theory of money articulated by the economic theorist, Georg Knapp, in his *State Theory of Money* (1924).[57] Knapp argued that the value of money did not depend on its material content but on the decision of the state to designate certain things as having 'the legal property of being the bearer of units of value'.[58] Debts were expressed in corresponding units of value so that the tender of money would have the effect of paying the debt.

Knapp wrote in a chartalist school of monetary thought. He argued that the thing which carried the monetary units was a mere token, which need not have any intrinsic value as a material substance.[59] The full implication of his argument was that the tokens might be completely notional and have no physical existence at all. Taken to this extreme, Knapp's theory seems a fair description of the dematerialized monetary system that developed in the nineteenth century system of giro payment,[60] and which is now the norm. Since the great monetary dislocations of the early 1930s, world currencies have ceased to have any direct connection with precious metals.[61]

Knapp's theory would not have found much support in the legal practice of the pre-modern period. Although lawyers recognized the special role of the sovereign in issuing and valuing money, they did not accept that coins could be mere tokens, the metal content of which was irrelevant to their value in payment. Medieval theologians even had difficulty in accepting that the sovereign-decreed *valor impositus* of a coin could exceed its *valor intrinsecus*, although in practice they accepted some difference between the two to allow for the costs of minting.[62] The pre-modern legal view of debts in continental legal doctrine was also incompatible with chartalism. Admittedly, prices and debts were often denominated in units of value which corresponded to the same units of monetary value in which coins were denominated. But the value of the debt was generally fixed in terms of the intrinsic value of the coinage circulating when the debt was first contracted. The rule that the intrinsic quality

[53] A point developed further in C. Desan, Chapter 2.
[54] Aristotle, *Nicomachean Ethics*, V.5.1133a.15; D. 18.1.1 pr.
[55] See the discussion in F. Wittreck, Chapter 4.
[56] D. 18.1.1 pr, discussed by T. Rüfner, Chapter 6.
[57] Knapp's state theory in the context of other chartalist explanations of money is discussed in R. Wray, Chapter 29.
[58] G. Knapp, *The State Theory of Money* (1924), at 7.
[59] Ibid., at 8, 25, 30.
[60] See, generally, S. Meder, Chapter 21.
[61] For the operation of the nineteenth century gold standard of currencies, see M. Bordo and A. Redish, Chapter 27; for the legal consequences of the disintegration of the gold standard in the early 1930s, see R. Kreitner, Chapter 31 and D. Fox, Chapter 32. For its replacement by the Bretton Woods international system and the demise of that system in the early 1970s, see P. Kugler, Chapter 28.
[62] See S. Kötz, Chapter 5.

at the time of the contract was to be considered (*bonitas intrinseca tempore contractus attenditur*) expressed a legal view of money and monetary obligations that was incompatible with the full acceptance of chartalism. The care taken by medieval jurists to distinguish the legal effect of a change in the intrinsic standard of a coin from an adjustment to its money of account value shows how far they were from accepting the view that money was a mere token.

The picture presented by the medieval and early modern common law was perhaps different.[63] The common law seems at least to have had the structures in place which would have allowed a chartalist system of money to develop. Debts were expressed in abstract monetary units. The courts did not treat the units as mere proxies for weights of precious metal. Their acceptance of the sovereign's power to debase the currency for self-serving fiscal motives might have laid a foundation for a chartalist view of money, since a point comes where the precious metal content of coins becomes so debased that they effectively circulate as tokens. Although this possibility existed, the monetary practice in England throughout most of the period covered by this book stands against the adoption of the full implications of chartalist theory. Intrinsically valuable coins remained the foundation of the English, British and—eventually—the Empire monetary system until the suspension of convertibility in 1914 on the outbreak of the First World War.[64] Token coins, banknotes and ledger balances derived their value from the possibility—more notional than actual—that they could be reduced to payment in intrinsically valuable coins with unlimited legal tender status.

We noted in an earlier section that monetary law seems have developed in two distinct strands: the law governing coin payments, and the law governing payment orders and dematerialized substitutes for coin. A similar dichotomy applies to the role of the state in the creation and valuation of money. Following the practice in the classical Roman law, the medieval sovereign's prerogative over money only controlled the minting, valuation, and import and export of coins. The term *ius cunendi* ('right of coinage') defined the legal boundaries of the right, and effectively exempted the creation of dematerialized substitutes for coin from the sovereign's exclusive control. In relation to them, the social theory for the creation of money has some useful explanatory force. The transferable ledger balances held by medieval merchants[65] and the notes issued by early bankers[66] can be understood as privately created currencies operating outside the sovereign's monopoly on coinage. Their acceptance as means of payment and the value at which they circulated depended on the trust of the commercial actors who used them.[67] They worked only as long as networks of confidence were sustained. Legal measures, such as statutory incorporation by a city or the conferral of legal tender status on payments, were only indirect means of supporting the social fact of confidence.[68]

IV. The Relationship between Law and Economics in Monetary Development

Money is omnipresent in modern societies, not only because of the popular confusion between money, a specific asset, with wealth, which can take any form (a confusion

[63] See D. Fox, Chapter 11. [64] See D. Fox, Chapter 32.

[65] See B. Geva, Chapter 20 (on the medieval payment order).

[66] W. Roberds and F. Velde, Chapter 22 (on early public banks of issue); J. S. Rogers, Chapter 24 (on notes issued by English private bankers and by the Bank of England); K. Reid, Chapter 25 (on Scottish banknotes).

[67] The point is developed particularly by J. S. Rogers, Chapter 24. Compare the social theories of the evolution of money considered by C. Desan, Chapter 2.

[68] For the value of legal measures in supporting early public banks of issue, see W. Roberds and F. Velde, Chapter 22.

stemming from its role as *mensura omnium rerum*). But it is also invisible, part of the complex plumbing system that facilitates myriad exchanges. It also takes multiple forms, as evidenced by the fact that there is no simple answer to the questions: what is money and how much money is there? Economists and statisticians use different aggregates (currency, monetary base, M1, M2, M3) depending on the context and purpose of the question. This multiplicity is nothing new. One thing is clear from the history of money: what passed as money never ceased to change. The objects that passed as money were in constant flux. At times the changes or innovations came from the private sector, at other times from the public sector.

One of the main questions economists address is the value of money: why does it have any value, and why does this value change over time? And, since money is pervasive and its effects can be felt everywhere, can changes in the value of money or its provision (in other words, monetary policy) improve economic outcomes? Pursuing an answer to these questions inevitably leads to a deeper question: why is this particular asset (coin, claim on a banker or an institution, piece of paper printed by a government agency) money, so that it fulfils certain economic functions?

Of the three textbook functions: medium of exchange, unit of account, store of value, the last is more of a corollary than an essential feature. There are many stores of value besides money in an economy: durable goods, land, capital and claims to capital or future payments all serve to store value. But for money to function properly as medium of exchange and/or as unit of account, it must be in some degree durable, have an existence that spans time. This makes money an asset, and assets are valued, at least in part, for the prospective returns or services that they will offer.

Why does the law matter? Fundamentally, the law matters because of expectations. If we return to the function of money as a medium of exchange, the role of money is intrinsically speculative: I accept a monetary object in exchange for a good or service, or in fulfilment of an existing obligation, in the expectation that I will be able to find someone else to accept it. Speculation implies expectations about the future, and the law plays a key role in shaping these expectations. To take an example from private law, the law will give me guidance on the circumstances under which a monetary instrument will allow me to discharge a debt.[69] As an example from public law: the government may have set rules about the circumstances in which I may be able to use the monetary object and the value at which it is to pass.[70]

If we now think of the unit of account function, the role of law might not be so clear at first sight. Whether an actor's budget constraint and the prices he faces are expressed in cents or dollars makes no difference. But the time dimension plays a role here as well, albeit a subtle one. Money's properties as a unit of account come into play over time, because money is used to denominate prices and values in different times and different circumstances—indeed, one could define money to be the object whose only valuable characteristic is to be worth the same no matter what; a dollar is a dollar is a dollar. This would be of little import if actors could trade and contract freely to buy or sell anything at any time and under any circumstance (what economists call the assumption of complete markets), but reality is obviously different, and promises to provide or receive a given quantity of units of account will have different effects under different circumstances. These

[69] See, e.g., B. Geva, Chapter 20.

[70] See W. Ernst, Chapter 7 and A. Thier, Chapter 8 on the status of money withdrawn by the sovereign (*moneta reprobata*) in the performance of debts in medieval civil and canon law. See D. Fox, Chapter 12 on the importance of the sovereign's power to define debased coins as legal tender and thus compel acceptance of them when it redefined the monetary standard.

promises, explicit or implicit, will be altered by how many units of account there are, and one way to think of monetary policy as it is commonly carried out is precisely to alter the relative price of units today versus units tomorrow (the short-term nominal interest rate).

As soon as we think of promises, the law is present. Much of what is discussed in this volume concerns the rules that govern the fulfilment of such promises. One enduring puzzle is the strong force that impels actors to make these promises in terms of units of account.[71] Another is the multiplicity of monetary objects that has already been mentioned.

Money, as an asset, is not in a strict sense fungible like wheat and wine since the asset that represents the money can come in many different forms. It can be fungible in the more general sense that one form of money can be substituted for another; or rather, it would be convenient if that were consistently the case. If we go back to the origin of coined money, it can be traced to the point when lumps of precious metal were produced (with great care) in standardized units, with designs indicating some common issuer or at least some presumption of equivalence across differently sized units or denominations.[72] It was not long before another layer of multiplicity was added, in the form of coins of different metals (gold, silver, bronze).[73] And from medieval times we see constant efforts to economize on the resource cost of coined money by providing means of transferring value using private or public liabilities instead of coins.[74] These forms of money are not disconnected from the monetary standard of coins, but partly rely on the concept of unit of account to provide some linkage, and later, with early central banks, on active management of the exchange rate with coin. Under what conditions could different monetary objects be taken as substitutes? This proves to be a crucial question in the legal history of money.[75] The emergence of nominalism provided one possible answer, one in which the State intervenes directly.

Is money a creature of the law or law a handmaiden of money? The latter view presumes that money emerges organically to meet an economic need or serve an economic purpose, as in Menger's theory, and will tend to a functional view of the law.[76] Legislators, jurists, and courts essentially spell out the desirable properties of money, adapting as changing circumstances require. To a first approximation, if one has an optimistic view of the legal process, the form of money and its properties will be invariant to the legal details, and dictated by economic functionality. The former view, in an extreme form, is Knapp's theory and posits that money cannot exist without the prior intervention of the state: in that view, the choices made by legislators, jurists, and courts can have important consequences.[77]

From an economist's perspective, while the latter view corresponds to a standard model in which markets can be trusted to deliver the right outcomes, the former view can be understood in the context of a game. The state can posit different rules, and different outcomes will arise. The intervention of the state appears as a necessity when the market

[71] See W. Ernst, Chapter 7 on the use of imaginary monetary units of account as the *moneta in obligatione* in medieval civil law. See D. Fox, Chapter 11 on the economic and legal institutional reasons which may have caused English commercial actors of the medieval and early modern period to express monetary obligations in units of account even during periods when the sovereign was active in reducing the monetary standard.

[72] See, e.g., the evolution of standard Anglo-Saxon pennies under the authority of territorial rulers, as described by C. Desan, Chapter 2.

[73] For the legal acceptance of the fungibility of coins, which tended to support the bimetallic or trimetallic coinage systems of Roman antiquity, see T. Rüfner, Chapter 6. For the difficulties of accommodating the medieval proliferation of coin types to the existing rules on performance of debts, see W. Ernst, Chapter 7.

[74] See B. Geva, Chapters 18 and 20.

[75] For the medieval civil law approach to this issue in developing the distinction between *moneta in obligatione* and *moneta in solutione*, see W. Ernst, Chapter 7.

[76] See K. Menger, 'On the Origins of Money', (1892) 2 *Economic Journal* 239.

[77] Knapp's state theory is discussed in the context of other chartalist explanations of money in R. Wray, Chapter 29. For an intermediate view that money evolves with a degree of legal support in order to facilitate the purposes of the state, see C. Desan, Chapter 2.

fails to deliver the right outcomes, typically because of externalities (the actions of some actors affect other actors in a way that is not mediated by the price mechanism), or when multiple equilibria are likely to arise, perhaps equally desirable, but whose emergence requires some form of coordination (cars could equally drive on the left or the right, the law provides the coordination needed to avoid chaos).

The two views are extreme poles, and reality can naturally be somewhere in the middle. Moreover, the long historical perspective that this volume gives leads to a more dynamic model, one in which economic forces and legal construction interact constantly, the law responding to those forces but also channelling them in turn. If we take the mid-point of this volume as the emergence and widespread adoption of nominalism as a turning point (one that coincides with the formation of powerful nation-states),[78] we might be tempted to see a stronger role for the state in shaping money in the later period. To temper this view we should keep in mind that much of the legal activity that takes place in the medieval period is in response to early forms of monetary policy by states (be it the debasements that vexed jurists or the growing use of legal tender laws),[79] whereas financial innovation in the modern period (notably the developments by the private sector of alternatives to coins for the transfer of value) continued to present states with new challenges and opportunities.[80]

Prima la legge o prima la moneta? The economist is a priori agnostic on the question, and it is fair to say that the modern literature is largely silent. Economists like to separate the *explicans* from the *explicandum*, or, in their language, the exogenous and the endogenous. The canonical approach is to specify an environment, stating preferences over goods and services, endowments of factors of production, technology to transform these factors into useful things, and what can be loosely put under the heading of 'rules of the game'. Law is about rules, and it seems natural, as a starting point, to place it in that category, along with all that is institutional. But it is obviously harder to take institutions, which are human constructs, as fully exogenous as endowments of land or the number of hours in a day. Most often the legal aspects of money are simply ignored, and theories of money as a necessary instrument are built in environments which are described in purely physical terms (incorporating spatial separation or anonymity); or else the necessity of money to carry out transactions is posited. The value of this volume will be, hopefully, to show how unsatisfactory this silence is.

[78] See Chapters 10–16 in Part II of this volume.
[79] See M. Allen, Chapter 3 for medieval currency depreciation and debasements.
[80] See for example S. Meder, Chapter 21 on the innovation of giro payment systems in eighteenth- and nineteenth-century Germany and the difficulty of accommodating them with received legal doctrine.

2

Money as a Legal Institution

Christine Desan

I. Introduction

Money has long played a central role in the character and culture of the Western world. The medium is seminal to economic activity and analysis: money provides the unit in which prices appear, supplies a means of exchange, and acts as a store of value. Money is essential as well to critics of economic orthodoxy: according to Marx, capitalism arrived when individuals moved from exchange aimed to reproduce equal value, to exchange aimed to accumulate monetary capital. Other commentators agree on the centrality of money, for better or worse. Karl Polanyi argued that money carried modern societies across a threshold that threatened the fabric of social life. As he described the nineteenth century, '[a]ll transactions are turned into money transactions, and these in turn require that a medium of exchange be introduced into every articulation of industrial life.' Popular culture restates that theme, whether observers identify the Gold Standard as 'the standard of civilization' or bemoan 'the almighty dollar'.[1]

In an account that became iconic, John Locke agreed that money played a pivotal role in the development of European societies. For Locke, the medium was transformative: money allowed men to accumulate property through labour without violating the natural prohibition against waste. Before money, each man appropriated to himself only what his labour and the 'conveniences of life' allowed him. That measure 'did confine every man's possession to a very moderate proportion', because 'no man's labour could subdue, or appropriate all; nor could his enjoyment consume more than a small part'. For the philosopher, man's labour created the right to property and man's capacity to use what he claimed provided a natural limit to that right:

> He that gathered a hundred bushels of acorns or apples, had thereby a property in them, they were his goods as soon as gathered. He was only to look, that he used them before they spoiled, else he took more than his share, and robbed others.[2]

[1] For a synopsis of economic approaches to money, see J. Tobin, *Money* (2nd edn, 2008), at 3. For Marx's argument that society moved from the trade of equal commodities through the intermediary of money (C–M–C), to the sale of commodities for monetary profit (M–C–M), see K. Marx, *Capital: A Critique of Political Economy*, trans. Ben Fowkes (1976), at 188. For Karl Polanyi's description, see *The Great Transformation: The Political and Economic Origins of our Time* (2nd edn, 2001), at 44. For popular commentary on the dollar, see, e.g., W. J. Bryan, 'Cross of Gold', in *The Annals of America*. Vol. 12: *1895–1904: Populism, Imperialism, and Reform* (1968) 100, available at http://historymatters.gmu.edu/d/5354/; W. Irving, 'The Creole Village', in *The Complete Works of Washington Irving*, ed. R. Rosenberg (1979 [1937]), vol. 27, at 27.

[2] J. Locke, *Second Treatise of Government* (1691), ch V, section 46.

According to Locke, money lifted that natural limit on the right to property. It allowed men to trade something durable for the material that would otherwise have gone to waste. The impact was emancipatory: it released men from the strictures that discouraged their work, and motivated them instead to invest in their land, to improve its cultivation, and to enlarge their possessions. Money amounted, in other words, to the font of economic productivity. In Locke's words, 'he that encloses land, and has a greater plenty of the conveniences of life from ten acres, than he could have from an hundred left to nature, may truly be said to give ninety acres to mankind'. For Locke, money marked the difference between the civilized environs of Europe, and the wild landscape of the New World: 'Thus in the beginning all the world was America, and more so than that is now, for no such thing as money was any where known'.[3]

For all its miraculous effect, money arrives so quietly in Locke's chapter on property that readers need not think about what it is, or how it works. The mystery is packed into the end of a paragraph about the labour theory of value and the prohibition against waste. A man could, notes Locke, give away any extra fruit he collected to avoid letting it spoil. Alternatively, he could trade it for something that would not decay:

> And if he also bartered away plums, that would have rotted in a week, for nuts that would last good for his eating a whole year, he did no injury; he wasted not the common stock; destroyed no part of the portion of good that belonged to others, so long as nothing perished uselessly in his hands. Again, if he would give his nuts for a piece of metal, pleased with its colour; or exchange his sheep for shells, or wool for a sparkling pebble or a diamond, and keep those by him all his life he invaded not the right of others, he might heap up as much of these durable things as he pleased; the exceeding of the bounds of his just property not lying in the largeness of his possession, but the perishing of any thing uselessly in it.[4]

The next paragraph confirms that Locke has said all he will about how money enters society. As Locke puts it there:

> And thus came in the use of money, some lasting thing that men might keep without spoiling, and that by mutual consent men would take in exchange for the truly useful, but perishable supports of life.[5]

Scanning back for the operative moment, we find that money is 'a piece of metal' that a man might agree to in a trade because he was 'pleased with its colour', content to accept 'shells', or 'a sparkling pebble or a diamond'. The equation is arresting in its simplicity and its subjectivity. We have an account of one man's exchange for a lovely object, an appealing vignette about an early world. But as a tale intended to explain money, it raises as many questions as it answers.

Why would anyone living on the edge, in a subsistence world with little margin, work to 'heap up' shells, or pieces of metal? Why is that person an incipient capitalist rather than a *naïf*, willing to work for baubles? In a world that was, by definition, uncivilized, why wouldn't a stronger man just take back the bauble if he so desired? Why would people ever begin to measure goods in terms of a material that no one needed? What good comes to hand in units like that? How, in other words, is the singular act that Locke portrayed generative of a collective and continuing consensus, one that explains rather than assumes the 'fancy or agreement' that would attribute value to 'money'?

Locke's account typifies a modern trend, one that elides the making of money and declares rather than explicates the way that medium works. Indeed, the philosopher's

[3] Ibid., sections 37 and 49. [4] Ibid., section 46. [5] Ibid., section 47.

account may well have triggered the trend.[6] The narrative most commonly offered to explain what money is and why it holds value suggests that people create money when they start to use a commodity of natural value, like Locke's piece of metal, as a medium. According to the conventional wisdom, they do so gradually, eventually adopting an object that all value in common because barter without currency is awkward. People who have certain goods that they would like to trade, pigs for example, need to find trading partners who both have what they want, cheese perhaps, and want pigs in return. Often, this 'double coincidence' of wants does not occur and the farmer with pigs must trade for items that may be of more interest to the cheese seller. The farmer may trade his pigs for hens, then trade hens for corn, then corn for wood, if he anticipates that the cheese seller wants wood and will give cheese to get it. All the deals are made difficult by time and distance.[7]

The problems created by barter would be alleviated if everyone recognized one commodity as the 'universal equivalent', a material that each person accepted as a valuable good that could be traded in the future.[8] In that case, the pig farmer could take the universal equivalent in payment from whoever wanted his pigs, and he could use that material as payment when he bought cheese. Some accounts imagine that the choice is made by mutual consent—a social consensus of sorts. Locke in his later years argued that silver claimed status as the 'equivalent to all other things' because of 'that estimate which common consent has placed on it'. That acclaim made it 'the universal barter or exchange which men give and exchange'.[9] Others imagine a teleology that produces convergence: 'As economizing individuals in social situations became increasingly aware of their economic interest, they everywhere attained the simple knowledge that surrendering less saleable commodities for others of greater saleability brings them substantially closer to the attainment of their specific economic purposes.' Exchanging awkward objects for more commonly demanded objects, eventually people came to recognize one commodity as the medium that all would give and take. 'No one invented it,' concludes one author, 'money is a natural product of human economy.'[10]

But the convergence story raises as many questions as Locke's early account. Each entails a kind of circularity, a 'Catch-22' of causation. First, the objects that appear as 'money' in the historical record—shells and metal tokens most commonly—are not obviously the most 'saleable' commodities in a subsistence economy. They are of little intrinsic use to those eking out a meagre living until, of course, they are recognized as money.[11] Second, objects of value would need to be standardized in order to be able to act as a uniform measure or constant unit of account. But it would not be worth anyone's time to standardize them until, again, they had attained stature as the unit of account. Third, the convergence story assumes conditions of order—contract and property rights in the materials transferred. But that presumes a polity or community with the resources to enforce contract and property rights. The world of barter would not likely support a mode of

[6] For an account of Locke's influence, see C. Desan, *Making Money: Coin, Bank Currency, and the Coming of Capitalism* (2014), at 330–65.

[7] See, e.g., Tobin, above n 1, at 3; R. Levine, 'Financial Development and Economic Growth: Views and Agenda', (1997) 35(2) *Journal of Economic Literature* 688, at 690.

[8] The term is from Marx, above n 1, at 162.

[9] According to Locke, the consensus was global, and 'even the *Indians* rightly call it, *measure*'. See J. Locke, *Further Considerations Concerning Raising the Value of Money* [1696], in P. H. Kelly (ed.), *Locke on Money* (1991) 399, at 410. Examples of similar reasoning from the nineteenth and twentieth centuries abound. See, e.g., J. B. Felt, *An Historical Account of Massachusetts Currency Microform* (1839), at 10; Tobin, above n 1, at 1–2.

[10] C. Menger, *Principles of Economics*, trans. J. Dingwall and B. F. Hoselitz (1981), at 263.

[11] Livestock and other perishable commodities were probably not as commonly chosen as money as once thought. See, e.g., M. S. Peacock, 'Accounting for Money: The Legal Presuppositions of Money and Accounting in Ancient Greece', (2013) 55(3) *Business History* 280.

governance that enforced monetary transfers, unless the group could use money to pay for that governance work. Fourth, the fact that an object began to circulate as money would not ensure its continued circulation. A powerful person or group could easily hoard the conventional resource, forcing everyone to trade with them or destroying the consensus that supported money. Only devices that ensured that the units acting as currency constantly entered and left circulation—only a working money supply in other words—would keep the system functioning. Fifth, and enough for the moment, whatever the origins of money in an object of value, money today is made of paper. If the consensus that supported silver ever occurred, its days are over. According to the economics books, we value a dollar only because everyone else does, but the strength of that 'network' effect is an untested assertion, made for lack of another explanation.

We might imagine answers to the mysteries created by the convergence story and the ongoing efficacy of money, even money made of paper. For centuries, however, the practice of money has suggested another story. Money in the Western world is a legal institution, a means of packaging value that depends on a set of opportunities and obligations defined by the polity. That process is an ongoing one, one that affects the way people relate to each other and to the larger community. In that sense, the process of making money involves people both as individuals and as a collective. It serves both private and public purposes. Like any other mode of governance, it can be structured in ways democratic or dictatorial. For good or ill, it is designed by those using it. Likewise, it is susceptible to redesign that changes the way it circulates and the exchange it enables.

The case for considering money as a legal institution can start where Locke left us. If we add to his story the conditions that would make it work, we can indeed produce 'money'. Money is neither an object—the lump of silver that the philosopher imagined, nor an abstraction—the convention that those observing paper money assume. Money is, instead, a method of representing and moving resources within a group: it is a way of referencing or entailing material value that creates a unit to measure other resources over time, pay off obligations finally, and transfer value immediately.[12]

The description of money as a legal institution revises the Lockean story in three dimensions. First, there are individuals in the revised story, but there is also a group—the set of people who are claimants to a pool of resources. We might imagine a collective (a family, clan, tribe, or polity) bound together at least for protection against those who would simply take their property. Locke's primitive man could otherwise be quickly dispossessed by a passing barbarian. Second, there is a process in the revised story, an interaction that brings Locke's individual and the group he inhabits together to recognize value in a unit that has relevance to all of them. Otherwise, there is no reason to assume that the unit coveted by one individual would gain status as a common referent for value. Third, the process that creates a relevant unit is perpetuated; it operates through an agreement, a set of rules or norms—we might call them laws. Money, it turns out, depends on a set of concepts—credit, debt, commodity, payment, sale, contract, and even (or especially) property—that are legal categories. Only by recapturing money's legal architecture can we understand how it operates to transfer goods, effectuate a deal, or generate stable exchange.

The next pages unpack each dimension to develop the story that explains money as an institution, one that creates a material referent for value and is enhanced by its distinctive

[12] For the standard definition of money as a unit of account, store of value, and medium of exchange, see, e.g., Tobin, above n 1, at 4. On the payment function of money, see S. Bell, 'The Role of the State and the Hierarchy of Money', (2001) 25(2) *Cambridge Journal of Economics* 149.

capacity as a measure, mode of payment, and medium. According to that story, individuals advance value to a group in exchange for a unit that everyone else recognizes; each person has reason to accept and use the token because the group endorses it as the item that will pay off obligations. Through that arrangement, the public gains a way to mobilize resources on demand. Individuals, meanwhile, gain a shared technology of value that facilitates exchange. Legal relationships structure the dynamic; as they change, the money they produce changes also. Indeed, money has taken many different forms in the West, each a product of the legal process that shapes it.

II. Making Money 'Real'

As in Locke's account, our story begins in a world without money. People act together and separately in this world, like any other. They bond for many reasons, including social life, productive exchange, and the defence of their homes and goods. Their common stake can be rooted in family, land, shared resources, a commitment like mutual protection, or a combination of many such interests. They contribute to maintain their place in the group, providing labour, goods or supplies, or military service. Chris Wickham describes early Anglo-Saxon England in terms that offer one example. There, small rulers led communities often related by birth or loyalty in return for tribute in labour, produce, and military service. In other eras, kings or counsels, warlords, or more structured governing bodies may control or represent the group; we might call those leaders 'stakeholders' to cover the variety while avoiding the implication that every collective activity is undertaken by a 'state'.[13]

The early Anglo-Saxon world furnishes a setting as well for the next stage of the story. According to most scholars, monetary activity in Britain broke down after the withdrawal of Roman forces in the early fifth century. The archaeological record, including numismatic evidence, suggests that the break with the imperial economy was virtually complete. Inhabitants experienced a 'drastic lessening of their living standards and political horizons' and a dramatic decline in the 'sophistication of material culture'. According to Wickham, 'exchange structures collapsed everywhere' after about AD 410. Pottery shards and looms indicate that production moved to the household, where families made ceramics and clothing for home use.[14] Other scholars argue for a more gradual decline and some survival of Roman influence, but even the revolution in numismatic evidence that has occurred with the advent of metal detecting and the increase in coin finds has not revised the basic consensus that a grave rupture in monetary activity occurred.[15]

[13] Wickham argues that early Anglo-Saxon societies consisted of peasants who were fairly autonomous economically, men not locked into feudal tenancies but dependent instead by bonds of 'mutual obligation and loyalty'. Rulers collected tribute reliably, in food, labour in bridge, and fortification building, and 'above all, army service'. See C. Wickham, *Framing the Early Middle Ages: Europe and the Mediterranean, 400–800* (2005), at 305.

[14] See ibid.; G. Williams, 'The Circulation and Function of Coinage in Conversion-Period England, c. AD 580–675', in B. Cook and G. Williams (eds), *Coinage and History in the North Sea World, c. AD 500–1250* (2006) 145, at 158; R. Abdy, 'After Patching: Imported and Recycled Coinage in Fifth- and Sixth-Century Britain', in Cook and Williams (eds), *Coinage and History*, 75; P. Spufford, *Money and its Use in Medieval Europe* (1988), at 9; I. Stewart, 'The English and Norman Mints c. 600–1158', in C. E. Challis (ed.), *A New History of the Royal Mint* (1992) 1, at 3.

[15] For a review, see Williams, above n 14, at 154; see also Abdy, above n 14, at 94; R. Naismith, *Money and Power in Anglo-Saxon England: The Southern English Kingdoms 757–865* (2012), at 15; T. S. N. Moorhead, 'Roman Bronze Coinage in Sub-Roman and Early Anglo-Saxon England', in Cook and Williams (eds), above n 14, at 95; C. Loveluck, K. Dobney, and J. Barrett, 'Trade and Exchange—The Settlement and the Wider World', in *Rural Settlement, Lifestyles and Social Change in the Later First Millenium AD: Anglo-Saxon Flixborough in its Wider Context* (2007) 112.

The inhabitants of fifth and sixth century Britain were, then, largely bereft of a common measure and media of exchange. They lacked a shared unit of account to value goods; according to current consensus, they used the old Roman coins that still circulated as jewellery, commodities, or weights.[16] Barter was an illiquid alternative. Rather than a world of easy exchange, deals were fragmented by distance, difficulty of travel, and the absence of information about the availability of goods. Households that engaged in subsistence production surely traded among themselves; scholars find evidence of gift exchange as well as tribute changing hands, even as the remaining coin appears most often in ornamental use. But as a recent history concludes, 'all forms of market exchange, beyond the simplest . . . must have ceased'.[17]

In such circumstances, most individuals would be hard pressed to set aside silver, much less gold. Both metals were scarce; they took skill and equipment to work; and neither had a practical use beyond the aesthetic. Each would be risky to hold and foolhardy to hoard. Given their high cost, the supply of silver or gold would be as erratic as demand. The argument that people would, acting incrementally and in parallel, predictably converge upon a shared money, let alone one made of metal, is far-fetched under those conditions.[18]

The community as a whole, however, was in a somewhat different situation. If anything, its need for a measure and mode of payment was especially great. While individuals could engineer idiosyncratic trades, groups collected goods and services from many hands and deployed them to a variety of uses. Communities in early Britain repeatedly rallied to construct bridges and fortifications, defend themselves, and support their forces.[19] That work could be done on the basis of in-kind contributions; charters from the English seventh and eighth centuries list the produce collected by Anglo-Saxon sovereigns—vats of honey, 'ambers' of ale, cows, loaves of bread, geese, and chickens. But romantic as in-kind collections may sound, the supplies must not always have fit the function. Conversely, collecting support in-kind created difficulties for stakeholders: the peripatetic habit of the early Anglo-Saxon rulers may have been driven in part by the need to move to gather support in-kind.[20]

If groups, considered in the figure of those who governed, had particular need for a currency, they also had unique capacity to create it. Their location at the hub of a community meant that they could easily invent money. The innovation occurred when a stakeholder identified a unit and began to use it as a kind of receipt to represent resources given to the group. That could happen without much planning—in fact, weak leaders without clear command of the resources in their community may have been especially inventive. Finding themselves unable to time their demands to match scheduled contributions, one such stakeholder could instead take an amount of goods or services early, giving in return a token that the recipient could provide later at a time of reckoning as proof that the service had been rendered. Continuing the technique, the stakeholder could mark other contributions in the same way.

The intervention, taken by an actor to whom many people were obligated, would create a standard of value across many goods. While no pair of people making deals could establish

[16] See Abdy, above n 14, at 75; Williams, above n 14, at 145; Moorhead, above n 15. Some bronze Roman coinage may have been used locally. See Abdy, above n 14, at 93.

[17] Wickham, above n 13, at 307.

[18] Carlo Cipolla's comparison between subsistence and wartime survival makes the point powerfully. See C. M. Cipolla, *Money, Prices, and Civilization in the Mediterranean World, Fifth to Seventeenth Century* (1967), at 9.

[19] See Wickham, above n 13, at 315 for the prevalence of these projects by the small polities of the early Middle Ages.

[20] Ibid.; Naismith, above n 15, at 29.

a unit of account for the exchange of others, the stakeholder could use his position as the common partner of all to set a unit apart.[21] The novelty of a commensurable and circulating measure is easy to overlook from the vantage point of the twenty-first century, a world awash with different forms of liquidity from money market mutual funds to Eurodollars. But in a world bereft of any shared unit of account, a token that entailed value relevant to people in common was an extraordinary accomplishment.

First, the strategy enabled public action: it opened up new ways to marshal and mobilize resources for the stakeholder. It effectively allowed him to choose the goods or services he needed when he needed them in return for a token, while retiring the token afterwards by taking it back. That is, innovating money allowed the stakeholder to spend now and tax later, a material achievement. Note that each unit of account represents an amount due to the centre. In that sense, every unit of account has a material referent: it is worth as much as the in-kind amount it represents. Indeed, the material referent for the unit of account is regularly made real in physical terms. Once the system is up and running, revenue can be routinely collected in money. But if those owing the stakeholder do not pay in money, the authority will confiscate other goods—house, tools, produce, whatever will pay off the obligation due.

A number of economic models confirm the fiscal component of money's value. As they suggest, money can be considered an asset with a value set according to its future utility in extinguishing a tax obligation. According to those models, the stakeholder can spend by giving people notes that they can use to pay their taxes. As long as the centre reliably imposes taxes payable in the notes, they will maintain their value.[22] The dynamic can also be captured in more classic, quantity theoretic terms. Under this approach, money holds its value insofar as its supply remains constant relative to the demand for it. Spending and taxing by the government enlarges and constricts money flow. As they anticipate expansion and contraction in supply relative to demand, people determine how much value to attribute to money.[23]

[21] In the world I use as an example here, most stakeholders were probably male small chiefs or clan leaders in the early Anglo-Saxon world.

[22] More precisely, the models assume that the notes will be spent at a discounted value, as people selling to the government calculate the value of the note by considering its use in the future for taxes. The discount occurs if the notes are useful only to pay taxes and not as cash in the interim. In that case, those earning money have laboured early and received a token that holds value only in the future. If they had put the same labour into something that grew in the meantime (presumably by the rate of the real interest rate), they would have more wealth by the time of the tax. In that sense, unless they are paid more at the outset, they will lose value by working early and earning a non-productive asset. Here, see the asset-pricing models of early American bills of credit, B. D. Smith, 'American Colonial Monetary Regimes: The Failure of the Quantity Theory and Some Evidence of an Alternate View', (1985) 18(3) *Canadian Journal of Economics* 531; C. W. Calomiris, 'Institutional Failure, Monetary Scarcity, and the Depreciation of the Continental', (1988) 48(1) *Journal of Economic History* 47; B. D. Smith, 'Money and Inflation in Colonial Massachusetts', (1984) 8(1) *Federal Reserve Bank of Minneapolis Quarterly Review* 1, and the responses to them: S. Sumner, 'Colonial Currency and the Quantity Theory of Money: A Critique of Smith's Interpretation', (1993) 53(1) *Journal of Economic History* 139; P. Bernholz, 'Inflation, Monetary Regime and the Financial Asset Theory of Money', (1988) 4(1) *Kyklos* 5. See also F. Grubb, 'Is Paper Money Just Paper Money? Experimentation and Local Variation in the Fiat Monies, Issued by the Colonial Governments of British North America, 1690–1775', National Bureau of Economic Research (NBER) Working Paper No. 17997 (April 2012) (abstracting out liquidity value and modelling paper money as a zero-coupon bond). We could analogize the situation to an 'origins' story in which the stakeholder provides a token that will exonerate the holder from a future tax, but takes a lower in-kind contribution than would be due in the future. Alternatively, the stakeholder could take the same in-kind contribution that would be due in the future but provide a token that carried extra value because it furnished cash services in the interim, as discussed below. A coercive stakeholder could also simply operate by force, requisitioning assets without a discount and without concern that a creditor received a token that furnished cash services.

[23] See, e.g., Sumner, above n 22. Sumner's model, like the asset-pricing alternatives, was built to explain colonial America, a world without circulating credit. The proliferation of credit would complicate the way people calculate price.

Second, money as a strategy changed relations in the private world: a unit of account that entailed value could be used by individuals as well as the stakeholder. The worker who initially received the token in our story need only be allowed to trade it to another, who could use it on his or her own behalf at the reckoning. Making a token transferable would be a simple modification but—in a world without a shared measure, medium, or agreed-upon mode of payment—a revolutionary one. Once the token was allowed to travel, the person with it held an item that every other person who owed a contribution to the centre would be willing to take in exchange for goods. That is, we have a unit that represents material value relevant to everyone (or virtually everyone) in the society, given their common relationship to the stakeholder. Thus assured of the token's value, each person would be willing to give and take it. The unit creates a shared standard of value, making prices possible in the process; it can move hand-to-hand; and it provides a payment that is secure as long as the stakeholder (or the political society he often symbolizes) lasts.

Between the time a token issues and the time it is taken back, the tokens provide an interim service to individuals that is just as substantive as their fiscal value to the group. That service would be very valuable—singularly valuable—in a world that was otherwise without any shared standard of measure, mode of exchange, and means of payment made reliable by enforcement. In that world, a person will work early for tokens because he can use the tokens to make productive transactions. In the world where the innovation of money is helpful as cash, those with goods to trade will want the tokens too. The economic models that theorize money's fiscal value, described above, recognize that people attach additional value, a kind of cash premium, to money insofar as they value the services it provides. According to those models, rather than discounting a token good for taxes in the future as if they were holding a non-productive asset, they may discount it less or not at all. In the latter case, they are treating money as an asset that provides just as much productivity as another resource.[24]

Early English history supports the notion that money is engineered on a fiscal frame and offers a singular service to individuals as an object that can be counted, transferred, and used to pay off obligations. According to most accounts, the Western Roman Empire ran its highly monetized economy on a fiscal base: it drove coin into circulation by spending and taxing robustly to support its expansive military and administrative state. Indeed, Simon Esmode Cleary argues that the British economy collapsed so completely in the fifth century because it was tied so closely to the Roman system: when imperial taxation ended, so also did the force that pumped money into the system.[25] There is little doubt that the economic meltdown in post-imperial Britain—a recent history calls the event catastrophic—occurred when the systems of exchange supported by Rome fell apart. For two centuries, the archaeological record suggests that money ceased to function. People lived on their own; they attempted to become self-sufficient rather than specializing their production to any significant extent.[26] Their experience suggests that when a 'working' money arrived, people would attach a premium to it as cash.

[24] People are acting as if the service provided by money is worth the real interest rate, a cost they are paying by holding cash without the deflation that would effectively return value to them (as prices fell and the token gained value). See, e.g., Smith, 'American Colonial Monetary Regimes', above n 22, at 533; Calomiris, above n 22.

[25] A. S. Esmonde Cleary, *The Ending of Roman Britain* (1989), at 138; see also Spufford, above n 14, at 14; Wickham, above n 13, at 308.

[26] See above text accompanying nn 13–18. The evaluation that the breakdown of material culture was a 'catastrophe', compared to the merely recessionary crisis in Gaul, is from Chris Wickham. See Wickham, above n 13, at 307.

Money becomes 'real' then, when we adjust the Lockean story. Rather than emerging from a convergence of independent deals, money arises from a co-ordinated initiative, one fiscally engineered and productive of cash services to individuals. In fact, many accounts about money suggest just that character—we might sample the evidence provided by coin itself, the practice of free-minting, judicial commentary, and academic theorizing.

Coins provide testament to their own creation. They began to circulate in Britain in the early seventh century, appearing first as gold scillingas and expanding when the English began minting silver sceattas in the 670s.[27] While gold coin often imitated Roman imperial precedents, silver sceattas boasted beautiful and varied designs, including animal forms, diademed busts, and figures like a long-haired or helmeted man with a hawk. For some scholars, the variety suggests that money emerged as a private industry.[28] For others, however, the plethora of types reflects the political geography of Britain at the time—small 'closely governed' kingdoms and maritime towns or 'wics', each of which could well have produced its own coin. According to that reading, many of the symbols that grace sceattas—the bust, heraldic animals, the helmeted figure—are imprimaturs of the community's stakeholder, a small ruler or one of his delegates.[29] That diagnosis fits neatly with the notion that collectives of many types can 'make money' according to the strategy described above.[30]

In any case, by the end of the eighth century, English rulers made their authorship of coin unambiguous. Beginning in Northumbria, and then in Mercia and Wessex, kings unified larger territories and built stronger political structures. Their authority was imprinted on their money: like the coin of the Roman Empire, it carried their names and portraits and was produced by the moneyers they controlled. Dues, tax burdens, and exchange all increased, along with specialization in the production of commodities like pottery. That is exactly the pattern we should expect if money is created on a fiscal frame and provides cash services as it circulates.[31] The power of the Anglo-Saxon kings that followed, along with sophistication of their minting and revenue raising machinery, has become legendary.[32]

The practice of making commodity money provides another form of evidence that corroborates the 'real' story. Note that in the account above, tokens produced by the stakeholder acted as the unit of account. The tokens could be made of anything, as long as they were exclusive to the stakeholder and could not be imitated; otherwise, people could fraudulently multiply the number of receipts that circulated.[33] Making tokens out of a material that was scarce, durable, and difficult to work—thus long-lasting and hard to counterfeit—made great sense under the circumstances. The English, like most Europeans more generally, turned to silver. Under a system called 'free-minting', they opened mints that sold inhabitants coin on demand: buyers brought in a pound of bullion, for example,

[27] Naismith, above n 15, at 5; Williams, above n 14, at 161.

[28] Naismith, above n 15, at 37; P. Grierson and M. A. S. Blackburn, *Medieval European Coinage*. Vol. 1: *The Early Middle Ages (5th–10th Centuries)* (1986), at 158–9.

[29] D. M. Metcalf, *Thrymsas and Sceattas in the Ashmolean Museum Oxford* (1993), vol. 1, at 12.

[30] The diagnosis gains additional breadth when we note the versatility of the monetary strategy: a community can put a coin into play partially and improvisationally. Similarly, the tokens might travel only within certain circles, elites, for example, or among town-dwelling traders who paid dues, bought, and sold in coin.

[31] Metcalf, above n 29, at 113; Naismith, above n 15, at 7. For the political development of these early kingdoms, see Wickham, above n 13, at 303; compare Loveluck et al., above n 15, at 119.

[32] P. Wormald, *The Making of English Law: King Alfred to the Twelfth Century*. Vol 1: *Legislation and its Limits* (2001); Naismith, above n 15, at 87; Stewart, above n 15, at 49; Spufford, above n 14, at 90.

[33] Indeed, units of account could be entries in an account book, so long as they could not be illicitly reproduced. See, e.g., M. McLeay, A. Radia, and R. Thomas, 'Money Creation in the Modern Economy', (2014) 1 Q1 *Bank of England Quarterly Bulletin* 1.

and got it back in coined form less a small charge for the work. Thus the mint might produce 242 pennies from a pound of silver, keep a fee of 12 pence for the moneyers and the king, and return 230 pennies to the buyer.[34] The counterintuitive label, 'free-minting', came from the fact that the government stood ready to coin as much money as people wanted, provided they paid the fee.

By definition, the system identified the value of silver in coined form with the value of the tax obligation. When a person turned in 230 pennies in taxes, he or she used it only for its fiscal value.[35] Hypothetically, the taxpayer could hand over the pound of bullion, leaving the government to make coin and pay itself its minting fee. The tax and the fee could be conceptualized together as a larger levy. Despite that possibility, people went to the mints and paid for coin over and above the amount they needed for taxes. They acted because they valued the cash services of money: when others felt the same way, prices in coin were low because people would give more goods for each coin. That is, they preferred having money to having bullion, even bullion that amounted to a greater amount of silver. People 'bought' coin, then, because although they received less silver from the mint, they received it in the form of coin—and coin carried a premium that made the cost worthwhile. Eventually, as people continued to go to the mint to buy coin, prices would rise: pennies would lose value because more were circulating, all other things being equal. At a certain point, prices would be high enough that inhabitants would rather have their silver bullion than a greater supply of coins, and they would stop going to the mints.[36]

In its very design, free-minting demonstrated both the fiscal component of money's value and the fact that coin often bore a premium as cash over silver bullion. As the system operated, it compelled people to buy enough coin to cover their obligations to the government; otherwise, they would pay the consequences in confiscated assets, whether in bullion or goods. The government had thus contrived a way to produce tokens and at the same time charge for them. In turn, individuals supplemented the amount of coin needed to satisfy the fiscal needs of government: to the extent that they wanted more money, they bought more coin at the mint. Throughout this time, the system protected the government and community from inflation by controlling the amount of money produced: those buying additional money 'paid' for it by creating more coin that had innate value cognizable in the taxed unit—the tax had, after all, been identified with a certain amount of silver due, plus whatever cash premium coin carried. Put another way, there was no danger from loss caused by oversupply of money because people stopped buying it as soon as they valued silver bullion more highly than coin, a decision prompted when prices rose above the point at which minting was worthwhile. In short, free-minting produced money tied, coin by coin, to the value of the units due for taxes while allowing people to buy as much coin as they could to satisfy their desire for cash.

Commentators have theorized money in ways that comport with the account developed above. In many ways, the courts have witnessed most directly to the character of money as they enforce it. In keeping with the example of English 'free-minting' is the early modern case that confirmed the sovereign power to define the unit of account. *The Case of the Mixt*

[34] See, e.g., A. Redish, *Bimetallism: An Economic and Historical Analysis* (2000), at 27. For a contemporaneous account comparing English charges to others on the Continent, see, e.g., 'Assay of the New Money' [1248], in *The* De Moneta *of Nicholas Oresme and English Mint Documents*, ed. and trans. C. Johnson (1956) 53, and 'A Treatise on the New Money' [*c*.1280], in *The* De Moneta *and English Mint Documents*, 65.

[35] 230 pennies would be an absurdly high tax; it is only used here to show the relationship between coin and bullion values.

[36] In fact, if prices kept rising, people might even begin to melt existing, increasingly low value, pennies. At the 'melting point', they would prefer to have the silver, rather than the coin itself. See, generally, T. J. Sargent and F. R. Velde, *The Big Problem of Small Change* (2002).

Money arose in the early seventeenth century, occasioned because Elizabeth I had debased the silver coin circulating in Ireland. Her action left it unclear whether creditors to private contracts should be paid in the original coin of high intrinsic value or the replacement coin of reduced silver content. If money depended on the stakeholder's authority to determine what passed current, a matter decreed by the government and implemented when it taxed and spent, then the new money with its lower intrinsic content must be a legal mode of payment. If, to the contrary, money meant an amount of silver, the product of private agreement, then the debased money was invalid as such payment.[37]

The Mixt Money Case discussed in Chapter 12 in this volume, vigorously confirmed the Queen's authority.[38] '[T]he most precious and pure metal' could not be money, the jurists reasoned, without 'the extrinsic good' provided by the sovereign form. It was not the 'natural material of the body of money', which composed it, they continued, quoting Molinaeus (Charles DuMoulin), 'but its imposed value that is the form and substance of money'. That was 'not of a physical body, but rather a contrived one'.[39] Invoking civilian as well as common law sources, they continued with Molinaeus, '[b]y law it matters not whether more or less silver is contained within it, so long as it is official (*publica*), genuine, and legitimate'.[40] They quoted the Italian jurist Baldus, 'With coinage, one should pay more attention to its use and circulation than to its substance'.[41] Finally, they came to the Roman Seneca, '[b]oth the man who owes gold coins and the man who owes leather imprinted with an official stamp is said to be in debt.'[42] Each authority suggested that money was a matter collectively engineered to entail value anchored by its use in a polity.

The gathering of evidence that money is fiscally engineered and carries a cash premium ultimately includes academic commentators. Adam Smith's observation takes us forward to the world of paper money. Smith, without wasting a word, conveys both the logic that fiscal activity fixes value in a currency, and the reality that the currency can provide cash services as effectively as did the silver or gold coin it displaces:

> A prince who should enact that a certain proportion of his taxes should be paid in a paper money of a certain kind might thereby give a certain value to this paper money, even though the term of its final discharge and redemption should depend altogether upon the will of the prince. If the bank which issued this paper was careful to keep the quantity of it always somewhat below what could easily be employed in this manner, the demand for it might be such as to make it even bear a premium, or sell for somewhat more in the market than the quantity of gold or silver currency for which it was issued.[43]

Smith spoke during a century of experimentation with paper money. Bank money, public debt, and commercial notes all invited analysis as credit forms. By the following century, credit had become paramount: the rise of deposit banking would expand the money supply in real terms until it was more than five times larger than it had been on the eve of the

[37] *Gilbert v. Brett ('The Case of Mixt Money')* (1605) Cobb. St. Tr. 114. The case was decided by the Privy Council acting as the relevant judicial authority for Ireland.

[38] See Chapter 12 of this volume.

[39] *Gilbert v. Brett ('The Case of Mixt Money')* (1605) Cobb. St. Tr. 114, at 124 ('non materia naturalis corporis monetae, set valor impostitius [sic] est forma est substantia monetae, quae non est corpus physicum set artificiale').

[40] Ibid., at 125 ('de iure non refert sive plus sive minus argenti insit, modo publica, proba, et legitima moneta sit').

[41] Ibid. ('in pecunia potiu attenditur usus et cursus quam materia').

[42] Ibid. ('Aes alienum habere dicitur, et qui aureos debet, et qui corium forma publica percussum.')

[43] A. Smith, 'On Money considered as a particular Branch of the general Stock of the Society, or of the Expense of maintaining the National Capital', in A. Smith, *An Inquiry into the Nature and Causes of The Wealth of Nations* (1937 [1776]).

Glorious Revolution.[44] In the early twentieth century, Georg Knapp would dub money a 'chartal' form, adopting the Latin term for 'ticket' to denote money's character as a token that could pay off a debt, most particularly a debt due from the state. The approach marginalized the commodity content of money. As Knapp pointed out, 'a man who gets rid of his debts' spent little time considering what material made up his means of payment.[45] He cared instead that the state 'when emitting it, acknowledges that, in receiving, it will accept this means of payment'. Knapp's 'state theory of money' emphasized the fiscal engineering that undergirded money's value.[46]

Knapp himself spent little time analysing the cash premium that money carried. That element was, however, a focal point for John Maynard Keynes, who recognized that people's desire to hold money drove a substantive wedge into neoclassical models of equilibrium in the market for real goods. The legacy informed later schools of monetary theory. Some explicitly reject the 'convergence' story of money. Modern monetary theory and a variety of sociological approaches locate the unit of account as a feat of fiscal engineering, which is expanded by modern credit relations.[47] Perhaps more surprising, theorists within the mainstream neoclassical tradition are beginning to explore fiscal theories of value and attend to the cash services of money.[48]

Given their great need and unique capacity, groups acting through stakeholders have probably invented money, again and again, in societies as different as Mesopotamia and early England.[49] When we embed an individual within a domestic community and consider the way they interact, money appears a relatively obvious strategy to mark and move resources. Intervening into the relationships of an individual and the group he or she inhabits, money fixes value that is neither abstract nor symbolic. To the contrary, it is as real as the relationships that give it substance. That takes us to law: it is the process that puts the relationships making money into practice.

III. The Place of Law

Money persists over time because, or insofar as, it is institutionalized. The relationships described above are matters of governance. They are carried out in law, understood expansively to include the wide variety of formal and informal practices of decision, interpretation, and enforcement that communities adopt to channel human interaction.

[44] The figure is adjusted for inflation and population. In other words, people kept on hand more than five times as much purchasing power in money form as they had previously held; that amount would rise even more precipitously in the century to come. B. R. Mitchell, *British Historical Statistics* (1988); Desan, above n 6, at 399.

[45] Georg Friedrich Knapp, *The State Theory of Money*, trans. H. M. Lucas and J. Bonar (abridged edn, 1924), at 52.

[46] Ibid. Knapp actually held a 'convergence' view of money's origins, a curiously metallistic twist on a mentality otherwise emphatically nominalist. In his view, 'money' took lasting shape when the state, inheriting an 'exchange commodity', legislated a substitute for it that was of different commodity value. After the transition, money's value depended on its legal form. See ibid.

[47] See, e.g., L. R. Wray, *Modern Money Theory: A Primer on Macroeconomics for Sovereign Monetary Systems* (2012); L. R. Wray, *Understanding Modern Money: The Key to Full Employment and Price Stability* (1998); Bell, above n 12; G. K. Ingham, *The Nature of Money* (2004); Peacock, above n 11. Another group of post-Keynesians extend the logic of credit-based money creation to explore endogenous money creation by the banking sector. See, e.g., M. Lavoie, *Post-Keynesian Economics: New Foundations* (2014); A. Graziani, 'The Theory of the Monetary Circuit', in M. Musella and C. Panico (eds), *The Money Supply in the Economic Process: A Post-Keynesian Perspective* (1996) 516.

[48] See, e.g., Grubb, above n 22; Calomiris, above n 22; Smith, 'American Colonial Monetary Regimes', above n 22 ; Smith, 'Money and Inflation in Colonial Massachusetts', above n 22.

[49] See, e.g., Peacock, above n 11; Desan, above n 6, at 37–69.

Law, after all, sets up all the relationships in the story of money's invention. Perhaps most obviously, it defines the contributions that individuals make to maintain their stake in a community. As we have seen, the stakeholder as the governing agent holds a pivotal position because he is the only creditor common to everyone. They owe him 'tribute', 'tithes', 'rents', 'dues', 'fees' for service, 'penalties', or 'taxes'. The extent of those obligations—and thus reach of the centre into the community—depends on the way those duties are interpreted and enforced. Furthermore, law shapes not only the extent but the nature of the obligations. It determines how they are distributed and by what criteria. Taxes or other fees may be widely shared and apportioned in ways the population accepts. Or, they may be harshly levied on weaker members. 'Money' can be a matter democratically engineered or coercively imposed, depending on the infrastructure that supports it.

That is just the beginning: a working money is a piece of legal engineering all the way down. The unit given to certify a contribution takes effect, to give another example, because the stakeholder recognizes it as a claim of service in the hands of its holder. Put another way, the token is a 'liability' that the centre is committed to accept.[50] To speak of a 'claim' or 'liability' refers to a legal category that defines the content of commitment. Indeed, the most conspicuous disputes involving money arise when a government revises the unit of account it takes in payment, also known as devaluation (or, less frequently, revalution). The legal issue, as *The Case of the Mixt Money* framed it, is whether public needs justify the monetary change or, by contrast, the sovereign liability should remain constant.[51]

The stakeholder himself acts and reacts in ways channelled by his authority. That authority, generically assumed above, takes much more specific shape as societies work out the powers legitimately held by a warlord, king, executive or legislature, judge, bureaucrat, or for that matter, corporate head, or religious leader. To leave the Anglo-Saxon stage for an early American example, colonial legislatures there restructured the imperial constitution when they asserted the authority to issue paper money. As those assemblies spent 'bills of credit' into circulation, they claimed new powers to appropriate on behalf of their polities. Then, they routed the paper back to newly created colonial treasuries when they taxed, cutting the royal governors and their tax receivers out of the action.[52] In effect, one stakeholder or set of stakeholders replaced another by rechanneling the authority to create money.

In fact, a community determines which goods and services can be alienated, and thus what counts as a 'commodity', when it decides what items or services money can buy. The sale of land, chartered and unchartered, was a complex issue in the second half of the first millennium; feudalism would take its character in part from those conditions.[53] Similarly, a contemporary code (AD 880) imposed restrictions on any sale involving 'slaves, or horses, or oxen'. Other provisions required transactions over a certain amount to be witnessed or made only within a given town.[54] Presumably, transactions involving money would not be

[50] See, e.g., A. M. Innes, 'What is Money?', (1913) 30 *Banking Law Journal* 377.

[51] For Knapp, the government's authority over the unit of account that it took was the root of its legal power to define money. See Knapp, above n 45, at 39. The argument here, by contrast, locates that legal determination as one of many critical interventions, including the definition of collective obligations and the enforcement of contracts more generally.

[52] See, e.g., E. J. Ferguson, 'Currency Finance: An Interpretation of Colonial Monetary Practices', (1953) 10(2) *William and Mary Quarterly* 153; J. P. Greene, *The Quest for Power: The Lower Houses of Assembly in the Southern Royal Colonies, 1689–1776* (1972); C. A. Desan, 'From Blood to Profit: Making Money in the Practice and Imagery of Early America', (2008) 20(1) *Journal of Policy History* 26.

[53] See Wickham, above n 13, at 314.

[54] See Law Code of Alfred-Guthrum, repr. in E. Screen, 'Anglo-Saxon Law and Numismatics: A Reassessment in the Light of Patrick Wormald's *The Making of English Law*', (2007) 77 *British Numismatics Journal* 148, at 164 (requiring that the buyer have 'the knowledge of his warrantor', assumedly as witness); Law Code of I Edward,

enforced if they were improperly made or inappropriately targeted a resource that could not be considered a 'commodity'. Later societies would decide, notoriously, to allow the sale of Africans. Debate over the sale of free labour continues, with disputes about what constitutes real choice—the option of other employment, a social safety net, equal educational opportunity.[55] Those debates are joined by a myriad of others, contests over what else is 'for sale', from honours to votes, sex to kidneys.

Conversely, while parties can trade without reference to money, that medium carries particular authority in many transactions; it is a privilege that opens up economic exchange. As a product promoted by a stakeholder to mobilize resources within a community, money serves the centre well if it circulates widely and is in increasing demand. Moreover, a stakeholder might independently value the faculty that money offers to expand certain kinds of exchange among subjects or citizens, understanding it as a moral or commercial good. For both reasons—a desire to strengthen demand for a sovereign medium and a determination to support economic exchange among individuals—officials often favour transactions made in money, enforcing them as matters that are good for the whole. That proposition illuminates the norm, which was early adopted by the English common law courts, that the sovereign's coin 'counted' for purposes of paying off an obligation, regardless of changes in metal weight. Indeed, it was the only mode of payment *that* counted. By the High Middle Ages, the writ of 'debt' was defined in a way that excluded all pleas but those claiming payment in the unit of account as currently decreed.[56]

The point is that the very definition of what can be 'sold' is determined by working out the legal operation of money. The outcome created by keeping money out of some transactions and demanding it for others shapes what we recognize as 'the market'. When we consider that conclusion in light of money's formative role engendering exchange in the first place, the market loses its aura of autonomy. Rather, the market has been dependent on its medium, money, from start to finish. And money, it turns out, has been dependent on law, that very human project of decision that defines our obligations, the government's commitments, its structure, and what we call commodities.[57]

Understanding money as a legal institution opens it to exploration. Rather than a neutral or constant medium, money is a process that has distinctively affected the communities that make it in ways that have changed over time. In closing, we can briefly tour a trio of monetary institutions, each with great stature in the Western tradition. Their power and peculiarities demonstrate the impact of money and its legal design.

Consider, for example, the monetary order that included 'free-minting,' described above. England for more than five centuries used that method to produce its currency. The decision tied its money supply to a commodity content for coin—the scarce and expensive metal, silver. Because Europe more generally had adopted the same method, competition for silver across the region became a destabilizing force. Sovereigns lightened coin

repr. in Screen, 'Anglo-Saxon Law and Numismatics', 148, at 165; Law Code of II Athelstan, in Screen, 'Anglo-Saxon Law and Numismatics', 148, at 165.

[55] See, e.g., A. D. Stanley, *From Bondage to Contract: Wage Labor, Marriage, and the Market in the Age of Slave Emancipation* (1998); R. J. Steinfeld and S. L. Engerman, 'Labor—Free or Coerced? A Historical Reassessment of Differences and Similarities', in T. Brass and M. van der Linden (eds), *Free and Unfree Labor: The Debate Continues* (1997) 118.

[56] See Desan, above n 6, at 83–97; Fox, 'The Structures of Monetary Nominalism in the Pre-Modern Common Law', (2013) 34(2) *Journal of Legal History* 138, at 160.

[57] The aspects of legal decision sampled here only begin to unpack the important legal determinations. We could continue to consider other aspects of money's legal design, like the kinds of circulating public finance we assume (public bonds, annuities, lotteries), the kinds of private credit we allow (futures, private derivatives), or the limits on negotiability we impose (bills of exchange, promissory notes, claims to collateral securing debt).

surreptitiously in peaceful times to attract more bullion to their mints; they debased money more frantically in times of war, throwing economic activity into tumult as they struggled to keep silver flowing to their mints and thus money flowing to their forces.[58]

The English manipulated their coinage much less than their European counterparts, but that decision created its own problems. While the Italian city-states, through repeated debasements, created low value moneys that supported active trading even at the level of small deals, England's penny remained so powerful that its purchasing power was too large for many transactions. Inhabitants made most everyday exchange on the basis of credit instead. But that borrowing, made to consume instead of invest, left a high proportion of the population vulnerable to debt litigation in hard times. Commodity money created a harsh environment for most of those who used it.[59]

The search for silver led Europeans to expedients that eventually remapped the world: the ventures that took them to Africa and across the Atlantic aimed to find silver and gold, prime among other resources. The contest for control of those resources drove colonial conquest and precious metal extraction with consequences that were tragic for indigenous populations.[60] Commodity money had another impact on the New World that was transformative at the monetary level: England's attachment to its traditional money led its American colonies to experiment with a whole new kind of currency, a second example on our tour of monetary institutions.

North American settlers innovated a new monetary form because British mercantilist regulation rendered them unable to keep enough silver and gold coin on their shores. Chronically short of ways to support their militias, they began to pay them with paper. Bills of credit were IOUs issued by colonial legislators and accepted back for local taxes. In fact, the basic hypothesis about how communities establish money, proposed above, describes the American experience closely, down to the presence of stakeholders and token money. Provincial assemblies claimed a role as stakeholders and created token money when they inaugurated a fiat currency that had no commodity content. In fact, a more transparent form of tax anticipation money would be hard to find.[61]

The innovation had constitutional momentum. Given how essential money creation was, it located the assemblies at the centre of provincial politics. Paper money became an issue that brought people to the polls. Over the course of the eighteenth century, pamphlets reflect an expanding sense of economic self-determination among colonists as well as a building commitment to electoral politics. Legislative power increased, as the assemblies imposed taxes and wielded the appropriation power brought by paper money. When Parliament, after decades of somnolence, reasserted its claim over colonial revenue, the effect was inflammatory. The American slogan, 'No taxation without representation', takes on new meaning in a monetary light: Americans were defending their right to shape their own political economies by controlling currencies—currencies they well understood to depend on local authority over taxation—when they rebelled.[62]

[58] See C. M. Cipolla, 'Currency Depreciation in Medieval Europe', (1963) 15(3) *Economic History Review* 413; Spufford, above n 14, at 289.

[59] For dimensions of these dramas, see Spufford above n 14; Sargent and Velde, above n 36; M. Kowaleski, *Local Markets and Regional Trade in Medieval Exeter* (1995); N. J. Mayhew, 'Population, Money Supply, and the Velocity of Circulation in England, 1300–1700', (1995) 48(2) *Economic History Review* 238; Desan, above n 6.

[60] M. De Cecco, *The International Gold Standard: Money and Empire* (1984).

[61] See generally L. V. Brock, *The Currency of the American Colonies, 1700–1764: A Study in Colonial Finance and Imperial Relations* (1975); Ferguson, above n 52.

[62] See, e.g., E. J. Ferguson, *The Power of the Purse: A History of American Public Finance, 1776–1790* (1961); J. A. Ernst, *Money and Politics in America, 1755–75: A Study in the Currency Act of 1764 and the Political Economy of Revolution* (1973); Desan, above n 52.

The early American system created money that was just as quirky as its free-minted predecessor. Because fiscal activity provided the only source of the paper money, the colonial medium ebbed and flowed sharply as provincial governments spent and taxed. That fluctuation disrupted economic growth and led Americans to experiment with ways to make money more available for private exchange. Just as in commodity money regimes, governments engineered methods to supplement the money supply. Rather than selling coin to inhabitants, they attempted land banks and expansions of public spending, strategies that reinforced the populist culture of early America.[63]

Other problems were more explosive, particularly the susceptibility of colonial tax anticipation currencies to depreciation if participants began to doubt the government's ability to tax. At times of exigency—the Revolution for example—officials found it almost impossible to collect revenues, and their moneys eventually lost value. Some commentators, including Benjamin Franklin and John Adams, saw the loss of value as an inflation tax that inevitably and perhaps appropriately spread the costs of the War. Others, including Alexander Hamilton, understood devaluation as a national default.[64] The decline of the continental dollar put the controversy over money's form at the heart of debate over the United States Constitution.

Americans would ultimately choose another way to engineer their monetary order altogether; it provides the last design alternative sampled on our tour. Rather than free-minted coin or tax anticipation money, bank-issued currency would become the major money form in the United States and in much of the modern West. The ascendance of bank-issued currency, a revolution in its own right, returns us in a curious way to Locke. The philosopher approached money as a matter that should flow from private agreement. A similar politics informed the decision to involve private investors in money creation.

Pioneering modern bank money in the 1690s, the English government licensed the Bank of England to produce notes representing the sovereign unit of account. The privilege was novel; both free-minted coin and legislatively issued tax anticipation currency had always remained government monopolies. Now, the government borrowed from a group of investors, lodging public debt with the enterprise and taking its loan in bank currency that promised to pay specie on demand. The Bank of England kept a store of coin on reserve; later bank systems would also use government bonds or bills of credit as an asset.[65]

The English government spent in Bank notes and, from early on, accepted those notes for taxes. The government could simply set the notes it collected off against its outstanding debt with the Bank. Given that arrangement, Bank notes remained a sovereign liability; in

[63] Land banks offered a new way of tying popular demand for cash to a supply designed to offer security. Rather than putting up silver, people put up land as collateral for notes and paid interest on their loans. See, e.g., T. Thayer, 'The Land-Bank System in the American Colonies', (1953) 13(2) *Journal of Economic History* 145; T. Bouton, *Taming Democracy: 'The People', The Founders, and the Troubled Ending of the American Revolution* (2007); R. Lester, 'Currency Issues to Overcome Depressions in Pennsylvania, 1723 and 1729', (1938) 46 *Journal of Political Economy* 324; R. Lester, 'Currency Issues to Overcome Depressions in Delaware, New Jersey, New York, and Maryland, 1715–37', (1939) 47(2) *Journal of Political Economy* 182.

[64] See B. Franklin, 'Remarks and Facts Relative to the American Paper Money', *Pennsylvania Chronicle* (25 May–1 June 1767); J. Adams, 'Letter to Comte de Vergennes, 22 June 1780', in F. Wharton (ed.), *The Revolutionary Diplomatic Correspondence of the United States* (1888), vol. 3, 805; A. Hamilton, 'Report of the Secretary of the Treasury, 14 December 1790', in C. B. Bickford and H. E. Veit (eds), *Documentary History of the First Federal Congress of the United States of America*. Vol. 4: *4 March 1789–3 March 1791* (1986) 174.

[65] See An Act for Granting to Their Majesties Several Rates and Duties upon Tonnage of Ships, (1694) 5 W. & M., C. 20, S. 19, *Statutes at Large* (3rd edn, 1768–70), vol. 3, 561; W. Paterson, *A Brief Account of the Intended Bank of England* (1694); J. H. Clapham, *The Bank of England: A History* (1970). For a detailed reconstruction of the way Bank of England notes became the unit of account, see *Making Money*, above n 6, at 295–329, 360–89. For an example of a bank built on government debt, see *Briscoe v. Bank of Commonwealth of Kentucky*, 36 U.S. 257 (1837).

fact, they could be theorized as simply another form of tax anticipation money. But the new architecture mattered enormously. It institutionalized the government's commitment to tax, formalizing it in the figure of a debt to investors that needed to be repaid. Those investors constituted an elite lobby at the political level and asserted contract rights to payment at the legal level.[66]

Even more remarkable, the mechanism pacing money creation was now a financial one. Bank notes issued when the government decided to borrow and the investors agreed to lend. The government paid for the arrangement, legitimating a profit incentive as the appropriate driver for money creation. Almost contemporaneously, the government began selling circulating bonds to the public. Both Bank investors and bond holders drew 'interest'. Far from the vice it had represented through the medieval era, self-regarding calculation came to seem an act that could also benefit the public.[67] Modern money, as it developed, was restructuring the way government operated, politics played out, and people conceptualized their own actions.

The pattern would take on enormous significance when it spread. Over the course of the following century, other governments established national banks of issue. As they did, they assimilated the operating principles that the English had developed.[68] The global order now shares an approach to money creation that appoints bankers to pace the process, identifies profit-driven calculation as the appropriate compass, and prioritizes the rights of creditors over a more diffuse public. That cluster of characteristics undergirds modern capitalism.[69]

The everyday face of the system is one of its most noteworthy characteristics. After establishing the Bank to lend to the government, the English allowed it to lend by bank currency to individuals. The practice expanded when the government and those following its example granted that licence to commercial banks. In the modern world, those banks decentralize the issue of state-denominated units of account, creating the money supply as they allocate credit. Highly integrated into the legal design of money, commercial banks depend on national payment systems to clear and on central banks to provide support as lenders of last resort. Working according to the profit-centred logic modelled by the Bank of England, they charge individuals a fee for creating money.[70]

The activity of commercial banks effectively supplements the money supply, analogous in that sense to the coin available for purchase under free-minting, and the notes issued by colonial land banks. The scale of production, however, has increased enormously. By the end of the twentieth century and using the English pound as an example, deposit creation by commercial banks had helped expand the money supply in real terms to about sixty-five times its size when the Bank opened.[71] In the last two decades, that abundance of liquidity

[66] See *The Case of the Bankers* (1696–1700), in T. B. Howell (ed.), *A Complete Collection of State Trials* (1812), vol. 14, 1, at 64. For the influence of bank creditors, see B. G. Carruthers, *City of Capital: Politics and Markets in the English Financial Revolution* (1996).

[67] See Desan, above n 6, at 266–94; H. Roseveare, *The Treasury, 1660–1870: The Foundations of Control* (1973), at 22–25. Albert Hirschman recaptures the earlier disapprobation attached to 'interest' and the timing of its transformation in his history: A. O. Hirschman, *The Passions and the Interests: Political Arguments for Capitalism Before its Triumph* (1997).

[68] See, e.g., C. Goodhart, *The Evolution of Central Banks* (1988); C. Goodhart, Bank for International Settlements Committee on Payment and Settlement Systems Report, 'The Role of Central Bank Money in Payment Systems' (2003).

[69] See Desan, above n 6.

[70] See, e.g., McLeay et al., above n 33; Wray, *Modern Money Theory*, above n 47; P. Mehrling, *The New Lombard Street: How the Fed Became the Dealer of Last Resort* (2011); M. Lavoie, 'The Monetary and Fiscal Nexus of Neo-Chartalism: A Friendly Critique', (2013) 47(1) *Journal of Economic Literature* 1.

[71] See Desan, above n 6, 3. Deposit creation by commercial banks now accounts for more than 95% of the bank-based money supply, compared to a monetary base of 5% or less. See J. Ryan-Collins, *Where Does Money Come From?* (2011), at 23.

has been enhanced further, almost two-fold in the shadow banking sector, an improvised industry that produces short-term claims which are marketable enough to act as 'near money'.[72]

As the Financial Crisis of 2008 demonstrated, the issues raised by the new process match the magnitude of the money and near-money that it creates. The debate over the power and responsibilities of banks and shadow banks can be understood as a struggle to find new ways to tie money creation safely to a stakeholder's unit of account—today's sovereign currency. Those buying money still put up material resources, tying up collateral in the form of houses or earning potential. They still pay a fee, demonstrating their desire for a resource that offers cash services. The government's new agents still produce tokens, issuing deposits instead of coin. But there the similarity ends. The production of money is more prolific—it rests on the representation of future earnings rather than the acquired capital of bullion. It is also more fragile—it fails more frequently because that promise is harder to cash out than a pound of silver.

The Financial Crisis dispelled the notion that money is a simple matter, one that comes spontaneously into effect. In 2008, responsibility for the system devolved onto the taxpaying public, the collective whose contributions ultimately undergird it. In the years that followed, issues of money design remain front-page news, rightly enough. The role of reserves, capital requirements, and portfolio management; the reach of deposit insurance; the relationship of financial institutions to lenders of last resort—they form the vocabulary of reform in a world with bank-based money. All are issues of legal process. As we make the legal decisions, we will (re)make the money.

[72] See, e.g., G. Gorton, *Slapped by the Invisible Hand: The Panic of 2007* (2010); M. Ricks, 'Regulating Money Creation After the Crisis', (2011) 1 *Harvard Business Law Review* 75; Mehrling, above n 70.

PART I

THE LATE MIDDLE AGES: COINS AND THE LAW

I

MONETARY ENVIRONMENT

3

Currency Depreciation and Debasement in Medieval Europe

Martin Allen

I. Introduction

In 1963, Carlo Cipolla published a seminal essay on currency depreciation in medieval Europe.[1] Currency depreciation can be defined as a fall in the intrinsic bullion value of a precious metal coinage, caused by a reduction of its weight or fineness, or by an increase in the nominal 'money-of-account' value of particular coins. Cipolla uses 'debasement' as a synonym of 'depreciation', but debasement can also be used in a more technical sense as a term referring to reductions in fineness only.[2]

Cipolla argued that currency depreciation was inevitable, and that it could have many possible causes:[3]

1. A long-term increase in the demand for money, related to growth in population, income, or monetization that could only be met by increasing the nominal value of a given weight of bullion.
2. A growth in government expenditure and deficits, creating a need to exploit the coinage for fiscal purposes.
3. The pressure of commercial interests favouring debased coinage.
4. Balance of payments deficits.
5. Mismanagement of mints, allowing malpractice by mint officials.
6. Wear of the coinage in circulation, sometimes aggravated by clipping.
7. Fluctuations in the relative market values of gold and silver.

Cipolla investigated depreciation and debasement in three areas of medieval Europe with very different monetary situations: England, France, and Italy.[4] A comparison of the pure silver in one pound in money-of-account between *c.*800 and 1500 showed England declining from about 330 grams to 172, with a much sharper fall in France from 390 to 22, and four of the principal mints of northern and central Italy worst of all, from 390 to between

[1] C. M. Cipolla, 'Currency Depreciation in Medieval Europe', (1963) 15 *Economic History Review* (new ser.) 413.

[2] N. Mayhew, *Sterling. The Rise and Fall of a Currency* (1999), at 8–9, discusses the two alternative uses of the term 'debasement'.

[3] Cipolla, above n 1, at 413–15.

[4] Ibid., at 415–21.

6 and 13.[5] Cipolla argued that the English currency depreciated very slowly because commercialization was less rapid than in Italy; the wool and cloth trades ensured a favourable balance of payments and good supplies of bullion to the mint; and the aristocracy and powerful interests in parliament were opposed to debasement. England had one strong national coinage, but in France and Italy fragmentation of the currency system into many local coinages promoted depreciation, as mints competed with each other to offer better prices for bullion in debased currency. In France, feudal magnates controlling mints took a leading role in the development of debasement as a source of revenue. In Italy, depreciation was accelerated by the Commercial Revolution of the long thirteenth century, which caused an increase in the demand for money that could not be entirely met by the development of new credit mechanisms. The governments of Italian cities were controlled by mercantile elites who favoured debasement over taxation. After the introduction of a gold coinage by Florence and Genoa in 1252 these elites could insist on payment to them in gold while their workers were often paid in progressively debased silver coins.

Recently John Munro published an alternative analysis of debasement.[6] He argued that the motives for debasements were of two kinds: aggressive and defensive. Aggressive debasements were intended to generate revenue, particularly in time of war, by increasing the margin for the government's profit or *seigniorage* from the coinage, and sometimes also by a growth in mint output resulting from mints being able to offer a higher price in debased coinage for bullion. Defensive debasements might defend a coinage from the competition of foreign mints able to offer better prices due to their own debasements, or they might be a reaction to the deterioration of coins in circulation. This deterioration, if not counteracted by defensive debasements, would eliminate the premium or *agio* between the monetary value of new coins and their bullion value, causing merchants to cease bringing their bullion to the mints, and promoting the culling of the best coins in circulation for their precious metal content. Some debasements officially justified on defensive grounds might, however, have been partly or wholly aggressive in nature. Debasements were consistently opposed by aristocracies and other landed interests, whatever the justification offered for them, because they reduced the real value of fixed incomes from land, but merchants and small farmers might benefit from them. Debasements promoted exports and inhibited imports by their effects on exchange rates, and the inflation they caused usually fell short of real changes in the intrinsic value of the coinage. Munro rejected the contention of Thomas Sargent and François Velde that a desire to remedy chronic shortages of small change was a principal cause of debasement.[7] He also rejected the mathematical model of debasement proposed by Velde in collaboration with Arthur Rolnick and Warren Weber, which is based upon the untenable assumption that debased coinages circulated at their bullion value rather than by 'tale'—nominal or face value.[8]

[5] Ibid., at 415–16, 422. See also comparisons of various currencies with the florin from 1252 to 1500 in P. Spufford, *Money and Its Use in Medieval Europe* (1988), at 291–3, 295–9.

[6] J. H. Munro, 'Introduction', in J. H. Munro (ed.), *Money in the Pre-Industrial World: Bullion, Debasements and Coin Substitutes* (2012) 1, at 4–8, 12–13; J. H. Munro, 'The Technology and Economics of Coinage Debasements in Medieval and Early Modern Europe: With Special Reference to the Low Countries and England', in Munro (ed.), *Money in the Pre-Industrial World*, 15.

[7] T. J. Sargent and F. R. Velde, *The Big Problem of Small Change* (2002), at 5, 7–8, 10, 40, 152, 187, 261, 321, 324; Munro, 'The Technology and Economics', above n 6, at 32.

[8] A. R. Rolnick, F. R. Velde, and W. E. Weber, 'The Debasement Puzzle: An Essay on Medieval Monetary History', (1996) 56 *Journal of Economic History* 789; Munro, 'The Technology and Economics', above n 6, at 15, 18–19.

II. Causes of Debasement

In this chapter I shall re-examine the causes and effects of depreciation and debasement, concluding with a discussion of the responses of representative bodies, ecclesiastical theorists, and lawyers. One major cause of debasement identified by both Cipolla and Munro is the need of mints to keep pace with a natural fall in the weights of coins in circulation, caused by wear or by deliberate clipping or 'sweating'.[9] This was the principal cause of reductions in the weights of the English coinage from the thirteenth century onwards. The weight of a pound of account in English silver coins dropped from nearly one Tower pound in 1279 to only about a half (0.47) Tower pound in 1526, at an overall compound rate of 0.30 per cent per annum. This annual figure is only slightly larger than the upper limit of Mayhew's estimates of the silver coinage's loss of weight by wear and clipping in the late thirteenth and fourteenth centuries.[10] The figures for gold show a similar decline of about 0.35 per cent per annum between 1344 and 1526.[11]

Another major cause of debasement was competition between mints for supplies of bullion, although it can be difficult to separate the effects of this from those of deliberate policies of debasement in pursuit of revenue from the coinage or for the benefit of commercial interests. In France the acquisition of minting rights by counts, bishops and abbots caused a fragmentation of the currency from the tenth century onwards, with progressive debasements of the proliferating feudal coinages at various rates.[12] By 1100 the heaviest and finest French silver *deniers*, such as those of Maine and Toulouse, were worth two or four of the debased *deniers* of some neighbouring territories.[13] The competitive debasement of the French feudal coinages was only effectively halted in the thirteenth century, when the monarchy started to take possession of many feudal mints and the remaining feudal coinages were increasingly subject to regulation.[14] In northern Italy significant growth of the network of mints started in the twelfth century, which was much later than in France. There were only four mints in Italy north of Rome until 1100—in Milan, Pavia, Lucca, and Venice—but mints proliferated in the twelfth and thirteenth centuries.[15] The competing mints debased the silver *denaro* at different rates, fragmenting the currency, as in France.

In England, the existence of a single national coinage from the mid-tenth century minimized internal competition between the mints, but they collectively faced external competition from continental currencies. English mint outputs and profits could be greatly increased by reductions in weight standards, which made the mints more competitive with the mints of other countries, and with the commercial markets for bullion. The comparison of mint outputs before, during, and after four reductions in the weights of the English coinage in Table 3.1 shows that outputs were greatly increased in each case, although the effect lessened with time, as the supply of old heavy coins suitable for

[9] Clipping is the illegal removal of gold or silver from the edges of coins with a pair of shears, for private profit. Sweating achieves the same aim by shaking coins together in a bag or box, producing a residue of precious metal dust.

[10] M. Allen, *Mints and Money in Medieval England* (2012), at 153–5; N. J. Mayhew, 'Numismatic Evidence and Falling Prices in the Fourteenth Century', (1974) 27 *Economic History Review* (2nd ser.) 1, at 3.

[11] Allen, above n 10, at 153, 155–6.

[12] Spufford, above n 5, at 101–3; N. Mayhew, *Coinage in France from the Dark Ages to Napoleon* (1988), at 26–9.

[13] Spufford, above n 5, at 103–4.

[14] H. Miskimin, *Money, Prices and Foreign Exchange in Fourteenth Century France* (1963), at 50–1; Mayhew, above n 12, at 72–3; Spufford, above n 5, at 199–200.

[15] Spufford, above n 5, at 100.

Table 3.1 English mint outputs before, during, and after recoinages

Before recoinage	*Index of annual output*	*Recoinage*	*Index of annual output*	*After recoinage*	*Index of annual output*
1240–7	100	1247–50	430	1250–6	140
1272–8	100	1279–82	1,614–42	1282–90	361
1344–51	100	1351–5	1,036	1355–61	540
1450–64	100	1464–70	1,396	1471–5	608

The annual outputs are indexed at 100 in the four periods before recoinages.

conversion to the new lighter coins was exhausted.[16] The effect of debasement on mint outputs in France is more debatable. Harry Miskimin argued on the basis of his analysis of French mint outputs between 1295 and 1395 that less silver was minted in periods of debasement, in general, and Nathan Sussman has found that the output of three minor French mints declined during a period of debasement between 1419 and 1422.[17] A contrary view has been provided by an analysis of outputs at nine French mints between 1354 and 1490 by Rolnick, Velde, and Weber, which shows that monthly rates of silver output were greater at all of the mints in periods of debasement, although gold outputs were lower at two out of four mints with available data.[18]

England provides two examples of the use of debasement to stimulate the production of much needed small change rather than to increase the output of all of the coinage. In 1335 a shortage of silver coinage was a major subject of debate in a parliament at York, and a statute dealing with various monetary problems included provision for the issue of debased halfpennies and farthings 'for the advantage and relief of the people'.[19] This coinage continued until 1343, when a more general debasement of the English coinage was introduced.[20] In 1445 a petition to parliament about a shortage of halfpennies and farthings claimed that travellers were being obliged to break a penny in two to pay for a halfpenny purchase, and that the shortage of small change was damaging the trade of retailers. Henry VI's government responded with a strictly temporary issue of light-weight halfpennies, which ended in 1447.[21]

There were to be no further debasements of silver small change intended for circulation in England, but in 1492 there was an issue of debased halfgroats for use by an English army

[16] Allen, above n 10, at 282–6, 306–13, 407–10, 415–16, 421. Rolnick et al., above n 8, at 794–5, reach a similar conclusion based upon the mint outputs of five-year periods before and after the weight reductions or debasements of 1344, 1351, 1412, 1464, 1526, and 1542.

[17] Miskimin, above n 14, at 92–3; N. Sussman, 'Debasements, Royal Revenues, and Inflation in France during the Hundred Years' War, 1415–22', (1993) 53 *Journal of Economic History* 44, at 57–8.

[18] Rolnick et al., above n 8, at 793–4.

[19] *Statutes of the Realm*, ed. A. Luders et al. (1810–28), vol. 1, at 269–74 (9 Edward III, Stat. 2); R. Ruding, *Annals of the Coinage of Great Britain and its Dependencies; from the Earliest Period of Authentic History to the Reign of Victoria*, 3 vols (3rd edn, 1840), vol. 1, 210–11; J. L. Bolton, *Money in the Medieval English Economy: 973–1489* (2012), at 163.

[20] A. Hughes, C. G. Crump, and C. Johnson, 'The Debasement of the Coinage under Edward III', (1897) 7 *Economic Journal* 185; P. Woodhead, 'The Early Coinages of Edward III (1327–43)', in J. J. North et al. (eds), *The J. J. North Collection: Edwardian English Silver Coins 1279–1351 with some Supplementary Examples* (1989) 54, at 69–71; N. J. Mayhew, 'From Regional to Central Minting, 1158–1464', in C. E. Challis (ed.), *A New History of the Royal Mint* (1992) 83, at 145; Allen, above n 10, at 149, 162, 175.

[21] *Rotuli parliamentorum ut et petitiones et placita in parliamento*, ed. J. Strachey et al., 6 vols (1767–77), vol. 5, at 108–9; Ruding, above n 19, vol. 1, at 275–6; J. Craig, *The Mint: A History of the London Mint from A.D. 287 to 1948* (1953), at 87; Mayhew, above n 20, at 176; Allen, above n 10, at 361–2. There was a comparable short-lived issue of light-weight single and double mites in Burgundian Flanders in 1457–8, in response to a shortage of small change (J. H. Munro, 'Deflation and the Petty Coinage Problem in the Late Medieval Economy: The Case of Flanders, 1334–1484', (1988) 25(4) *Explorations in Economic History* 387, at 409–10).

in France, using silver collected for a 'benevolence' in support of Henry VII's French expedition.[22] After Henry VII's rapid agreement of a truce with the French, a proclamation declared that he had prepared an expedition to France 'where the coygne currant is full sleighte and of fulle smalle valour', and in order to conserve the stock of good money in England he had ordained 'a certeyne somme of penys of ijd. [halfgroats] more feble and of less value thane his coigne currant', to be used only to supply the needs of the army in France. Contrary to the King's intentions some of these bad coins had been brought back to England. They would cease to be legal tender from 14 January 1493 and could be exchanged for good money at par until 2 February 1493.[23]

It will be seen that the English debasements of 1335–43, 1445–7, and 1492 were all strictly temporary and limited in their extent, providing no real support for the contention of Sargent and Velde that the provision of small change was a major cause of debasements.[24] David Sorenson has argued that in late medieval France debasements could reduce the supply of already debased small change or 'black money' (*monnaie noire*), by encouraging the export or melting of these coins for their silver and copper contents, and by discouraging the production of new small coins: because their relatively high cost of production per unit of value was not consistent with the pursuit of profit from the coinage.[25]

In Italy the *moneta piccola* of the debased *denaro* and its multiples of four (the *quattrino*) and six (the *sesini*) met the need for small change, but this was a largely fortuitous result of a long-term process of competitive debasements. The introduction of large coins of good silver (the *moneta grossa*) from around 1200 and a gold coinage from 1252 created a three-tier system of coinage. The commercial interests who dominated the administration of the towns of northern Italy benefited from the fact that they sold their goods for gold while they often paid their workers in the depreciating *moneta piccola*.[26] Debts and professional fees were reckoned in gold, giving creditors and the professional elite of Italian cities a vested interest in the stability of the gold coinage.[27]

The pressures of commercial interests and the competing needs of different segments of society can be seen most clearly in Florence in the fourteenth century. In the 1340s Giovanno Villani (*c.*1276/80–1348) wrote that 'the clothiers pay their workers in small coins and sell their cloth for [gold] florins', and so a weak florin caused them 'great distress'.[28] When Villani was writing there had been a temporary fall in the value of gold against silver, which did not halt the general depreciation of petty currency. According to the *Cronaca fiorentina di Marchionne di Coppo Stefani* of Baldassere Bonaiuti (1336–85) 'the lesser artisans are paid in [silver] *soldi*; the merchants sell for [gold] florins, and pay the work done in *soldi*; thus the merchants pressed for a strong florin, especially the clothiers and those who lived on rents'.[29] After 1350 the lesser artisans referred to by Bonaiuti had a significant presence in the government of Florence, and a policy of stability in the silver

[22] P. Grierson, 'King Henry VII's Dandyprats', (1972) 41 *British Numismatic Journal* 80; C. E. Challis, *The Tudor Coinage* (1978), at 52–4; P. R. Cavill, 'The Debased Coinage of 1492', (2007) 77 *British Numismatic Journal* 283–6; Lord Stewartby, *English Coins 1180–1551* (2009), at 342, 346, 441; Allen, above n 10, at 152; Lord Stewartby, 'Dandyprats Again', (2012) 82 *British Numismatic Journal* 227.

[23] British Library Stowe MS 501, fo. 35r.–36r., 41v; Cavill, above n 22, at 285.

[24] See Sargent and Velde, above n 7, at 5, 7–8, 10, 20, 152, 187, 261, 321, 324; and Munro, 'The Technology and Economics', above n 6, at 32.

[25] D. W. Sorenson, *Silver and Billon Coinage in France under Charles VI* (Ph.D. Thesis, University of Cambridge, 1988), at 98–9.

[26] C. M. Cipolla, *The Monetary Policy of Fourteenth Century Florence* (1982), at 24.

[27] Ibid., at 25–6. [28] Ibid., at 23.

[29] Ibid., at 23–5, noting that many rents were actually reckoned in petty currency of account.

coinage resulted.[30] Competition from imported debased coins forced debasements of the Florentine petty currency in 1366 and 1371, however, and the silver *grosso* was debased for similar reasons in 1369 and 1392.[31] The Florentine gold coinage was immune to debasement in the thirteenth and fourteenth centuries, but in 1402 and 1423 the weight of the gold florin had to be slightly reduced as a defensive measure against foreign debasements.[32]

In 1347 the Commune of Florence greatly increased its seigniorage from the coinage to ease a severe fiscal crisis, but the coinage was usually not a major source of government finance in the great commercial centres of Italy: they had public debts to address that problem.[33] David Chilosi and Oliver Volckart have shown that debasement was also not a significant source of emergency finance in late medieval Basel and Hamburg, and that although frequent adjustments of the coinage in late medieval Flanders had a fiscal function they were often a defensive reaction to falls in mint output.[34] The debasement of 1488–9 during a civil war in the Burgundian-Habsburg Netherlands briefly raised mint profits from a negligible level to nearly a quarter of total revenue, but this was exceptional.[35] In England direct taxation and customs duties were usually the principal sources of government finance from the late thirteenth century, and the English mints normally supplied less than 10 per cent of total revenue, and often less than 1 per cent.[36] Henry VIII's use of debasement as a major source of government finance in the 1540s was a radical departure for England. In contrast, 'aggressive' debasement was a major source of government finance in France in many periods of warfare, from the 1290s to the first half of the fifteenth century.[37]

In 1295 Philip IV of France embarked upon a series of debasements and temporary *renforcements* or restorations of the coinage to pay for his wars in Gascony and later in Flanders. In a period of just under eighteen months in 1298–9 the mints provided over 60 per cent of total revenue received by the Trésor du Louvre. Philip IV's lawyers defended his absolute right to debase the coinage, but he became known as the false moneyer (*le faux-monnayeur*).[38] Peace was made with England over Gascony in 1303, and with Flanders in 1305, allowing the restoration of the currency, but in 1311 a new war with Flanders forced another debasement.[39] The outbreak of the Hundred Years War in 1337 was followed by a series of debasements and only partly effective *renforcements*, which reduced the coinage to only 2.4 per cent of its 1329 silver content by 1360.[40] There was a radical change in 1360. Peace with England eased the pressure on government finance and it was decided to use a *taille*—which was principally a hearth-tax—and a sales tax to fund the ransom of John II, who had been captured at the battle of Poitiers in 1356. The *taille* replaced debasement as a major source of finance, and it continued in this role until the death of Charles V in 1380.[41]

[30] Ibid., at 28–9, 51, 54.

[31] Ibid., at 64–7, 71–4; D. Chilosi and O. Volckart, 'Good or Bad Money? A Comparative Analysis of Debasement in the late Middle Ages', Paper read at the Economic History Society Conference, University of Durham, 26–8 March 2010, at 20.

[32] Chilosi and Volckart, above n 31, at 19–20.

[33] Cipolla, above n 26, at 42–5; Chilosi and Volckart, above n 31, at 15.

[34] Chilosi and Volckart, above n 31, at 15–18, 20–3.

[35] P. Spufford, 'Debasement of the Coinage and its Effects on Exchange Rates and the Economy: In England in the 1540s, and in the Burgundian-Habsburg Netherlands in the 1480s', in J. H. Munro (ed.), *Money in the Pre-Industrial World: Bullion, Debasements and Coin Substitutes* (2012) 63, at 69–70.

[36] Allen, above n 10, at 201–10. Rolnick et al. above n 8, at 795–8, analyse the contribution of the English mints to total revenues in seven periods between 1323 and 1547.

[37] Rolnick et al., above n 8, at 796–7.

[38] Mayhew, above n 12, at 79–84; Spufford, above n 5, at 302; D. Wood, *Medieval Economic Thought* (2002), at 102.

[39] Mayhew, above n 12, at 83; Spufford, above n 5, at 303.

[40] Mayhew, above n 12, at 86–91.

[41] Spufford, above n 5, at 307.

The French nobility, who supported strong money, were normally exempt from the *taille* and took an increasing share from its collection.[42]

Henry V's invasion of Normandy in 1417 triggered a major series of debasements by the mints of the four governments competing for power in France: those of Charles VI, the Dauphin, the Duke of Burgundy, and Henry V. None of these four governments wanted to fall behind in this process, and the coinages of all four were debased to only 25 per cent of their 1417 silver content by 1420.[43] During this period of debasement the accounts of Charles VI's receiver general, Pierre de Gorremont, show the mints providing more than 80 per cent of total revenue in one account, rising to over 90 per cent in the next account.[44] In December 1420 the government of Charles VI opted for a *renforcement*, followed by Henry V in May 1421, and Burgundy in November 1421.[45] The Dauphin was unable to stabilize his currency in the absence of alternative sources of large-scale finance, and his coinage was reduced to a standard of only 3 per cent silver by June 1422.[46] Sussman has analysed the Dauphin's revenue from debasements between 1412 and 1422, finding that profits from the coinage increased from only 5.3 per cent of total revenue in 1415–17 to a peak of 55.8 per cent in 1422, while revenues from farmed taxes of fixed nominal values were eroded by debasement to virtually nothing.[47] The landed interests in the Dauphin's territories in southern and central France desperately needed a return to strong money, which was implemented in September 1422, after the death of Henry V, and the *taille* was revived.[48] The Dauphin's debasements resumed in August 1427 to pay for the cost of defending the Loire against the Duke of Bedford's English army, but they continued only until the raising of the siege of Orléans, the Battle of Patay, and the coronation of the Dauphin as Charles VII at Rheims in 1429.[49] After 1429 strong money was again the normal policy of Charles VII, and the *taille* became a regular occurrence.[50] There were, however, further debasements in 1444 (after the expiry of the Truce of Tours), in 1470–3 and again in 1476–9, probably related to campaigns against the Burgundian Netherlands.[51]

Promises to halt or reverse the process of debasement could be used as a means to raise revenue by taxation. A *monetagium* or hearth-tax payable every third year was introduced in Normandy in the late eleventh century, justified by an undertaking not to further debase an already heavily debased coinage. There were similar taxes in various parts of France, the Low Countries, and Spain in the twelfth and early thirteenth centuries, in return for the ruler abandoning his otherwise undoubted right to change the coinage.[52] In 1305 Philip IV forced Pope Benedict XI to make a large grant of church revenues in return for the restoration of sound money.[53] Philip VI received a grant of a sales tax from the estates of Paris in 1343 in return for a return to strong money, which proved to be only temporary, as usual.[54] In 1355 John II struck a bargain with the estates of southern France to abandon further debasement in return for taxes, and in 1357 the estates of Paris offered taxes in return for the restoration of the coinage.[55]

[42] Miskimin, above n 14, at 47; Spufford, above n 5, at 307–8.

[43] H. Miskimin, *Money and Power in Fifteenth-Century France* (1984), 58–9; Mayhew, above n 12, at 97–100; Sorenson, above n 25, at 88–93.

[44] Spufford, above n 5, at 308–9.

[45] Mayhew, above n 12, at 99–100.

[46] Mayhew, above n 12, at 100; Spufford, above n 5, at 309–10.

[47] Sussman, above n 17, at 54–6, 59–60, 64–7.

[48] Spufford, above n 5, at 309–10.

[49] Miskimin, above n 43, at 59–60; Spufford, above n 5, at 310; Mayhew, above n 12, at 101.

[50] Spufford, above n 5, at 310.

[51] Miskimin, above n 43, at 60.

[52] T. N. Bisson, *Conservation of Coinage. Monetary Exploitation and its Restraint in France, Catalonia, and Aragon (c. A.D. 1000–c. 1225)* (1979), 13–28; Mayhew, above n 12, at 33–4; Spufford, above n 5, at 301.

[53] Miskimin, above n 14, at 45–6; Miskimin, above n 43, at 77–8.

[54] Spufford, above n 5, at 305.

[55] Sargent and Velde, above n 7, at 96–7.

III. Consequences of Debasement

The first consequence of debasement or depreciation to be considered is inflation. Miskimin used data from the French debasements of the late thirteenth to fifteenth centuries to argue that grain prices adjusted very quickly to changes in the intrinsic value of money-of-account.[56] He noted that prices expressed in the decreed values of debased money could be converted to a stronger money-of-account in records of transactions, and that prices were increased to take account of debasements.[57] In opposition to this view, David Sorenson and Nathan Sussman have both found that during the debasements of 1418–22 in the Dauphiné, grain and wine prices followed the rising mint prices for silver, and not the actual changes in the intrinsic value of the coinage, which were much greater.[58] Furthermore, John Munro has demonstrated that changes in consumer price indices are significantly less than associated changes in the intrinsic value of the coinage of Flanders and England at various times between 1351 and 1554.[59]

Chilosi and Volckart have argued that wages might rise faster than price indices during periods of debasement, resulting in an increase in calculated real wages. They have produced calculations which seem to show increases in real wages following debasements in late medieval Florence, Hamburg, and Bruges.[60] Munro's more soundly based calculations for Flanders support the opposite conclusion, that real wages tended to be reduced by debasements, although they could rise when the intrinsic value of the coinage was restored in a subsequent *renforcement*.[61]

Peter Spufford has shown that international exchange rates adjusted to mint prices for bullion, rather than to actual changes in the intrinsic value of the coinage, during the English debasement of 1542–51.[62] The changes in exchange rates caused a large increase in English cloth exports, which became relatively cheaper abroad, and a reduction of imports of iron and wine, which became more expensive for the English consumer.[63] Similarly, debasements in the Burgundian-Habsburg Netherlands in the 1480s and early 1490s caused changes in exchange rates which reduced imports of wine, grain, and many other commodities.[64] Domestic producers of grain and livestock in the Netherlands of the 1480s and 1490s may have benefited from temporarily increased prices for their produce and inflation-proof fixed rents.[65]

Debasement eroded the real value of rents with fixed nominal values in moneys of account, hence the desire of great landowners and the Church to offer taxes in return for promises of the restoration of sound money.[66] Urban landlords might attempt to protect themselves from debasements by anticipating them in rental contracts: in a legal case decided by the Paris *Parlement* in 1401, a landlord successfully defended his right to have a

[56] Miskimin, above n 14, at 72–82; Miskimin, above n 43, at 61–8; H. Miskimin, 'Money, the law and legal tender', in G. Depeyrot, T. Hackens, and G. Moucharte (eds), *Rhythmes de la production monétaire de l'antiquité à nos jours* (1987) 697, at 699–700.

[57] Miskimin, above n 14, at 60–4.

[58] Sorenson, above n 25, at 121–5; Sussman, above n 17, at 61–2; Spufford, above n 35, at 64.

[59] Munro, 'The Technology and Economics', above n 6, at 23–8.

[60] Chilosi and Volckart, above n 31, at 11–14.

[61] J. H. Munro, 'Gold, Guilds and Government: The Impact of Monetary and Labour Policies on the Flemish Cloth Industry, 1390–1435', (2002) 5 *Jaarboek voor middeleeuwse geschiedenis* 153, at 157–72, 199–204; J. H. Munro, 'Wage-stickiness, Monetary Changes, and Real Incomes in Medieval England and the Low Countries, 1300–1500: Did Money Matter?', (2003) 21 *Research in Economic History* 185, at 219–26, 252–6.

[62] P. Spufford, 'Münzverschlechterung und inflation im spätmittelalterlichen und frühneuzeitlichen Europa', in M. North (ed.), *Geldumlauf, Währungssysteme und Zahlungsverkehr in Nordwesteuropa 1300–1800* (1989) 109; Spufford, above n 35, at 64–6.

[63] Spufford, above n 5, at 66–8. [64] Ibid., at 68–74. [65] Ibid., at 74–9.

[66] Miskimin, above n 56, at 700–1; Spufford, above n 35, at 79–81.

rent of 16 *sols* in strong and ancient money or 20 *sols* in the money then current, to preserve the real value of his income.[67] When the coinage was restored and rents were demanded in newly strong money, tenants would suffer. After the restoration of Charles VI's coinage in 1420 a Parisian noted in his journal that the poor of Paris reacted to the resulting increase in the real value of their rents by rioting and then abandoning their tenements and leaving the city.[68] There had been similar problems after the *renforcement* of the French coinage in 1305–6, which tripled the real intrinsic value of the coinage. At Christmas 1306, Parisian landlords demanded their rent in strong money, causing riots. To defuse the crisis the King passed an ordinance allowing the payment of the next three quarters of a year's rent in debased money. An ordinance of October 1306 had conceded that rents might be paid in the money current at the time of the original contract if the rent 'was so high that the tenant would be burdened', but this had clearly not been effective.[69]

IV. Political and Legal Responses to Debasement

From the early fourteenth century the landed and commercial interests in English Parliaments were consistently opposed to any debasement of the currency, unless it was absolutely necessary. In 1309 a petition presented to Parliament expressed concern about a possible change in the coinage, at a time when the mints were under the management of a representative of the King's Italian bankers, the Frescobaldi, who were believed to want to debase the coinage.[70] The opposition to Edward II led by the Lords Ordainers was opposed to all foreign influence at Court, and their Ordinances imposed upon Edward in 1311 expelled the Frescobaldi from England, as well as declaring that the King should make alterations of the coinage only 'by the common counsel of his baronage and that in parliament'.[71] The introduction of the debased coinage of halfpennies and farthings in 1335 was agreed in Parliament, in response to an extreme scarcity of silver coinage, but a petition in the Parliament of 1343 asked that halfpennies should be of good sterling silver and good weight in future, and the issue of debased coins was terminated.[72]

There was renewed parliamentary concern about the debasement of the English coinage after the reductions of the weights of the gold and silver coins in 1351 to improve the competitiveness of the mint prices for bullion. In the Parliament of 1352, which was the first at which a package of common petitions was presented to the King—but not answered—before a grant of taxation,[73] the Commons petitioned that the 'money of gold and sterling now current shall not be changed or debased of its weight or alloy as it is now'. This received an answer that '[t]he King wills that the money current shall not be debased; but as soon as a good way is found, it shall be put in the ancient state of sterling', and this became the basis of a clause in the Statute of Purveyors of 1352. This has been interpreted to mean that it was accepted that the coinage could not be changed in future without the

[67] Miskimin, above n 14, at 702–3.

[68] *A Parisian Journal 1405–1449*, trans. J. Shirley (1968), at 159–62; Sorenson, above n 25, at 104–5; Spufford, above n 5, at 309.

[69] Sargent and Velde, above n 7, 88.

[70] *Rotuli parliamentorum*, above n 21, vol. 1, at 444a; Spufford, above n 5, at 303; Bolton, above n 19, at 36. Amerigo de Frescobaldi was the warden of the London and Canterbury mints from 1307 to 1311.

[71] Wood, above n 38, at 108; Spufford, above n 5, at 303–4; Bolton, above n 19, at 36.

[72] *Rotuli parliamentorum*, above n 21, vol. 2, at 143a; Ruding, above n 19, vol. 1, at 216; Bolton, above n 19, at 163, 166–7.

[73] G. L. Harriss, *King, Parliament and Public Finance in Medieval England to 1369* (1975), at 356–75.

consent of Parliament, although that is not explicit in the statute.[74] There were to be further petitions asking for the restoration of the old standards of sterling in the Parliaments of 1353 and 1354, with no effect.[75]

During a parliamentary enquiry of 1379 into mint affairs it was suggested that the weight of the English gold noble should be reduced because the nobles in circulation had been diminished by clipping, but this suggestion was not adopted. The goldsmith John Lincoln urged that the weight of the noble should remain unchanged, and this view prevailed.[76] In 1409 the weights of the gold and silver coinage were secretly reduced, however.[77] It was evidently feared that there would be opposition to this move if it was made public, and in 1411 Henry IV was careful to obtain parliamentary approval for a further reduction in weights.[78] After the next reduction of weights, in 1464, a writ sent to sheriffs to proclaim the new coinage forbade seditious language about the changes and invited anyone with a complaint to bring it before the King and his council.[79]

In the fifteenth century the Dukes of Burgundy faced organized opposition to the alteration of the coinage on two occasions. In 1418 representatives of the Flemish towns agreed to a debasement only after Philip the Good, acting on behalf of his father John the Fearless (Duke of Burgundy, 1404–19), promised that there would not be another debasement for fifteen years.[80] This did not prevent Philip from debasing the silver coinage of Ghent ten years later, but he kept his promise elsewhere in Flanders until the fifteen years elapsed in 1433.[81] After the promise expired he secured the agreement of the Estates of the Burgundian Netherlands to a reform and unification of the coinage, but only at the cost of an undertaking not to alter it further for twenty years.[82]

There was opposition to debasement in France from the early fourteenth century. In 1314 complaints about the effects of debasement were prominent amongst the grievances of provincial nobility in a series of revolts against Philip IV, and his son Louis X promised a return to strong money later that year.[83] In the 1320s and 1330s Philip VI went through the motions of consultation, meeting with general assemblies of the *Langue d'Oil* in 1320, 1321, 1329, and 1333 to consider the state of the coinage.[84] He resumed debasements after the outbreak of the Hundred Years War in 1337, however, and in 1346 an ordinance that started a new series of debasements declared that the King had sole control of the coinage.[85] Nevertheless, by the 1350s there was growing opposition to debasement from members of the nobility demanding a return to strong money.[86] At a meeting of the Estates of the *Langue d'Oil* in 1355 a group of the French nobility asked John II for a package of reforms which included a strong money policy, and these demands were repeated to the Dauphin

[74] *Rotuli parliamentorum*, above n 21, vol. 2, at 240, item 32, no. XXII; *Statutes of the Realm*, above n 19, vol. 1, at 322 (25 Edward III, Stat. 5, c. 13); Ruding, above n 19, vol. 1, at 227; A. Feaveryear, *The Pound Sterling: A History of English Money*, rev. E. V. Morgan (2nd edn, 1963), at 32; Cipolla, above n 1, at 421; Bolton, above n 19, at 36.

[75] *Rotuli parliamentorum*, above n 21, vol. 2, at 253, item 37; vol. 2, at 260, item 33, no. XVII.

[76] Ruding, above n 19, vol. 1, at 240–2; T. F. Reddaway, 'The King's Mint and Exchange in London 1343–1543', (1967) 82 *English Historical Review* 1, at 12; Allen, above n 10, at 150; Bolton, above n 19, at 243–4, 293–4.

[77] Reddaway, above n 76, at 13; C. E. Blunt, 'Unrecorded Heavy Nobles of Henry IV and Some Remarks on that Issue', (1967) 36 *British Numismatic Journal* 106, at 106, 111–13; Mayhew, above n 20, at 172; Challis (ed.), above n 20, at 708; Allen, above n 10, at 150–1.

[78] *Rotuli parliamentorum*, above n 21, vol. 3, at 658; Feaveryear, above n 74, at 37–8; Mayhew, above n 20, at 172.

[79] *Calendar of Close Rolls 1461–8*, at 216–17.

[80] J. H. Munro, *Wool, Cloth and Gold. The Struggle for Bullion in Anglo-Burgundian Trade 1340–1478* (1973), at 74–5.

[81] Ibid., at 81–2. [82] Ibid., at 101–2. [83] Spufford, above n 5, at 303.

[84] Ibid., at 304; Wood, above n 38, at 107.

[85] Miskimin, above n 43, at 698; Spufford, above n 5, at 305; Wood, above n 38, at 107–8.

[86] Wood, above n 38, at 105.

Charles in 1357, after John II's capture by the English at the battle of Poitiers in the previous year.[87] From 1358 the leaders of the opposition became influential advisors of the Dauphin, who implemented a strong money policy in 1360.[88]

The academic spokesman of the strong money lobby of the 1350s was Nicholas Oresme (*c.*1320–85), who was a chaplain of the Dauphin Charles. Oresme's treatise *De origine, natura, jure et mutationibus monetarum*, also known as *De moneta* or *Traité des monnaies*, became the manifesto of strong money, and an established part of academic orthodoxy.[89] Oresme argues that the prince ought not to vary the standard of the coinage, unless by agreement of the whole community. A prince taking profit from the alteration of the coinage without consent is an unjust tyrant. Debasement can be condoned as a temporary expedient with consent, but the standard of the coinage must be restored as soon as possible. Oresme analyses the possible kinds of alteration of the coinage: changes in the coin designs or the names of denominations, adjustments of the bimetallic ratio between the values of gold and silver coins, and changes in weight and fineness. He warns that debasements of the coinage can impoverish the whole community, that merchants will cease to bring their goods to a country where they are paid in bad money, and that rents and other dues cannot be well and justly valued or credit and loans given, when the coinage is debased. Bankers and money-changers will make unjust profits.

Oresme advocated the Aristotelian view (based upon Aristotle's *Politics*) that money is a definite weight of precious metal of a standard guaranteed by an issuing authority. This was essentially consistent with the doctrine of canon law that a debt should be repaid in the money extant when the debt was contracted, or in coins of equivalent intrinsic value.[90] The jurists who developed Roman civil law held a similar 'valorist' view, that money was a commodity of a fixed gold or silver content, but this element of their 'common doctrine' (*ius commune*) had to be modified to deal with the reality of medieval debasement.[91] A key text in the development of the *ius commune* on debasement was Pillius' *Quidam creditor Lucenses* (*c.*1180), which posed the question of what happened when a man lent pennies of Lucca for five years, during which time they were debased. The answer, that payment had to be in the same kind of coin as at the time of the contract, was further developed as a doctrine of Roman law in Azo's brocard around the end of the twelfth century, although jurists allowed the possibility that a contract could provide for payment in current money of equivalent intrinsic value.[92] A document of 1195 from Lucca recording the sale of some land specifies the payment of either sixty pounds in good money more than thirty years old, or twice as much in current money (*Libros LX ad bonam monetam, qui fuit a XXX annis retro, vel duplum de presenti moneta*).[93] Local statutes of other Italian towns and cities, such as those of Novara in 1277 and Brescia in 1313, might stipulate current values for debts contracted during periods of debasement in the past, taking the degree of debasement into

[87] Spufford, above n 5, at 300–1.

[88] Ibid., at 301; J. Le Goff, *Money and the Middle Ages* (2012), 88–9.

[89] *The* De moneta *of Nicholas Oresme and English Mint Documents*, ed. C. Johnson (1956), ix–x; Spufford, above n 5, at 299–301, 308; Wood, above n 38, at 104–5; Le Goff, above n 80, at 88; Bolton, above n 19, at 36; G. R. Sarrat de Tramezaigues, 'Nicole Oresme: rupture précaires dans le mode de financement de l'effort de guerre', in O. Bertrand (ed.), *Sciences et savoirs sous Charles V* (2013) 158.

[90] Miskimin, above n 56, at 698; Chapter 8 in this volume.

[91] Sargent and Velde, above n 7, 70–2.

[92] Chapter 7 in this volume; Sargent and Velde, above n 7, at 77.

[93] D. Herlihy, 'Pisan Coinage and the Monetary History of Tuscany 1150–1250', in *Le zecche minori toscane fino al xiv secolo: Atti del 3º Convegno internazionale di studi del Centro italiano di studi di storia e d'arte, Pistoia, 16–19 settembre 1967* (1974) 169, at 177.

account.[94] As a consequence of the French debasements of the late thirteenth and fourteenth centuries French courts adopted the doctrine that payments could be either in the coinage used when a contract was made or in current coins, with their value adjusted to take account of any debasement, while debased small denominations were not legal tender for debts contracted in gold or silver.[95] When disputes about payments resulted in litigation before the *Parlement* of Paris it often sought to stipulate the payment of coins equivalent in intrinsic value to the money current when a contract was made.[96] In England, which was unaffected by aggressive debasements until the 1540s, practitioners of the common law were able to adopt a 'nominalist' approach, requiring payment in current money without any adjustment for debasements.[97]

V. Conclusions

The evidence presented in this chapter broadly supports the analyses of both Cipolla and Munro. In England, the principal cause of debasement was a need to keep pace with the depreciation of the currency in circulation, and 'defensive' adjustments of the standards of the coinage usually greatly increased mint output. English mint output was also sustained by imports of bullion through the wool and cloth trades, and shortages of small change were temporarily alleviated by strictly limited debasements. England had one unified national coinage, in contrast to the decentralized coinages of France and Italy, where competition between mints encouraged progressive debasements. In Italy debased petty coinages served the needs of a rapidly commercializing society, and debasement was not usually seen as a principal means of finance, but in France 'aggressive' debasements became an important source of finance in time of war from 1295 onwards. Debasements were consistently opposed by landed interests, because they reduced the value of fixed incomes, but they could have beneficial economic effects. Debasements might be necessary to sustain a viable coinage, and they could improve import and export trade balances through changes in exchange rates. The inflationary effects of debasements were generally less than any changes in the actual intrinsic value of the coinage, but these changes posed a challenge to medieval lawyers and theorists.

[94] *Statuta Communitatis Novariae anno MMCCLXXVII*, ed. A. Ceruti (1879), 36–7, rub. 73; *Statuti di Brescia . . . : colla tavola dei consoli, podesta, vicari, capitani, ecc. che ressero il comune dal 1121 al 1329*, ed. F. Oderici (1876), col. 1766, cap. 180.

[95] Miskimin, above n 56, at 701–2; Sargent and Velde, above n 7, 89.

[96] Miskimin, above n 14, at 703–4.

[97] Chapter 11 in this volume.

4

Money in Medieval Philosophy

Fabian Wittreck

I. Introduction

This chapter explores the influence of medieval philosophy on the development of monetary law.[1] It does not deal with medieval monetary law as such—this quest is left to the chapters on the precepts of the canon, common, and customary law on money and its use.[2] Instead, the chapter is devoted to the study of the medieval inquiry into the nature of money and the normative limitations of its use that were discernible by means of practical philosophy. Underlying this study is the conviction that an examination of the works of the Schoolmen may yield outcomes relevant to the overall project of this book.[3]

To this end, this chapter will address three questions. First, it will outline the major normative monetary issues that were considered by medieval philosophers. Second, it will launch an inquiry into the main sources of medieval monetary philosophy, with a view to expanding the focus beyond Thomas Aquinas. Third, it will have to engage with the problem of the practical relevance of the medieval philosophical texts on money. Are the texts merely messages from an ivory tower, or are they a down-to-earth assessment of medieval monetary practice? Finally, we will have to ask whether scholastic monetary philosophy bore any discernible 'fruit' for the analysis of money.

II. The Main Monetary Issues of Medieval (Practical) Philosophy

The medieval sources tend to focus on three topics or issues concerning money. The first is essential, and pertains to the notion, function, and basic morality of the use of money itself. The second addresses the central issue of usury and the closely related notion of the 'just price' (*iustum pretium*). The third deals with the effect of sovereign power on money, notably the conceptions of *valor impositus* and the formal debasement of coinage.

[1] It is based on the author's dissertation thesis: F. Wittreck, *Geld als Instrument der Gerechtigkeit* (2002; literally: Money as an instrument of justice) on the teachings of St Thomas Aquinas on money and monetary law.

[2] See Chapters 8 and 7 of this volume, respectively. See, for an introduction, Wittreck, above n 1, at 86–111.

[3] Following F. Wittreck, 'Philosophisch fundierte Zinsverbote–Rechtsrahmen und Relevanz', in M. Casper, F. Wittreck, and N. Oberauer (eds), *Was vom Wucher übrigbleibt* (2014) 47.

1. The Notion, Function, and Morality of Money

The Schoolmen were faced with a fundamental question about the very morality of money itself.[4] While the High Middle Ages experienced the development of a fledgling monetary economy,[5] they were still burdened by a long tradition of the demonization of money, which was not exclusively Christian in its origins. For example, one current epithet for coinage was to call it the 'devil's excrement',[6] and the authenticity of the new Dominican and Franciscan religious orders rested on their initial refusal even to handle coins.[7] This frequently expressed enmity was, admittedly, just one side of the matter, since money was also a potent symbol of wealth and power.[8] Thus, the inquiry into the nature or function of money was not made as an end in itself, but was directed at the settling of a controversial, but necessary, social practice. This inquiry is achieved, if at all, by increasing rationalization of the terms of debate.[9]

Prior to the reception of Aristotle,[10] there was only scant reasoning on money, which did little more than denounce its sinfulness as such, or at least its role as a stimulus for transgression.[11] After acquainting themselves with the relevant chapters of the *Nicomachean Ethics* (Book V) and *Politics* (Book I),[12] the Schoolmen rapidly reached a consensus on the basic functions of money, which were its role as a standard of value, a medium of exchange, and a measure to store value.[13] At the same time, they recognized these functions as necessary and beneficial for the common weal.[14]

The underlying question about the notion of money itself—as far as can be seen—was only answered by implication. While Schoolmen lived to see the development of credit money in the great merchant cities of Italy,[15] and Thomas Aquinas even co-authored a professional opinion on the morality of the extension of payment as practised by Tuscan merchantmen trading at the great fairs of the Champagne,[16] it remained the case that the

[4] See most recently A. Walsh and T. Lynch, *The Morality of Money* (2008), at 32–6.

[5] Just see the classical study of R. S. Lopez, *The Commercial Revolution of the Middle Ages, 950–1350* (1971).

[6] See L. K. Little, 'Pride Goes before Avarice: Social Change and the Vices in Latin Christendom', (1971) 76 *The American Historical Review* 16, at 38; Wittreck, above n 1, at 162–5; U. Rehn, '*Avarus non implebitur pecunia*: Geldgier in Bildern des Mittelalters', in K. Grubmüller and M. Stock (eds), *Geld im Mittelalter* (2005) 135.

[7] Cf. L. Hardick, '"Pecunia et denarii": Untersuchungen zum Geldverbot in den Regeln der Minderbrüder', (1959–61) 41–43 *Franziskanische Studien* 216 and 268; L. K. Little, *Religious Poverty and the Profit Economy in Medieval Europe* (1994).

[8] For instructive overviews, see R. H. Bloch, 'Money, Metaphor, and the Mediation of Social Difference in Old French Romance', (1981) 35 *Symposium* 18; H. Maguire, 'Magic and Money in the Early Middle Ages', (1997) 72 *Speculum* 1037; K.-H. Brodbeck, *Die Herrschaft des Geldes* (2009), at 848 et seq.

[9] Stressed by Little, above n 6, at 30; see also Wittreck, above n 1, at 497–9.

[10] See Section III of this chapter.

[11] For the development of the doctrine before *Aquinas*, see I. Seipel, *Die wirtschaftsethischen Lehren der Kirchenväter* (1907), at 162 et seq.; G. Hollis, *Christianity and Economics* (1961), at 13 et seq., 18 et seq.; J. Viner, 'The Economic Doctrines of the Christian Fathers', (1978) 10 *History of Political Economy* 9, at 9 et seq.; Wittreck, above n 1, at 156–60.

[12] For an overview of Aristotle's general theory on money, see P. Koslowski, *Politik und Ökonomie bei Aristoteles* (1993), at 56–63; S. von Reden, *Exchange in Ancient Greece* (1995), at 185–7; S. Meikle, *Aristotle's Economic Thought* (1995), at 87–104; Wittreck, above n 1, at 211–63; Brodbeck, above n 8, at 419–41. The major issues pertaining to the legal aspects of money will be developed later on (see Sections II.2 and II.3 of this chapter).

[13] Extensive appraisal by O. Langholm, *Wealth and Money in the Aristotelian Tradition* (1983).

[14] See Thomas Aquinas, *In IV Sententiarum* 49.1.4b.1: 'Quia, Matth. XX, dicitur, quod omnes accipient singulos denarios. Denarius autem significat aliquid quod omnes communiter habebunt.' Aquinas comments on the parable of the workers in the vineyard; cf. Wittreck, above n 1, at 313–14, 497–9.

[15] P. Spufford, 'Le Rôle de la monnaie dans la révolution commerciale du XIIIe siècle', in J. Day (ed.), *Études d'histoire monétaire* (1984) 355; cf. P. Spufford, *Money and Its Use in Medieval Europe* (1988), at 240 et seq.

[16] Thomas Aquinas, 'De Emptione et Venditione ad Tempus', in *Opera Omnia iussu Leonis XIII*, vol. 42 (1979), at 393–4; see A. O'Rahilly, 'Notes on St. Thomas, III. St. Thomas on Credit', (1928) 31 *The Irish Ecclesiastical Record* 159; O. Capitani, 'La venditio ad terminum nella valutazione morale di san Tommaso d'Aquino e di Remigio de "Girolami"', (1958) 70 *Bolletino dell' Istituto storico Italiano per il Medio Evo* 299, at 323 et seq.;

conceptual horizon of the Schoolmen did not extend beyond the metal coin.[17] To put it in other words, the embodiment of money, in the Schoolmen's eyes, was the coin. Even if individual scholastic thinkers reached conclusions that, in principle, required a more complex understanding of money—such as the idea that money represented a quantity of spending power—they still clothed their findings in the language of coins.[18]

2. Immoral Use of Money: Interest and *Iustum Pretium*

While the Schoolmen's notion of money as such was rather abstract or 'bloodless', the issue of interest or 'usury' had a central place in the medieval marketplace of ideas. A vast variety of sources,[19] ranging from the gargoyles on gothic cathedrals to the popular depictions of the horrible fate of usurers,[20] made it quite clear that interest was not only a theoretical problem vexing the Schoolman, but one that drove medieval societies to despair.

Since this chapter has a rather specialized topic, it will not, and cannot, deal with all of the relevant sources. Concentrating on the philosophical dispute about the permissibility of interest-bearing loans, it will consider the guidelines of a discussion which originated in other disciplines. The starting point of the philosophical debate is the religious ban on interest. This was based on biblical precepts, an exhaustive body of conciliar canons and papal letters, and, to a lesser degree, on secular jurisprudence.[21] The new 'authority' to substantiate this traditional prohibition was rediscovered in the writings of Aristotle. In the *Politics*, he reaches the conclusion that interest is 'against nature' because it de-links money from its necessary function of facilitating the exchange of non-monetary goods.

> The most hated sort, and with the greatest reason, is usury, which makes a gain out of money itself, and not from its natural object. For money was intended to be used in exchange, but not to increase at interest. And this term interest, which means the birth of money from money, is applied to the breeding of money because the offspring resembles the parent. Wherefore of all modes of getting wealth this is the most unnatural.[22]

This notion of 'sterility' or 'barrenness' tends to be misunderstood.[23] Aristotle did not address the metal content of coins, but their man-made function, or *telos*. Money was

B. H. D. Hermesdorf, 'Thomas van Aquino als raadsman van toskaanse kooplieden', (1963) 26(1) *Mededelingen der Koninklijke Nederlandse Akademie van Wetenschappen, Afd. Letterkunde* 3; Wittreck, above n 1, at 472 et seq.

[17] Deplored by O. Langholm, 'The Medieval Schoolmen (1200–1400)', in S. Todd Lowry and B. Gordon (eds), *Ancient and Medieval Economic Ideas and Concepts of Social Justice* (1998) 439, at 493.

[18] This is the case with Aquinas' argument against usury: Wittreck, above n 1, at 452–4 and Section III.1 of this chapter.

[19] The same is true for the secondary literature, which is simply unmanageable. Reliable general accounts: T. P. McLaughlin, 'The Teaching of the Canonists on Usury', (1939–40) I and II *Mediaeval Studies* 81 and 1; J. T. Noonan, *The Scholastic Analysis of Usury* (1957), at 11 et seq.; O. Langholm, *The Aristotelian Analysis of Usury* (1984); A. Lapidus, 'La propriété de la monnaie: doctrine de l'usure et théorie de l'intérêt', (1987) 38 *Revue économique* 1095; Wittreck, above n 1, at 111 et seq.; the most recent German overview (with an extensive survey of literature in the major European languages): H.-J. Becker, 'Das Zinsverbot im lateinischen Mittelalter', in Casper et al. (eds), above n 3, at 15.

[20] See the masterly account in J. Le Goff, *Wucherzins und Höllenqualen* (1988).

[21] See R. P. Maloney, 'Early Conciliar Legislation on Usury', (1972) 39 *Recherches de théologie ancienne et médiévale* 145; E. Bianchi, 'In tema d'usura: Canoni conciliare e legislazione imperiale del IV secolo', (1983–84) 61–62 *Athenaeum* 321 and 136; F. Wittreck, *Interaktion religiöser Rechtsordnungen* (2009), at 38–63; Becker, above n 19, at 15 et seq.

[22] Aristotle, *Politics*, trans. B. Jowett (1905), at 2–8, Bk I ch 10, 1258b. For the Aristotelian polemics against usury, see Langholm, above n 19, at 54 et seq.; Koslowski, above n 12, at 63 et seq.; von Reden, above n 12, at 185 et seq.; Meikle, above n 12, at 63 et seq.; Wittreck, above n 1, at 263–9; Wittreck, above n 21, at 77–8; Wittreck, above n 3, at 58–9.

[23] See Wittreck, above n 1, at 125–9.

invented to obtain those material goods that a given human group lacks when it fails in its aim of *autarkia* or self-sufficiency. The usurer instead uses money to multiply money, and thus severs the connection between money and the *Realwirtschaft*.

What function was fulfilled by this new 'authority' or bargaining chip in the argument over usury?[24] As we have seen, Aristotle's explanation could serve as a new and 'secular' justification of a traditional religious dogma that was under mounting pressure.[25] It was of no assistance, however, in the re-evaluation or 'tuning' which that traditional dogma underwent throughout the High Middle Ages. An example of this accommodation to economic and social reality is the so-called 'extrinsic titles' to interest.[26] These instruments had to be fashioned and justified by the Schoolmen without the help of Aristotle. His staunch attitude towards usury simply did not accommodate the complexity of the commercial situation witnessed by the Schoolmen.

To summarize, the response of the Schoolmen and their companions from the Canon Law was to fortify the general prohibition on usury. As a basic principle, an interest-bearing loan was forbidden or sinful, irrespective of the amount of interest. While modern 'usury' is understood as an excessive demand,[27] according to the medieval dogma even a single *denarius* of interest on a loan sufficient to ransom a prince was deemed usurious. As we have seen, the authority of Aristotle proved helpful in fortifying this position. Nevertheless, it was not intended to apply without qualification. The two major tools used to mollify this harsh, and intentionally over-inclusive, view were the intrinsic titles, which allowed exceptions to the rule in those cases where interest made economic sense, and the actual practice of persecution. As far as can be seen, the Church courts did not prosecute all 'usurers' indiscriminately, but regularly singled out those who were conspicuous in charging excessive interest rates or in exploiting the exigency on the side of the lender.[28] Below this line, the result was fairly comparable to the modern understanding of when usurious loans deserved to be penalized.

The same is true for the closely related figure of *iustium pretium*.[29] For the vast majority of the Schoolmen, among them Aquinas, the 'just price' was simply the market price, assuming it did not result from spoofing or some other manipulation of the market such as hoarding.[30] The amount of misreading, misquotation, and misinterpretation of this matter is astonishing. Even today, accounts penned by economists credit the Schoolmen, or at least

[24] For a compelling account, see Langholm, above n 19.

[25] For the current assessment of the comprehensive non-observance of the usury prohibition, see, with further references, Wittreck, above n 1, at 113–16.

[26] W. Endemann, *Studien in der romanisch-kanonistischen Wirthschafts- und Rechtslehre* (1883), vol. 2, at 243 et seq.; Noonan, above n 19, at 100 et seq.; H. Johnston, 'Mediaeval Doctrines on Extrinsic Titles to Interest', in C. O'Neil (ed.), *An Etienne Gilson Tribute* (1959) 86; Le Goff, above n 20, at 75 et seq.; Wittreck, above n 1, at 129–132.

[27] See only Wittreck, above n 3, at 58.

[28] See for this thesis, A. Blomeyer, 'Aus der Consilienpraxis zum kanonischen Zinsverbot', (1980) 66 *Zeitschrift der Savigny-Stiftung für Rechtsgeschichte (Kanonistische Abteilung)* 317, at 318 et seq.; R. H. Helmholz, 'Usury and the Medieval English Church Courts', (1986) 61 *Speculum* 364, at 367–8, 370; Wittreck, above n 1, at 134 et seq.

[29] Just a few key studies from the rich literature: Noonan, above n 19, 82 et seq.; R. de Roover, 'The Concept of the Just Price: Theory and Economic Policy', (1958) 18 *Journal of Economic History* 418; J. W. Baldwin, 'The Medieval Theories of the Just Price: Romanists, Canonists and Theologians in the Twelfth and Thirteenth Centuries', (1959) 49(4) *Transactions of the American Philosophical Society* 1; S. T. Worland, *Scholasticism and Welfare Economics* (1967), at 210 et seq.; S. T. Worland, '*Justum Pretium*: One More Round in an "Endless Series"', (1977) 9 *History of Political Economy* 504; G. W. Wilson, 'The Economics of the Just Price', (1975) 7 *History of Political Economy* 56; O. Langholm, *Economics in the Medieval Schools* (1992), at 223 et seq.; Wittreck, above n 1, at 80 et seq., 325 et seq. For the foundations of Roman law, see V. I. Langer, *Laesio enormis. Ein Korrektiv im römischen Recht* (2009).

[30] See only Baldwin, above n 29, at 75 et seq., and Wittreck, above n 1, 83.

some of them, with objective theories of value based on factors such as the amount of work and expense devoted to the object to be measured.[31]

3. The Power of the Prince: Debasement and *Valor Impositus*

A different picture emerges of the implications of sovereign authority over money, which was covered by Aristotle once again in *Ethics* V and *Politics* I.[32] The notion that money—or to be more precise, coinage—is a prerogative of the public authority is a commonly stated proposition derived from the heritage of Roman law in medieval Europe.[33] The point of dispute, however, was the precise identification of the public authority in a society which typically worked according to a multi-layered constitution. The result was to split what was presumably the royal '*Münzrecht*' (literally 'the minting prerogative') into distinct capacities concerning coinage. These could be, and in fact were, dispersed among a group of authorities or corporations.[34]

Two closely connected capacities or prerogatives were especially contentious.[35] The first was the debasement of the circulating coinage (*renovatio monetae*),[36] and the other was the power to create *fiat* money, which involved assigning a certain valuation to a token coin of lesser or virtually no metallic value. (This valuation was later termed *valor impositus* as opposed to the *valor intrinsecus* of technically pure gold or silver coins.[37]) The exercise of the first prerogative was in fact an easy way to impose and collect taxes on the possession of coined money.[38] After the *renovatio*, the subjects of the particular monetary authority were obliged to exchange their coins for new ones, which were generally of lesser silver content. At the very least the holder of the monetary prerogative netted the incidental charges for minting and changing the coins.[39] Furthermore, he could issue new coins of lesser bullion content, which added still further to his profit in the operation.[40] Opposition to both practices was considerable; it emanated especially from merchant cities that relied on the reputation of their coinage, as the conflict between the city of Cologne, and the Archbishop of the same diocese amply demonstrates.[41] The outcome was a multitude of measures to

[31] See the famous statement of R. H. Tawney, *Religion and the Rise of Capitalism* (1990 [1926]), at 48: 'The true descendant of the doctrines of Aquinas is the labour theory of value.' Counter to primary and secondary sources, see also Brodbeck, above n 8, 451–2. And see the incisive comment by de Roover, above n 30, at 418: 'fairy tale'.

[32] See Wittreck, above n 1, at 220 et seq.

[33] Still indispensable A. Luschin von Ebengreuth, *Allgemeine Münzkunde und Geldgeschichte des Mittelalters und der neueren Zeit* (1926), at 235 et seq.; see further E. Babelon, 'La théorie féodale de la monnaie', (1908) 38 *Mémoires de l'Académie des inscriptions et belles-lettres* 279; A. Suhle, 'Münzhoheit', in F. Freiherr von Schrötter (ed.), *Wörterbuch der Münzkunde* (1970) 419; A. Suhle, 'Münzrecht', in von Schrötter (ed.), 427; E. Wadle, 'Münzwesen (rechtlich)', in *Handwörterbuch zur deutschen Rechtsgeschichte* (1984), vol. 3, 770; A. M. Stahl, 'Mints and Money', in J. R. Strayer (ed.), *Dictionary of the Middle Ages*, vol. 8 (1987) 427.

[34] T. N. Bisson, *Conservation of Coinage* (1979), at 2: 'a prerogative of composite character'; see also (with further reading) Wittreck, above n 1, at 95 et seq.

[35] Following Wittreck, above n 1, at 100 et seq.

[36] See Endemann, above n 26, vol. 2, at 174–5, 184 et seq.; Luschin von Ebengreuth, above n 33, at 260 et seq.; W. Hävernick, 'Münzverrufungen in Westdeutschland im 12. und 13. Jahrhundert', (1931) 24 *Vierteljahresschrift für Sozial- und Wirtschaftsgeschichte* 129; Bisson, above n 34, 7 et seq.; P. Spufford, 'Monetary practice and monetary theory in Europe (12th–15th centuries)', (2000) 26 *Semana de Estudios Medievales Estella* 53, at 54 et seq.

[37] See Endemann, above n 26, vol. 2, at 172 et seq., 185, 197 et seq.; Luschin von Ebengreuth, above n 33, at 223; F. Baltzarek, 'Münzwert', in *Handwörterbuch zur deutschen Rechtsgeschichte* (1984), vol. 3, at 764–5.

[38] Stressed by P. Spufford, 'Assemblies of Estates, Taxation and Control of Coinage in Medieval Europe', in *XIIe Congrès international des sciences historiques* (1966) 113, at 115.

[39] H. van Werveke, 'Currency manipulations in the Middle Ages: The Case of Louis de Male, Count of Flanders', (1949) 31 *Transactions of the Royal Historical Society* 115, at 118; Wadle, above n 33, at 784; J. H. Munro, 'Schlagschatz', in M. North (ed.), *Von Aktie bis Zoll* (1995) 357.

[40] See only Spufford, *Money and Its Use*, above n 15, at 289 et seq.

[41] See Section III.2 of this chapter.

restrict the sovereign's power to debase the coinage or to at least make it dependent on the consent of the people affected by the change.[42]

What changed in this debate after the reception of Aristotle?[43] As we will see, the *philosophus* combined a non-metallistic worldview in the *Nicomachean Ethics* with statements in the *Politics* having a tendency to be read in favour of a *valor intrinsecus* view of money. Accordingly, he provided both sides to the dispute with new arguments, or at least gave them the benefit of his eminent authority.[44]

In the *Ethics*, money is presented as a problem of justice.[45] It is described as a creature of the law (*nomisma* being derived from *nomos*) established for the purpose of facilitating exchange. Two passages of the exposition are especially challenging. First, after the etymological derivation Aristotle proceeds:

> [A]nd this is why it has the name 'money' (*nomisma*)—because it exists not by nature but by law (*nomos*) and it is in our power to change it and make it useless.[46]

Just a few lines further on, he concludes his explanation of the functions of money as a medium of exchange, and as a store of value (which he expresses in the potent image of a bailsman standing surety for another) with observation that reads rather like a truism:

> And for the future exchange—that if we do not need a thing now we shall have it if ever we do need it—money is as it were our surety; for it must be possible for us to get what we want by bringing the money. Now the same thing happens to money itself as to goods—it is not always worth the same; yet it tends to be steadier.[47]

These rather unremarkable lines eventually became the seeds of the great conflicting schools of medieval monetary philosophy.[48] While the passage on money as a creature of the *nomos,* and on the possibility of its being rendered useless became the base for 'nominalistic' theories (including the notions of *valor impositus* and debasement), the second passage was partly adopted by the opposite camp. The notions of 'surety' and 'steadiness' were overturned. What were originally intended as statements with a purely empirical significance instead took on a normative pretension. They thus assisted in the emergence of the competing 'metallistic' theories of money.[49]

This oscillating picture was complicated further by the second monetary treatise in the *Politics*, where the focus shifted.[50] Here Aristotle is concerned with the genesis of human collectivization, which culminates in his famous depiction of man as an animal bound by nature to build a *polis*, rather than any other institutionalized form of social interaction (the

[42] Essential reading: Bisson, above n 34, *passim*, and Spufford, above n 38, at 113 et seq.; see also Babelon, above n 33, at 315 et seq.; Wittreck, above n 1, at 101 et seq.

[43] Instructive briefing by Langholm, above n 13, at 89 et seq.

[44] See Wittreck, above n 1, at 211–12 and 259–63.

[45] For the following, see ibid., at 212–45.

[46] Aristotle, *Nicomachean Ethics*, trans. W. D. Ross (1966), at 30–1, Bk V ch 8, 1133a. Read in the genetical context, the passage should be understood as the approval of the power of the *polis* to issue *fiat* money and to recall it later. Based on the *Ethics*, Aristotle thus has to be classified as a nominalist: Wittreck, above n 1, at 227–37 (with comprehensive further references).

[47] Aristotle, above n 46, at 10–14, Bk V ch 8, 1133b. That (and why) he appraised the stability of money as desirable at least, is exposed by Wittreck, above n 1, at 237–44.

[48] Once more Langholm, above n 13, at 9 et seq.

[49] Indeed, both schools claim Aristotle as their respective founding father: see B. J. Gordon, 'Aristotle, Schumpeter and the Metallist Tradition', (1961) 75 *Quarterly Journal of Economics* 608, at 608 et seq. (nominalism) and M. Alter, 'Aristotle and The Metallist Tradition: A Note', (1982) 14 *History of Political Economy* 559, at 559 et seq. (metallism).

[50] Wittreck, above n 1, at 246–59.

common translation as 'political animal' is in fact highly misleading in this case.[51]) To this end, he depicts the graduating scale of house (*oikos*), village, and *polis*, which are each described with due attention to their respective needs for subsistence. In this context, money is chiefly treated as a means of receiving those goods that cannot be produced by the community in question.

> For when they had come to supply themselves more from abroad by importing things in which they were deficient and exporting those of which they had a surplus, the employment of money necessarily came to be devised. For the natural necessaries are not in every case readily portable; hence for the purpose of barter men made a mutual compact to give and accept some substance of such a sort that was itself a useful commodity and was easy to handle in use for general life, iron for instance, silver and other metals, at the first stage defined merely by size and weight, but finally also by impressing on it a stamp in order that this might relieve them of having to measure it; for the stamp was put on as a token of the amount.[52]

Once again, the passage, as well as its subsequent interpretation by the Schoolmen, is highly ambiguous. The 'stamp' (*kharakter*) had connotations of sovereign influence, alluding inter alia to *valor impositus*, and the talk of 'mutual compact' and 'useful commodity' served as reference points for concepts of *valor intrinsecus,* or the assessment of coinage by the population at large.[53] This multifaceted reception is the subject of the rest of this chapter.

III. The Main Sources of Medieval Monetary Philosophy

As mentioned, the serious medieval monetary philosophy starts with the reception of the Aristotelian *Ethics* (Book V) and *Politics* (Book I). These contain the first ever comprehensive theory of money. Thus, the starting point of our inquiry is the impressive work of Thomas Aquinas. He is one of those scholastic thinkers who may be considered responsible for the implementation of the writings of the Greek *philosophus*. Contrary to the commonly held view, which tends to equate Aquinas with medieval philosophy itself, we will have to contrast Aquinas' views with those of his contemporaries, especially his numerous adversaries. Keeping in mind that most of Aquinas' thinking on money tends to be implicit, it will be necessary to sift through the works of his successors in their disputes over questions that were merely adumbrated by Aquinas himself. In a final step, a cross-cultural study will be undertaken which will reveal the relevance of the incorporation of Aristotle's monetary philosophy into the writings of Muslim, Jewish, and Byzantine scholars.

1. Foundation: No Way Around Aquinas

Thomas Aquinas (*c.*1225–74) is without doubt a towering figure in medieval philosophy.[54] He enjoys the same stature in modern accounts of medieval monetary thinking.[55] However, the soundness of this assessment may in fact be open to doubt.

[51] See the illustrative interpretation by R. S. Mulgan, *Aristotle's Political Theory. An Introduction for Students of Political Theory* (1977), at 15 et seq.

[52] Aristotle, *Politics*, trans. H. Rackham (1950), at 30–41, Bk I ch 9, 1257a. For details, see Wittreck, above n 1, at 251 et seq.

[53] Once again Langholm, above n 13, at 79 et seq. and *passim*.

[54] Just see R. L. Friedman, 'Latin Philosophy, 1200–1350', in J. Marenbon (ed.), *The Oxford Handbook of Medieval Philosophy* (2013) 192, at 208–9.

[55] Exemplary Brodbeck, above n 8, 452 et seq. See *contra* Langholm, above n 29, at 11 et seq. with the chapter heading 'Not only Aquinas'.

> In many textbooks a great deal is made of the economic doctrines attributed to Thomas Aquinas (1226–74) as though he had said the last word on the subject.... In truth, there is very little on economics in the vast works of Thomas Aquinas except some casual remarks buried here and there among extraneous material.... By putting these scattered elements together, some have tried to reconstruct the economic thought of Thomas Aquinas, a rather hazardous undertaking, since nobody really knows how he himself would have assembled the pieces of his jig-saw puzzle.[56]

Of course, Aquinas was the first Western Schoolman to provide a coherent commentary on the relevant passages of Aristotle,[57] apart from Albertus Magnus who was, in any event, Aquinas' closely related teacher.[58] Compared with Buridan or Oresme (who are considered in Section III.3 below), Thomas is not overly interested in money, or at least not interested in the details covered by his successors.[59] Moreover, one has to beware of the danger of equating Thomas with Thomism. Over the centuries, the original philosophy of Aquinas has been overlaid with thick layers of benevolent commentary.[60]

As an example of the confusion between Thomism and Thomas himself, the text normally presented as being representative of Aquinas' monetary philosophy[61] turns out to be a pseudograph. The famous chapter II.13 of *De regno* derives from his pupil Ptolemy of Lucca.[62] Thus one particularly prominent feature of the source[63]—the explicit approval in that chapter of the prince's power to fix a *valor impositus*—is valueless if it pertains to Thomas' genuine monetary reasoning.[64]

Even leaving aside this spurious text, the search for the true monetary philosophy of Aquinas has its pitfalls. Most scholars confine themselves to the *Summa theologiae*, which is only helpful inasmuch as it contains the most refined version of Thomas' argument against usury,[65] and the commentaries on the *Ethics* and *Politics*. These are rather terse if one consults the relevant passages on money.[66] It is much more fruitful to peruse the whole

[56] See, to the point, R. de Roover, *San Bernardino of Siena and Sant'Antonino of Florence* (1967), at 7.

[57] See only J. Owens, 'Aquinas as Aristotelian Commentator', in Pontifical Institute of Mediaeval Studies (ed.), *St. Thomas Aquinas 1274–1974: Commemorative Studies* (1974), vol. 1, at 213 et seq.

[58] See Section III.2 below.

[59] Stressed by C. D. W. Goodwin and N. B. de Marchi, 'Introduction by the Editors', (1978) 10 *History of Political Economy* 1, at 7: 'He [J. Viner] also realized, no doubt, that however much Aquinas may have written on economic subjects, it was not an area which particularly excited his interest and hence where his genius was most likely to shine.'

[60] See T. O'Meara, *Thomas Aquinas Theologian* (1997), at 152 et seq.; H. Schmidinger, 'Thomismus', in *Historisches Wörterbuch der Philosophie*, vol. 10 (1998) 1184; D. Berger, *Thomismus: Große Leitmotive der thomistischen Synthese und ihre Aktualität für die Gegenwart* (2001).

[61] See, e.g., Spufford, above n 38, at 119; M. Honecker, 'Geld, II. Historisch und ethisch', in *Theologische Realenzyklopädie*, vol. 12 (1984) 278, at 284, 296.

[62] Translation *Ptolemy of Lucca: On the Government of Rulers*, trans. J. M. Blythe (1997); see Wittreck, above n 1, at 29–30, 705–17 (with further references).

[63] Ptolemy, *De Regno*, Bk II, ch 13: 'In qua quidem, etsi liceat suum ius exigere in cudendo numisma, moderatus tamen debet esse princeps quicumque vel rex sive in mutando sive in diminuendo pondus vel metallum . . . '. Cf. Wittreck, above n 1, at 711–12 (with further references).

[64] In addition to works of Odd Langholm already cited, see F. E. Flynn, *Wealth and Money in the Economic Philosophy of St. Thomas* (1942), at 32 et seq.; G. Tozzi, *I fondamenti dell'economia in Tommaso d'Aquino* (1970), at 221 et seq.; B. Gordon, 'Scholastic Contributions to the Theory of Money: Thomas d'Aquinas (1225–74) to the Venerable Lessius (1554–1623)', in L. T. Houmanidis (ed.), *Readings in Economic History and History of Economic Theories* (1974), vol. 1, 58, at 58 et seq.; B. Gordon, *Economic Analysis before Adam Smith* (1975), at 159 et seq.; C. Dupuy, *La monnaie médievale (XIe–XIVe siècle): une étude des faits et de la pensée* (1988), at 187 et seq.; L. Baeck, *The Mediterranean Tradition in Economic Thought* (1994), at 159 et seq.; A. Lapidus, 'Metal, Money and the Prince: John Buridan and Nicholas Oresme after Thomas Aquinas', (1997) 29 *History of Political Economy* 21, at 25 et seq.; J. Kaye, *Economy and Nature in the Fourteenth Century: Money, Market Exchange, and the Emergence of Scientific Thought* (1998), at 56 et seq.; J. Kaye, 'Changing Definitions of Money, Nature, and Equality c. 1140–1270, reflected in Thomas Aquinas' questions on usury', in D. Quaglioni, G. Todeschini, and G. M. Varanini (eds), *Credito e usura fra teologia, diritto e amministrazione* (2005), at 25–55.

[65] See later in this section.

[66] For the details, see Wittreck, above n 1, at 317–47.

corpus. (It should be added that the same is true for all other medieval thinkers, although regrettably most of them are not accessible electronically.[67]) Close inspection of the biblical commentaries, which abound with allusions to coins and money,[68] and the works on general theology allow the following picture to take shape.

In Thomas' view, money is essentially embodied in silver coins,[69] and to that extent he may be called a non-normative metallist. At the same time, he has learned from Aristotle that money is a creature of law, and human law in particular.[70] This strong connection between money and law is especially apparent in biblical commentaries: Thomas Aquinas interprets a *denarius* appearing in the Gospels as a symbol for the observance of the law laid down in the Ten Commandments.

> Per denarium istum significatur vita aeterna, quia denarius ille valebat decem denarios usuales. Item habebat impressam similitudinem regis. Unde quod significatur per istum denarium, consistit in observatione decalogi.[71]

If one turns to a source seldom cited by monetary scholars, we see confirmation for Thomas' view that the minting of coins from silver was merely customary rather than mandatory.[72] When writing on the seven sacraments and their impact, Thomas more than once uses the example of a lead coin issued by the king with the *fiat* value of 100 pounds.

> Et ponunt exemplum de hoc quod aliquis deferens denarium plumbeum accipit centum libras, non ideo quia denarius plumbeus sit causa faciens aliquid ad acceptionem centum librarum, sed quia sic statutum est ab eo qui potest dare, ut quicumque defert talem denarium accipiat tantam pecuniam.[73]

Thomas' introduction to this example assertively supports the view that princes had a corresponding prerogative to impose a *valor impositus* on coins.[74] This would be in perfect harmony with Thomas' view on the scope of authority of the human law. Contrary to the widespread assumption that Thomas is one of the champions of natural law theory,[75] closer scrutiny reveals that he is the patron saint of the incipient development of the modern legislative state.[76]

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[67] For a detailed examination of all money-related terms in the works of Aquinas, see Wittreck, above n 1, at 348–69.

[68] For a closer view, see ibid., at 434–41.

[69] Ibid., at 369.

[70] Thomas Aquinas, *In V Ethicorum* 9:

> ... manifestum est per hoc quod nummisma factum est secundum compositionem, id est secundum conventionem quandam inter homines, propter commutationem necessitatis, id est rerum necessariarum; est enim condictum inter homines quod afferenti denarium detur id quo indiget. Et inde est quod denarius vocatur nummisma (nomos enim lex est), quia scilicet denarius non est mensura per naturam, sed nomo, id est lege.

See Wittreck, above n 1, at 330–1, 403–4.

[71] Thomas Aquinas, *Super Evangelium Matthaei* 20.1. See Wittreck, above n 1, at 434–6 (once again, Thomas comments on the workers in the vineyard [Matthew 20: 1–16]).

[72] Prior to Wittreck, above n 1, only Courtenay offered an interpretation of two of the pertinent passages: see W. J. Courtenay, 'The King and the Leaden Coin: The Economic Background of "Sine qua non" Causality', (1972) 28 *Traditio* 185.

[73] Thomas Aquinas, *De Veritate* 2.27.4 corpus; see in detail Wittreck, above n 1, at 416–26 with further references.

[74] This attribution of moderate monetary nominalism to Aquinas seems to be prevalent: see Flynn, above n 64, at 34–5; Gordon, above n 64, at 164–5; Lapidus, above n 64, at 23, 25 et seq.; Wittreck, above n 1, at 411 et seq. See *contra* Langholm, above n 29, at 491.

[75] From recent literature, see J. Porter, *Nature as Reason* (2005) and J. Goyette, M. S. Latkovic, and R. S. Myers (eds), *St. Thomas Aquinas & the Natural Law Tradition* (2004).

[76] See only S. Gagnér, *Studien zur Ideengeschichte der Gesetzgebung* (1960), at 179 et seq.; A.-H. Chroust, 'The Philosophy of Law of St. Thomas Aquinas: His Fundamental Ideas and Some of his Historical Precursors', (1974) 19 *American Journal of Jurisprudence* 1, at 29, and Wittreck, above n 1, 70–4.

To substantiate this claim, it is useful to turn to the next prominent monetary issue, which was the only one Thomas was really interested in.[77] This was the prohibition of usury.[78] At the outset, it has to be noted that the voluminous writings of Aquinas on usury[79] are practically devoid of general comments on the nature of money.[80] In fact, however, they are subject to a twofold influence of the Roman law. To begin with, Aquinas' most distinct contribution to the medieval prohibition of usury is the so-called argument of consumption that he laid down for the first time in *De Malo*. The *Summa* contains an abbreviated version of the same argument. If money is used in exchange transactions, according to Roman law it belongs to the category of goods that are consumed by use.[81] Thus its use, which consists in payment, may not be separated from its substance.

> Dicitur enim usura ab usu, eo scilicet quod pro usu pecuniae pretium quoddam accipitur, quasi ipse usus pecuniae mutuatae vendatur. Est autem considerandum quod diversarum rerum diversus est usus. Quaedam enim sunt quarum usus est consumptio substantiae ipsarum rerum, sicut proprius usus vini est ut bibatur, et in hoc consumitur vini substantia; et similiter proprius usus tritici aut panis est ut comedatur, quod est consumptio ipsius tritici vel panis; ita etiam proprius usus pecuniae est ut expendatur pro commutatione aliarum rerum. Sunt enim inventa numismata commutationis gratia, ut philosophus dicit in VII Politic.[82]

If this is the case, charging interest for money lent means demanding a double payment. The borrower is therefore obliged to reimburse the principal *and* to pay for the use of it.

> Sed in illis rebus quarum usus est consumptio, non est aliud usus rei quam ipsa res; unde cuicumque conceditur usus talium rerum, conceditur etiam et ipsarum rerum dominium, et e converso. Cum ergo aliquis pecuniam mutuat sub hoc pacto quod restituatur sibi pecunia integra, et ulterius pro usu pecuniae vult certum pretium habere, manifestum est quod vendit seorsum usum pecuniae, et ipsa pecunia substantiam. Usus autem pecuniae, ut dictum est, non est aliud quam eius substantia; unde vel vendit id quod non est, vel vendit idem bis, ipsam scilicet pecuniam, cuius usus est consumptio eius; et hoc est manifeste contra rationem iustitiae naturalis. Unde mutuare pecuniam pro usura, est secundum se peccatum mortale.[83]

The argument is quite modern insofar as Aquinas does not think in terms of metallic substance but in terms of their purchasing power.[84] Of course, coins are not physically consumed in this process. Nevertheless, even though it may be marginally more convincing than other medieval arguments against usury, it still does not quite hit the mark, at least from a modern-day perspective.[85]

Leaving aside the merits of the argument, the most thrilling question pertains to the consequences of the argument itself. As a matter of principle, the argument prohibits any

[77] According to J. Y. B. Hood, *Aquinas and the Jews* (1995), at 104, Aquinas is to be called a 'zealot' on the issue of usury.

[78] For depictions of Aquinas' doctrine of usury, see A. M. Knoll, *Der Zins in der Scholastik* (1933), at 13 et seq.; Noonan, above n 64, at 51 et seq.; Langholm, above n 19, at 82 et seq.; Langholm, above n 29, at 236 et seq.; Lapidus, above n 19, at 1097 et seq.; Wittreck, above n 1, at 442–88; Wittreck, above n 3, 59–63.

[79] For a detailed treatment, see Wittreck, above n 1, at 444–85.

[80] J. Finnis, *Aquinas* (1998), at 205; Wittreck, above n 1, at 488.

[81] For the background in Roman law, see Gordon, above n 64, at 134–5, 160–1.

[82] Thomas Aquinas, *De Malo* 13.4 corpus (English translation in Thomas Aquinas, *De Malo*, trans. J. A. Oesterle [1995], at 404–5). On this argument, see Gordon, above n 64, at 160–1; Langholm, above n 19, at 84 et seq.; Langholm, above n 29, at 241 et seq. Aquinas' numbering of the books of *Politics* is faulty; he is in fact alluding to ch I.7.

[83] Thomas Aquinas, *De Malo* 13.4 corpus.

[84] Wittreck, above n 1, at 452–4, with further references.

[85] For an essential critique, see J. Melitz, 'Some Further Reassessment of the Scholastic Doctrine of Usury', (1971) 24 *Kyklos* 473, at 479 et seq.

rate of interest as usurious or 'against nature', where 'nature' is understood to mean the mode of operation of an institution of human ingenuity, rather than the metallic quality of the coin itself.[86] But what happens if the human law contravenes this natural law precept? This seems clearly to be the case with the rules on the Roman law on loans, as Aquinas explicitly points out. This is the second influence of the Roman law on his reasoning on interest.

> Praterea, ius positivum a iure naturali derivatur, ut Tullius dicit in sua Rhetorica. Sed ius civile permittit usuras, ergo non est contra ius naturale dare mutuum ad usuras, ergo non est peccatum.[87]

The effect is that if the human legislator is able to cite sound reasons in the interest of the common good, for example ensuring that the poor have easy access to loan finance, then the human law prevails over the natural law.[88] Contrary to the common perception, this is Aquinas' favourite way of solving conflicts of norms.

Finally, a few remarks on Thomas' notion of the just price are necessary. As mentioned, he identifies the *iustum pretium* with the market-based price,[89] so that he is even willing to give his approval to a person who profited from a local grain shortage.[90] Whether there is any connection between this understanding of the just price and Aquinas' monetary theory in the strict sense, is a matter for ongoing debate.[91]

2. Contemporaries and Adversaries of Aquinas

In contrast to the modern view of Aquinas as the very embodiment of scholastic philosophy, it has to be pointed out that he was a highly controversial thinker in his time.[92] He was also a debater known to his contemporaries for taking no captives.[93] At the same time, it is important to stress that his views on monetary questions, in the broadest sense, were not especially contentious.[94]

Nonetheless, it is worth taking a closer look at other philosophical minds of the thirteenth century. This is particularly true for Albertus Magnus (*c*.1200–80).[95] His positions on the major monetary issues outlined in the previous section are especially noteworthy since he was twice involved as an arbitrator in a practical dispute concerning coinage. As already mentioned, the city of Cologne and its archbishop disagreed over the prelate's prerogative to debase the coinage. In 1252 and 1258, Albert participated in an

[86] Rightly stressed by J. T. Noonan, '*Tokos* and *Atokion*: An Examination of Natural Law Reasoning Against Usury and Against Contraception', (1965) 10 *Natural Law Forum* 215, at 218.

[87] Thomas Aquinas, *De Malo* 13.4.6. See Wittreck, above n 1, at 456–7, with further references.

[88] Thomas Aquinas, *De Malo* 13.4 ad 13.6: 'Et hoc modo ius positivum permisit usuras propter multas commoditates quas interdum aliqui consequuntur ex pecunia mutuata, licet sub usuris.' Similarly, Thomas Aquinas, *Summa Theologiae* II-II 78.1 ad 3.

[89] See Wittreck, above n 1, at 83, with further references.

[90] Aquinas' model case is a merchant sending a ship with a cargo of grain to a country suffering from a poor harvest. The merchant may demand a (considerably higher) local (distress) price, and is not even obliged to disclose that more ships are en route: see Thomas Aquinas, *Summa Theologiae* II-II 77.3 ad 4.

[91] Odd Langholm has argued for a close interconnection between the notions of *iustum pretium* and *usura*. In the eyes of Aquinas, the just price for the use of money ought to be zero: see Langholm, above n 29, at 243–4.

[92] Stressed by Friedman, above n 54, at 208–9.

[93] See Wittreck, above n 1, at 54 (with further reading).

[94] For the crucial issues, see C. G. Normore, 'Who Was Condemned in 1277?', (1995) 72 *Modern Schoolman* 273.

[95] See J. A. Weisheipl, 'The Life and Works of St. Albert the Great', in J. A. Weisheipl (ed.), *Albertus Magnus and the Sciences* (1980), at 13; Wittreck, above n 1, at 272 et seq.; S. B. Cunningham, *Reclaiming Moral Agency* (2008), at 24 et seq., 46 et seq.

attempt to reconcile both parties so as to ensure a return to monetary stability.[96] The arbitrators recognized that the bishop's right to *renovatio monetae* should only be exercised in two cases that were especially costly to him. These were the inauguration of a new bishop, and the royal array to the 'Romzug' (this being the armed march of the German 'Roman' King to the coronation in Rome). Moreover, the arbitrators specified the required bullion content of the shilling of Cologne, which was then to be safeguarded by the deposit of standard specimen coins in the cathedral and the guildhall.[97]

These arbitration awards are explained in detail here because they exhibit striking parallels with Albert's commentaries on the *Nicomachean Ethics* and *Politics*.[98] Commenting on Aristotle's narrowly expressed remark on the comparative stability of money, the Schoolman pointed out that, as a measure of value, money ought to be 'sure' (*certa*), and went on to demand a measure for the measure (the analogy here seems to be the specimen shillings deposited in Cologne). On the other hand, he acknowledged that the coinage could be debased, as long as the time intervals were not too frequent, this remark being a comment on Aristotle's admission that the value of money may fluctuate. Thus, Albert blends the interpretation of Aristotle with his practical experience to steer a middle course between nominalism and metallism. In contrast, his doctrine on usury is rather uninspired.[99]

3. Developed Scholastic Monetary Thought: Buridan and Oresme

The early attempts of Thomas and his contemporaries to cope with the major issues of money and monetary law were completed by their successors of the fourteenth century. Of eminent note are John Buridan (who flourished *c.*1300–58)[100] and Nicole Oresme (*c.*1320–82).[101] Both were French. The precise chronology of their findings is contested, as is their presumed teacher–pupil relationship.[102]

Both writers took a narrow view of monetary theory. Confronted with the massive debasement of the Royal French coinage by King Philip the Fair,[103] they focused on the issue of the stability of money. In this situation, they finalized the 'normative turn' of Aristotle's factual observation that money tends to be stable.

Buridan, who served for a while as the dean of the arts faculty of the Sorbonne, commented on the *Nicomachean Ethics* and also, rather poorly, on the *Politics*. His main contribution to monetary science was his clear distinction between the nominal value, the intrinsic value, and the purchasing power of a coin. The normative outcome of this was the rule that the king may only impose a nominal value on his coins. Their purchasing power

[96] For further references, see Wittreck, above n 1, at 303–1. See also D. Strauch, *Der Große Schied von 1258* (2008).

[97] For details on the arbitration awards, see Wittreck, above n 1, 303 et seq.

[98] For an abstract, see Wittreck, above n 1, at 311–13; see ibid. at 279–96 for a detailed interpretation of the commentaries. See also Langholm, above n 29, at 168 et seq.; Kaye, above n 64, at 70 et seq.

[99] See Wittreck, above n 1, at 296–301.

[100] See C. Miller, *Studien zur Geschichte der Geldlehre* (1925), at 99 et seq.; O. Langholm, *Price and Value in the Aristotelian Tradition* (1979), at 123 et seq.; Lapidus, above n 64, at 27 et seq.; Kaye, above n 64, at 137 et seq.; Wittreck, above n 1, at 721–3.

[101] See W. Roscher, 'Ein großer Nationalökonom des vierzehnten Jahrhunderts', (1863) 19 *Zeitschrift für die gesamte Staatswissenschaft* 305; E. Bridrey, *La théorie de la monnaie au XIVe siècle: Nicole Oresme* (1906); Lapidus, above n 100, at 27 et seq.; Spufford, above n 36, at 70 et seq.; Wittreck, above n 1, at 723–5; H. Mäkeler, 'Nicolas Oresme und Gabriel Biel: Zur Geldtheorie im späten Mittelalter', (2003) 37 *Scripta Mercaturae. Zeitschrift für Wirtschafts- und Sozialgeschichte* 56, at 56 et seq.

[102] See Wittreck, above n 1, at 723.

[103] Delineated by A. Vuitry, *Études sur la régime financier de la France avant la révolution de 1789* (1883), vol. 2, at 181 et seq.; see also Spufford, above n 36, at 63 et seq.

depends on their intrinsic value and prevailing economic circumstances such as supply and demand.

> Quum si nulla esset modo pecunia et rex aliquam de novo fabricaret verum est quod posset sibi nomine imponere, sicut quod vocaret denarius vel obolus sed etiam non esset imponere quantum valeret denarius vel obolus posito et quod rex diceret valeat denarium quartam vini hoc non esset iustum quum unum vinus est melius alio et in uno loco quam in alio.[104]

This clear metallistic twist corresponded to a more sophisticated view of the properties of money. Buridan listed six such properties: small size, the prince's impression, steady weight, durability, precious material, and—with the needs of the poor in mind—small denominations.[105] The underlying obsession with stability is obvious. Nevertheless, his analysis of money has been hailed as the apogee of medieval scholastic doctrine on the topic.[106]

Oresme, scholar, royal counsellor, and Bishop of Lisieux, may be credited with the honour of authoring the first monograph on money or monetary law. His diatribe, *Tractatus de origine et natura, iura & mutationibus monetarum*[107] is not a philosophical analysis in its own right but the desperate attempt to influence the monetary policy of his prince. To that end, it musters arguments from the arsenal of scholastic philosophy, and in some cases sharpens them. On the whole, however, the booklet is conventional in its treatment of money. Since money acts as a measure of value, it ought to be stable as it would not otherwise be able to fulfil this function.[108] As a creature of the law, it ought to be changed only according to the prerequisites for the change of the law itself, and these are spelled out in close affiliation to Aquinas.[109] Like Buridan, Oresme favoured the metallistic interpretation of Aristotle. The consensus among writers is that Oresme's contribution to monetary theory mainly consists in the popularization—and even politicization—of older ideas.[110]

4. Byzantine, Islamic, and Jewish Sources?

During the formative period of Western Aristotelianism, the scholastic debate about the Peripatetic philosophy and its merits has to be understood as part of an *Interpretationsverbund* or interpretation network connecting the Latin discourse to its Eastern predecessors.[111] It is well established that the *Corpus Aristotelicum* (apart from the *Organon* and other texts classified as merely propaedeutic) reached the medieval West via Muslim Spain (the first 'wave' from the twelfth century onwards) and Constantinople (the second 'wave' after the conquest of the city in the insufferable 'Fourth crusade' in 1204).[112] Till the

[104] J. Buridanus, *Questiones Joannis buridani super decem libros ethicorum aristotelis ad nicomachum* (1513), Quaestio 17 Art. 2 (fo. 106v).

[105] Ibid., Quaestio 17 Art. 1 (fo. 106v).

[106] See, in particular, Langholm, above n 29, at 496.

[107] N. Oresme, *Tractatus de origine et natura, iura & mutationibus monetarum* (exact date unknown); see edition and German translation: N. Oresmius, *Traktat über Geldabwertungen*, ed. and intro. by E. Schorer (1937). The designation of 'diatribe' dates from Endemann, above n 26, vol. 2, at 188.

[108] Oresme, *Tractatus*, above n 107, at 12.

[109] Ibid., at 8.

[110] See Wittreck, above n 1, at 724–5, with further references.

[111] Ibid., at 28.

[112] See ibid., at 167–72, 507–14, with further references. See also S. Fazzo, 'Aristotelianism as a Commentary Tradition', in P. Adamson, H. Baltussen, and M. W. F. Stone (eds), *Philosophy, Science and Exegesis in Greek, Arabic and Latin Commentaries* (2004) 1; G. Guldentops et al., 'Philosophische Kommentare im Mittelalter—Zugänge und Orientierungen', (2007–8) 32–33 *Allgemeine Zeitschrift für Philosophie* at 157–77, 259–90, and 31–57.

present, the issue of a possible influence of the corresponding Arab and Byzantine thinkers on the medieval philosophy of money has been generally neglected.[113]

Three philosophers or thinkers may be singled out since they are known to have influenced Thomas Aquinas and his interpretation of Aristotle. First, is the Byzantine scholar Michael of Ephesus (twelfth century) who contributed to a Greek composite commentary on the *Nicomachean Ethics* (his commentary on the *Politics* is lost).[114] This was accessible to Thomas and other Schoolmen in a translation by Robert Grosseteste.[115] Second, is the Muslim polymath Ibn Rushd (Averroës; twelfth century),[116] for his partial commentary on Aristotle's *Ethics*, which earned him the sobriquet 'the commentator'.[117] The third known influence on Thomas was the Jewish philosopher–lawyer Maimonides (d. 1204) who tried to forge a synthesis between Aristotelian philosophy and traditional Jewish law.[118] The abstract of this endeavour was again accessible to Latin readers as the 'Guide of the Perplexed'.[119]

The last book summarizes the basic challenge of all medieval scholars attempting to consult Aristotle, which was to balance the philosopher's teachings with scriptural revelation.[120] This approach may not seem to be especially daring as far as the issue of money is concerned. The prohibition on interest was, after all, a case where the Holy Scriptures and peripatetic philosophy were in agreement.[121] The fate of two of the three philosophers mentioned, among many others, serves as a lesson in the pitfalls of medieval Aristotelianism. While Aquinas has been hailed for 'baptizing' Aristotle in the West, Ibn Rushd and Maimonides, or at least portions of their writings, have been ostracized by their respective communities.[122] Both are cited even today as relevant authorities on Muslim and Jewish religious law, but their efforts to reconcile Aristotelian philosophy and religious tradition have been largely ignored. (The number of extant commentaries penned by Ibn Rushd in Hebrew and Latin by far outnumbers those composed in Arabic).

To give a short summary of these writers' relevant theories on money, it is expedient to start with Michael of Ephesus. Michael flourished in an empire that, on one hand, had a

[113] Marked exception, Baeck, above n 63.

[114] See *Eustratii et Michaelis et Anonyma in Ethica Nicomachea Commentaria*, ed. G. Heylbut (1892). See H. P. F. Mercken, 'Introduction', in H. P. F. Mercken (ed.), *The Greek Commentaries on the Nicomachean Ethics of Aristotle* (1991), vol. 3, 1* at 3*, 21* et seq.; Wittreck, above n 1, at 515–71; G. Kapriev, *Philosophie in Byzanz* (2005), at 215–16.

[115] Edition: H. P. F. Mercken (ed.), *The Greek Commentaries on the Nicomachean Ethics of Aristotle in the Latin Translation of Robert Grosseteste, Bishop of Lincoln (✠ 1253)*, vol. 1 (1973); vol. 3 (1991). See K. D. Hill, 'Robert Grosseteste and His Work of Greek Translation', in D. Baker (ed.), *The Orthodox Churches and the West* (1976) 213.

[116] See O. Leaman, *Averroes and his Philosophy* (1998), at 3–4; R. Arnaldez, *Averroes: A Rationalist in Islam* (2000) at 5 et seq.; Wittreck, above n 1, at 572–652; A. E. Ivry, 'Introduction', in A. E. Ivry (ed.), *Averroës, Middle Commentary on Aristotle's* De anima (2002) xiii, at xiii et seq.; H. Eichner, *Averroes' Mittlerer Kommentar zu Aristoteles'* De generatione ed corruptione (2005), at 1 et seq.

[117] The Arab version is lost; for Latin translation, see 'Aristotelis Stagiritae Libri Moralem totam Philosophiam complectentes', in *Aristotelis Opera cum Averrois Commentariis*, vol. 3 (1562), fo. 1r et seq.; see F. E. Cranz, 'Editions of the Latin Aristotle accompanied by the commentaries of Averroes', in E. P. Mahoney (ed.), *Philosophy and Humanism* (1976) 116, at 127–8; L. V. Berman, 'Introduction', in L. V. Berman (ed.), *Averroes' Middle Commentary on Aristotle's Nicomachean Ethics in the Hebrew Version of Samuel ben Judah* (1999), at 19 et seq.

[118] A. Broadie, 'Maimonides', in S. Hossein Nasr and O. Leaman (eds), *History of Islamic Philosophy*, (1996), vol. 1, at 725 et seq.; Wittreck, above n 1, at 635–701; M.-R. Hayoun, *Geschichte der jüdischen Philosophie* (2004), at 103 et seq., 131 et seq.

[119] M. Maimonides, *The Guide of the Perplexed*, trans. S. Pines, 2 vols (1963; 1995); for its Latin reception, see J. O. Riedl, 'Maimonides and Scholasticism', (1936) 10 *New Scholasticism* 18.

[120] For the 'Aristotelian challenge', see F. van Steenberghen, *Die Philosophie im 13. Jahrhundert* (1977), at 75 et seq. and *passim*; J. Marenbon, *Medieval Philosophy* (2007), at 129–30, 182 et seq., 192 et seq., 205 et seq.

[121] See Section II.3 of this chapter.

[122] See Wittreck, above n 1, at 574, 581 et seq., 659 et seq., with further references.

long history of stable sovereign regulation of currency issues,[123] but, on the other, had suffered from a rather massive depreciation of its coinage in the wake of internal strife and the ensuing Turkish conquest.[124] Despite this eventful background, Michael is rather reticent in his comments on Aristotle's well-known passage on the 'rendering useless' of coinage.[125]

The same is true, it must be said, of Maimonides. As far as can be seen, his considerable engagement with questions of monetary law is based exclusively on Talmudic law, while there are no borrowings from Aristotle.[126] Moreover, the Latin translation of Maimonides' *Dux Neutrorum* was especially influential with respect to Aquinas, but transmitted only a very small excerpt from his doctrine on usury.

> The *commandments* comprised in the fourth class are those included in the *Book of Seeds* of our compilation . . . and also the *commandments* that we have enumerated in *Laws concerning the Lender and the Borrower*. . . . If you consider all these *commandments* one by one, you will find that they are manifestly useful through instilling pity for the weak and the wretched, giving strength in various ways to the poor, and inciting us not to press too hard upon those in straits and not to afflict the hearts of individuals who are in a weak position. . . . Similarly if you consider one by one all the *commandments* that we have enumerated in *Laws concerning the Lender and the Borrower*, you will find that all are imbued with benevolence, pity, and kindness for the weak; they forbid depriving anyone of a utility necessary for his nourishment.[127]

This in turn was practically useless for the Western discussion, because the Halachic law permitted the taking of interest from gentiles, and was not interested in a rationale for a general prohibition.[128] Thus, Maimonides may be an important respondent of the Schoolmen in affairs of Jewish religious law, but is more or less mute on money issues.

The most interesting contribution may be ascribed to Ibn Rushd. He had to grapple with the entrenched position of Islamic Law (*fiqh*),[129] that gold and silver coins were to be treated as commodities, which meant they had to be weighed rather than counted according to their face value as *dinar* or *dirham*. This prescription derived from the Islamic version of the prohibition of usury, or *ribā*. The concept is of a broader scope than its Western counterpart, which is essentially limited to a ban on interest for a loan. The Islamic version covered the exchange of the six canonical *ribā*-goods. Besides *dinar* and *dirham*, these were dates, wheat, barley, and salt. Their commutation had to take place one for one and step by step. Thus, a sum of *dirhams* paid as interest on a loan of silver coins would constitute *ribā,* because the exchange was not one for one, and did not take place at the same time. The repayment in gold for a loan of silver would, however, be another matter.[130]

[123] See M. F. Hendy, *Studies in Byzantine monetary economy, c.300–1450* (1985).

[124] See only P. Grierson, 'The Debasement of the Bezant in the Eleventh Century', (1954) 47 *Byzantinische Zeitschrift* 378, at 379 et seq.; Hendy, above n 123, at 233–4, 508 et seq.

[125] The Latin version is yet to be edited. The relevant passage is—courtesy of the editor H. P. F. Mercken—available in Wittreck, above n 1, at 737–40. See in detail ibid., at 550–60; cf. also Langholm, above n 13, at 91.

[126] See in detail Wittreck, above n 1, at 689–700.

[127] Maimonides, above n 119, at 550–1, 553, Bk III ch 39; for an interpretation, see Wittreck, above n 1, at 699–70.

[128] See Wittreck, above n 1, at 676–82; most recently, see E. Otto, 'Zinsverbot und Schuldenerlass als Elemente einer Sozialpolitik in der Thora', in Casper et al. (eds), above n 3, at 1.

[129] For recent overviews, see W. B. Hallaq, *An Introduction to Islamic Law* (2009) and M. Rohe, *Das islamische Recht* (2009).

[130] For the concept of *ribā*, see N. A. Saleh, *Unlawful Gain and Legitimate Profit in Islamic Law: Riba, Gharar, and Islamic Banking* (1986), at 8 et seq.; R. Lohlker, *Das islamische Recht im Wandel. Riba, Zins und Wucher in Vergangenheit und Gegenwart* (1999), at 23 et seq.; Wittreck, above n 1, at 599–607; and most recently N. Oberauer, 'Das islamische ribā-Verbot', in Casper et al. (eds), above n 3, 111.

Ibn Rushd utilizes Aristotle's treatment of money in the *Ethics* to rationalise this prohibition.

> This is because the aim of prohibiting *riba* is (to avoid) the excessive injustice implicit in it and that justice in transactions demands an approximate equivalence. And therefore, when it became difficult to achieve equivalence in things of different natures, *dinars* and *dirhams* were set up for their valuation, that is, assessment of their values. . . . In the prohibition of excess in *dinars* and *dirhams* the underlying cause is readily apparent; their purpose is not profit, but the valuation of other things that have necessary benefits.[131]

At the same time, the religious fixing of gold and silver coin values relative to their metallic fineness rendered Ibn Rushd deaf to Aristotle's hint that 'changing' the coinage may be possible.[132] The Muslim thinker summed up the position of his Greek interlocutor on money, by describing it as a man-made thing. But his staunch commitment to metallism left practically no room for arrangements affecting the coinage, such as alterations to its value.[133]

IV. The Realistic Approach and Practical Relevance of Medieval Philosophy

Finally, we have to address the question of the ivory tower. How realistic is medieval monetary philosophy? The question implies three subquestions. First, to what extent is scholastic philosophy shaped by the monetary reality of its time? Second, from the opposite perspective, are the philosophical positions of any significance for the coeval monetary law? Finally, does the scholastic philosophy have any long-term effect on the law or other sciences? To anticipate the results, all questions may be answered with a discreet 'yes'.

1. The Significance of Monetary Reality for Medieval Philosophy

The term *weltabgewandt* (which literally means 'detached from the world') occurs quite often in modern German accounts of the medieval thinking on money and the broader economy.[134] This term is probably misplaced and should be discarded. It is true, of course, that the Schoolmen were not, in spite of the heavy influence of Aristotle, adherents to the empirical method. They had inherited a rather rigid set of rules dictating the identification and the hierarchy of authorities;[135] and 'the marketplace' was not among those authorities. Nevertheless, they had at their disposal a range of outlets which related them to the economic and monetary reality of the time. Among these, one may mention months of wandering the streets of Latin Christianity,[136] and their involvement in tangible monetary controversies, of which Albert of Cologne is a very prominent example.[137] In addition were

[131] Averroes, *Bidayat* Bk XXIV ch 2.2.1, in Ibn Rushd, *The Distinguished Jurist's Primer: A Translation of* Bidayat Al-Mujtahid (1996), vol. 2, at 162. See for historical background on the source (Ibn Rushd's juristic encyclopaedia): Leaman, above n 116, at 147–8; Arnaldez, above n 116, at 20 et seq.; for a detailed interpretation, see Wittreck, above n 1, at 622–4.

[132] See Section II.2 of this chapter.

[133] See in detail Wittreck, above n 1, at 630–40; see also Baeck, above n 64, at 113–14.

[134] In this sense, see H. Contzen, 'Die national-ökonomischen Grundsätze des heiligen Thomas von Aquino', (1870) 3 *Christlich-soziale Blätter* 130, at 131; for a similar approach, see Flynn, above n 64, at 13.

[135] See the magisterial study by M. Grabmann, *Die Geschichte der scholastischen Methode*, 2 vols (1909–11).

[136] On Aquinas' itinerary, see A. Walz, *Luoghi di San Tommaso* (1961), at 13 et seq.

[137] See Section III.2 of this chapter.

the close connections between the mendicant orders and the urban population.[138] But above all these there was the chief purpose of medieval moral philosophy. Philosophy was part of the vocational training for theologians, and was supposed to prepare them for the close confrontation with the reality that they would encounter in the confessional.[139]

Accordingly, the solutions to the monetary issues under scrutiny were not 'detached' from reality at all. Points such as identifying the 'just price' with the market price,[140] recognizing the exception for intrinsic titles bearing interest,[141] the acceptance that the secular law acquiesced in interest,[142] and the brokering of reasonable compromises between those holding monetary prerogatives and their subjects, as happened in Cologne,[143]—none of these is a sign that the Schoolmen who wrote on monetary affairs were innocent of the world. Rather, they were responsive to the medieval monetary reality. Unless this is recognized, their writings will be constantly misinterpreted.

2. The Significance of Medieval Philosophy for Medieval Legal Doctrines

If we change the direction of inquiry, and pose the question of the influence or significance of scholastic philosophy on other fields, then the answer presents a more intricate picture. At the outset, one has to admit that the following lines are no more than first tentative steps in a direction of future research.

But within these limits, it is necessary to distinguish between the great bodies of medieval law, namely the Roman law, the Canon law, and the vast corpus of statutory law. The Canon law, which became the most dynamic system in the wake of what Berman has called the 'Papal Revolution', is generally considered to owe a great debt to scholastic philosophy. Its main contributions are in matters of natural law which provided an essential approach to new problems as they arose.[144] In contrast, while Roman law was not self-sufficient, it did not have the same need to generate 'new' law as the law of the Roman church did. The statutory law was highly heterogeneous. It seems that the findings of the scholastic philosophy were directly adopted by the statutory law only in exceptional cases.[145]

3. The Long-term Imprint of Medieval Monetary Philosophy

This leads us to the third sub-question. Are there any lasting results of the scholastic teachings on monetary matters? There are at least three which merit special attention.

First, leaving aside the influence on jurisprudence (which was addressed in the preceding subsection (2)), the monetary theories of the Schoolmen fostered the growth of economics as a distinct science. Prior to the differentiation of the various disciplines, the philosophy of the moral or natural law provided a home for the first rudiments of what later developed

[138] Stressed by Little, above n 7, at 24–5, 197 et seq.; see also C. H. Lawrence, *The Friars: The Impact of the Early Mendicant Movement on Western Society* (1996), at 102 et seq.

[139] See Little, above n 7, at 219; Wittreck, above n 1, at 49–51. For an instructive study, see O. Langholm, *The Merchant in the Confessional: Trade and Price in the Pre-Reformation Penitential Handbooks* (2003).

[140] See text accompanying n 30 above.

[141] See text accompanying n 26 above.

[142] See text accompanying nn 87–8 above.

[143] See Section III.2 of this chapter.

[144] See the classic study by R. Weigand, *Die Naturrechtslehre der Legisten und Dekretisten von Irnerius bis Accursius und von Gratian bis Johannes Teutonicus* (1967).

[145] The prohibition of usury may be a special case in this context. Of course, there are countless (secular) ordinances that permit, prohibit, or regulate charging interest. However, the interconnections of those regulations with the canonical ban, as well as their interpretation by the Schoolmen, may not be easily reduced to a common denominator.

into an independent interest in the notion and the function of money, the function of markets, and the harmful or baneful effects of a monetary economy.[146]

Second, the speculations of the Schoolmen have left a moral imprint which is still relevant today. As the current financial crisis amply demonstrates, the moral quality of human economic behaviour is still discussed in terms dating back to scholastic philosophy and even to Aristotle who provided the foundation for their use. That is not to say, however, that those philosophical precepts provide solutions to the concerns raised.[147]

Third, if, following in the footsteps of Max Weber, rationality really is the *kharakter* of Western or Latin culture, the contribution of the Schoolmen to the rationalization of money as an integral part of modernizing societies must not be underestimated.[148]

V. Conclusion: Salvaging Money from Purgatory?

We started with the allusion to the frequent demonization of money in medieval society: coins literally paved the direct way into purgatory, or something even worse. Numerous depictions of *vanitas,* representing the futility of life, use money as a potent symbol for the here and now.[149] In the course of their disputes about money—its functions, the powers of the prince over it, and the just price of its temporal use—the Schoolmen succeeded in composing a different picture. Based on Aristotle's *Ethics* and *Politics*, Thomas Aquinas, his contemporaries, and especially his successors in the fourteenth century established money as a necessary instrument with a capacity for fulfilling important functions for the common good. At the same time, they tried to draw normative boundaries for the public and private handling of this 'instrument of justice'. Their innovations had lasting effects which remain discernible even in present debates. In contrast, the contribution of the other medieval cultures engaged in the interpretation of the Peripatetic philosophy was more limited. It was confined to mediating the relevant works of Aristotle and serving as a first point of access to the sources.[150]

[146] This is the main concern in Langholm, above n 29, at 5–8 and *passim*.
[147] For the last notion, see Wittreck, above n 3, at 64–6 and 72–3.
[148] Wittreck, above n 1, at 497–9.
[149] See G. Gsodam, 'Vanitas', in E. Kirschbaum (ed.), *Lexikon der christlichen Ikonographie*, vol. 4 (1972; 1994) 409.
[150] Wittreck, above n 1, at 571, 651–2, 702.

5

The Last Scholastic on Money

Gabriel Biel's Monetary Theory

Stefan Kötz

I. Introduction

Gabriel Biel (*c*.1410/5–95) is regarded as one of the most distinguished scholastic thinkers working at the end of the Middle Ages, and it is not uncommon for him to be labelled as the last of that era.[1] Of course, scholasticism did not cease with Biel: there were many philosophers and theologians teaching in the scholastic method after Biel at almost every university and school throughout Europe. For, although scholasticism was accompanied by new ways of thinking during the second half of the fifteenth century, and thus partly infiltrated by them, it was not until the first half of the sixteenth century that scholasticism, its curricula, and textbooks were gradually replaced by humanism and its fundamentally altered methods of teaching. However, on the Iberian Peninsula in particular, scholastic thinking reached its peak as late as the sixteenth and the first half of the seventeenth centuries, although by this stage it had incorporated various currents of intellect, such as *devotio moderna* and transalpine humanism. In their focus on natural law and ethics which was based chiefly on Thomas Aquinas, Spanish philosophers, theologians, and jurists also dealt extensively with economic issues, including monetary theory.[2] But on the whole it was

[1] This labelling of Biel goes back at least to the middle of the eighteenth century, and has been quite common since the last third of the nineteenth century: see F. X. Linsenmann, 'Gabriel Biel, der letzte Scholastiker, und der Nominalismus', (1865) 47 *Theologische Quartalschrift* 449. For an exhaustive survey of the manifold branches of research on Biel's life and writings within the last one and a half centuries, see P. van Geest, 'Das Niemandsland zwischen via moderna und devotio moderna: Der status quaestionis der Gabriel-Biel-Forschung', (2000) 80 *Nederlands archief voor kerkgeschiedenis* 157. For Biel's biography, see, e.g., U. Bubenheimer, 'Biel, Gabriel', in *Die deutsche Literatur des Mittelalters: Verfasserlexikon*, vol. 1 (1978) 853; W. Dettloff, 'Biel, Gabriel (vor 1410–1495)', in *Theologische Realenzyklopädie*, vol. 6 (1980) 488; U. Bubenheimer, 'Gabriel Biel', in M. Greschat (ed.), *Gestalten der Kirchengeschichte*. Vol. 4: *Mittelalter II* (1983) 308; see, in particular, I. Crusius, 'Gabriel Biel und die oberdeutschen Stifte der devotio moderna', in I. Crusius (ed.), *Studien zum weltlichen Kollegiatstift in Deutschland* (1995) 298, at 299–309 and I. Crusius, 'Gabriel Biel: Eine Karriere zwischen vita contemplativa und vita activa', in U. Köpf and S. Lorenz (eds), *Gabriel Biel und die Brüder vom gemeinsamen Leben: Beiträge aus Anlaß des 500. Todestages des Tübinger Theologen* (1998) 1. A catalogue of Biel's writings together with a short characterization of the most important ones can be found in nearly every of these biographical articles and in works dedicated to the study of individual writings (see the references cited below in n 4).

[2] On the role of economics within late Spanish scholasticism, especially with regard to the problem of value in general and monetary value in particular, as elaborated in the so-called School of Salamanca, see, e.g., M. Grice-Hutchinson, *Early Economic Thought in Spain, 1177–1740* (1978), at 81–121. On late Spanish monetary theory, see also Chapter 14 in this volume.

Biel who provided the academic world of his time with the last and most comprehensive compendium of scholastic theology and philosophy: his *Collectorium circa quattuor libros Sententiarum*. Biel's writings, which appeared on the very threshold of the Reformation, transmitted late medieval scholastic thought into the Early Modern Age. This was especially true, for instance, of Martin Luther, who drew his early theological knowledge mainly from the study of Biel. As a consequence, it was particularly against Biel that, later on, in 1517, Luther directed his general invective against scholasticism. So to label Biel as the last scholastic rests on an ambiguous premise: on the one hand, he was the last to synthesize and, in a way, bring to completion the broad medieval theory, and on the other hand, he was the last to do so at the very beginning of new times.[3]

The *Collectorium circa quattuor libros Sententiarum*,[4] Biel's largest work by far, is a kind of commentary on the *Sentences*. Academic theological teaching and writing of this sort was quite common in late medieval scholasticism. The final versions of the *Collectorium* were composed after Biel's appointment in 1484 as professor of theology at the recently founded university of Tübingen in Württemberg. The last of its four books remained unfinished, but was completed later by a student of Biel's, Wendelin Steinbach (d. 1519), who also went on to become a professor of theology in Tübingen. Prior to this, in 1501, he had sent Biel's work to press. The *Collectorium*, however, does not comment directly on the *Quattuor libri sententiarum* of Peter Lombard (d. 1160), the first and most influential collection containing the substance of the Fathers' theological teachings. Rather, the *Collectorium* is a commentary on the commentary of William of Ockham (d. 1347), who in turn had commented on Lombard's *Sentences* in 1317–19. Biel's choice of Ockham was the result of a remarkable affinity for his thought. Biel's academic studies at Heidelberg and Erfurt had fundamentally trained him in the so-called *via moderna*, based on Ockham and his successors. On the subject of the late medieval antagonism between the realists (*via antiqua*) and the nominalists (*via moderna*), Ockham can be regarded as one of the various authorities of the nominalist section of scholasticism. Although an issue of philosophy, which became institutionalized in the faculties of arts throughout Europe, the distinction between realists and nominalists was also transferred to many faculties of theology, including Tübingen. In fact, as regards theology, it was Biel who actually made Ockham the chief authority of nominalism (*venerabilis inceptor*), since he was the first to synthesize Ockhamistic thought. Thus, at the very end of the Middle Ages, Biel shaped Ockhamism into a distinct version of the theological *via moderna*.[5] Accordingly, Biel's *Collectorium* was the last—and only—compendium of scholastic theology from a nominalist, Ockhamistic point of view. It constituted a benchmark in late medieval Ockhamism.

[3] On Biel's position within late-medieval scholasticism and for a characterization of Biel as a theologian, see, e.g., H.-H. Vogelsang, *Gabriel Biel: Seine Stellung in der Spätscholastik* (Ph.D. Thesis, University of Freiburg, 1958); H. A. Oberman, *The Harvest of Medieval Theology: Gabriel Biel and Late Medieval Nominalism* (1963) (this is the most comprehensive reconstruction of the entirety of Biel's theology); R. P. Desharnais, 'Gabriel Biel: Last or Distinguished among the Schoolmen?', (1978) 10 *International Studies in Philosophy* 51; W. Werbeck, 'Gabriel Biel als spätmittelalterlicher Theologe', in Köpf and Lorenz, above n 1, 25. See also Geest, above n 1, at 169–81.

[4] For the text, see W. Werbeck and U. Hofmann (eds), *Gabrielis Biel Collectorium circa quattuor libros Sententiarum*. Vol. 1: *Prologus et Liber primus* (1973); Vol. 2: *Liber secundus* (1984); Vol. 3: *Liber tertius* (1979); Vol. 4.1: *Libri quarti pars prima (dist. 1–14)* (1975); Vol. 4.2: *Libri quarti pars secunda (dist. 15–22)* (1977); *Indices* (1992). An exhaustive characterization of Biel's *Collectorium* can be found in nearly all of the many works on the innumerable aspects of Biel's theology since the 1960s (on this see Geest, above n 1, at 181–9): see, in particular, F. J. Burkard, *Philosophische Lehrgehalte in Gabriel Biels Sentenzenkommentar unter besonderer Berücksichtigung seiner Erkenntnislehre* (1974), at 13–21; W. Ernst, *Gott und Mensch am Vorabend der Reformation: Eine Untersuchung zur Moralphilosophie und -theologie bei Gabriel Biel* (1972), at 53–6.

[5] On this process of creating a nominalist theological authority, see V. Leppin, 'In Ockhams Schule? Überlegungen zum Verständnis Gabriel Biels anhand seiner Begründung des Wissenschaftscharakters der Theologie', in G. Mensching (ed.), *De usu rationis: Vernunft und Offenbarung im Mittelalter* (2007) 185, esp. at 186–9, 194–5.

With his *Collectorium circa quattuor libros Sententiarum*, Biel intended to outline the entire theological knowledge of his time in terms of the doctrines of one principal, programmatic authority. Ockham, however, had only fully worked out the first book of his commentary, which is concerned with the more general philosophical and speculative issues of theology (*Ordinatio*). By contrast, he left the second, third, and fourth books only in the form of rough drafts (*Reportatio*). Hence, in book one, which deals with God and Trinity, Biel abbreviated Ockham, distilling the quintessence of his thought. However, in books two to four, which are devoted to creation, salvation, and the Sacraments, respectively, Ockham proved deficient, ambiguous, and open to interpretation. Here, Biel had to interpret Ockham, to make him in any way definite. As a result, he was quite free in posing, arranging, and trimming matters by raising scholastic questions ('scolasticas movere quaestiones'). In this part of the work, Biel, who generally was strongly interested in morality and ethics, effectively added much of his own thought. For his sources, he consulted—or, in the literal sense of a *Collectorium*, collected—many authorities. He thus drew on scholars of nearly every intellectual stream who, in one way or another, have contributed to the cognition of the theological truths. Compared to the work of Ockham upon which it was modelled, Biel's *Collectorium* proves to be an autonomous, enhanced piece of work. It is complete in its contents, systematic in its structure, precise in its arguments, intelligible in its style, and objective in its attitude. Now, in the fifteenth chapter (*distinctio*) of the fourth book, Biel, within a detailed treatment of penitence from the fourteenth chapter onwards, comes to talk about a person who has unrightfully ('iniuste') acquired things he does not own, thereby causing damage to another, that is the owner. The point is that this sinfully inflicted damage must be compensated by restitution ('restituere') if that person wishes to obtain absolution after penitence ('Qui rem alienam iniuste auferendo proximum damnificat, non potest paenitendo veniam consequi, nisi ablatum dum potest restituat'). At first, having resolved a more general issue of repentance (§ 1), Biel asks whether restitution should in itself be considered as an act of penitence (§ 2). Thereafter, various cases of infliction of damage are discussed: theft and robbery (§ 3); acts of war (§ 4); oppression of one's own or foreign subjects (§ 5); levy of judicial claims (§ 6); nomination of unsuitable persons to ecclesiastical functions (§ 7); misuse of sinecures and neglect of official duties (§ 8); fraud in terms of dealing, trading, and labour (§ 10); usurious acquisition (§ 11); sale and donation of temporal or perennial revenues (§ 12); ignominious acquisition (§ 13); acquisition by adverse possession due to prescription (§ 14); bodily injury (§ 15); defamation (§ 16); and mental injury (§ 17). In the ninth paragraph (*quaestio*), Biel finally turns to falseness, and in particular to falseness in coins. It is in this specific context of sinful infliction of damage and compensation within the all-embracing *Collectorium* that Biel's monetary deliberations find their place. Hence, the question, which is to be answered in three steps (*articuli*), comprising five *notabilia*, seven *conclusiones*, and four *dubia*, runs: 'Utrum falsarius acquirens aliquid per dolum falsitatis teneatur ad restitutionem taliter acquisiti damnificatis.'[6]

[6] See Werbeck and Hofmann, above n 4, vol. 4.2, at 175–89 (all quotations in the present chapter are taken from this edition). Biel's monetary theory has been dealt with in a most recently published article of mine: S. Kötz, 'Geldtheorie an der Universität Tübingen um 1500. Die Traktate "De potestate et utilitate monetarum" des Gabriel Biel (nach 1488/89) und des Johannes Adler gen. Aquila (1516)', in S. Lorenz et al. (eds), *Die Universität Tübingen zwischen Scholastik und Humanismus* (2012) 117, at 120–4, 135–49, 156–60. This article was written as a contribution to the early history of the University of Tübingen with regard to the process of transition from scholasticism to humanism in the last decades of the fifteenth and the first decades of the sixteenth centuries. It aimed at focusing research on the shared, but entirely different, treatments of monetary theory in the works of two Tübingen professors, the theologian Biel and the jurist John Adler/Aquila (d. 1518). In this article of mine, both treatises were to be put into the context of the life and writings of the respective authors and to be situated within

II. Gabriel Biel's Monetary Theory: Contents

1. Notabilia

In *Notabile* 1, Biel first of all has to determine the very meaning of 'falsarius' and 'falsitas'. He sees its basis as the unrightful deception ('deceptio') of another, committed either directly or indirectly ('falsarius est, qui falsitatem inducit seu committit, directe vel indirecte, ad proximi deceptionem iniustam'). Falseness, as distinct from trueness, is the perception of a thing by the mind ('in apprehensione intellectus') as other than it really is, or the denotation ('denominatione quadam extrinseca') of a thing as false. Examples are gold admixed with inferior metals or wine diluted with water, which are perceived as pure or denoted as adulterated. Falseness, then, may be effected in four ways. The first is by the intellect ('in mente') when a thing is perceived wrongly. The second is by speech ('in verbo') and writing ('in scripto') when a thing is denoted wrongly, whether by false accounts ('falsis relationibus'), lies ('mendacibus'), promises ('promissionibus'), traps ('fallacibus'), insinuation ('verborum cautelis loquendo'), or concealment ('tacendo'). The third is by action ('in opere') when a thing is merely pretended to be done, whether with regard to its material ('in substantia'), dimension ('in mensura'), weight ('in pondere'), or number ('in numero')—or by simulation ('in pharisaica simulatione'). Only the first way of falseness, by the intellect, does not deceive another, because it is not perceptible, whereas the other three ways actually do. And since falseness, in particular with regard to things ('falsitas in rebus'), is frequently to be found in processes of exchange such as sale or purchase, the medium ('medium') of which is money, Biel sets out to comment on the falsification of coins ('falsificatio numismatis') in the following passages.

In *Notabile* 2, Biel states at the outset that the use of money was born from necessity ('ex necessitate') so as to facilitate the exchange of commodities essential to human life. At first, Biel lists the reasons which impede the immediate exchange of goods: long distances and difficulties in transportation; the limited time of preservation; and the various needs of men which require the divisibility of goods, whilst many goods, especially those of high value, are indivisible. Then, Biel enumerates the advantages of using money as a medium of exchange. Money is small and thus easily handled and transported. It bears the mark of the sovereign and is thus guaranteed as to its value ('valor'), which has the effect of preserving an equal balance in exchange ('aequalitas in commutationibus'). It is of defined weight and thus of defined value ('pretium'). It is durable and thus available in the future. It is made of precious material and thus capable of storing and transporting high value. Lastly, it is

the specific academic setting of Tübingen. It was not intended, however, to fully investigate the monetary theory itself, even though an outline of the respective contents and a summary assessment were delivered. The present chapter will, on the one hand, provide a more detailed and, at times, amended outline of the contents; on the other hand, it will go further and try to investigate at greater length the sources Biel relies on and the concepts he is committed to. Thanks to his prominence, Biel's text is known generally within research on his life and writings (see the references cited above in n 1) or on the history and early scholarship of the University of Tübingen (see, e.g., J. Haller, *Die Anfänge der Universität Tübingen 1477–1537*, vol. 1 (1927), at 171, vol. 2 (1929), at 64*; H. A. Oberman, *Spätscholastik und Reformation II: Werden und Wertung der Reformation: Vom Wegestreit zum Glaubenskampf* (3rd edn, 1989), at 165–70 ('Die Geldtheorie der Nominalisten')). It is also known, naturally, within research on economic theory in general (see the references cited below in n 18) and monetary theory in particular. For an overview, see, e.g., A. E. Monroe, *Monetary Theory before Adam Smith* (1923), at 17–42, *passim*. As one of the few works on late medieval European monetary theory and policies that include a substantial chapter on Biel, see P. Spufford, 'Monetary Practice and Monetary Theory in Europe (12th–15th Centuries)', in *Moneda y monedas en la Europa medieval (siglos XII–XV)* (2000) 53, at 79–85. For a reading of Biel's text, see H. Mäkeler, 'Nicolas Oresme und Gabriel Biel: Zur Geldtheorie im späten Mittelalter', (2003) 37 *Scripta Mercaturae: Zeitschrift für Wirtschafts- und Sozialgeschichte* 56, esp. at 79–90; S. Kötz, 'Kann denn Münze Sünde sein? Gedanken eines spätmittelalterlichen Theologen zum Thema Geld', (2013) 4 *Momente: Beiträge zur Landeskunde von Baden-Württemberg* 17.

divisible into units and thus applicable to goods of all prices. Summing up, Biel notes that money in the form of coins enjoys these properties either on its own terms ('ex sui natura') or by human statute ('ex hominum instituto'). And since the value ('valor') of a thing, and hence its price ('valor pretii'), is dependent on human needs, money operates as a defined measure of all commodities ('certa mensura omnium commutabilium et venalium').

In *Notabile* 3, Biel defines the three ways of falsifying coins, which follow from the threefold nature of a coin ('de substantia monetae'). Coins may be falsified as to their material ('materia metallata or substantia') when the statutory alloy ('liga legitima') is not preserved. Coins may be falsified as to their weight ('quantitas ponderis') when the statutory weight ('legitimum pondus') is not preserved. And, finally, coins may be falsified as to their form ('publica forma') when the names, signs, and images of the minting authority are not adhered to. As concerns weight, Biel states that in principle the weight of the coin has to be congruent with the weight of the uncoined metal—or, more precisely, the weight of the coin must depend on the pure metal substance which is determined for that coin. This means that the fineness of the coin has to be congruent with the determined substance. Hence, the weight of the coin must not be reduced by filing or clipping ('per rasuram'), nor must it be reduced more subtly ('subtilius') by a corrosive chemical treatment ('per aquam artificialem corrosivam') or by other methods that are similarly hard to detect; for a falsification as to the weight of this kind decreases the substance of the coin itself ('diminutio substantiae'). Consequently, the value ('valor') of the coin, which is defined by its weight ('valere ex pondere'), has to follow the value of the uncoined metal, although a deduction may be made to allow for the costs of minting ('saltem deductis expensis monetandi'). As concerns form, Biel holds that the statutory form ('forma praefinita') of a coin guarantees its authenticity and rightfulness ('quaedam testificatio veritatis et iustitiae ipsius monetae') in terms of material and weight. For this very reason coins frequently show divine symbols, so that any alteration is inherently regarded as deceit ('mendacium'), injustice ('periurium'), and bearing false witness ('falsum testimonium'). This function of giving a warranty as to truth is also implicit in the derivation of the word 'moneta', the classical etymology of which runs that a coin by its very self warns ('monet') against fraud ('fraus') in terms of its material or weight.

In *Notabile* 4, Biel goes on to speak about the alteration of coins ('mutatio monetae'), which may occur in various ways. Coins may be altered as to their material ('in materia') when, due to the lack or abundance of a certain metal, they are minted in another metal or alloy. Coins may be altered as to their form ('in forma') when they are minted with varied images, signs, or inscriptions. Coins may be altered as to their value ('in valore') when they are minted in another metal, alloy, or weight, or when they are assigned ('statuere') another value. And, finally, coins may be altered as to their denotation ('in nomine') when either the 'accidentalia', such as the names of the sovereign or mint, are changed, or when there is a change in the 'essentialia', relating directly to the statutory value or weight of the coin. A change to the denotation of coin denominations is considered to be such an alteration. Any of these kinds of alteration may be executed while an existing coinage continues to circulate at its own value, or when it has been discontinued by repudiation ('reprobatio') or prohibition ('prohibitio'). There are various motives for an alteration of coins. These motives may be reasonable, when they arise out of necessity and confer an advantage on the community ('propter necessitatem aut utilitatem rei publicae'). But they may also be greed ('ex cupiditate') and pride ('ex superbia'), which are damaging to the community ('in damnum rei publicae'). Thus, a distinction is to be made between a legitimate ('licite') and an illegitimate ('illicite') alteration of coins. An alteration of the second kind is regarded as culpable ('culpabiliter').

In *Notabile* 5, Biel finally gives examples of the four kinds of deceptive falseness—as to the material, number, weight, and dimension—by referring to things other than coins ('in aliis rebus'). Here, however, as regards the material ('in substantia'), he again refers to metals ('ut aurichalcum pro auro, electrum pro argento vel alchymisticum pro vero et naturali'). Similarly, Biel focuses on the broad field of human falseness by referring to simulation and hypocrisy as to the essence ('in substantia') and personality ('in persona'), or to the characteristics ('in aliqua accidentali habitudine') of a certain person.

2. Conclusiones

In *Conclusio* 1, Biel returns to the falsification of coins and declares: 'Falsificans monetam in substantia, forma vel pondere peccat mortaliter . . . '. The proof states that falsifying is an act of iniquity ('iniquum'); that it is a theft ('furtum'), as it deprives someone of his property against his will, on which grounds it is a mortal sin; and that it requires compensation, because it fraudulently ('fraudulenter') causes damage to another or to the community. However, Biel stresses, ' . . . si illud faciat in damnum proximi vel rei publicae'. His point is that falsification only as to the form, which does not affect the value of the coin, does not cause damage. The same is true when a coin that is no longer in circulation is clipped. Neither situation then is to be regarded as a sin at all.

In *Conclusio* 2, Biel extends the subject matter of damage to the community from the falsification to the alteration of coins: 'Mutans monetam in damnum rei publicae tenetur damnum illatum restituendo compensare.' The proof is based on the idea that such an alteration causes damage to a thing—here the community—which is not owned ('in re non sua') by the person executing the alteration. This in itself gives rise to a right to compensation. At this point, Biel also debates extensively on three cases of legitimate ('licite') alteration of coins. None of these leads to compensation since they are undertaken for reasonable motives ('ex rationabili causa') for the advantage of the community. The first case is when a foreign sovereign or a falsifier introduces false coins that maliciously ('malitiose') imitate local ones but which are of lesser value. Then, such a coinage, which is deceptive ('sophistica') in its tendency to prevent people from detecting it, may be counteracted by minting new coins of altered form, but at the former value. The second case is when a coinage deteriorates ('peiorata') in the course of circulation, and thus diminishes ('imminuta') in its material and weight. Then, the old coinage may be repudiated ('prohiberi') and replaced by minting new coins of altered form, but at the former weight. The third case is when metal prices increase due to the scarcity of minting metals. Then, either a higher value may be assigned to the existing coins in due correlation to the coins of other metals, or new coins may be minted at a reduced weight and in altered form, but at the same value ('pretium') as the coins they replace. The latter option is probably ('forte') better for the community, since prices of goods and revenues ('redditus ac pecuniarii census') thus remain unchanged without fraud. Through this method, the old coinage does not even need to be repudiated, provided that the due correlation ('debita proportio') between the coin denominations and their relation to prices and amounts are preserved. Eventually, Biel adds a fourth case: the realization of a profit ('lucrum') by minting new coins. This is limited, however, to a case of profit not for the moneyer ('monetarius'), who ultimately is the sovereign, but for the community who actually need it. 'Extra hos casus mutatio monetae in valore reproba est et iniusta', because it causes damage to the community ('rei publicae damnosa') and deprives the subjects ('spoliativa subditorum'). By contrast, an alteration affecting only the form or the non-essential names, which does not affect the value of the coin, seems tolerable, whether it is made out of pride ('superbia'), pomposity ('pompa'), contemptibility ('aliorum contemptu'), or other dishonest motives ('sinistra intentione'). The reason for tolerating it is that it causes no damage. However, although it does not give rise to any right to compensation, it is nevertheless to be condemned as a sin: 'Unde consilium est quod non fiat mutatio monetae nisi ex magna et rationabili necessitate.'

In *Conclusiones* 3 to 5, Biel provides solutions to three special problems. In *Conclusio* 3: 'Expendens scienter monetam falsam pro vera et iusta falsarius est et tenetur restituere illata damna.' This is proved by the definition of the term *falsifier* as a person who deceives another by causing damage to another or to the community, which in itself gives rise to a right to compensation. In *Conclusio* 4: 'Expendens scienter monetam non currentem aut alias minus valentem pro bona et currente fraudat proximum et tenetur restituere.' The proof of this is the same as above. In both cases, Biel draws a distinction between acting knowingly ('scienter') or ignorantly ('ignoranter'). Ignorance, at any rate, absolves the person spending such a coin from sinning, but he can only be relieved from the duty to pay compensation if he remains ignorant of what he has done. For, once he realizes what he has done, then compensation must be paid. This applies even if the person has accepted such a coin in good faith—worse still, if he accepted it on purpose; either way, he should have examined it cautiously ('caute'). And in *Conclusio* 5: 'Transferens monetam de certo loco, ubi minoris valoris aestimatur, ad locum ubi magis valet, non peccat, si non alias fraudem committat.' This is proved by the fact that the realization of a profit ('lucrum') of one's own accord ('sua industria') is not forbidden, provided that no damage is caused to another and there is no manipulation to the coins, which then amounts to a fraud.

In *Conclusiones* 6 and 7, Biel finally refers to *Notabile* 5 again, which is concerned with falseness in general and as it pertains to human beings. As *Conclusio* 6, he answers: 'Omnis proximum defraudans per falsitatem commissam, sive in rerum substantia, numero, qualitate, pondere vel mensura, sive in verbo aut in scripto, praeter poenas canonicas et legales quas incidit, et peccatum mortale quod committit, tenetur de omni damno inde secuto.' As usual, Biel's proof relies on damage, mortal sin, and compensation, but also on the commandment of charity which is infringed by falseness ('contra fraternam caritatem'). And as *Conclusio* 7: 'Recipiens aliquid occasione certae habitudinis simulatae et non existentis, alias non accepturus, fraudat donantem et tenetur ad sic accepti muneris restitutionem.' Biel's proof is the same as above, but it is augmented here by scores of general deliberations on the problem of the transfer of the ownership of a thing in the case of false pretences. To this, five exemplary *corrolaria*, which form a kind of further *conclusiones*, focus mainly on the cases of the hypocritical beggar ('mendicus') and the fraudulent pardoner ('quaestor'), who resort to falseness to get alms ('munus' or 'eleemosyna').

3. Dubia

In *Dubium* 1, Biel asks: 'Quis habeat cudere monetam?' The answer is no one but the emperor ('solus princeps, id est imperator'). It follows that no inferior power ('inferior potestas') may coin money unless by authorization ('concessione principis') and custom ('praescribere'), or unless the power, like that of the kings of Spain, is of the same standing as the imperial rights. Thereupon, Biel argues that, since money was established so as to redound to the good of the community ('pro bono communitatis'), it has to be produced and marked ('signare') by the respective sovereign. The sovereign, however, does not own the money ('non est sua'), that is the coins circulating within his dominion. Rather, the owner is the people ('populus'), as it freely possesses the so-called natural fortunes ('naturales divitiae') consisting of the commodities and manpower, for which the coins earned are the equivalent ('aequivalens') medium of exchange ('medium permutandi'). The sovereign, on this account, is not allowed to determine the value of the coins ('constituere valorem monetae') or the correlation between the coin denominations ('proportionem unius monetae ad aliam')—or at least he is not allowed to do so arbitrarily ('secundum suam voluntatem'). For thereby the rightful ('iusta') and naturally given correlations of gold to silver and of pure metal to alloyed metal have to be preserved. Rather, the decision ('decretio') on that in principle belongs to the community. As a consequence: 'Ex quo sequitur quod princeps reprobans monetam aliquam valentem, ut eam remissius emat et conflet et inde aliam minus valentem fabricet, ei priorem valorem constituendo, monetam fraudat et ad restitutionem tenetur.' Biel's proof is that in this way a thing which is bought at a cheaper price is sold at a higher price, which is 'contra iustitiam'. He draws the analogy of someone who buys up an entire harvest of a crop and sells it at an arbitrary price, whereas actually the price ('pretium') should reflect human needs ('humana indigentia'). Thus, the sovereign unjustly ('indebite') takes possession ('attrahere') of the people's money, 'quae utique esset iniustissima et tyrannica exactio populi'.

In *Dubium* 2, Biel goes on to ask: 'Utrum in aliquo casu princeps mutare possit monetam propter lucrum suum. Vel generalius: An princeps possit habere lucrum ex moneta, constituendo maiorem valorem monetae quam valeat eius materia non monetata, deductis necessariis expensis, vel minuendo pondus aut ligam sub priore valore.' The answer is that the realization of a profit ('lucrum') of this sort is only permitted if there is a sudden need for a large amount of money. Biel gives the examples of the defence of the nation ('pro defensione rei publicae') or paying a ransom for the sovereign ('pro redemptione principis'), which are actually to the advantage of the community ('in utilitatem rei publicae') which is required to pay these subsidies ('subsidium'). If, then, coins are altered as to their material or weight, people notice ('sentire') this extra imposition less, since the value of the coins remains unchanged, as long as the sovereign's profit does not exceed what is necessary. Biel, however, insists on the consent of the community ('consensu subditorum') which owns the money; the only dispute may then be as to the actual extent of this consent. An alteration of coins is the easiest and most efficient way to collect money quickly ('citius'), justly ('sine fraude'), and inexpensively ('sine expensis'). It is adapted to the subjects' abilities ('proportionabilior facultatibus'), and it is more bearable and less likely to spark riots ('sine murmure et periculo rebellionis') since people take less notice of it. Moreover, it encompasses all sections of the community ('generalissima')—'Verum an haec ita se habeant, committo diligenti lectori'. It is crucial, however, that the altered coins circulate only within the realm in question, as otherwise foreign subjects are unrightfully ('iniuste') damaged. Equally, it is crucial that, as soon as necessity has ceased, the alteration is withdrawn.

In *Dubium* 3, Biel addresses the case: 'Utrum eligens ad partem meliores denarios ac magis ponderantes et conflari faciens peccet et ad restitutionem teneatur.' On the one hand, the case concerns a person who culls coins that are better ('meliores'), in the sense that their higher weight gives them a higher value as compared to coins that are of lesser value because of their lesser weight. Such a person is to be considered as a falsifier, on the ground that he commits a mortal sin ('mortaliter'). For by the practice of culling, the totality of the coinage ('corpus pecuniae') is damaged. This is because the moneyers are simply not able to adjust the actual weight of every individual coin to its statutory weight, but can only ensure that a given batch of coins conforms to this weight. On the other hand, if every individual coin holds the statutory weight, whereas some coins, owing to the inattentiveness ('ex improvidentia') of the moneyer, have a somewhat higher weight ('magis ponderantes'), then a person who culls these coins is not to be considered as a falsifier. For, although he commits a venial sin ('venialiter') by acting wrongly ('male'), he nevertheless partakes of salvation if he desists. Furthermore, if he does so only on a limited scale ('modicitas'), he is excused, because then the damage to the moneyer is less than if it were done on a large scale. But whatever the scale of the damage, that person is in all cases required to pay compensation.

In *Dubium* 4, Biel finally goes on to make another departure from the topic of money so as to investigate another special case of—putative—human falseness. This is the knotty ('nodosa') episode in Genesis 27 where Jacob obtained the birthright from his father Isaac only by pretending to be his twin brother Esau. But God did not inflict any punishment since Jacob did in fact possess this right. Unbeknownst to his father, Jacob had learned of his birthright from his mother due to a divine revelation.

III. Gabriel Biel's Monetary Theory: Sources

Any commentary aims both at elucidating and elaborating on the diverse subject matter presented in the original work. The same is true of a commentary on the *Sentences*, whether it is Gabriel Biel commenting on William of Ockham, or Ockham commenting on Peter Lombard. As regards falseness, which was the basis of Biel's monetary deliberations within the all-embracing *Collectorium circa quattuor libros Sententiarum*, Ockham completely failed as an authority. Moreover, although all but the last five chapters of his own *Quaestiones in librum quartum Sententiarum* also dealt with the sacraments, that is baptism (chapters 2–5), the Eucharist (chapters 6–9), and penitence (chapters 10–11), Ockham had nothing at all to say about money or coins.[7] In respect of penitence he merely resolved the questions whether sin might be absolved even without repentance, and whether by repentance absolution was bestowed on all penitents. However, since—as was essential in scholastic thinking and writing—Biel had to base his arguments on authorities, he had to search for another chief authority on monetary issues. The medieval theory on money was split into two branches, once one went beyond the basic knowledge provided by encyclopaedic works such as the *Etymologiae* of Isidore of Seville (d. 636). The first branch stemmed from jurisprudence both of civil and of canon law, the commentators on which developed a thorough doctrine of the various legal aspects of money from the twelfth century onwards.[8] The core issue, which arose from a general assessment of monetary value, concerned all kinds of monetary obligations: the risk of changes in the monetary value had to be shared between the creditor and the debtor. The second branch stemmed from philosophy and theology, based on Aristotle. Aristotle's monetary theory, as presented in the *Ethics* and the *Politics*, had been fundamental to medieval scholarship from the middle of the thirteenth century.[9] Aside from the Arabic tradition of Averroes (d. 1198), the most important commentators on the occidental *Corpus Aristotelicum* were Albert the Great (d. 1280), Thomas Aquinas (d. 1274), Henry of Ghent (d. 1293), and Jean Buridan (d. 1358).[10] The core issue here, in terms set out by Aristotle, was the essence, properties, and

[7] For the text, see R. Wood, G. Gál, and R. Green (eds), *Venerabilis inceptoris Guillelmi de Ockham Quaestiones in librum quartum Sententiarum (Reportatio)* (1984).

[8] On civil law, see W. Ernst, 'The Glossators' Monetary Law', in J. W. Cairns and P. J. du Plessis (eds), *The Creation of the 'Ius Commune': From 'Casus' to 'Regula'* (2010) 219, at 220–38 and Chapter 7 in this volume; on canon law, see Ernst, 'The Glossators' Monetary Law', at 239–44 and Chapter 8 in this volume.

[9] On Aristotle's monetary theory, see F. Wittreck, *Geld als Instrument der Gerechtigkeit: Die Geldrechtslehre des Hl. Thomas von Aquin in ihrem interkulturellen Kontext* (2002), at 173–271, esp. at 211–71.

[10] On this see, e.g., Monroe, above n 6, at 17–42; C. Miller, *Studien zur Geschichte der Geldlehre*. Vol. 1: *Die Entwicklung im Altertum und Mittelalter bis auf Oresmius* (1925), at 74–120; O. Langholm, *Wealth and Money in*

functions of money, as seen from an ethical perspective. Taken together, these authorities would have provided a good basis for Biel when writing on money.

However, Biel does not refer to even one of the above-mentioned philosophers and theologians, nor indeed to any of a handful of others who dealt with monetary issues at the end of the twelfth, in the thirteenth, and in the first half of the fourteenth centuries. Nor does he cite Isidore or any similar encyclopaedia.[11] Even though the etymology of the word *moneta*, as given at the end of *Notabile* 3, is borrowed from Isidore, Biel quotes the decretist Hugh of Pisa alias Huguccio's (d. 1210) early work on grammar, the *Liber derivationum*, an etymological dictionary. And there is only a glimmer of the scholarship of Late Antiquity when Biel, reasoning on prices at the end of *Dubium* 1, quotes an aphorism from the *Variae* by Cassiodore (d. *c.*580). By contrast, references to juridical texts are frequent, either to the *Corpus iuris canonici* or to its numerous commentators; only once does Biel refer to a commentator on the *Corpus iuris civilis*. With respect to the *Corpus iuris canonici* itself, when mentioning falseness by writing in *Notabile* 1, Biel points to the gloss on D. 19 c. 3 *In memoriam* and to X 5.20.5 *Licet ad regimen* with its gloss, which both dealt with the falsification of papal documents in particular. In the proof of *Conclusiones* 1 and 3 that compensation must be paid, Biel cites X 5.36.9 *Si culpa*, which was generally concerned with the duty of compensation for a culpably, ignorantly, or negligently inflicted damage. In *Dubium* 1, Biel links his discussion of the right of minting to X 5.40.26 *Super quibusdam*, which dealt with the acquisition of public rights by prescription. Lastly, when addressing the necessity of the consent of the community to the alteration of coins in *Dubium* 2, Biel alludes to C. 7 q. 1 c. 8 *Quam periculosum*, which said that nobody should relinquish his right on things he owns. None of these references is specifically related to money or coins, and they are, accordingly, used to prove non-monetary issues. By contrast, all but one of Biel's references to the commentators on the *Corpus iuris canonici* are related to the same text, specifically devoted to money, namely decretal X 2.24.18 *Quanto personam tuam*. Originally, this letter, written by Pope Innocent III (1198–1216) in 1199, provided an answer to the question whether the king of Aragon was bound by his oath not to alter the coinage of his predecessor, even though this coinage had in fact become debased. The pope's advice was that new coins should be introduced at the restored value. The decretal, in addition to a few others, such as X 3.39.20 *Olim causam*, was the focal point for the canonists' in-depth investigation of the problem of monetary value. That investigation, however, extended beyond the related topic of monetary obligations to the sovereign's right to alter coins and the necessity for the community to give its consent. The commentators consulted by Biel are classics: Pope Innocent IV (d. 1254) and his *Apparatus super libros Decretalium*; Henry of Segusio alias Hostiensis (d. 1271) and his *Apparatus sive Commentum super libros Decretalium*; John Andreae (d. 1348) and his *Novellae super quinque libris Decretalium*; and Nicolò of Tudeschi alias Panormitanus (d. 1445) and his *Commentaria seu Lectura in libros Decretalium*. In *Notabile* 3, in the definition of the three ways of falsifying coins, Biel relies fully on Panormitanus and the corresponding gloss. This is true even when he reports and once quotes the contradictory opinions of Innocent IV and the

the Aristotelian Tradition (1983); Wittreck, above n 9, at 572–652 (Averroes), 272–314 (Albert), 315–503 (Thomas), and 703–27 (after Thomas).

[11] Here, only the sources referred to by Biel himself or identified by the editors of the *Collectorium* (see Werbeck and Hofmann, above n 4, *Indices*) can be taken into consideration. Furthermore, the frequent references in *Conclusio* 7 and *Dubium* 4 on human falseness will be excluded here. Besides the Holy Bible, Biel used the *De civitate Dei* by Augustine (d. 430), the *Dialogi* by Pope Gregory the Great (d. 604), the *Summa theologica* by Alexander of Hales (d. 1245), the commentary on the *Sentences* by John Duns Scotus (d. 1308), the *Postilla litteralis super Bibliam* by Nicholas of Lyra (d. 1439), and a single passage from the *Clementines*.

legist Bartolus of Saxoferrato (d. 1357) commenting on D 48.10.19 *Qui falsam monetam*, which concerned the question of who was to pay for the costs of minting. In *Conclusio* 1, the *dictum* stems from Hostiensis and other, unnamed, authorities such as Panormitanus ('Haec conclusio est Hostiensis . . . '), and so should the whole proof, including all citations. In *Dubium* 1, the initial response to the question raised comes from Panormitanus ('Respondet hic Panormitanus'), as do two quotations and the link to *Super quibusdam* mentioned above. The same is true of the *dictum* further down, which is borrowed from Hostiensis ('Haec est sententia Hostiensis et Panormitani'). In *Dubium* 2, Biel cites Innocent IV and Panormitanus, and their dissent on the actual extent of the consent of the community to the alteration of coins, including the allusion to *Quam periculosum*. And finally, in *Dubium* 3, the response to the question raised had already been delivered by Hostiensis, John Andreae, and others, including Panormitanus (' . . . sequens Hostiensem, Iohannem Andreae ac alios'). Only once, in *Conclusio* 1, is the decretal *Quanto personam tuam* on oaths cited directly. It is used here as the basis for deducing from the nullity of an oath on false money that the falsification of coins is iniquitous. Additionally, in the same *Conclusio* 1, in support of the proof that falsifying coins is a mortal sin, Biel cites Extravag. Ioh. XXII 10, un. *Prodiens*, where persons falsifying coins and committing monetary fraud were excommunicated.

At first sight, Biel's preoccupation with the decretal *Quanto personam tuam* and its commentators, which is supplemented by only a few other canon law texts, seems to be made at first-hand. But a closer look at Biel's juridical references reveals that nearly all of them are in fact second-hand. With a single exception, they are adopted from two authors whom Biel cites quite frequently and whom he commonly consulted even without explicitly referring to them. On the one hand, there is Antoninus of Florence (d. 1459),[12] an Italian Dominican, who held several leading functions in the order and eventually became archbishop of Florence, and was the author of his *Summa theologica moralis* (first printed in 1477). On the other hand, there is Angelo Carletti di Chivasso (d. 1495),[13] an Italian Franciscan, who similarly held several leading functions in the order, and was the author of his *Summa de casibus conscientiae* or *Summa angelica* (first printed in 1476). In *Notabile* 3, the entire treatment by Panormitanus of the three ways of falsifying coins, including the contradictory opinions of Innocent IV and Bartolus, is borrowed from Angelo, and not just the assertion that the opinion of Innocent IV is commonly accepted, as Biel implies ('ut vult Angelus . . . '). Similarly, nearly the whole of *Conclusio* 1, that is the *dictum* based on the commentators and the proof, is from Angelo ('Haec conclusio est . . . et doctorum communiter'), including the citations from *Quanto personam tuam*, *Prodiens*, and most likely *Si culpa*. The *dictum* of *Conclusio* 3 is taken from Antoninus, although he is not directly cited, as is the proof including *Si culpa* which is only hinted at here. From both Antoninus and Angelo stems the *dictum* of *Conclusio* 4 ('Haec conclusio in sententia est Angeli in Summa et Antonini'). Parts, if not the whole, of the subsequent discussion of acting knowingly or ignorantly also derive from Antoninus, including a direct quote. Likewise, the entire *Conclusio* 5, including the *dictum* ('Haec est Antonini') and the proof ('Probatur secundum eum'), can be found in Antoninus, as are the *dictum* and undoubtedly the proof of *Conclusio* 6 about falseness in general ('Haec conclusio communiter doctorum est'), which are also in Angelo. In *Dubium* 1, Panormitanus' entire response to the question

[12] There is no modern edition of Antoninus' text; the edition consulted here is Verone 1740 (Biel used Bk 2, title 1, ch. 18, §§ 4–7, see Werbeck and Hofmann, above n 4, *Indices*, at 72–3).

[13] There is no modern edition of Angelo's text; the edition consulted here is Lyon 1516 (Biel used ch. *Falsarius*, §§ 3–7, 9, and 11, see Werbeck and Hofmann, above n 4, *Indices*, at 69–71).

raised, and the accompanying two quotations, are taken from Antoninus. This is also true of the *dictum* further down, which is based on both Antoninus and Angelo, although neither is directly cited. Moreover, in *Dubium* 2, Biel relies fully on Angelo when he considers the consent of the community to the alteration of coins. The references thus cited second-hand include the dissent of Innocent IV and Panormitanus, and Angelo is explicitly said to have subscribed to the views of the latter ('Ideo dicit Angelus . . . '). And, finally, Angelo is Biel's source for a better part of the response of the commentators to the question raised in *Dubium* 3 ('Respondet Angelus in Summa sequens . . . '). Thus, not only all the juridical references, but virtually the whole substance of all *conclusiones* and *dubia* dedicated to monetary issues come from either Antoninus or Angelo, or both of them, including *Conclusio* 6 on falseness in general. *Conclusio* 2 and most of *Dubium* 2, which are both concerned with the alteration of coins in particular, are a notable exception.

However, there is another author whom Biel cites and quotes quite frequently and whom he commonly consulted even without explicitly referring to him: Nicolas Oresme (d. 1382) and his *Tractatus de origine, natura, iure, et mutationibus monetarum*, known as *De moneta*, dated *c.*1358.[14] From Oresme, Biel tacitly adopts the outline of the invention of money in *Notabile* 2, which is concerned with the reasons which impede the immediate exchange of goods and the advantages of money as a medium of exchange. Originally, of course, these ideas hail back to Aristotle, to whom Biel refers—as was usual in the Middle Ages—as *Philosophus*. However, it turns out to be a typical medieval transformation of Aristotle as delivered by Oresme. In Biel's discussion of the falsification of coins as to their form at the end of *Notabile* 3, the entire reflection on the theological significance of the form of coins and the consequences of their alteration if the form includes divine symbols is taken from Oresme. The borrowing includes two quotations, as well as Huguccio's etymology of the word *moneta*. By contrast, Biel's extensive discussion in *Conclusio* 2 of the four cases where coins may be legitimately altered contains no reference to Oresme, even though the first and the second case with their explanations are found in Oresme. The *ratio principalis*, following the initial response to the question raised in *Dubium* 1, which deals with the ownership of money and the respective rights of the sovereign, is, including a quotation, taken entirely from Oresme. And, finally, at the end of the same *Dubium* 1, Biel's argument about prices relies fully on Oresme. The argument contains two quotations, an illustrative example from Genesis 41:53 et seq. about the sale of crops by Joseph, a corresponding passage from Aristotle, and a quotation of an aphorism by Cassiodore. Thus, the whole substance of Biel's *conclusio* and the *dubium* on the alteration of coins are derived straight from Oresme. However, Biel went further and also incorporated Oresme's discussion of other, minor monetary issues, including virtually all references to non-juridical texts, especially to Aristotle's monetary theory.

IV. Gabriel Biel's Monetary Theory: Concepts

The subject matter of falseness in general and monetary falseness in particular, addressed in Gabriel Biel's scholastic commentary, his *Collectorium circa quattuor libros Sententiarum*, was not introduced by William of Ockham's work. Consequently, in the fifteenth *distinctio* of the fourth book, when commenting on sin, confession, penitence, and absolution—

[14] For the text with English translation, see C. Johnson (ed.), *The* De Moneta *of Nicholas Oresme and English Mint Documents* (1956), at 1–48 (Biel used chs 1–3, 5–6, 9–10, and 21, see Werbeck and Hofmann, above n 4, *Indices*, at 129).

topics explicitly discussed by Ockham—Biel enjoyed great freedom in approaching a pretty complex problem. The point is that a person who has unrightfully acquired things he does not own, thereby causing damage to another, must compensate for this sinfully inflicted damage if he wishes to obtain absolution after penitence. Hence, the entire system of the *Collectorium*, in its treatment of various cases of infliction of damage, led almost automatically to a discussion of falseness ('falsitas') in the ninth *quaestio*. Falseness in coins, then, had to be considered too, but it formed only a part—admittedly a major part—of the whole subject matter of falseness. For completeness, Biel also had to address, within the same paragraph, falseness in general (*Notabilia* 1 and 5 and *Conclusio* 6), and human falseness in particular (*Notabile* 5, *Conclusio* 7, and *Dubium* 4). Thus, the general issue of falseness steered Biel's exploration of the cases in which money or coins would cause damage. Apart from a few other instances, those cases concerned the falsification as well as the alteration of coins. At the beginning, the *notabilia* structure the subject matter, provide definitions of terms, and concretize the several subsections of the question. Within this framework, Biel had to systematize the various ways of falsifying coins in *Notabile* 3 and of altering coins in *Notabile* 4. Prior to that, in *Notabile* 1, he had to consider the broad field of falseness in its various dimensions, and eventually restrict the scope of inquiry to monetary falseness, which was the topic at hand. The outline of the invention of money in *Notabile* 2, which provides a concise summary of the essence, properties, and functions of money, simply served as a segue to the topics to follow. Therefore, *Notabilia* 3 and 4 present cases in which money is not able to function as a medium of exchange in the ideal Aristotelian sense, as previously presented in *Notabile* 2. The *notabilia*, just as the *conclusiones* and the *dubia*, end with a thorough assessment of falseness in general and as it pertains to human beings in particular. These non-monetary sections, however, will not be considered here.

Next, the *conclusiones* set out to answer the lead question of the ninth paragraph, namely whether a person who has acquired things through falseness should pay compensation by restitution for the damage caused. To resolve this problem, Biel had to decide whether certain actions involving money and coins are to be qualified as an act of falseness and therefore as a (mortal) sin, which in itself requires compensation. The particular answers to the several subsections of this question are put down in a so-called *dictum*. The proof then provides a systematic argument and deductive discussion of the evidence and sources, using the typical scholastic method of dialectics employing the techniques of logical causality. The first case, as presented in *Conclusio* 1, is, of course, the falsification of coins as to their material, form, or weight. In the event that it causes damage to another or to the community, falsification is a mortal sin. Here, however, Biel points out that there is damage only if the value of the coins has been affected. On these grounds, he excludes from sinfulness the falsification of coins only as to their form, as well as the retention of a false or manipulated coin. In *Conclusio* 3, Biel goes a step further and identifies as a falsifier someone who knowingly passes a false coin as authentic. Similarly, in *Conclusio* 4, he identifies a falsifier as someone who knowingly passes an invalid coin or a coin below its statutory value as valid. Both persons are condemned to pay compensation, as they sinfully cause damage. The related distinction between acting knowingly or ignorantly, which impacts on the question whether the person has committed a sin or not, culminates in the conclusion that the guilt of the person passing such a coin and the error of the person receiving it must not be the cause of damage to another. The three points associated with the falsification and manipulation of coins are plausible, given the frequent practice of falsifying and manipulating coins in the late Middle Ages. In addition, Biel engages with aspects of the late medieval monetary system and economic life, including the regional concomitance of coins of different values and the need for valuation in the regions where they actually circulate. Thus, in *Conclusio* 5, Biel addresses the transfer of coins from one place, where they are rated at a lesser value, to another, where they are rated at a higher value. A person who profits from these differences in valuation, or from the variable exchange rates between one place and the other, is not a sinner since no damage is caused to anybody. Finally, in *Dubium* 3, Biel refers to the medieval technique of minting which results in slight variations in individual coin weights within a given batch of coins where the batch as a whole conforms to the statutory weight. Such coins minted *al marco* are to be distinguished from coins minted *al pezzo*, where each individual coin holds the statutory weight. Here, Biel makes a distinction between two cases where coins of higher weight are culled, depending on whether any damage is caused to the totality of the coinage by reducing the value of a given batch of coins. If there is damage, a person who melts down the better coins for profit is to be identified as a falsifier committing a mortal sin. In the case, however, where there is no damage, that person is a venial sinner but not a falsifier.

However, the core of Biel's monetary deliberations is the alteration of coins, and his attention to this question follows logically from the falsification of coins and the structure of the whole ninth paragraph of the *Collectorium*. It has been declared in *Conclusio* 1 that a person who falsifies a coin as to its material or weight—and thus falsifies it as to its value—causes damage to another or to the community. Hence, in *Conclusio* 2, the alteration of coins is treated as analogous to falsification, and it is qualified as a mortal sin in the event of damage. In a large annex to *Conclusio* 2 Biel then discusses three cases of legitimate alteration of coins. These are cases of necessity, based on reasonable motives, which are free of sin and not subject to the requirement of compensation since they confer an advantage on the community. The first two cases, which amount to mere alteration of form, include the withdrawal of false coins and the replacement of worn-out coins so as to restore the statutory value of the coins. The third case, however, concerns the alteration as to the value. Such an alteration may be executed either by altering the weight or the alloy, or by assigning another value to the coins in circulation after a change in circumstances, such as a variation in metal prices brought about by changes in the supply of minting metals. By contrast, compensation has to be paid for an illegitimate alteration as to the value, which is not justified by any necessity. Such an alteration is culpable and sinful since it causes damage to the community. At the end of *Conclusio* 2, Biel adds that even an alteration that does not affect the value of the coins, and may therefore be considered to be tolerable, is sinful if it is made for any sort of dishonest motives. Now, as regards the legitimate alteration of coins as to their value, Biel argues in favour of altering the weight or alloy rather than assigning the coins another value, since the prices of goods and revenue levels are thereby held steady. He then proceeds to *Dubium* 1, which like all *dubia* deals with special aspects of the question and forms something of an autonomous *quaestio* with its own *conclusio*. *Dubium* 1, which is concerned with the ownership of money and the respective rights of the sovereign, again takes up the question of the assignment of value. Biel asks who has the right of minting and, after a general assessment of this issue, answers that it is the sovereign. Biel states, however, that the sovereign does not possess the coins in circulation; hence, he is not entitled to determine the value of the coins by his own authority. Rather, this is the task of the community, since, as the owner of the natural fortunes, it actually owns the money. And since, as has been said in *Notabile* 2, the value of a thing and thus its price reflect human needs, the value of money as a defined measure of all commodities is to be determined by the forces of supply and demand in the economy. But Biel does not entirely condemn the determination of value. Without actually favouring it, he has permitted such a determination in *Conclusio* 2, provided that the correlation between the coin denominations adheres to the correlation between gold and silver. He rather resolutely opposes an arbitrary determination of value, or the arbitrary alteration of the denotation of coin denominations which does not take into account the correlations between metals and the prices in real economy. As a result, the *conclusio* of *Dubium* 1 holds that the sovereign is bound to pay compensation if he repudiates a coinage at the statutory value with a view to buying it up cheaply, melting it down, and then minting new coins of lesser value which would then be assigned the former value. This fraud is, of course, a mortal sin, since the sovereign causes damage to the community by preying on people when he orders such a rise in prices, as is demonstrated at the end of *Dubium* 1. Since the sovereign's motive in this case is to realize a profit, *Dubium* 2 goes on to ask whether he may alter coins in any case for the sake of his own profit. And Biel phrases the question in general terms: is the sovereign allowed to realize a profit on money by assigning the coins a value higher than that of the uncoined metal, or by reducing the weight or fineness of the coins while retaining their former value? In *Notabile* 3, Biel has given expansive consideration to the value of the coin. In principle, it has to be congruent with the value of the uncoined metal, but with an allowance made for deducting the costs of minting. Here, Biel also allows the actual expenses to be deducted. However, beyond this necessary discrepancy between the intrinsic value of the coin—represented by the substance of pure metal—and its extrinsic value—represented by the face value—a so-called *seignorage* is allowed only for one reason. This is where some profit is necessary for the sake of the community, as Biel has already pointed out when foreshadowing a possible fourth case of legitimate alteration of coins in *Conclusio* 2. Again, Biel favours minting new coins of reduced weight or fineness, so that the coinage is diminished by reducing its intrinsic value while keeping the face value constant, rather than assigning a higher face value to the coins in circulation, so that the coinage is devaluated. Thus, the new coins may be altered also as to their form, which makes them distinguishable from the old coins. After this short *conclusio* of *Dubium* 2, Biel debates on the requirement of consent of the community to the alteration of coins. He addresses issues of the defence of the nation or the payment of a ransom for the sovereign as circumstances which necessitate such a measure. An alteration of coins as to their value for the sake of profit is not made on economic grounds in line with an increase of metal prices, as has been the point in *Conclusio* 2, but on political grounds, where the sovereign arbitrarily determines the value. Interestingly, Biel's preferred way, the repudiation of the circulating coinage, which at the end of *Dubium* 1 was prohibited as preying on people if it does not arise out of necessity, is now regarded as the optimal way of collecting a large amount of money at a time of political need. Lastly, Biel lists the advantages of such an indirect taxation of currency: It is quick, just, and inexpensive; it is adapted to the subjects' abilities; it is more bearable; it is less likely to spark riots; and it affects all sections of the community, unlike a direct taxation of consumption. Biel, however, is non-committal as to whether these advantages are valid, as is the opinion of 'quibusdam'. Precisely because this extra imposition is felt less readily, Biel establishes strict rules for it. The most important one is that the profit exacted from the alteration must not exceed the actual necessity for it.

By making falseness the basis of his monetary deliberations, Biel is as much concerned with theology in general as with morality in particular. This is also true of the problem of whether or not certain actions involving money and coins are to be treated as sin, which is to be resolved in the *conclusiones* and *dubia*. The starting point of the whole paragraph is that, by resorting to falseness, a person acquires things against the will and without the consent of the owner ('Quia per simulationem et falsitatem res acquiruntur contra voluntatem (saltem condicionatam) domini rei'). Accordingly, since falseness aims to benefit the deceiver by fraudulently causing damage to another, the falsification of coins in particular is proved in *Conclusio* 1 to be an act of iniquity, a theft, and thus a mortal sin. Furthermore, in *Conclusio* 6, falseness in general is qualified as an infringement of the commandment of charity. Thus, it is the violation of natural as well as divine law. As a theologian, Biel's intention is to ascertain the theological implications of committing falseness, and to consider the duty of compensation by giving restitution for the sinfully inflicted damage, since this is the basis of a person's right to partake in the sacrament of penitence. Throughout the paragraph, the theologian stays focused on this point in the course of the discussion, the individual arguments, and the numerous quotations. This also holds for the distinction in *Dubium* 3 between the situations in which the culling of coins of higher weight is a mortal or a venial sin. Similarly, theology is Biel's main concern in the reflection at the end of *Notabile* 3 on the significance of the form of coins and the consequences of their alteration if the form includes divine symbols. This is also true of the proof which operates with the validity of an oath in *Conclusio* 1, of the distinction between knowingly or ignorantly passing false coins or coins of lesser value in *Conclusiones* 3 and 4, and of the illustration of due prices with a passage from Genesis and an aphorism by Cassiodore at the end of *Dubium* 1. A recurrent word which runs like a thread through the whole ninth *quaestio* is rightfulness ('iustitia'), or rather its opposite, unrightfulness. The term is already used at the beginning of *Notabile* 1 in the definition of falseness as the unrightful deception ('deceptio iniusta') of another. Falseness in general does, of course, offend 'iustitia', because it is a sin. But monetary falseness in particular, which mainly consists in reducing the value of a coin in terms of its weight or, more precisely, the substance of pure metal, infringes the rightful determination of weight ('determinatio ponderis iusta'). The damage done is to the just weight ('iustum pondus') and the just value ('iustus valor') of the coins or, more generally, to the essence, properties, and functions of money. The damage may be inflicted by the falsification of coins, which is damaging in itself, or by other damaging actions involving money and coins as treated in *Conclusiones* 3 and 4 and *Dubium* 3, or by a damaging alteration of coins. The damaged party is an individual or, in an abstract way, the community as a whole. The party inflicting the damage is the falsifier or the sovereign. And the thing which is unrightfully acquired is monetary profit. Realizing a profit on money was a crucial point for the theologian, in light of the fundamental debate on interest and usury. But when coins are altered, it is the sovereign who, at first sight, earns the profit. Therefore, Biel shifts the discussion from morality to ethics: a sovereign who alters a coinage without any necessity, by arbitrarily determining the value of the coins so as to realize a profit, is treated along the same lines as a falsifier. He commits a mortal sin and thus loses salvation. He is also afflicted by greed and pride, which are both most dishonest motives. Consequently, a damaging alteration of this kind is reprobate ('reproba') and unrightful ('iniusta'), as is stated at the end of *Conclusio* 2. The alteration involves bearing false witness, since the form of a coin, by way of the insignia of the sovereign, guarantees its authenticity and rightfulness in terms of value, as is stated at the end of *Notabile* 3. And the alteration is an act of tyranny, since it preys on people most unrightfully ('iniustissima et tyrannica exactio populi'), as is stated at the end of *Dubium* 1. Hence, *Dubia* 1 and 2, which form the core of Biel's monetary deliberations, are concerned with the sovereign's right to alter coins on political grounds. In fact, this right is heavily restricted by the participation of the community. For, in the event of a damaging alteration, the community which actually owns the money and the profit deriving from it, finds that profit involuntarily alienated. However, if, in the exercise of its very right to determine the value of the coins, the community consents to the alteration, then the monetary profit, in a contractually stipulated manner, redounds to the good of the community. An advantageous alteration of this kind is then rightful ('iusta'). But, bearing in mind other potentially damaging effects of an alteration of coins on the economy and society, Biel offers some advice ('consilium') at the end of *Conclusio* 2: the coinage should not be debased by deterioration or devaluation unless it is justified by reasonable necessity.

The moral and ethical perspective, which provided the organizing structure to Biel's monetary deliberations as well as to his *Collectorium* as a whole, was also constitutive for the authorities that were the basis of his commentary. These authorities were, first of all, Antoninus of Florence and Angelo Carletti di Chivasso, two fifteenth-century theologians. Their major works, the *Summa theologica moralis* and the *Summa de casibus conscientiae*, respectively, were veritable compendia of morality. The purpose of these works was a casuistic examination of the totality of human life and customs insofar as it concerned potentially sinful actions. Falseness then, of course, played a considerable role in both works. Antoninus' handbook placed a special emphasis on contemporary economics and finance. Here, falseness, including falseness in coins, was treated within a broad chapter on ill-acquired wealth. Angelo's handbook was intended especially for confessors, and, in the course of 659 paragraphs arranged in alphabetical order, developed arguments on innumerable cases of conscience. Here, falseness, including falseness in coins, was treated under the headword *Falsarius*. Thus, Antoninus and Angelo provided the textual basis for the subject matter of falseness in general and monetary falseness in particular, as well as for the treatment of the whole topic of sinful acquisition and compensation by restitution. Furthermore, they provided the actual discussion of the individual issues where falseness was relevant. Since Ockham was completely silent on this point, both authors—whom Biel calls his 'doctores'—served as Biel's chief authorities on falseness and for nearly all of his monetary *conclusiones* and *dubia*. This included all juridical references, although not the special issue of the alteration of coins. Drawing heavily on jurisprudence, both compendia had synthesized the broad juridical tradition up to Panormitanus, as had Panormitanus himself. In fact, all of Biel's juridical references predating Panormitanus can be found in Panormitanus' commentary. Interestingly, Biel compiled *Conclusio* 7 and *Dubium* 4 on human falseness from other sources and from the Holy Bible. By contrast, throughout the whole fifteenth *distinctio* of the fourth book of his *Collectorium*, Biel relied heavily on Antoninus and, more extensively, on Angelo, who was Biel's contemporary. However, for Biel's core issue, the alteration of coins, the chief authority was Nicolas Oresme's *De moneta* dating back to the middle of the fourteenth century. This was the first text dedicated solely to money and particularly to the alteration of coins.[15] Oresme's work was based broadly on John Buridan, who had first delivered a profound analysis of this phenomenon using his own experience of the continuing debasements of coinage in France since the end of the thirteenth century. Thus, the *De moneta* was not so much a philosophical commentary as a political treatise. Oresme wrote against the background of John II's (1350–64) renewal of major debasements for the purpose of raising war finance. His text was originally a pamphlet of protest, calling for a steady coinage, something which became a policy under Charles V (1364–80). Oresme examined at length the various kinds of alteration of coinage, the respective rights of the sovereign, and the restrictions imposed on those rights by the participation of the community. And he wrote on the serious economic and social consequences of altering coins. Thus, Oresme provided Biel with the basis for his treatment of the

[15] On Oresme's monetary theory, see, e.g., A. Lapidus, 'Metal, Money, and the Prince: John Buridan and Nicholas Oresme after Thomas Aquinas', (1997) 29 *History of Political Economy* 21; B. Schefold, 'Nicolaus Oresmius: Die Geldlehre des Spätmittelalters', (1997) 1 *Zeitsprünge: Forschungen zur Frühen Neuzeit* 166; Mäkeler, above n 6, at 67–79.

special issue of the alteration of coinage, and as shown earlier, a great portion of Biel's actual discussion, ethical as it was, came from Oresme. Furthermore, Oresme can be regarded as Biel's primary source for all his basic monetary knowledge, since he had synthesized the tradition of Aristotelian commentary from the second half of the thirteenth century up to his own time. This should also explain Biel's silence about the other authors, especially Buridan. Antoninus and Angelo are not relied on here, and, despite the frequent references to juridical texts elsewhere, Biel does not cite jurisprudence. However, from the end of the twelfth century, the jurisprudence itself had dealt with the topic of the sovereign's right to alter the coinage and the necessary consent of the community.

Given this heavy dependency on authorities, there finally arises the question of Biel's originality. In general, Biel's thinking, in the *Collectorium* and beyond, did not claim to be unique or innovative, but was synthetical. The technique was a true scholastic method: the subject is treated in terms of the doctrines in a few chief authorities by adopting their concepts, main points, proofs, and references. Nevertheless, Biel did present his own thought as well. He did transcend his authorities, and developed his own position by concretizing matters, giving explanations, providing examples, and, in so doing, citing and quoting other sources.[16] The issues he raised were not necessarily chosen for their topicality, although they had in fact been common features of the monetary experience for centuries. This was certainly true of the falsification of coins; the passing of false or manipulated coins; the differences between coin valuations due to the monetary and economic conditions of the time; and the problems deriving from the technique of minting *al marco*. Also, the politically motivated alteration of coins was frequently practised in the late Middle Ages so as to realize a profit for the sovereign rather than for any supposed economic reasons. It spread over nearly the whole of Europe in the course of the fourteenth and fifteenth centuries.[17] Thus, the monetary setting of Biel's own time probably quickened his interest in monetary falseness in general and the alteration of coins as a means of finance in particular. In the third quarter of the fifteenth century, debasements of coinage also occurred in the middle Rhinelands, the major site of Biel's life before he was called to Württemberg in the mid-1470s. The monetary setting, however, was not the immediate impetus for his writings. Unlike Oresme, Biel did not intend to write a political pamphlet targeting the sovereign's monetary policy. Rather, his intention was to compose a scholastic commentary, organized in terms of the exclusively theological system of his *Collectorium*. As a result, Biel's argumentation was rather abstract. He failed, for instance, to answer the question how a person should actually make restitution for the damage sinfully inflicted by certain actions involving money and coins as a precondition to partaking in the sacrament of penitence.

[16] To separate Biel's own thought from that of his predecessors and contemporaries, and to evaluate the entirety of his monetary thinking in terms of specific contributions to the development of monetary theory in general and to the discussion of individual monetary issues in particular, it would be necessary to double-check his deliberations, down to the smallest details, against the scholarly tradition so as to identify the origin of every single idea, especially relating to his chief authorities, including cited authors and authors not cited directly, as well as to the sources consulted by the authorities themselves (for a preliminary comparison of Biel and Oresme, see Mäkeler, above n 6). The question whether and to what extent Biel's theory on the alteration of coins is possibly an advancement of Oresme's, as well as the problem whether and to what extent there is any topicality in Biel's actual discussion, require further research.

[17] For a historical survey, see, e.g., P. Spufford, *Money and Its Use in Medieval Europe* (1988), at 289–318; P. Spufford, 'Münzverschlechterung und Inflation im spätmittelalterlichen und frühneuzeitlichen Europa', in M. North (ed.), *Geldumlauf, Währungssysteme und Zahlungsverkehr in Nordwesteuropa 1300–1800: Beiträge zur Geldgeschichte der späten Hansezeit* (1989) 109; Spufford, above n 6. See also Chapter 3 in this volume.

V. Conclusion

Gabriel Biel's monetary deliberations do not constitute an autonomous, self-contained treatise exclusively dedicated to the subject matter of money, nor were they composed for that specific purpose. On the contrary, they form a rather small part of an encyclopaedic work containing a multitude of other topics. They exhibit an entirely different intention and are consistently balanced in their contents, structure, and arguments. The *Collectorium circa quattuor libros Sententiarum*, a kind of commentary on the *Sentences* in terms of the doctrines of William of Ockham, is a work of theology, a highly comprehensive compendium of scholastic theology and philosophy. After all, Biel's entire life and writings made him a theologian, or, as regards the *Collectorium*, an academic theologian to the core. Hence, Biel's monetary deliberations do not form a monetary theory in the real sense of the word. They do not provide a systematic display of the totality of contemporary knowledge of this subject matter, as did the tradition of Aristotelian commentary up to the middle of the fourteenth century. It follows that Biel is not really concerned with the invention of money, its essence, properties, and functions, or with the whole topic of value and price, although elements of these topics are scattered throughout the paragraph. Rather, Biel's monetary deliberations are theological in nature, set in the specific context of sinful infliction of damage and compensation in view of penitence. They are based on the concept of falseness, and form an integral part of his thinking. The falsification of coins and other potentially falsifying actions involving money and coins are discussed from the perspective of morality. The alteration of coins, Biel's core issue, however, is discussed from the perspective of ethics. The key questions are the sovereign's right to alter coins so as to realize a profit and the extent to which the participation of the community is necessary. And Biel expands these questions to the overall relationship between the sovereign and subjects on the basis of their ownership of money. Naturally, this theological approach determined the chief authorities which Biel commented upon. For their part, these authorities—two fifteenth-century theologians and Nicolas Oresme—generally governed the actual discussion of the individual issues of monetary falseness. Biel was in fact not a jurist, he was not interested in the legal prosecution of falseness or monetary falseness as a crime. Nor did he present any legal theory on money: the topic of monetary obligations and transactions is totally absent here. However, Biel's monetary deliberations are part of a broader theological treatment of economic issues. Throughout the fifteenth *distinctio* of the fourth book of his *Collectorium*, Biel conducts an in-depth investigation of topics such as private property, trade and exchange, value and price, and interest and usury. Taken together, these things form the basis of Biel's reputation as one of the fathers of modern economics. On the one hand, as the last scholastic, he synthesized the theological theory on money at the very end of the Middle Ages. But, on the other hand, he also produced some rather modern knowledge at the very beginning of new times.[18] Thanks to the many offprints and reprints of his monetary theory, Biel thus was regarded as a chief authority on money up to the beginning of the seventeenth century.

[18] As a result, Biel is generally included in compendia of the history of economics: see, e.g., W. Roscher, *Geschichte der National-Oekonomik in Deutschland* (1874), at 21–8 (on money at 24–6) (a recapitulation of Roscher's ideas is to be found in G. Berthold, 'Biel, Becher und Weiss, drei pfälzische Volkswirte', (1891) 15 *Mitteilungen des Historischen Vereins der Pfalz* 150, at 156–63 (on money at 160–1)); J. A. Schumpeter, *History of Economic Analysis* (1954), at 95.

II

CIVIL LAW

6

Money in the Roman Law Texts

Thomas Rüfner

I. Introduction

Money, it has been observed, 'requires a host of laws, regulations, and controls to work and have value.'[1] The Roman economy was monetized since the early times of the republican city-state.[2] It is therefore hardly surprising that the Roman legal sources contain a huge number of texts on money and monetary law.

It is not the purpose of this chapter to reconstruct in detail the legal and economic realities of the Roman monetary system on the basis of a complete account of Roman monetary law. The following pages have the more limited purpose of providing a structured overview of the sources scattered[3] in the codifications of Emperor Justinian (527–67) in order to introduce the reader to the material on which the jurists of the *ius commune* based their reasoning.

II. Conceptions of Money

1. The Debated Nature of Roman Money

Traditionally, it has been held that in Greek and Roman antiquity, 'money was essentially coined metal and nothing else'.[4] In the past years, this view has been questioned and a wider definition of ancient money has been proposed.[5] Since this chapter is confined to the textual evidence found in the legal sources and, more specifically, to the material contained in the Justinianic compilations, no definite answer to the question of what should be regarded as Roman money can be offered. The legal sources do permit two more limited conclusions, which may be relevant to the debate. On the one hand, there is ample evidence

[1] S. von Reden, *Money in Classical Antiquity* (2010) 1.
[2] M. Crawford, 'Geld, Geldwirtschaft, III. Rom', in H. Cancik, H. Schneider (eds), *Der Neue Pauly*, vol. 4 (1998) col. 877, at col. 877.
[3] On the absence of a *sedes materiae* for money-related issues in Justinian's law books, c.f W. Ernst, 'The Glossators' Monetary Law', in J. W. Cairns and P. J. du Plessis (eds), *The Creation of the Ius Commune* (2010) 219, at 221.
[4] M. I. Finley, *The Ancient Economy* (3rd ed, 1999), at 196.
[5] W. V. Harris, 'A Revisionist View of Roman Money', (2006) 96 *Journal of Roman Studies* 1; W. V. Harris, 'The Nature of Roman Money', in W. V. Harris, (ed.), *The Monetary Systems of the Greeks and Romans* (2008) 174; D. B. Hollander, 'Money, Greco-Roman', in R. Bagnall et al. (eds), *The Encyclopedia of Ancient History*, vol. 8 (2013) 4577; in a similar vein, see R. Göbl, *Antike Numismatik* (1978), vol. 1, at 21.

in the legal sources supporting the claim that '[a] wide array of objects could fulfil at least some of the functions of money'.[6] On the other hand, the Roman jurists probably thought of money as 'coined metal and nothing else'. They did not develop a functional conception of money, which would have been capable of encompassing credit money or bullion.[7]

2. Alternative Means of Payment in the Legal Sources

(a) Credit money

Harris emphasizes the importance of credit as a means of payment or medium of exchange in the Roman world[8] to buttress his claim that the Roman concept of money was not confined to coins.[9]

The texts in the Justinianic compilations do in fact show that credit and credit money played an important role in Roman economy. The Roman jurists facilitated the use of credit as a means of cashless payment by devising the *delegatio*: it was possible for a debtor (the delegant) to settle a monetary debt by advising his own debtor (the delegate) to pay or promise to pay to the creditor. According to the maxim 'solvit qui delegat' ('*delegatio* is tantamount to payment'), the delegate's promise to pay extinguished the delegant's debt as if the delegant had paid in cash.[10]

The practical importance of *delegatio* is confirmed by the large number of texts in the Digest dealing with issues related to it.[11] It can hardly be disputed that credit was indeed widely used as a means of payment and medium of exchange.

(b) Bullion

Bullion is another candidate for inclusion in a widened category of Roman money. According to the narrative offered by Gaius and Pliny,[12] and supported by archaeological evidence,[13] the early Roman money consisted of bullion circulating by weight rather than by tale. Some texts in the Justinianic compilation indicate that bullion was still used as a unit of account and a means of payment during the Empire.[14]

In addition to cases where private citizens make bequests of a certain amount of unminted gold or silver,[15] Justinian's Digest and Code contain numerous provisions, which express legal threshold values,[16] the salaries of government officials,[17] and the amounts of fees[18] and fines[19] in pounds of gold or silver rather than in coins.

There are at least two possible explanations for the use of bullion in this way. Either the standard of gold and silver coins was so stable that it made no difference whether an

[6] Hollander, above n 5, at 4577.

[7] Cf Ernst, above n 3, at 221 fn 8.

[8] See Harris, 'A Revisionist View', above n 5, at 5 on the importance of the function as a medium of exchange as the 'distinguishing feature' of money.

[9] Ibid., at 15.

[10] Ulpian 29 ad edictum D. 16.1.8.3; Iulian 90 digestorum D. 46.1.18; see M. Kaser, *Das römische Privatrecht* (2nd edn, 1971), vol. 1, at 651.

[11] For details, see G. Sacconi, *Ricerche sulla delegazione in diritto romano* (1971).

[12] Gaius 1, 122; Plinius, *Naturalis Historia*, 33, 13, 11.

[13] Göbl, above n 5, at 70.

[14] Cf. Hollander, above n 5, at 4578; Harris, 'A Revisionist View', above n 5, at 3–4, is more sceptical in this regard. See also R. Wolters, *Nummi Signati* (1999), at 360.

[15] Scaevola 4 responsorum D. 31.89.2; Scaevola 20 digestorum D. 34.4.30 pr.

[16] Marcian C. 1.3.25.1 (456); Iustinian C. 4.2.17 (528); C. 7.62.37 (529) and 39.2 (530); Theodosius, Arcadius, and Honorius C. 8.11.9 pr. (393).

[17] Iustinian C. 1.27.1.21 (534).

[18] Zeno C. 12.3.3.1; Zeno C. 12.3.4.1.

[19] Macer 1 publicorum iudiciorum D. 47.15.3.3; Valentinian and Marcian C. 1.5.8.5 (455); Arcadius and Honorius C. 12.50.17 (398); Iustinian C. 3.1.13.8 (530).

amount was expressed by a certain number of coins or a by a certain weight of bullion,[20] or there were reasons not to trust the coins and therefore bullion had to be used as a more reliable measure of value.

The first explanation may be correct with regard to Justinianic law. In Justinian's salary schedule for the Prefecture of Africa, the use of pounds of gold to express the amounts of salaries is confined to the Prefect and his highest ranking officials. All other salaries are expressed in *solidi*. Apparently, the *libra aurei* is used as shorthand for seventy-two *solidi*: since the times of Emperor Constantine I (306–37), the gold *solidus* was struck to a standard of seventy-two *solidi* to the Roman pound.[21]

It seems likely, however, that the earlier emperors had different reasons to avoid the use of coins as units of account in their laws. A constitution by Emperor Constantine, which is contained in the Theodosian Code, provides that if payment is made in *solidi*, seven *solidi* shall be accepted in lieu of one ounce of gold.[22] The text presupposes a debt expressed in bullion. Since a Roman pound has twelve ounces, the provision implied that eighty-four *solidi* rather than seventy-two *solidi* had to be paid for one pound of gold.[23]

Another constitution of 367, which was also incorporated in the Theodosian Code, provides that payments to the treasury shall not be made in *solidi*. Rather, the required amount of gold shall be sent to the treasury in bullion which may be gained either by melting down *solidi* or from other sources.[24] According to the text of the constitution, the measure is taken to prevent the payment with forged coins and other types of fraud.

The quality of the gold *solidus* remained mostly stable during the fourth century and beyond.[25] We may therefore assume that forgery and fraud were in fact the reasons why the Emperors preferred payments in bullion.[26]

It should be noted, though, that the two constitutions were not included in Justinian's Digest. The jurists of the *ius commune* could not rely on these texts which make it clear that bullion was not just a convenient unit of account, but at times the preferred means of payment for the settlement of debts with the imperial treasury. Instead, Justinian included a constitution by Valentinian and Valens which confirmed that seventy-two *solidi* were the equivalent of a pound of gold[27] in the Code. Justinian's Digest contains a text stating that a debt of a certain weight of silver can be settled by paying coins (*pecunia numerata*) of the same value.[28] It is thus emphasized that coins rather than bullion were the universal means of payment.

Even so, the texts in the Digest and Justinian's Code show that bullion was among the objects which 'could fulfil at least some of the functions of money'.[29]

(c) Tesserae frumentariae

It has been claimed that *tesserae* may be regarded as money 'in a limited sense'.[30] *Tesserae* are small, coin-like objects made from various materials. They were given out by the

20 In this sense, see K. Geißler, *Die öffentliche Wasserversorgung im römischen Recht* (1998), at 202 with fn 77.

21 R. Laprat, 'Essais d'interpretation de C 11.11 (10).2', in *Studi in onore di Edoardo Volterra*, vol. 5 (1971) 297, at 299; M. F. Hendy, *Studies in the Byzantine Monetary Economy* (1985), at 466; A. Mlasowsky, 'Aureus', in H. Cancik and H. Schneider (eds), *Der Neue Pauly*, vol. 2 (1997) col. 325, at col. 325; cf. Valentinian and Valens C. 10.72.5 (367) = C.Th. 12.6.13.1.

22 Constantinus C.Th. 12.7.1 (325).

23 Laprat, above n 21, at 302.

24 Valentinian and Valens C.Th. 12.6.13 pr. (367), cf. Laprat, above n 21, at 306–7.

25 Laprat, above n 21, at 299.

26 Cf. Laprat, above n 21, at 306 n 39.

27 Valentinian and Valens C. 10.72.5 (367) = C.Th. 12.6.13.1.

28 Pomponius 6 ad Sabinum D. 34.2.1.1; cf. Modestin 9 regularum D. 34.2.9; Paulus 14 responsorum D. 34.2.35 pr.

29 Hollander, above n 5, at 4577.

30 Göbl, above n 5, at 31.

government or by private citizens as vouchers which could be exchanged for goods or services.[31] Three texts in the Digest mention *tesserae frumentariae*.[32] These tokens entitled the holder to receive a free monthly ration of grain under the *annona* scheme. The texts in the Digest seem to indicate that such *tesserae* could be bought[33] and passed on to a legatee upon death.[34]

Recent research on the organization of the distribution of food in Rome makes it unlikely that the *tesserae* could be freely transferred from one private holder to another. The only entity entitled to sell *tesserae* was probably the *annona* administration. The bequest of a *tessera* mentioned in one text may have been a *fideicommisum* obliging the heir to buy a *tessera* from the administration for the beneficiary.[35] If these assumptions are true, then the *tesserae* mentioned in the Digest cannot be regarded as money even in a limited sense.

This does not mean that *tesserae frumentariae* have to be dropped from the list of alternative forms of money. This would be premature at least if the Justinianic texts are considered as the basis of the *ius commune*. The jurists of the *ius commune* could not rely on modern research on the organization of *annona*. Looking at the text of the Digest alone, it is still possible to view *tesserae frumentariae* as an alternative form of money.

3. Theoretical Statements by the Roman Jurists

(a) Definitions of pecunia *in title 50, 16 of Justinian's Digest*

The presence of examples of alternative means of payment in the legal sources does not prove that the Roman jurists viewed these means of payment as money or near money. None of the texts analysed above contains a statement to the effect that credits, bullion, or *tesserae* should be regarded as money for legal or other purposes. It remains to be seen whether the Roman jurists had a clear conception of money, and if it encompassed any alternative means of payment in addition to coins.

The most obvious place to look for a definition of money is the title 'On the meaning of words' in Justinian's Digest (D. 50.16). This title contains no less than four fragments explaining the meaning of the term *pecunia*.

The first fragment, written by the late classical jurist Iulius Paulus, explains that *pecunia* refers to all kinds of assets which make up a person's estate.[36] In its original context, the broad definition of *pecunia* was probably used by Paul in connection with specific issues of procedural law. The exact reasons why Paul construed the term *pecunia* as broadly as he did cannot be stated with precision.[37]

The three other texts originally all dealt with the sale of an inheritance. If an inheritance was sold, the seller usually warranted to the buyer to pass on to him all *pecunia* that he would acquire due to his position as heir.[38] Again, the term *pecunia* was construed as

[31] Ibid., 31–2.
[32] Ulpian 6 fideicommissorum D. 5.1.52.1; Paulus 5 ad legem Iuliam et Papiam D. 31.49.1; Paulus 14 responsorum D. 31.87 pr.
[33] Ulpian 6 fideicommissorum D. 5.1.52.1; Paulus 5 ad legem Iuliam et Papiam D. 31.49.1.
[34] Paulus 5 ad legem Iuliam et Papiam D. 31.49.1.
[35] C. Virlouvet, *Tessera Frumentaria* (1995), at 206–13.
[36] Paulus 2 ad edictum D. 50.16.5: 'Pecuniae significatio ad ea refertur quae in patrimonio sunt.'
[37] See the references in M. Varvaro, 'Sulla storia dell'editto De pecunia constituta', (2007/2008) 52 *Annali del Seminario Giuridico dell'Università degli Studi di Palermo* 327, at 344 fn 44.
[38] Celsus 32 digestorum D. 50.16.97; Ulpian 50 ad edictum D. 45.1.50.1.

broadly as possible. Celsus,[39] Ulpian,[40] and Hermogenian[41] all inform us that *pecunia* encompasses all kinds of assets.

The broad acceptance of the term is in keeping with the etymology of *pecunia*. The Romans themselves were aware that the word is related to *pecus*, 'cattle'.[42] Modern authors assume that cattle were the most important category of movable assets in archaic times and that the word later came to be used for other property as well.[43]

The texts of title 50, 16 are cited by the scholars who propose a broader definition of money in support of their position.[44] Yet, while etymologically correct and probably legally expedient in their original context, the definitions of *pecunia* tell us little about the Roman concept of money. It is obvious that a definition which encompasses every sort of assets cannot be a meaningful definition of money. Rather than defining money, the texts in D. 50.16 remind jurists that *pecunia* in legal contexts frequently does not mean money. There are legal sources in and outside the Justinianic codifications which use *pecunia* in its broad sense.[45] In the vast majority of cases, however, there is no indication that *pecunia* refers to anything but coins.

That *pecunia* refers primarily to coins is confirmed by the fact that two of the statements in D. 50.16 explicitly refer to this alternative and more frequent acceptance of the word. Both Ulpian[46] and Hermogenian[47] stress that *pecunia* does not refer to 'counted money' (*pecunia numerata*) only. This implies that outside the specific context of the legal issue discussed by the jurist, the word would be understood to refer to *pecunia numerata*. The terms *pecunia numerata* and *pecunia signata*, which are sometimes used to indicate that *pecunia* is taken in the narrow sense,[48] can hardly refer to credit money, bullion, or other alternative means of payment.

With regard to bullion, the conclusion that the Roman jurists did not conceive of it as a form of money is confirmed by two texts outside the title D. 50.16 dealing with testamentary interpretation. These texts show that the Roman jurists drew a clear distinction between bullion and coins: Ulpian states in D. 34.2.19 pr. and D. 34.2.27.1 (44 ad Sabinum) that a legacy of 'the gold', 'the silver', or 'all the silver' does not encompass coins. Money in the form of coins was obviously a category apart from bullion.[49]

[39] Celsus 32 digestorum D. 50.16.97.

[40] Ulpian 49 ad Sabinum D. 50.16.178 pr.; cf. O. Lenel, *Palingenesia iuris civilis* (1889), vol. 2, at col. 1189 fn 8; this original context is not taken into account by A. Bürge, 'Geld- und Naturalwirtschaft im vorklassischen und klassischen Recht', (1982) 99 *Zeitschrift der Savigny-Stiftung für Rechtsgeschichte (Romanistische Abteilung)* 128–57, 156.

[41] Hermogenian 2 iuris epitomarum D. 50.16.222; cf. Lenel, above n 40, vol. 1, col. 270 fn 1.

[42] Varro, *De lingua latina* 5, 17, and 19; *De re rustica* 2.1.11; Plinius, *Naturalis Historia* 18.3.11 and 33.13.11; Ovid, *Fasti* 5, 280–1.

[43] B. Linke, *Von der Verwandtschaft zum Staat* (1995) 18 fn 6; F. Gnoli, 'Di una recente ipotesi sui rapporti tra "pecus", "pecunia", "peculium"', (1978) 44 *Studia et Documenta Historiae et Iuris* 204. The contrary opinion of É. Benveniste, *Le vocabulaire des institutions indo-européennes* (1969) vol. 1, at 47–61, English translation, É. Benveniste, *Indo-European Language and Society*, trans. E. Palmer (1973), at 40–51 is not relevant for the purposes of this chapter.

[44] Harris, 'A Revisionist View', above n 5, at 7; Hollander, above n 5, at 4578.

[45] Ulpian 19 ad edictum D. 30, 30 pr. (on this text cf. T. Rüfner, *Vertretbare Sachen?* (2000), at 62–3); Gaius 3, 124; Ulpian ad edictum P. Rylands III 474 (*Fontes Iuris Romani Anteiustiniani* II, 314).

[46] Ulpian 49 ad Sabinum D. 50.16.178 pr.

[47] Hermogenian 2 iuris epitomarum D. 50.16.222.

[48] For *pecunia numerata*, see, e.g., Ulpian 27 ad edictum D. 13.3.1 pr.; African 6 quaestionum D. 32.64; Pomponius 6 ad Sabinum D. 34.2.1.1; Gaius 2 aureorum D. 44.7.1.2; Iavolen 10 epistolarum D. 46.1.42; Celsus 18 digestorum D. 50.16.88; Diocletian and Maximian C. 4.44.9 (293); Inst. 2.29 pr.; Inst. 3.14 pr.; for *pecunia signata* Ulpian 20 ad Sabinum D. 34.2.19 pr.; cf. M. Schermaier, *Materia* (1992), at 249.

[49] K. Hasler, *Studien zu Wesen und Wert des Geldes in der römischen Kaiserzeit von Augustus bis Severus Alexander* (1980), at 73–4; Ernst, above n 3, at 221 fn 5.

The situation is slightly more complicated with regard to credit money. As discussed above, credit could be used as a medium of exchange by means of a transaction known as *delegatio*. In Ulpian 32 ad edictum D. 50.16.187, a text which apparently has not been cited by the proponents of a broader definition of Roman money, Ulpian explains that the term 'money received' (*exacta pecunia*) does not only refer to the actual fulfilment of a claim (*solutio*), but also to *delegatio*.

The text seems to indicate that credit money which is used to extinguish a debt is regarded as a form of *pecunia* by Ulpian.[50] However, the significance of D. 50.16.187 should not be overestimated. On its face, the text is not a general definition of *pecunia*. Rather, it is an explanation that for a specific purpose, and as part of a specific legal phrase (*exacta pecunia*), the word *pecunia* takes on a specific meaning. In its original context, Ulpian's statement may have been related to the sale of an inheritance, like three of the definitions of *pecunia* discussed above.[51] When the compilers placed it in title 50, 16 of the Digest, they probably did not intend to provide a starting point for an innovative theory of money. Rather, they intended to give a prominent place in the codification to Ulpian's elegant summary of the principle that a *delegatio* is tantamount to payment.

(b) Paul's treatise on sale and barter

While the texts in D. 50.16 do not foster the understanding of the Roman concept of money, there is one text by the late classical jurist Iulius Paulus in the *Digest*'s title on the conclusion of contracts of sale (D. 18.1), which deserves to be quoted in full:

> The practice of buying and selling developed from barter. For in ancient times there was no such thing as a coin and it was not usual to distinguish between 'goods' and 'price'. Rather, everyone exchanged useless things for useful ones according to the necessities of the time and of his affairs as it happens very often that something, which one person can spare, is needed by another person. But since it did not always and not easily occur that you owned what I would have liked to have and at the same time I owned what you would have liked to get, a material was chosen, which due to its publically attested and permanent value would help to overcome the difficulties of barter through the equality of amounts. This material, which is minted in the form approved by the state, is valuable to the owner because of its amount rather than its substance. And no longer are both objects [of the contract] called 'goods'; instead, one of them is called the price.[52]

Although Paul does not even use the word *pecunia*, his text contains the definition of money which is conspicuously absent from D. 50.16. Paul's words anticipate W. Stanley Jevons' observation that barter requires a 'double coincidence' of the needs of both parties 'which will rarely happen'.[53] Paul may have been the first person to make this observation. At any rate, it was not formulated with similar clarity by Plato and Aristotle,

[50] On the Roman maxim *solvit qui delegat*, see above n 10.

[51] Cf. Lenel, above n 40, vol. 2, at 636 fn 2; Sacconi, above n 11, at 60.

[52] Paul 33 ad edictum D. 18.1.1 pr.:

> Origo emendi vendendique a permutationibus coepit. olim enim non ita erat nummus neque aliud merx, aliud pretium vocabatur, sed unusquisque secundum necessitatem temporum ac rerum utilibus inutilia permutabat, quando plerumque evenit, ut quod alteri superest alteri desit. sed quia non semper nec facile concurrebat, ut, cum tu haberes quod ego desiderarem, invicem haberem quod tu accipere velles, electa materia est, cuius publica ac perpetua aestimatio difficultatibus permutationum aequalitate quantitatis subveniret. eaque materia forma publica percussa usum dominiumque non tam ex substantia praebet quam ex quantitate nec ultra merx utrumque, sed alterum pretium vocatur.

[53] W. S. Jevons, *Money and the Mechanism of Exchange* (2nd edn, 1876), at 3–4.

to whose considerations on the origins and the nature of money[54] Paul may otherwise be indebted.[55]

It should be kept in mind that Paul's text was not conceived as an introduction to a comprehensive treatment of the legal aspect of money. Despite the striking resemblance between Paul's reasoning and modern expositions, which seek to explain the advantages of money by referring to an economy based on barter,[56] Paul's remarks are simply intended to explain the difference between sale and barter.[57] Paul's exposition of monetary theory was meant to provide a solution to a specific legal issue, just like the definitions of *pecunia* which were placed in D. 50.16 by Justinian's compilers. Unlike these texts, Paul's little treatise was left in the context of sales law.

Even so, the text from Justinian's *Digest* shows that the Roman jurists were able to grasp the function of money as a medium of exchange and to express it in similar terms as modern economists. By stressing the importance of the public authority backing the money, and the fact that the value of money does not depend on its substance, Paul came close to a nominalistic conception of money.[58] Interestingly, Paul, who died around 230 AD,[59] lived at a time when repeated debasement turned the Roman silver currency from commodity money into fiduciary money.[60] One may speculate whether his monetary theory was influenced by the economic realities of his time. Despite its less prominent location in the Digest, the text became influential in the *ius commune*.[61]

With regard to the debate on the definition of Roman money, it is important to note that the text does not support the claim that the Romans had a wide concept of money which included alternative means of payment like bullion or credit money.

While Paul analyses the function of money as a means of exchange in a strikingly modern way, he fails to draw the conclusion that this function cannot be fulfilled exclusively by coins. The definition of money as 'material, which is minted in the form approved by the state' leaves no room for credit money[62] or bullion.

III. Coined Money

The legal sources contain ample evidence of the use of means of payment other than coins. Still, only coins were regarded as money by the Roman jurists. The rest of this chapter will therefore be devoted to the law relating to coined money.

1. A Short History of Roman Imperial Coinage

The legal texts in the Justinianic *Corpus iuris* originated between the first century BC and the sixth century AD. The history of Roman coinage during this period is complex and cannot be traced in detail in this chapter. The following remarks are intended to provide some background for the understanding of the legal sources which mention various kinds of coins.

[54] Plato, *Res publica* II 370e–371b; Aristoteles, *Ethica Nicomachea* V, 5, 10, 1133a.

[55] On the influence of Aristotle's definition of money on Paulus see C. Nicolet, 'Pline, Paul et la théorie de la monnaie', (1984) 72 *Athenaeum* 105, at 126–34; Wolters, above n 14, at 336–8.

[56] Cf., e.g., Jevons, above n 53, and J. Tobin, 'Money', in S. N. Durlauf and L. E. Blume (eds), *The New Palgrave Dictionary of Economics* (2nd edn, 2008) vol. 5, 725, at 725.

[57] Aldo Schiavone, *Studi sulle logiche dei giuristi romani* (1971), at 104.

[58] Hasler, above n 49, at 65–6; Wolters, above n 14, at 357.

[59] T. Giaro, 'Iulius Paulus', in H. Cancik and H. Schneider (eds), *Der Neue Pauly*, vol. 6 (1999) col. 50, at col. 50.

[60] Harris, 'A Revisionist View', above n 5, at 20; Wolters, above n 14, at 403–4.

[61] See Chapter 7 in this volume.

[62] Cf. Bürge, above n 40, at 133–4.

Throughout its monetary history, the Roman Empire relied on a bimetallic or at times even a trimetallic system. At the beginning of the first century AD, the Romans used gold *aurei* and silver *denarii*. The *aureus* weighed one fortieth of a Roman pound. One *aureus* was valued at twenty-five *denarii*. In addition, coins made from brass, bronze, or copper were used as small change.[63] Of these smaller denominations, the *sestertius*, which was made from brass,[64] was often used as a basic unit of account. Four *sestertii* were equal in value to one silver *denarius*. Consequently, one *aureus* was worth 100 *sestertii*.[65]

During the following centuries, the names of the coins and the value relations between the various coins changed several times.

The weight and (to a lesser extent) fineness of gold coins were constantly reduced.[66] Under Emperor Diocletian (284–305), the weight of the *aureus* had decreased to one sixtieth of a Roman pound. Constantine introduced a new gold coin, which came to replace the old *aureus*. It was struck at seventy-two to the Roman pound.[67] Modern scholars call the new coin *solidus*. However, there are contemporary sources which use the term *solidus* for coins struck according to the old standard and *aureus* with reference to the new coins.[68]

In the late third century, the Emperors drastically reduced the fineness of the silver *denarii*. This caused a severe crisis in the monetary system.[69] The *denarius* was no longer minted.

There were several attempts in the fourth century to introduce new silver coins and to re-establish a silver currency, but they did not meet with enduring success.[70] In the fifth and sixth century, silver coins almost disappeared.[71] The *denarius* continued to be used as a unit of account, but it was now valued at a fraction of its earlier value. According to Diocletian's Edict on Maximum Prices, the maximum price for one Roman pound of gold, whether in bars or in coins was 72,000 *denarii*.[72] Thus, one *aureus* struck to Diocletian's standard had a maximum price in silver of 1,200 *denarii*.[73]

The debasement of the silver currency also affected the system of the smaller coins.[74] The debased silver coins, which consisted mostly of copper, drove out the *sestertii* and the other smaller coins.[75]

During most of the fifth century, only one bronze coin, the *nummus*, was minted.[76] Like the names *aureus* and *solidus* for the gold coins, the term *nummus* is liable to create confusion. Before it became the name of a specific coin, the term *nummus* had referred to any coin. To make things even more complicated, the term *nummus* had also been used to refer to the *sestertius*.[77]

63 On the earliest copper currency in Rome, see Gai 1, 122.

64 Wolters, above n 14, at 133.

65 C. Katsari, *The Roman Monetary System* (2011), at 72.

66 Wolters, above n 14, at 341; Mlasowsky, above n 21, cols 325–6; Katsari, above n 65, at 81.

67 See Laprat, above n 21; Hendy, above n 21; Mlasowsky, above n 21; cf. Valentinian and Valens C. 10.72.5 (367) = C.Th. 12.6.13.1.

68 Hendy, above n 21, at 450 (on the use of the term *solidus* in *Diocletian's Edict on Prices*) and 466; D. Klose, 'Solidus', in H. Cancik and H. Schneider (eds), *Der Neue Pauly*, vol. 11 (2001) col. 699, at col. 700.

69 R. Meyers, 'Coinage, Roman Empire', in R. Bagnall et al. (eds), *The Encyclopedia of Ancient History* (2013) vol. 3, 1637, at 1638;

70 Hendy, above n 21, at 476.

71 P. Grierson, 'Coins', in A. Kazhdan et al. (eds), *The Oxford Dictionary of Byzantium* (1991), vol. 1, 478, at 478.

72 This is the reading in the edition by M. Giacchero (ed.), *Edictum Diocletiani et Collegarum de pretiis venalium* (1974), at 28, 1a, which Hendy, above n 67, at 450, follows. Katsari, above n 65, at 100 relies on S. Lauffer (ed.), *Diokletians Höchstpreisedikt* (1971), at 30, 1a, who reads 50,000 instead of 72,000. Giacchero's version is preferable, because it is based on the Aezani inscription, which was not available to Lauffer.

73 Hendy, above n 21, at 450.

74 Meyers, above n 69, at 1638.

75 D. Klose, 'Sestertius', in Cancik and H. Schneider (eds), above n 68, col. 474, at col. 476.

76 Hendy, above n 21, at 475.

77 D. Klose, 'Nummus', in H. Cancik and H. Schneider (eds), *Der Neue Pauly*, vol. 8 (2000) col. 1063.

After the monetary reforms carried out by Emperor Anastasius in 498 and 512, additional coins valuing five, ten, twenty, and forty *nummi* were introduced. They were now made of pure copper.[78] Thus, when Justinian's law books were compiled, the monetary system was bimetallic. It comprised gold and copper coins. The gold coins were the *solidus* and smaller coins worth one half and one third of a *solidus*, respectively. The copper coins were the *nummus* and its multiples.[79]

In addition to the imperial Roman currency, various provincial currencies existed throughout the Empire. The Romans allowed provincial mints, especially in the east, to continue the production of coins according to their own standards. Thus, a variety of silver *drachms*, *hemidrachms*, *tetradrachms*, etc. circulated in the east.[80] To what extent the provincial currencies were integrated into the imperial monetary system is not entirely clear. Many scholars assume that the provincial coins could be exchanged against imperial currency at fixed rates set by the Roman authorities,[81] but there is no consensus on this point.[82] It is also unclear whether the provincial coins were accepted outside the territory for which they were produced.[83] At any rate, the provincial coins in practice only circulated in circumscribed areas.[84]

2. Coins in the Legal Sources

The texts collected in Justinian's law books reflect the complex history of Roman coinage, although the compilers adapted them to some extent to the situation of the early sixth century.

(a) Sestertii *and* nummi

The most obvious change is the elimination of the *sestertius* from the texts included in Justinian's codification. The institutes of Gaius show that during the classical period, sums of money in the praetor's edict,[85] laws,[86] imperial decrees,[87] and in hypothetical cases discussed by the jurists[88] were given in *sesterces*. The texts in Justinian's Digest never mention *sestertii*.[89]

The most important sources which help us to understand how Justinian's compilers dealt with amounts in *sestertii* are texts concerning a threshold value contained in the Augustan *lex Papia Poppaea*. Under this law, the former master of an emancipated slave

[78] Hendy, above n 21, at 476–7.
[79] E. Lianta, 'Coinage, Byzantine', in Kazhdan et al. (eds), above n 71, vol. 1, 1607, at 1607.
[80] Katsari, above n 65, at 72–5.
[81] W. Ernst, 'Rationalia ad D. 46.3.99', in P. Pichonnaz et al. (eds), *Spuren des römischen Rechts: Festschrift für Bruno Huwiler zum 65. Geburtstag* (2007) 233, at 239, citing Crawford, above n 2, at col. 881–2; Katsari, above n 65, at 73–4.
[82] *Contra* Wolters, above n 14, at 373; see also S. von Reden, 'Money and Finance', in Walter Scheidel (ed.), *The Cambridge Companion to the Roman Economy* (2012) 266, at 273.
[83] Hasler, above n 49, at 69 on the basis of Volusius Maecianus, *Assis distributio* 45. According to Ernst, above n 81, at 238, Maecianus refers to foreign, not provincial coins.
[84] Crawford, above n 2, at 882.
[85] E.g. Gai 4.43 (sample *condemnatio* clauses), Gai 4.186 (rule on the amount contained in a *vadimonium*).
[86] Gai 3.42 (provision of the *lex Papia Poppaea* on the succession of a freedman leaving behind an estate of more than 100,000 *sesterces*); 3.124 (prohibition of suretyship in an amount of more than 20,000 *sesterces* for one person through a *lex Cornelia*).
[87] Gaius 1.33 (decree granting Roman citizenship to *Latini* with an estate of 2,000,000 *sesterces* or more).
[88] Gaius 3.102; 113; 161.
[89] *Sesterces* are only mentioned in historical retrospect in the Institutes (Inst. 3.7.2 and 3) and in Justinian's Code (C. 8.53.37).

enjoyed enhanced succession rights upon the freedman's death if the freedman left behind an estate of 100,000 *sestertii* or more.[90]

A Greek constitution enacted by Justinian in 531 AD makes some changes to the succession rules regarding freedmen and sets the threshold value of the estate at ἑκατὸν νομίσματα (100 *nomísmata*).[91] In Justinian's Institutes, it is expressly stated that the threshold was set at 100 *aurei*, because the amount mentioned in the old law was converted at a rate of 1,000 *sestertii* for one *aureus*.[92] The words νομίσματα and *aurei* denote the new gold coin first introduced by Constantine and usually called *solidus*. The text confirms the observation that only modern scholars consistently refer to the old, pre-Constantinian coin as *aureus*, and to the new coin as *solidus*.[93]

Another text in the Digest, which is ascribed to the classical jurist Africanus, gives the amount simply as '100'.[94] Passages from the institutes of Gaius and other classical texts which have come down to us in versions that were not altered by Justinian's compilers contain similar mentions of amounts of money without a monetary marker.[95] In these cases, the reference to *sestertii* is implied. It must be assumed that the original text by Africanus referred to the threshold amount of 100,000 *sestertii* set by the *lex Papia Poppaea*. It cannot be said with certainty whether the original text used the word *sestertii*. The compilers must have changed the amount according to the exchange rate of 1,000:1. They, at least, did not deem it necessary to state the currency explicitly, because in the context of their time, it was evident that the amount was expressed in *aurei*/*solidi*.

There is further evidence beyond the texts on the threshold amount contained in the *lex Papia Poppaea*. A text reporting a legal opinion given by Paul mentions in its introductory sentence a 'note for ten *solidi*'.[96] The text goes on to say that by this note one party promised to pay '10,000' of an unspecified currency to the other. It seems likely that the original text referred twice to a sum of 10,000 sesterces. The compilers apparently changed the text to ten *solidi* at the first occurrence of the sum and failed to make analogous changes in the second place.

It is commonly accepted that these texts reflect the general approach of Justinian's compilers. Amounts given in *sestertii* were divided by 1,000, and references to *sestertii* were replaced with references to *aurei* or *solidi*.[97] In the many texts which mention a sum of money without specifying the currency, the reference to *solidi*/*aurei* is implied.

This does not mean, however, that wherever texts ascribed to classical jurists mention an amount of x *aurei*, the original text referred to x times 1,000 *sestertii*. It is entirely possible that a classical jurist gave an amount of money in *aurei* since a coin by that name was in circulation in classical times. It is equally possible that an amount in sesterces was replaced by an amount in *aurei* without using the standard conversion rate of 1:1,000.[98]

Where amounts of money which were contained in legislative texts are reported in *aurei* by the classical jurists, an original amount in sesterces may have been converted to *aurei* by the jurist himself or by a pre-Justinianic editor using the classical conversion rate of 1:100 rather than the Justinianic rate. Chapter 55 of a *lex Mamilia Roscia Peducea Alliena Fabia*

[90] Inst. 3.7.3. [91] Iustinian C. 6.4.4.9a (531). [92] Inst. 3.7.3.

[93] See Hendy, above n 21, at 450; Klose, above n 68, at col. 700.

[94] Africanus 2 quaestionum D. 38.2.26.

[95] Cf., e.g., Gaius 2, 235 and the further examples listed by B. Frier, 'Subsistence Annuities and Per Capita Income in the Early Roman Empire', (1993) 88 *Classical Philology* 222, at 223 fn 7.

[96] Paulus 7 responsorum D. 24.3.49 pr.: 'instrumentum solidorum decem'.

[97] R. Röhle, 'Zur Bedeutung der lex locationis in CIL 6, 33840, ll. 2–4', (1987) 104 *Zeitschrift der Savigny-Stiftung für Rechtsgeschichte (Romanistische Abteilung)* 436, at 446, with further references; Frier, above n 95, at 223.

[98] Frier, above n 95, at 224.

of unknown date[99] set a penalty of 5,000 *sestertii* for the removal or relocation of a boundary stone. According to a text in the Digest[100] the penalty is 50 *aurei*. The two amounts are equal according to the conversion rate of one *aureus* = 25 *denarii* = 100 *sestertii*, which was applicable in classical times. According to the Justinianic rate, the penalty in the Digest is ten times higher.[101]

From the fifth century onward, the *nummus* was the basic copper coin. Neither this coin, nor its multiples seem to be mentioned in the Justinianic law-books. There are some texts which mention a certain amount of *nummi*. However, they do not employ the word to denote the small copper coin which went by that name. Rather, they use *nummus* as an alternative designation of the *aureus*.[102]

(b) Denarii

The *denarius* turns up relatively frequently in the Digest. Most of the occurrences are in legal opinions which quote verbatim from testaments or contracts.[103] Obviously, Justinian's compilers saw no need to eliminate these references to a coin that had long been obsolete when the Digest was composed.

(c) Aurei *and* solidi

As has already been pointed out, the term *aureus* is frequently used in the Digest. It is also found in the Code in constitutions made both before[104] and after[105] the introduction of the *solidus* by Emperor Constantine. The term *solidus* is used both in the Digest[106] and in the Code.[107]

The two words are effectively treated as synonyms. According to a text by Papinian, a slave who is freed on the basis of a *fideicommissum* contained in a codicil which later turns out to be a fabrication, retains his freedom but is obliged to pay twenty *solidi* to his former master.[108] The same rule is contained in a constitution by Antoninus Pius, which mentions an amount of twenty *aurei*.[109]

Some texts even use both terms side by side. A constitution by Justinian gives judges authority to fine the bailiffs (*exsecutores*) of the court if they did not handle the tasks assigned to them properly. According to the constitution, higher ranking judges may inflict

[99] The text of the law is contained in the *Corpus scriptorum gromaticorum*, cf. F. Bluhme, K. Lachmann, and T. Mommsen (eds), *Die Schriften der römischen Feldmesser* (1848), vol. 1, 263, at 265.

[100] Callistratus 2 de cognitionibus D. 47.21.3 pr.

[101] Cf. W. Simshäuser, *Iuridici und Munizipalgerichtsbarkeit in Italien* (1973), at 112 fn 12; see also the doubts of Martin Pennitz, 'Zur Noxalhaftung bei den sog: *actiones de effusis vel deiectis* und *de posito* (*aut suspenso*)', (2011) 58 *Revue internationale des droits de l'antiquité* 275, at 276 fn 5 with regard to Ulpian 23 ad edictum D. 9.3.1.1.

[102] See Röhle, above n 97, at 446; J. Platschek, *Das Edikt De pecunia constituta* (2013), at 213 (on Papinian 9 quaestionum D. 16.3.24).

[103] See, e.g., Scaevola 1 responsorum D. 10.2.39.2; Paulus 3 responsorum D. 12.1.40; Scaevola 3 responsorum D. 36.2.27.1; Paulus 3 quaestionum D. 45.1.126.2.

[104] E.g., Gordian C. 4.32.15 (242); Alexander C. 8.29.3 (223).

[105] E.g., Iustinian C. 4.27.2 pr. (530); Iustinus C. 6.23.23 (524).

[106] See, e.g., Ulpian 23 ad edictum D. 9.3.5.6 (purportedly quoting the praetor's edict) and D. 24.3.49 pr. (quoted above n 96).

[107] E.g. Constantinus C. 6.1.5 (319); Iustinian C. 1.1.19 (528).

[108] Papinian 6 quaestionum D. 40.4.47 pr.

[109] Antoninus C. 7.4.2. Cf. Tryphonin 15 disputationum D. 37.14.23.1 and the observations of B. Kübler, 'Sklaven und Colonen in der römischen Kaiserzeit', in *Festschrift Johannes Vahlen zum siebenzigsten Geburtstag gewidmet* (1900) 559, at 576–7.

fines of up to six *solidi*, whereas for the judges of the lower courts the amount of the fines is limited to three *aurei*.[110]

Texts in Justinian's Code also mention the smaller gold coins, the *semissis*[111] and *tremissis*.[112]

(d) Unspecified coins

In most of the texts which mention amounts of money without a monetary marker, the currency to which the text refers is either implicitly clear from the context or irrelevant for the legal issues discussed. Only in a few cases, the practice of giving amounts of money without specifying the currency creates problems of interpretation.

The text of Paul 3 quaestionum D. 12.1.40 is an example in point.[113] Paul quotes a loan agreement which requires the recipient of a loan of 'fifteen' to pay back in monthly instalments of 300 *denarii*. It is obvious that the currency of the sum of fifteen cannot be *denarii*.[114]

If it is assumed that the implied reference is to *aurei* and that the text was changed by the compilers according to their standard practice, the original text must have given the amount of the loan as 15,000 *sestertii*.[115] If the conversion rate from *sestertii* to *denarii* was still four *sestertii* for one *denarius* when Paul wrote, then the loan amounted to 3,750 *denarii*. This seems plausible, although it means that the amount of the loan was not divisible without remainder by the amount of the monthly instalments. It would take twelve and a half instalments to pay off the loan.

The inconvenience is avoided if it is assumed that the loan was for 15,000 *denarii*. In this case, it would take fifty instalments to pay back the loan.[116] To adopt this solution one has to make the unlikely assumption that the compilers paid no attention to the huge difference in value between *aurei* and *denarii* and changed a text mentioning a sum of 15,000 *denarii* in the same way as they would have changed it had it contained a reference to a sum of 15,000 *sestertii*. It seems, therefore, more likely that the loan was for 15,000 sesterces and had to be paid back in instalments of 300 *denarii* in just over a year.

(e) Coins without official status

Besides the various coins which made up the currency of the Roman Empire, the legal sources sometimes mention coins which were not regarded as lawful money.

Pomponius 5 ad Sabinum D. 7.1.28, states that old coins (*numismata*) which are commonly used as jewellery can be the object of a usufruct. The point seems to be that a true usufruct is possible because the obsolete coins can be used without destroying or transferring them, whereas actual money is used by spending it. Since the object of a

[110] Iustinian C. 3.2.3 pr. (530); see also Leo and Anthemius C. 1.3.32.5 (472).

[111] See Leo and Anthemius C. 1.3.32.5.

[112] Anastasius C. 12.37.16.1a and 1b; Arcadius and Honorius C. 12.39.3 (396).

[113] On this text, the famous *lex lecta*, see A. Cherchi, *Ricerche sulle 'usurae' convenzionali nel diritto romano classico* (2012), at 40–56, with further references at 42 fn 5. For another text presenting similar problems, see Scaevola 16 digestorum D. 34.2.28 pr. Cf. Frier, above n 95, at 225–6.

[114] See Cherchi, above n 112, at 42 fn 5 who discusses the question, but leaves it open.

[115] This is assumed in the new German translation of the Digest, which for D. 12.1 is based on a draft by F. Peters; cf. O. Behrends, R. Knütel, B. Kupisch, and H. H. Seiler, *Corpus Iuris Civilis: Text und Übersetzung* (1999), vol. 3, at 65.

[116] In this sense R. Knütel, 'Stipulatio und pacta', in D. Medicus and H. H. Seiler (eds), *Festschrift für Max Kaser zum 70. Geburtstag*, (1976) 201, at 216.

usufruct has to be restored to the owner upon the extinction of the usufruct, real money cannot be the object of a true usufruct.[117]

The term *numismata* is used again with reference to obsolete coins in Ulpian 44 ad Sabinum D. 34.2.27.4. Ulpian notes that a bequest of 'the minted gold or silver' includes *filippi* and *numismata*. *Filippus* (or *philippeus*) was the name of a gold coin minted by King Philip of Macedonia, the father of Alexander the Great, in the fourth century BC.[118] Apparently, this coin of venerable age is mentioned as an example of a *numisma* which is no longer in use as a means of payment. While the decision is in keeping with the wording of the testamentary clause, it leads to the result that the bequest encompasses coins which are kept as ready money and collectors' items alike.

In addition to being obsolete by reason of their age, the *filippi* mentioned in the text were also coins coming from a foreign country. When they were minted, Macedonia was not under Roman domination. This seems to be the only mention of non-Roman coins in the Digest. Outside the Digest, there is a text by the classical jurist Volusius Maecianus according to which a foreign coin (*peregrinus nummus*) like a *tetrachmum* or a *drachma*, or the *victoriatus*, before it became a Roman coin, has to be considered as goods, not money.[119] The text is taken by Ernst to refer to coins from outside the Roman Empire.[120] This view is certainly correct with regard to the *victoriatus*. According to Pliny, the *victoriatus* was originally imported from Illyria before that region became part of the Empire. Later, the Romans themselves minted such coins.[121] The names of the coins which according to Maecianus are still to be treated as non-money (*drachma* and *tetrachmum*) are well attested as names of provincial coins.[122] This lends plausibility to Hasler's view[123] that Maecianus denies the status of lawful money not only to foreign coins, but also to provincial coins.

Provincial coins are not explicitly mentioned in the Digest at all. There is, however, a famous text (Paulus 4 responsorum D. 46.3.99) which is thought by many scholars to refer to provincial money.[124] Paul gives the legal opinion that a debtor cannot be forced to accept money in another form (*in aliam formam*) if thereby he is going to suffer a loss.

The first obvious problem with the text is that it seems to presuppose that the debtor is entitled to receive money. Either the word 'debtor' (*debitorem*) has been brought into the text by a scribal error instead of 'creditor' (*creditorem*)[125] or it must be assumed that Paul was presented with a case involving three persons of which one is indebted to the second and at the same time has a claim against the third, so that the first person is at once a debtor and a creditor.[126]

If it is accepted that the person referred to is in fact (also) a creditor of money, the text states that money in another form does not have to be accepted.

The next question is what is meant by 'money in another form' (*in aliam formam*). In his definition of money, Paul emphasizes the importance of minting in the form approved

[117] Cf. Gaius 7 ad edictum D. 7.5.2. [118] Hasler, above n 49, at 73.

[119] Volusius Maecianus, *Assis distributio* 45. [120] Ernst, above n 81, 238.

[121] Plinius, *Naturalis Historia* 33.13.46; cf. Wolters, above n 14, 17.

[122] Cf. Katsari, above n 65, at 73. *Tetrachmum* is just a variant appellation of the tetradrachm.

[123] Hasler, above n 49, at 69.

[124] Ernst, above n 81, at 238; Hasler, above n 49, at 30; Wolters, above n 14, at 359.

[125] This seems to be the assumption of Hasler, above n 49, at 30 and Wolters, above n 14, at 359.

[126] Ernst, above n 81, at 242–3; yet another explanation is offered by B. Kupisch, 'D. 46,3,99 (Paulus 4 resp.): Ein Text ohne Sinn oder ein geldrechtlich relevanter Text?', in H. Altmeppen et al. (eds), *Festschrift für Rolf Knütel zum 70. Geburtstag* (2009) 617, at 624–8. According to Kupisch, the text deals with a loan that has not yet been paid out. The recipient of the loan is referred to as 'debtor' because he will become a debtor once he has received the loan. For the purposes of determining the legal status of the coins *in aliam formam* mentioned in the text, it is not necessary to decide which explanation is the most plausible.

by the state (*forma publica*). The expression *nummi in aliam formam* in D. 46.3.99 apparently refers to coins minted by a different authority and according to a different standard. It seems plausible that provincial coins are meant. If the money in question is provincial money, the text says essentially the same as the text by Maecianus which was discussed before. Provincial money is not real money, but a commodity.

The fact that according to Paul the money *in aliam formam* can only be refused if the recipient is in danger of incurring a loss, whereas Maecianus categorically denies the status of money to the *drachma* and *tetrachmum*, does not militate against the assumption that both texts concern provincial coins. The reference to a potential loss does not have to be read as a strict condition. It could be meant as an indication that the problem will only occur in practice if the recipient fears a loss.

It seems therefore plausible that both the text by Maecianus and D. 46.3.99 refer to provincial coins and deny them the status of lawful money outside their area of circulation. It should be noted, however, that the expression *in aliam formam* is far from unambiguous. There was ample room for the jurists of the *ius commune* to apply D. 46.3.99 to different factual situations.[127]

A similarly ambiguous term is found in Ulpian 30 ad edictum D. 13.7.24.1. This text contains the rule that a payment of *reprobi nummi* does not extinguish a debt. There seems to be a consensus among modern interpreters that the adjective *reprobus* refers to counterfeit or adulterated coins,[128] although the adjective *adulterinus* is otherwise used in the sources to indicate counterfeiting.[129] However, the Latin word *reprobus* is very rare. With the exception of D. 13.7.24.1 it seems to be used exclusively by Christian authors.[130] The affinity to the verb *reprobo* indicates that *reprobus* refers to anything bad or base. It was therefore possible for the medieval jurists to apply the rule stated in D. 13.7.24.1 to coins which had been withdrawn from circulation by the authorities.[131]

IV. The Special Status of Money in Roman Contract and Property Law

1. Enhanced Fungibility of Money

The Roman jurists counted money (*pecunia numerata*) in the category of fungible things (*res, quae pondere numero mensura constant*).[132] Fungible things are characterized by the absence of significant individual differences between several pieces belonging to the same category.[133]

Apparently, the Romans accorded to coins an enhanced fungibility. All coins were regarded as equal as long as they represented the same value. Thus, a debt expressed in silver currency could be settled through payment of a corresponding amount in gold and vice versa. This principle seems to have been so self-evident to the Roman jurists that they saw no need to discuss it. There is only indirect evidence for it.

[127] See Chapter 7 in this volume.

[128] Cf. A. Berger, 'Reprobus', in A. Berger, *Encyclopedic Dictionary of Roman Law* (1953) 676; G. Noordraven, *Die Fiduzia im römischen Recht* (1999) 317.

[129] See the criminal provisions against counterfeiting: Ulpian 8 de officio proconsulis D. 48.10.9 pr.; Ulpian 7 de officio proconsulis D. 48.13.8 pr; Constantinus C. 7.13.2 and C. 9.24.1 pr. (both from 321).

[130] Cf. K. E. Georges, *Ausführliches Lateinisch-Deutsches Handwörterbuch*, vol. 2 (1988) col 2332.

[131] T. S Sargent and F. R. Velde, *The Big Problem of Small Change* (2001), at 84; Chapter 7 in this volume.

[132] Gai 2 aur. D. 44.7.1.2; Inst. 3.14 pr.; Gai 3.90; cf Rüfner, above n 45, at 32–3.

[133] Rüfner, above n 45, at 19.

According to Florentine, if one party to a *stipulatio* asked the other to promise a certain amount of *denarii* and the other party promised an equivalent sum of *aurei*, the *stipulatio* contract was validly concluded, although a *stipulatio* required a strict formal correspondence of the declarations of both parties.[134] If amounts in gold and silver currency were regarded as equivalent for the purposes of the *stipulatio*, it seems plausible that they could also be used interchangeably to settle monetary debts.[135]

By accepting the enhanced fungibility of coins, the Roman jurists made an important contribution to the functioning of the bimetallic or trimetallic system. They ensured that all coins could fulfil the primary function of money and serve as a universal means of payment and medium of exchange.

2. Transfer of Ownership

In principle, coins were treated as corporeal things and were subject to the general rules of Roman property law. Ownership of coins was transferred by *traditio*.[136] *Traditio* required the passing of physical control from the previous to the new owner and the existence of a legal cause which justified the passing of ownership.

If coins were in the possession of a person who did not own them, the owner was entitled to reclaim the coins by means of the *rei vindicatio*. The *vindicatio* presupposed that the owner was able to identify the specific pieces which belonged to him.[137]

Generally, Roman law followed the maxim that no one can transfer more rights than he has himself.[138] Therefore, if a non-owner purported to transfer ownership, the *traditio* failed and ownership did not pass. This rule was unsuitable for money, because the possibility that a creditor who had accepted a payment of coins in good faith might become subject to a *rei vindicatio* by an alleged owner of the coins could have hindered the free circulation of money. The Roman jurists found ways around this problem.

Iavolen 11 ex Cassio D. 46.3.78 is the most important provision ensuring the circulation of money. According to this text, if someone had paid coins which were not his to a creditor, the creditor acquired ownership of the coins as soon as they were unidentifiably mixed with the creditor's own money.[139] This was a significant departure from the general rules, which provided that if two substances were mixed, the (former) owners of the ingredients were each entitled to a share in the mixture.[140] In the case of coins, once the mixing had occurred, the former owner of the coins had no remedy against the payee. According to D. 46.3.78, he had an action for theft (*actio furti*) against the payer instead.

The rule that the possessor of coins belonging to a third party became the lawful owner as soon as he mixed them in good faith[141] with his own money was probably in itself sufficient to ensure the unhampered circulation of coins.

It is not entirely clear how much further the Roman jurists went in protecting payers and payees who had paid or received coins belonging to a third party. There are numerous sources which imply that the owner of coins which had passed into the hands of a third

134 Florentin 8 institutionum D. 45.1.65.1.
135 Wolters, above n 14, at 359.
136 Inst. 1, 2, 40.
137 On the *vindicatio nummorum*, cf. M. Kaser, 'Das Geld im römischen Sachenrecht', (1961) 29 *Tijdskrift voor Rechtsgeschiedenis* 169–229, 173–83; A. Wacke, 'Die Zahlung mit fremdem Geld', (1976) 79 *Bullettino del'Istituto di Diritto Romano* 49–144, 104; Hasler, above n 49), at 33–6.
138 Ulpian 46 ad edictum D. 15.17.54.
139 Wacke, above n 136, at 114.
140 See Kaser, above n 10, at 430 for details.
141 If the possessor acted in bad faith, he was liable for *furtum* (theft).

party lost ownership once the coins had been 'consumed' in good faith.[142] It is not easy to determine what the jurists mean by consumption since coins cannot be physically consumed. It may even be that the Roman jurists made an exception from the rule that no one can transfer more rights than he has himself and accepted the bona fide acquisition of ownership in the coins by the payee.[143]

The details of the debate regarding the consumption of money need not be laid out here. Whatever the correct explanation, it is clear from the sources that the Roman jurists facilitated the acquisition of ownership in money paid by a non-owner and thus ensured the free circulation of money.

3. Debasement

The debasement of the currency was a recurring problem in antiquity and in later ages. The legal sources do not reflect the magnitude of the economic problems which ensued from the currency crises that shook the Empire repeatedly. While there are numerous texts in the Digest dealing with changes of the factual situation subsequent to the conclusion of a contract[144] or the making of a will,[145] the effects of changes to the monetary system on contracts and testamentary dispositions are apparently never discussed.

Only the three constitutions in title 11, 11 of Justinian's Code are directly relevant to the problems of debasement.

The first constitution commands that all *solidi* have to be accepted in payment even if they are decorated with the portraits of previous emperors. This could be read as an injunction to accept even money of bad quality if it was backed by the state. However, the duty is limited to coins that have the required weight and form.[146] This proviso left it open to debate which coins really had to be accepted.[147]

The third constitution in title 11, 11 of Justinian's Code seeks to reinforce the duty to accept the *solidi* minted by earlier emperors by threatening the death penalty to all those who do not assign equal value to all *solidi* provided they are made of pure gold (*obryziaci*).[148] The requirement that the *solidi* have to be *solidi obryziaci* essentially repeats the limitation which was already contained in C. 11.11.1. It seems likely that the duty to accept all *solidi* at face value was difficult to enforce despite the draconian sanctions threatened in C. 11.11.3.[149]

The most interesting of the three constitutions is the second one, which reads in full:

> Due to the diminution of the value of the solidus, which may possibly be brought about, the prices of all goods must be reduced.[150]

[142] See, e.g., Ulpian 37 ad Sabinum D. 40.7.3.9; Pomponius 19 ad Sabinum D. 46.3.17 and the texts listed by Hasler, above n 49, at 41.

[143] This is the theory of Kaser, above n 136, at 200; Kaser, above n 10, at 431, but see Wacke, above n 136, at 142; Hasler, above n 49, at 43.

[144] E.g., African 7 quaestionum D. 46.3.38 pr.

[145] E.g., Scaevola 22 digestorum D. 32.41.4.

[146] Valentinianus and Valens C. 11.11.1 (367).

[147] F. Dorn, '§§ 244, 245. Geldschuld', in M. Schmoeckel, J. Rückert, and R. Zimmermann (eds), *Historisch-kritischer Kommentar zum BGB*, vol. 2.1 (2007) 432, at 443.

[148] Gratian, Valentinian, and Theodosius C. 11.11.3.

[149] As far as the *ius commune* is concerned, it should be kept in mind that Ulpian 13 ad edictum D. 13.7.24.1 (discussed above in Section III.2.(e)) and Paulus 4 responsorum D. 46.3.99 (also discussed above in Section III.2.(e)) could be read as excluding any duty to accept debased coins, cf. Chapter 7 in this volume.

[150] Valentinianus, Valens, and Gratian C. 11.11.2: 'Pro imminutione, quae in aestimatione solidi forte tractatur, omnium quoque specierum pretia decrescere oportet'.

By this law, which was probably promulgated between 365 and 367 AD, private parties were prohibited from increasing the prices of goods after a decrease in the value of the coin in which prices are expressed. The prices in the devalued currency would thus nominally remain the same.

The modern reader who is aware of the economic and monetary crises of Late Antiquity tends to view the constitution as a measure designed to rein in inflation in connection with a debasement of the coinage. According to Laprat, however, there probably was no debasement. Rather, it seems likely that the gold price went down at the time when the constitution was made due to a positive development of the economic conditions. The Emperor intervened in order to maintain the stability of prices expressed in *solidi*.[151]

Due to the scarcity of sources, it is impossible to say with certainty why the constitution was made. Regardless of its original purpose, the constitution has been used by the jurists of the *ius commune* who had to deal with legal issues arising from the voluntary debasement of the coinage since the Middle Ages.[152]

V. Conclusion

As predicted at the beginning of this chapter, we have surveyed a host of laws and regulations, all designed to make the monetary system work. We cannot even claim to have covered all pertinent sources. The material in the Justinianic codifications is vast and sometimes the relevance of a text for the legal aspect of money is not discernible at first glance.

Although many interesting texts were left out by Justinian's compilers, the legal sources contain a huge amount of information on the mechanics of Roman money. This information must have been immensely useful to the jurists of the *ius commune* as they set about constructing a legal framework for the monetary system of their own time.

The texts in Justinian's compilations contain the building blocks for a functional theory of money as well as illustrative material for the working of a bimetallic or trimetallic system. They also contain the provisions necessary to ensure that coins can circulate freely and function as a universal medium of exchange and means of payment. With regard to the vexed question of debasement, the Roman jurists provided only limited guidance for their medieval and early modern successors.

151 Laprat, above n 21, at 332–3.; see also E. Lo Cascio, 'Teoria e politica monetaria a Roma tra III e IV d. C.', in A. Giardina (ed.), *Società romana e impero tardoantico*, vol. 1 (1986) 535, at 554.

152 See the references in Laprat (n 21) at 324–5.

7

The Legists' Doctrines on Money and the Law from the Eleventh to the Fifteenth Centuries

Wolfgang Ernst

I. Introduction

1. Money in Justinian's Laws

This chapter tries to establish the learned lawyers' view of money in the time of the glossators and post-glossators, or the medieval civilians handling the Roman law sources. Since the civilians' focus was on the secular, as opposed to the canon (Church), laws, they were also referred to as 'legists'.[1] We shall first look into the pioneering developments of legal doctrines up to the *Glossa Ordinaria*, the Grand Gloss (around 1220–50),[2] and then turn to later developments. Since the medieval learned lawyers unfolded their doctrines by way of scholarly interpretations of the Roman law texts compiled in Justinian's legislation, it is necessary to consider what Justinian's law books contained in this respect, and therefore to turn briefly to the views that the Roman lawyers of antiquity held on the law regarding money and currency.

The Roman economy was fully monetarized.[3] Money for the Romans meant coins, *nummi*. Roman coins were 'commodity money', but circulated by tale.[4] The Roman currency was state controlled; coins were referred to as *materia forma publica percussa*. The minting of coins was meticulously organized: there was no free-minting. Coins came in two, later three, denominations which were brought into an official, rigid relation. Bimetallism and trimetallism (the parallel use of copper, silver, and later also gold) required adjustments from time to time, and these were brought about in an orderly way. Public finances, taxation, and the administration of justice relied on the Roman currency. Penalties were fixed in amounts of Roman money. Judgements in private law matters also had to be rendered in sums of Roman money (*condemnatio pecuniaria*). A number of Roman contracts required the fixing of a specific amount of money.

[1] Parts of this chapter have been published as W. Ernst, 'The Glossators' monetary law', in J. W. Cairns and P. du Plessis (eds), *The Creation of the Ius Commune* (2010) 229.

[2] On the Accursian gloss, see, most recently, H. H. Jakobs, *Magna Glossa. Textstufen der legistischen glossa ordinaria* (2006), and the same author's collected articles, H. H. Jakobs, *Digesten-Glosse-Savigny: Kleine Schriften zur Wissenschaft vom Römischen Recht*, ed. W. Ernst (2004); H. Dondorp and E. J. H. Schrage, 'The Sources of Medieval Learned Law', in Cairns and du Plessis (eds), above n 1, 7, at 24 et seq.

[3] On Roman money, see, most recently, the contributions to W. V. Harris (ed.), *The Monetary Systems of the Greeks and Romans* (2008).

[4] This has been ascertained by K. Hasler, *Studien zu Wesen und Wert des Geldes in der römischen Kaiserzeit von Augustus bis Severus Alexander* (1980).

Given the overwhelming importance of money for the public sector as well as for everyday commerce, and the marginalization of non-monetary transactions,[5] it is no wonder that Roman lawyers dealt with innumerable legal issues involving money. In a nutshell, the Roman lawyers' approach was as follows:[6] coins were considered, and indeed were, personal chattels (literally *pecunia*) and *res nec mancipi*. Coins were thus in principle subject to the law applicable to chattels. Although produced by official mints, coins were the subject of individual property, rather than state property. Coins were considered *res quae numero pondero mensura constant*—goods determined by number, weight, or measure (*res fungibiles*). The Roman jurists considerably modified the law pertaining to personal chattels when it applied to coins. These modifications decisively supported the circulation of money. The legal concepts of *commixtio* and *consumptio nummorum* show a clear grasp of money circulating as a means of exchange. Roman lawyers on a number of occasions quite stringently distinguished minted coins, which were commodity money made of standardized silver, from silver in its form as bullion.[7] Likewise, a *corpus nummorum*, a hoard of coins, was distinguished from a sum of money stated in abstract terms (*quantitas, summa*).[8] The Romans had a sharp concept of legal tender or 'lawful money'. They debated, for example, whether foreign coins were legal tender.[9] While there was something like transfers of bank credit, these were not seen as 'legal tender'.[10]

Turning to Justinian's codification, we find a basic approach to money which faithfully reflects and revives the approach of the Roman lawyers of antiquity. The simple reason was that an extensive overhaul of money-related legal issues was neither necessary nor feasible, given the way Justinian's *corpora* of law were compiled from older material. The Digest and Code therefore maintain the notion of 'money', in the form of coins circulating by tale, as the standard medium of exchange. The Digest and Code also contain an abundance of money-related legal problems, both great and small. But the relevant texts are scattered throughout: there is no specific title in either body of law devoted to money. The Digest preserves an interesting piece on monetary theory by the jurist Paul—D. 18.1.1.1.[11] Paul here supports a sharp distinction between sale and barter, this being the majority opinion among Roman lawyers, relying on the qualification of money as a universal means of exchange.

In spite of the abundance of legal material addressing monetary problems, the Digest and Code do not accurately reflect the historical development of monetary issues during the times of the Roman Republic and the Principate, and of course, they were not meant to. Most notably, we miss a discussion of the single most important issue recurring in the

[5] The persisting field of non-monetary transactions, as seen from a legal perspective, has been dealt with by A. Bürge, 'Geld- und Naturalwirtschaft im vorklassischen und klassischen römischen Recht', (1982) 99 *Zeitschrift für Rechtsgeschichte, Romanistische Abteilung* 128.

[6] On money in Roman law, see recently the overview by L. Winkel, 'L'argent en droit romain', in *Argent et Gestion, Neuvièmes rencontres 23 et 24 novembre 2000* (2001), at 97. For a specific examination of the Roman texts relating to money, see Chapter 6 of this volume.

[7] A striking example is the handling of legacies by which 'all silver' is bequeathed. Silver coins, Ulpian tells us, are not included, D. 34.2.27 pr.1: 'non facile enim quisquam argenti numero nummos computat'.

[8] Cf., e.g., D. 30.34.1, 3–4: a bulk of coins (*corpus nummorum*) can be bequeathed but once, whereas several legacies for amounts of money can coexist.

[9] Volusius Maecianus, *Assis distributio* § 45, in E. Seckel and B. Kübler (eds), *Iurisprudentiae anteiustinanae reliquiae* (1908) 415; Plinius, *Nat. hist.* 33, 46, ed. K. Mayhoff (1897), at 149–50.

[10] Recent research has intensively turned around the issue to what extent the Romans used 'bank money': cf. W. V. Harris, 'The Nature of Roman Money', in Harris, above n 3, 174; J. Andreau, 'Some Observations on Banking and Roman Law', in W. J. Zwalve and E. Koops (eds), *The Past and Future of Money: Proceedings of the Leiden Congress, August 31st and September 1st, 2006* (2008) 6; B. Geva, *The Payment Order of Antiquity and the Middle Ages: A Legal History* (2011), at 191–251. It would be difficult, however, to vindicate the status of legal tender for Roman 'bank money'.

[11] On this text, see P. Blaho, 'Abgrenzung zwischen Kauf und Tausch in der Dichtung des Homer', in E. Jakab and W. Ernst (eds), *Kaufen nach römischem Recht* (2008) 53, at 55–6.

history of monetary law, which is the interplay between fluctuations of the currency, tectonic shifts in the monetary system, and monetary obligations. This issue must have troubled lawyers of the third and fourth centuries.[12] Justinian's compilation, however, was meant to serve as the basic law of an empire with a well-ordered, centralized monetary system.[13] Deliberations by the Roman jurists on currency crises which we know to have occurred in their own time had no place in Justinian's law books. Justinian's compilers adapted the money-related texts which they used for the Digest, Code, or Institutes to the contemporary Byzantine monetary environment. This is most strikingly reflected in a thorough revision of the original Roman denominations.[14] Amounts stated originally in *sestertii* were changed to amounts of *aurei*, while the original use of *denarii* remained unaltered.[15] Thus, texts of the Digest and Code could be read in the light of the contemporary, sixth century, monetary environment. This was unavoidable, given the intention of the Byzantine legislator to make the Digest and Code the law of the land. Wherever in the Digest or Code sums of money are mentioned to fix fines or alimony payments (other than as mere illustrations), the coins available in real life had to be used. The Byzantine lawmakers had little reason to deal with currency turbulences which were absent from the monetary environment that had been established in sixth-century Byzantium. Moreover, in grand-scale codifications issued in aspiring times, the legislators seldom provide for the possibility of currency disasters or the total collapse of the economy.

The other issue conspicuously absent from the monetary discussions in both the Digest and Code is the mingling of money from different currencies. While in the Roman Empire commercial actors and their lawyers did have to deal with a multitude of currencies,[16] Justinian's law texts seem to be based on the idea of a self-contained monetary environment where the currency was uniform throughout the empire. This, at least, was the ideal which the Byzantine sixth century, with its strong gold-based currency, tried to live up to.

All in all, the Digest and Code offer ample material for a study of the legal aspect of money, both in their treatment of the idea of money itself and, more predominantly, in the multitude of micro-level issues where money played a part. But both the Digest and Code fall short when we look for specific guidance about the legal problems caused by tectonic shifts in the monetary environment or transactions involving coins from different currencies.

2. The Glossators' Monetary Environment

While we may debate the extent to which features of real life generally found their way into the glossators' work, as far as money is concerned there can be little doubt that the glossators knew very well the nature and functions of money in their own time. The twelfth- and early thirteenth-century glossators lived in a single coin environment.[17] The only coins in circulation were relatively small, silver coins of one type. It was only from the late 1230s

[12] Of course, Diocletian's rulings on *laesio enormis* (C. 4.44.2 and 8) were a response to the inflationary crisis of the late third/early fourth centuries, as was his edict on tariffs.

[13] On money in Byzantium, see M. F. Hendy, *Studies in the Byzantine Monetary Economy, c. 300–1450* (1985).

[14] S. Mrozek, 'Zur Geldfrage in den Digesten', (1970) 18 *Acta Antiqua Academiae Scientiarum Hungaricae* 353.

[15] Probably at a rate of 1000:1.

[16] Interestingly, our key sources (see Volusius Maecianus, *Assis distributio* § 45; Plinius, *Nat. hist.* 33, 46) are not from the Justinianic texts. In the *Digest*, one can only occasionally assume that a text dealt with the parallel use of different currencies; see, for the case of D. 46.3.99, W. Ernst, 'Rationalia ad D. 46.3.99', in P. Pichonnaz et al. (eds), *Spuren des römischen Rechts: Festschrift für Bruno Huwiler zum 65. Geburtstag* (2007) 233.

[17] On money in the twelfth century, see T. J. Sargent and F. R. Velde, *The Big Problem of Small Change* (2003), at 45–53; F. C. Lane and R. C. Mueller, *Money and Banking in Medieval and Renaissance Venice.* Vol. 1: *Coins and Moneys of Account* (1985), at 105 et seq.

onwards that the minting of large silver or gold coins, *grossi*, like the Venetian *ducat* or the Florentine *florin*, began in Northern Italy. The additional difficulties that arose with bimetallism will be addressed later;[18] in the world of the early glossators, there was only one coin, the *denarius*, and silver was the only metal used for minting.[19]

To speak of a single-coin environment is not, however, entirely correct. As a denomination, the Carolingian *denarius* had indeed survived the break-up of the Carolingian empire. But the coin was now minted by a multitude of local potentates, all using different standards of fineness, and faces or designs of their own choice. 'Most coinage was struck by, and for the profit of the local nobility, lay or ecclesiastical, who proceeded to reduce the weight and fineness of the *denier* at differing rates, resulting in the regionalisation of currency.'[20] In commercial dealings, therefore, monetary obligations were specified by stating the origin of the *denarii* in question, such as *denarii* from Pavia or Cologne.

The *denarius* was a relatively small coin, a 'penny'. As a medium of exchange it was not ideal for large-scale transactions. Therefore, large-scale obligations were often expressed by stating certain weights of silver or gold, and relied on the use of bullion.[21] Scales and standard weights were everyday features of medieval commerce. To the extent that un-minted gold or silver in standard bars of typified weights was used in transactions, we can speak of a bullion currency. For storage purposes, coins and precious metal were used more or less indiscriminately. Often they were kept not in the form of standard bars but as *objets d'art* for church and other use (chalices, goblets, and the like). Since the work of silversmiths was cheap, only the silver content counted. The twelfth-century economy thus used two rather different means of exchange, side by side: bullion and, as *pecunia numerata*, a single denomination in the form of a small silver coin, albeit one that was in reality coined by a multitude of regionally controlled mints, their products greatly varying in style, face, and fineness.

A characteristic feature of the currencies in the high Middle Ages was the recurring debasement of coins. The circulation of coins was often limited to a statutory period (typically a year), at the end of which all coins had to be returned to the mint (known as *reprobatio nummorum, renovatio monetae*). The incoming coins, having lost weight as a result of use or deliberate clipping, were used to mint the same amount of coins anew without adding new silver. The new coins were therefore of diminished fineness. The new coins normally carried the same name as the old ones, and were of the same denomination. It was sometimes possible to tell the difference owing to a change in the appearance of the coin, but often the two issues of coin were indistinguishable from each other. If the older coins were officially taken out of circulation, they became *pecunia reproba*.

II. Glossators on Monetary Issues

1. Introduction

Before Accursius could compile the *Glossa ordinaria*, stone first had to be piled upon stone: an evolutionary story could be written for each and every gloss—and even for single words

[18] See Section III.3.(d) of this chapter.

[19] Digest texts dealing with the interchangeability of smaller and larger coins, e.g., D. 45.1.65.1, the latter part of the *lex quae extrinsecus*, could hardly have real-life meaning for the glossators. Gold coins were not, however, altogether unknown, if only because foreign gold coins were imported.

[20] M. Blackburn, 'Money and Coinage', in R. McKitterick (ed.), *The New Cambridge Medieval History* (1985; repr. 2002, 2004), vol. 2, 538, at 559.

[21] Looking into (somewhat older) medieval collections of deed-formulas for contracts of sale, H. Siems encountered a characteristic difficulty in determining whether fixed prices referred to coins or to bullion: H. Siems, *Handel und Wucher im Spiegel frühmittelalterlicher Rechtsquellen* (1992), at 386 and *passim*. From a learned legal point of view, using bullion as *pretium* would have led to a classification of the contract as barter (*permutatio*).

within it—which covered its transmission from early authors such as Irnerius to Accursius (and beyond). The material for these 'histories of glosses' has to be elicited from dozens of manuscripts. The earliest glosses, which were no more than extremely abbreviated statements, became the basis of all further developments. All sorts of thoughts, ideas, and notions—smart and stupid alike—were absorbed into the process of transmission, frequently without attribution to a specific author. The cross-references used to annotate the Roman law texts were sometimes triggered only by association, where the underlying 'train of thought' is usually obscure to a modern legal mind. Indeed, a mere cross-reference could conceal a sophisticated argument, which would be obvious to contemporary scholars but which is at first sight meaningless to today's reader. Older glosses and later additions were reverently treated as a common heritage. The *Glossa ordinaria* wove a mass of glosses into a single apparatus, wiping out the intricate stories behind the individual glosses. The generations that followed Accursius still knew, or had easy access to, the many subtle argumentative nuances which, by reason of previous developments, a thirteenth century reader would have found accompanying each individual gloss. A legal historian reading the Accursian *Glossa ordinaria* can only attain a full understanding of the legal content of the glosses if he or she re-establishes, at least partly, the textual stages of their pre-Accursian history.

2. On the Nature of Money: The *Lex Origo Emendi* (D. 18.1.1)

The glossators took up Paul's musings in D. 18.1.1, the *lex origo emendi*, on money as the defining element of sale as opposed to barter.[22] There was some flexibility in the reading of the passage that the use and property of money sprang *non tam ex substantia praebet quam ex quantitate*. If the use of money *ex quantitate* was taken to refer to money in circulation,[23] and the use *ex substantia* to refer to the use of the silver as a material (for example, for melting and production of precious objects), neither of these two uses was actually excluded. The use *ex quantitate* was merely considered to be comparatively more important. One thus read *non tam/quam* as 'not so much . . . as';[24] or as 'as well . . . as'.[25] The assumption of a dual use of coins was in line with the situation in real life where coined silver was easily converted into bullion or other kinds of silverware, and vice versa. In contrast, in a fully monetized economy, such a dual use of coins would be an anomaly, since money is defined as a medium of exchange, circulating by tale and, hence ideally, regardless of the inherent substantive value of the coin. It was only later that glossators overcame the

[22] The Greek quote in the text from Homer would have been lost on them. For the text in the context of the Digest sources, see Chapter 6 of this volume.

[23] Some of the glosses explaining the words *ex quantitate* already took *quantitas* as an abstract, referring to a number of interchangeable (fungible) objects, interlinear gloss Trier MS 838 fo. 179r: 'ex quantitate: id est ex numero; y<rnerius>'. Other glosses seem to understand *quantitas* as a specific (corporeal) amount of coins. For both views, see W. Taeuber, *Geld und Kredit im Mittelalter* (1933; repr. 1968), at 332 fn 919. On the medieval concept of *quantitas*, see W. Ernst, 'Die Konkretisierung in der Lehre vom Gattungskauf', in W. Schoen (ed.), *Gedächtnisschrift für Brigitte Knobbe-Keuk* (1999) 49, at 57–60; W. Ernst, 'Kurze Rechtsgeschichte des Gattungskaufs', (1999) 7 *Zeitschrift für Europäisches Privatrecht* 583, at 612–15. On the concept of fungible objects in the Middle Ages, see T. Rüfner, *Vertretbare Sachen? Die Geschichte der res, quae pondere numero mensura contant* (2000), at 74–92.

[24] Marginal gloss Stockholm MS B680 fo. 192v: 'Ergo ex utroque, sed magis ex quantitate quam ex substantia [. . .] p<lacentinus>'; taken from Taeuber, above n 23, at 332 fn 922.

[25] Azo's marginal gloss '*dominumque*' ad D. 18.1.1: 'Id est, utilitatem sui ipsius dominii prebet ex duobus. Hoc est ipsa substantia, quia tantum potest tibi esse carum aurum vel argentum quod in numo, ac si esset in massa. Item potest esse carum, quia per pecuniam facile est omnia invenire. Azo.' BamSB MS iur. 11 fo. 209r. For variants in other manuscripts, see Taeuber, above n 23, at 334 fn 922.

dual use doctrine, and began to define money by its circulatory function, which negated its use *ex substantia*. They thus read *non tam/quam* as 'not as . . . but as'.[26]

Azo held that the technical usability of a coin's metal was as important as its usability as a means of exchange.[27] Accursius took Azo's statement a step further in relying on the technical usability of a coin's metal as a reason for its usability as a means of exchange. Thus he made one of the uses (*ex substantia*) the precondition of the other (*ex quantitate*):

> gloss *praebet* to D. 18.1.1
> Note that a coin has two types of usefulness—one deriving from its inherent utility and the other from its ownership. The first derives from the utility of its substance, because a single coin has as much value as the quantity of silver it contains. The second derives from its value, because the value of a coin is level with an equivalent thing, and thus equality in value arises through a coin.[28]

The notion that 'a single coin has as much value as the quantity of silver it contains' (*tantum valet unus nummus quantum argenti tantundem in massa*) was to become a key reference for the glossators' and post-glossators' approach to currency policies. There was a general mistrust of coins functioning as money proper, that is to say, of their circulating by tale as units for payment. Rather, coins were commodified, and defined as publicly certified pieces of silver. Since coins were valued according to their inherent metal value, they could not, the glossators held, be given a nominal value exceeding their metal value. This reading of D. 18.1.1 resulted in a specific demand made of monetary policy makers: rulers must not deceive the public by minting underweight coin.[29] Ideally, from the legists' point of view, there should be no seigniorage at all.[30] Canonists were to support a slightly more liberal, or perhaps more realistic, approach, allowing for a 'modest' seigniorage.[31]

3. Property Law Aspects

The Roman property law aspects of money, especially *commixtio* and *consumptio nummorum*, which were legal means of facilitating the circulation of money in Rome, could be taken up by the glossators quite easily. For the doctrine of *consumptio nummorum* a number of Digest texts could be relied upon, D. 12.1.11.2, the *lex si fugitivus*, being the most prominent. The text is about the creation of the borrower's contractual liability, which as a general rule required the transfer of ownership from lender to borrower. While a borrower who tendered coins which were not his own was not able to transfer ownership, once the recipient had spent the coins, he was considered to be under the lender's liability to return the number of coins received.

[26] Taeuber, above n 23, at 332 fn 921, with references to Jacobus de Puteo and Hieronymus Butigella.

[27] See Azo's marginal gloss '*dominumque*' ad D. 18.1.1, quoted at n 25 above.

[28] 'Nota quod in duobus prebet utilitatem: sui usus, et sui dominii. Primo ex substantia quia tantum valet unus nummus quantum argenti tantundem in massa. Secundo ex quantitate, quia aequiparatur quantitas nummi aequivalentiae rei, et sic per nummum fit aequalitas in quantitate.' Wording as in the edn. of Lyon, 1618. The wording is not substantially different in earlier manuscripts of the *Digestum Vetus*, e.g., Basel MS CI4. See also, for variants in other mansucripts, Taeuber, above n 23, at 334 fn 925.

[29] Taeuber, above n 23, at 334.

[30] Seigniorage is the difference between the costs of minting and the nominal, the face value of the coin. It is the seignorage which made minting a profitable, often hugely profitable, business. On seigniorage, see Sargent and Velde, above n 17, at 50–63.

[31] On X 2.24.18, see T. Bisson, 'Quanto personam tuam (X 2.24.18): Its original significance', in S. Kuttner (ed.), *Proceedings of the 4th International Congress of Medieval Canon Law* (1976) 229; F. Wittreck, 'Conservare monetam. Geldwertstabilitat im hochmittelalterlichen Aragon im Lichte der Dekretale "Quanto personam tuam" (1199)', in A. Weber (ed.), *Währung und Wirtschaft: Das Geld im Recht. Festschrift für H. J. Hahn* (1997) 103; F. Wittreck, *Geld als Instrument der Gerechtigkeit. Die Geldrechtslehre des Hl. Thomas von Aquin in ihrem interkulturellen Kontext* (2002), at 103–4, and see Thier, below Chapter 8, Section I.2.

The doctrine of *commixtio nummorum* had D. 46.3.78, the *lex si alieni nummi*, as its basis. If coins belonging to another person are used for payment and mixed with the recipient's coins so as to become indistinguishable, the recipient becomes owner and the payment is considered to be perfect, while the payer becomes liable for theft. The gloss '*accepit*' informs the reader that this is a special law for *pecunia*, since in the case of mixing wheat there is no extinction of property. Perhaps as an explanation, the mixing of the coins is referred to as a *quasi consumptio*, indicating that the *commixtio* is seen as another case of the *consumptio nummorum*. Indeed, the characteristic feature of *consumptio*, from a Roman law perspective, was that the object had become untraceable. No further explanation is given as to why coins should be treated differently from wheat. No reference is made to the circulation of money and its facilitation; one has to bear in mind, however, that the Roman law texts themselves say nothing of that sort. As to the question whether the rule is applicable also in the case of a bad faith recipient, the gloss simply states, without committing itself to a solution, that according to 'some' the bad faith did not matter.

4. Monetary Obligations: Coins for Bullion?

Difficulties arose as to monetary obligations. It is easy to see, in retrospect, that the state of monetary affairs in the twelfth century required answers to the following questions. Could one discharge a bullion debt by payment of coins? Could one use *denarii* issued by different rulers for payment? What should the effect of debasement be? All these issues, none of which was addressed directly in the Roman law texts, were eventually settled.

The monetary environment in which the glossators worked knew two different media of exchange: *denarii* and bullion. Could a debt stated in bullion be discharged by payment in coins? A dispute can be established from the glosses to D. 12.1.2, the *lex mutuum*, which is a key introductory text to the law on loans.[32] Thus the law of loans was relevant even though the debt expressed in bullion need not have been based on a loan. Hugolinus found bullion and coins to be two different *genera*. Repayment by coins would be *numerus pro pondere*, and hence inadmissible. Azo (and Accursius quoting him), on the other hand, argued that bullion and coin were of the same *genus*, provided that their fineness was the same.

> gloss *per solutionem* to D. 12.1.2.1:
> If therefore I shall have received money, will I have the authority to return a measurement of cereal or a weight of silver? I answer 'No' following the argument below in D. 46.1.42. It is otherwise if I shall have received silver, for then I return money, as argued below in D. 34.2.1. But the silver in the money should not be mixed with base metal. Azo.[33]

Having first excluded from the scope of loan contracts an agreement to pay money for return of cereal or bullion (unminted silver), Azo allowed the repayment in coins for a loan made out in bullion, provided that the coins themselves were pure. Azo's prevailing opinion is very much in line with the general focus on silver content. The dissenting opinion of Hugolinus is preserved in the gloss *pondere* as recorded by Accursius:

> Likewise, what if I shall have received silver of a particular weight? Do I have the authority to return money? I answer 'Yes': not, however, if it is corrupt, as below at D. 34.2.1.1, D. 34.2.9,

[32] Taeuber, above n 23, at 161 fn 441, 196.

[33] BamSB MS iur. 11 fo. 145r in margine (R61 m):

> Si ergo pecuniam accepero, numquid frumentum in mensura vel argentum ad pondus reddere potero? Respondeo, non, argumento infra, *de fedeiussoribus l. si ita fedeiussorum accepero* [D. 46.1.42]. secus si argentum accepero tunc enim reddo pecuniam, ut infra, *de auro et argento legatis l. Ia* [D. 34.2.1]. argenteam tamen non cum here <ere> mixtam. Azo.

D. 34.2.19.1 and C. 8.53(54).35.1. But Hugolinus says 'No', as below at D. 46.3.99, and he says it may have been particularly provided for in advance in a final will and C. 8.53(54).35.1 speaks in particular favour of gift . . .[34]

5. Debasement

(a) Bulgarus and the case of the Bolognese bushel

The issue of the Bolognese bushel, though not in itself concerned with money, was to exert great influence on the history of medieval monetary doctrine. There was a lack of uniform and stable standards of measurement. Regional standards of measurement were fixed and often changed by local statutes. One unit of measurement of capacity was the bushel. The obvious question arose of how a governmental redefinition of the bushel affected the obligation to return a quantity in kind. Our earliest source for the *quaestio* concerning the Bolognese bushel is the *Quaestiones Dominorum Bononiensium*;[35] from there, we can trace it to Pillius[36] and to Albertus Gandinus.[37]

Quaestiones Dominorum Bononiensium, *Quaestio 60* Titius granted his farm to Seius to be cultivated according to the agreement that he, Titius, should annually receive a specific amount of corn, to be measured according to the standards of Bologna. Afterwards, however, the Bolognese reduced the size of their measure, and even enacted a penalty if anyone measured by other standards of measurement. The question is whether Titius can sue for the agreed amount of corn, to be measured according to the earlier measurement, and if he were to sue for it, whether he would incur the penalty imposed. Bulgarus said it ought to be decided in favour of the plaintiff. The action on lease establishes this.

Plaintiff[38]	Defendant
D. 45.1.49	D. 50.17.34
D. 40.5.24	D. 44.7.22
D. 16.3.1.9	D. 32.75
D. 34.2.40	D. 12.1.22
D. 4.4.3.2	D. 2.14.44
D. 2.11.7	& D. 2.14.10
D. 31.88 D. 18.1.77;	D. 18.1.69; D. 18.1.34
Nov 115 praef[39]	

[34] Wording as in the edn. of Lyon, 1618, above n 28:

Item, quid si accepero argentum ad pondus: nunquid potero reddere pecuniam? Respondeo, sic; non tamen ere contaminatam, ut infra, *de auro et argento legatis l. 1 § finali* [D. 34.2.1.1] et *l. cum auri certum* [D. 34.2.9] et *l. cum aurum § proinde* [D. 34.2.19.1] et *C. de donationibus l. si quis argentum* § I [C. 8.53.35.1]. Sed H<ugolinus> dicit, quod non, ut infra, *de solutionibus l. Paulus respondit creditorem* [D. 46.3.99] et predicta in ultima voluntate specialia dicit. et in *1. si quis argentum* [C. 8.53.35.1] speciale dicit favore donationis . . .

[35] Although Bologna is referred to, we do not know whether this was a real-life case or just an academic exercise.

[36] Pillius, *Quaestiones Sabbatinae* [1560], in *Corpus Glossatorum Iuris Civilis IV* (1967) 145–7 (*quaestio* 79).

[37] A. Gandinus, *Quaestiones Statutorum*, in *Bibliotheca iuridica mediiaevi: Scripta anecdota glossatorum*, ed. A. Gaudenzi et al. (1888–1901; 2nd edn, 1913; repr. 1962) 193.

[38] The texts on which the plaintiff and defendant founded their arguments were originally thus in columns.

[39] Paris MS lat 4603, in *Bibliotheca iuridica mediiaevi*, above n 37, vol. 1, at 246:

Titius dedit agrum suum colendum Seio hoc pacto, ut unoquoque anno certam modiationem frumenti acciperet, metiendo scilicet mensura bononiensi. Postea vero Bononienses mensuram diminuerunt, et penam etiam statuerunt si quis de cetero alia mensura metiretur. Queritur an Titius possit petere modiationem constitutam, metiendo scilicet mensura prestita, et si petierit, an incidat in penam a talibus constitutam. BULGARUS ait pro actore iudicandum. Hic proponitur actio ex locato./ A<ctor>/

To paraphrase the text: Seius thus contracted to cultivate Titius' land on the terms that Titius was to receive a certain quantity of the harvest, to be measured in Bolognese bushels. Subsequently the Bolognese reduced the quantity of the bushel, and made it a statutory offence to use any other standard of measurement. The question is whether Titius can demand the agreed quantity in old bushels, and if he does so, whether he suffers the punishment laid down. Bulgarus favoured judgment for the plaintiff, thereby deciding that the old bushel must be used.

The argument advanced for this conclusion needs to be extracted from the cited *leges*. Most of these texts address issues resulting from changes over time. We select some references to get the general idea. D. 18.1.69 deals with the sale of a pond including a strip of land of a certain width around it. It was held that an increase in the surface of the pond owing to a rise in the water level did not affect the extent of the land sold. In D. 34.2.40 a bequest of the testator's 'travelling silver' is taken to mean the silver used by the testator while travelling at the time the last will was made. D. 50.17.34 and D. 32.75 deal with issues of interpretation arising from terms understood differently in different locations. The idea to be taken from these texts is that the place where the contract was concluded controls the language of the contract. Taken together with the previously cited texts the general idea is that the time (and place) of the formation of the contract must be taken into account. It is notable that the case of the changed bushel is tackled as an issue of interpretation of a contract, given that these cases could equally well be seen as raising such questions as distributive justice or change of circumstances.

(b) *Pillius'* Quaestio 'Quidam creditor Lucenses'

Bulgarus' solution for the case of the changed bushel was applied to the case of debased coin. The issue is elaborately discussed in one of Pillius' *quaestiones*, dating from around 1180, often referred to as *Quidam creditor Lucenses*.[40] It is one of his *quaestiones Sabbatinae*—or classes given on a Saturday.[41] This *quaestio* is the central achievement of the glossators' efforts in the field of money, the pinnacle of early glossators' work, decisively shaping the further development of the legists' doctrine.

The case had arisen in Lucca.[42] The cities in Tuscany used the *denarius* (or *denaro*), a coin which was still modelled after the Carolingian *denarius*. At first, the coin was minted only in Lucca, until, sometime shortly after 1150, Pisa, which was in an economic upswing, started minting the same coin. From then on, both cities competed for dominance of the

> *D. de verborum obligationibus l. cum filius* [D. 45.1.49]./ *D. de fideicommissariis libertatibus l. generaliter* [D. 40.5.24]./ *D. depositi l. 1 § si quis servum* [D. 16.3.1.9]./ *D. de auro et argento legatis l. medico* [D. 34.2.40]./ *D. de minoribus l. Denique § scio etiam* [D. 4.4.3.2]./ *D. si quis cautionibus l. Si quis* [D. 2.11.7]./ *D. de legatis II l. penult.* [D. 31.88]./ *D. de contrahenda emptione et venditione l. in lege* [D. 18.1.77], *l. Rutilia* [D. 18.1.69], *l. si in emptione* [D. 18.1.34]./ *In Auth. tit. ut cum de appellatione cognoscitur, constitutio pervenit* [Nov 115 praef]./ R<eus>/ *D. de regulis iuris l. Semper in stipulationibus* [D. 50.17.34]./ *D. de actionibus et obligationibus l. cum quis in diem* [D. 44.7.22]./ *D. de legatis III l. Nummis* [D. 32.75]./ *D. si certum petatur l. vinum* [D. 12.1.22]./ *D. de pactis l. cum in eo esset* [D. 2.14.44] *et l. Rescriptum* [D. 2.14.10].

The forward slashes correspond to line breaks in the main text. Cf. also Grenoble MS no. 626, in *Bibliotheca iuridica mediiaevi*, above n 37, suppl. vol., at 21.

40 Text with all variants given by Taeuber, above n 23, at 311; Taeuber has also most meticulously analysed the *quaestio* and its prehistory: ibid., at 119–48, 216–24. For all details not addressed here, the reader may therefore wish to consult Taeuber.

41 On the *Quaestiones Sabbatinae*, see H. Lange, *Römisches Recht im Mittelalter*. Vol. 1: *Die Glossatoren* (1997), at 234–5.

42 On the economic context, see Sargent and Velde, above n 17, at 139.

regional Tuscan coin market, some cities opting for the Tuscan (or Luccan) *denarius*, others for that of Pisa. The coins of both cities were debased by at least one half. The following question was posed by Pillius. If coins from Lucca are given as a loan and, before the repayment is due, a debasement occurs, can the creditor demand payment in old *denarii* or must he accept new ones? Pillius opted for payment in the old coins. Many *leges* are referred to and arguments advanced for creditor and debtor alike. While the whole set of arguments cannot be laid out here, we shall analyse Pillius' solution and the key arguments used in the *quaestio*.

Pillius, in his *solutio*, relies first and foremost on the opinion advanced by Placentinus[43] on the basis that the depreciated coins are *reproba in partem*. The opinion referred to a text of the Digest stating that *pecunia reproba* cannot be used for discharging debts, D. 13.7.24, the *lex eleganter*.[44] This was supported by the rule that the debtor is not discharged by tendering only a part of what is due, D. 50.16.114, the *lex solvendo*. Pillius does not seem convinced that the decision depends simply on choosing between two controlling moments in time, that of the *datio* and that of repayment of the loan,[45] with the two opposing rules being *tempus dationis inspicitur*[46] and *tempus solutionis inspicitur*.

The key argument advanced for the creditor was D. 12.1.3, then known as the *lex cum quid*. Pomponius stated that, in the case of a loan, the debtor may not return things out of the same genus which are of lesser quality: for example, he may not return new wine for old. This holds, Pomponius says, even in the absence of a particular stipulation to this effect (a *cautio*); this was in fact the very legal issue at hand, because, he says, whatever seems to be agreed upon can be seen as being stipulated.[47] And it seems, Pomponius concludes, that parties (typically) agree *ut eiusdem generis et eadem bonitate solvatur, qua datum sit*: items must be returned of the same *genus* and of the same quality as had been given.

The debtor invoked the absence of a coinage clause by which the creditor could have insisted on repayment being made in old coins. He could try (or did try) to argue, one learns,[48] that he was entitled to use the money in circulation at the time of payment, because he had to render objects belonging at the present time to the *genus* agreed upon (relying on *sit* instead of *fuit* in D. 12.1.3). Payment in today's *denarii* would hence meet both requirements of same *genus* and same *qualitas*, since, within the *genus* of the day, the quality of the *denarii* was perfectly good. Indeed, another Roman law text, D. 17.1.52, which was also referred to here, allowed the debtor, in the absence of a specific stipulation, to use goods of less than average quality to discharge a generic obligation.

The detailed discussion is largely devoted to the proper understanding of *eiusdem generis et eadem bonitate*. The first issue addressed was whether the old and new coins were from the same genus. A similar issue, in the interpretation of D. 12.1.3, had previously been dealt with extensively, and one can assume that the older discussion was known to Pillius and his

[43] 'Dominus p. dicit.'

[44] As to the legists, this was already noted in an early gloss of Martinus ad D. 13.7.24 found in BamSB MS iur. 12 fo. 139r: 'Reprobam pecuniam non liberare solventem. M(artinus).' Reading this gloss narrowly, it only stated that the old coins, when officially out of circulation, can no longer be used for payment. One does not learn, from D. 13.7.24.1 or from Martinus' gloss, how the debtor can discharge the obligation instead. Could he pay with new, typically debased coins, and was it sufficient to pay the initial number of these coins or did he have to make up for the debasement?

[45] A concluding remark of doubtful authorship ('dominus tamen-fin.') seems to hint at a distinction depending on whether interest was agreed upon or not, perhaps assuming that the risk of debasement is taken into account in the rate of interest.

[46] Or: 'tempora primitiva servari debent'.

[47] On the original meaning of D. 12.1.3, see, most recently, U. Babusiaux, *Id quod actum est* (2006), at 61.

[48] *Quidam creditor Lucenses*, from 'respondit debitor' on.

students.[49] The issue dealt with in earlier glosses to D. 12.1.3 turned on the example given by Pomponius, namely the inadmissibility of tendering new wine for old. The glossators had asked in what respect new wine was of lesser quality, and whether, inversely, one could tender old wine for new.[50] Most important, perhaps, was the question whether the new/old issue was one of *genus*, or one of quality within the *genus*. Some glossators tended to assume that wine of different ages constituted different *genera*;[51] but Pillius does not seem to have subscribed to this view, which was so obviously out of tune with Pomponius' text.

In another *quaestio*, Pillius had also dealt with the case of the changed bushel, and it is there that he addressed the public law aspect of the problem.[52] He approves Bulgarus' solution, and separates the issue at public law from that at civil law. The statutory regulations were future-oriented, and hence not retroactive. Anyway, the issue was not about what actually happened in the city or state, but about what ought to happen. This is also a nice little contribution to the delineation of statutory law and *ius commune*.

(c) Azo's brocard

The position first established by Pillius became part and parcel of the glossators' monetary law. This was due to the authority attaching to the name of Azo, to whom a brocard is attributed in the *Brocardica sive generalia iuris*.[53] This work was published under Azo's name, and may be traced, at least for the greater part, to Otto Papiensis, and dated around the end of the twelfth century.[54] We may here disregard the disputed issue of the editorship of this collection, since the specific brocard we are looking into is assigned to Azo.

The brocard starts with the juxtaposition of two opposing statements, each accompanied by a host of references, mostly to texts of the Digest and Code, but also to other brocards within the same volume: 'the same measurement or coined money is owed, as was owed at the time of contracting' (*eadem mensura vel moneta debetur, quae erat tempore contractus*) and 'the reformed money or measurement is owed, whether it be greater or lesser' (*superveniens moneta vel mensura debetur, sive maior sive minor sit*). In his concluding argument Azo without hesitation opts for the rule of *eadem mensura*. He holds (as Pillius had held) that intervening statutes have no retroactive effect on contracts already operative.[55] Texts referring to legacies are eliminated by Azo on the ground that they depend on the wording of the last will. Azo's last, and perhaps most troublesome, point concerns D. 12.1.22, the *lex vinum*, with Julian's statement that 'the time of payment is examined' (*tempus solutionis inspicitur*). The glossators' dealings with this Digest text deserve a closer look.[56]

[49] Taeuber, above n 23, at 129–33.

[50] We only give Azo's gloss, which is already based on an extensive prior discussion, BV MS lat 1408 32m:

> Quid si pro novo reddere vetus velit? R<espondit> Jo<.>b<assianus> non liberatur, quia non videtur eque bonum reddere, ut infra *Institutionibus de actionibus* § *huic autem qui* [J. Inst 4.6.33d]. Sed contrarium est argumentum supra, *si servitus vendicetur l. si forte* § *ultimo* [D. 8.5.6.7] et infra, *de verborum obligationibus ubi non* [D. 45.1.75]. Nam ibi dicit (iureconsultus), quod est optimum, ipsum quoque bonum est. Hoc tamen, si eiusdem qualitatis est, ut utrumque novum vel vetus. Secus si datum est vetus, redditur novum. Azo.

See Taeuber, above n 23, at 136 fn 369 with variants.

[51] In the later words of Baldus: 'illud bonum non subalternatur illi optimo, et est ac si essent diversorum generum'. See Taeuber, above n 23, at 136.

[52] *Quaestio* 79 in Pillius, above n 36, at 146.

[53] *Brocardica sive generalia iuris* (1567), at 136, rubrica XII 'De Contractibus'. For a critical edition, recording the variant readings of the different manuscripts, see Taeuber, above n 23, at 328–30. The *solutio* of the brocard can also be found (anonymously) in Turin MS F II 14 (AA) fo. 109r; Taeuber, above n 23, at 330.

[54] For details on the issue of authorship, see Lange, above n 41, at 145.

[55] 'Statuta post contractum facta futuris contractibus dant formam, non praeteritis.'

[56] For more details, see Taeuber, above n 23, at 184–93, 229.

D 12.1.22, the *lex vinum*, is about the Roman *condemnatio pecuniaria*. It addresses the question of the moment in time on which the judge must base his monetary estimate of performance which the defendant has unlawfully denied the plaintiff (*aestimatio*). Julian discusses a loan of wine, the borrower being sued for redelivery. The question arose whether the value of the wine should be determined at the time its redelivery was due, or at the time of consolidating the law suit (the *litis contestatio*), or at the time of the judge's ruling. If a fixed date was agreed upon for the time of delivery, according to Julian this should also be the time for the *aestimatio*. The moment of *litis contestatio* was only to be decisive if no time had been agreed upon. How was *tempus solutionis inspicitur* to be reconciled with the doctrine based on *cum quid* that the quality was fixed by (and thus at the time of) the making of the loan? The *lex vinum* was quite a stumbling block, not least because the glossators did not understand the original context of *aestimatio*, since they did not subscribe to the strict necessity of *condemnatio pecuniaria*.[57] We shall not go into the details of the way in which the glossators tackled this contradiction.[58] Azo distinguished the *lex vinum* from the *lex cum quid* on the ground that, in the case of the *lex vinum*, the measure was unaltered.

While D. 12.1.3 confirmed that the subject matter of the *datio*, with regard to *genus* and *qualitas,* determines the proper subject matter of repayment, Azo's brocard refers to the time the contract was concluded as controlling the issue of the coins to be used for repayment.[59] With regard to loans this makes no difference, since the Roman loan, as a so-called real contract, became binding only on the *datio*.[60] However, the applicability of the test is now considerably widened, and the rule could be relied upon for other contracts as well. Shifting from 'payment' to 'contract' was vital for extending the scope of the rule to contracts other than loans. The idea is now that the contract determines, perhaps indirectly, by reference to the items made over for the 'real' contract, the amount of silver the creditor can reclaim.

Azo's brocard explicitly equates the issues of debased coinage and measurements altered by statute. The brocard addresses and solves both types of case in a uniform fashion. There is no distinction between diminutions and enlargements of measurements, and thus the brocard does not invariably favour the creditor; but given that changes of measurements or coinage normally worked against the creditor, the effect of Azo's brocard may have been more important for the creditor than for the debtor.

Later printed editions inserted another element of Azo's position into the brocard, which had initially only been part of the solution and which came to be referred to in the following language:

> The same measurement or coined money is owed as was owed at the time of contracting; *or, if other money is tendered, the loss must be accounted for*.[61]

[57] On the issue of specific performance (as opposed to *condemnatio pecuniaria*), see T. Repgen, *Vertragstreue und Erfüllungszwang in der mittelalterlichen Rechtswissenschaft* (1994); H. Lange and M. Kriechbaum, *Römisches Recht im Mittelalter*, Vol. 2: *Die Kommentatoren* (2007), at 902–5, with references.

[58] It should be noted that this text, like D. 12.1.3 (*lex cum quid*), did not deal with money. As with D. 12.1.3 (*lex cum quid*), it would not have made sense at all, for a Roman lawyer, to apply D. 12.1.22, the *lex vinum*, to a monetary obligation, since coins then were not subject to free *aestimatio*, 'since the value of coins is fixed' (*cum certa sit nummorum aestimatio*), as D. 12.3.3, the *lex nummis depositis*, explained. In Roman times, a number of coins could well be subject to *aestimatio*, by using another coin with a different face value, but then the *aestimatio* was indeed *certa*, because the Roman currency system defined the various face values of its different coins as handy multiples/fractions of each other. For the medieval lawyers, the lack of a currency system with coins of different face values meant that little could be made out of D. 12.1.3 (*lex cum quid*).

[59] This idea goes back to Pillius. See Section II.5.(b) of this chapter.

[60] On Roman financial loans as real contracts, see W. J. Zwalve, 'The Past and Future of "mutuum"', in Zwalve and Koops (eds), above n 10, 17.

[61] 'Eadem mensura vel moneta debetur, quae erat tempore contractus; *vel si alia moneta praestetur, habeatur ratio damni*.' *Brocardica sive generalia iuris* (1567), at 136, rubrica XII 'De Contractibus'; for the editions, see above n 53.

Azo's brocard was to feature as the controlling formula for the coming centuries. From 1250 onwards, we find Azo's doctrine confirmed in the Bolognese statutes:

> Of quality of money tendered: We enact that, if money is owed on account of a dowry or of any other legitimate past event, let he, to whom the money is owed, receive money of the same quality that it will have had at the time of the contract.[62]

(d) Evaluating the glossators' achievements as to debasement

In the *ius commune* the issue of debasement of coinage was linked to the *lex cum quid*, D. 12.1.3. How appropriate was this text for the issue at hand? It is disturbing that D. 12.1.3 became a cornerstone of the monetary doctrine of the medieval learned lawyers. The text bears no relation to money at all. True, the text is about *mutuum*, but money was by no means the only possible subject matter of the Roman *mutuum*, which covered financial loans and non-cash loans alike. The quality issue dealt with by Pomponius could arise with regard to all possible objects of *mutuum*, except money. In a well-ordered monetary environment, with coins circulating by tale, the question of the quality of the substance used for discharging the loan can hardly be raised. Pomponius' question was meaningful, in the Roman context, only for non-cash loans, for which Pomponius gives a loan of wine as an example. Of course, there was nothing wrong with extending the scope of D. 12.1.3 to financial loans as well, in times when coins did, in fact, vary in quality.

Nor did D. 12.1.3 really deal with changes over time.[63] Rather, the text is about properly selecting, from a variety of presently available commodities, those items which are fit to be used for discharging the borrower. However, the example given by Pomponius, that of old wine/new wine, made it possible to read a temporal aspect into the text, although this was hardly more than an associative link triggered by the terms 'new' and 'old'. For Pomponius, old and new wine were different commodities available at the same time: new wine was not the 'debased' successor of the old wine. Reading the temporal aspect into D. 12.1.3 the formula arrived at was simple: *tempus dationis inspicitur*.

Mobilizing the *lex cum quid* (D. 12.1.3) to adapt monetary obligations to currency turbulences raised a further problem. The test established by reliance upon D. 12.1.3 works for financial loans, but not for monetary obligations arising out of other contracts. Monetary obligations can arise from long-term leases, and indeed from all obligations to make recurring payments, originating, for example, from public law (such as pensions) or last wills, and, in all of these, the considerable interval between the initial agreement and the time for payment renders the obligation susceptible to turbulences in the currency. The test established by Pillius, later adopted by other glossators, does not work for such obligations. Perhaps Pillius was already conscious of the problem, because he subtly shifted his language from *tempus dationis inspicitur* to *tempora primitive servari*, the latter phrase being applicable to contracts other than those originating in a *datio*. Azo's brocard was unambiguously applicable to all sorts of contract.

As Nussbaum suggested, the rule that the borrower must, in any case, return the metallic content he had received in the first place can be seen in the context of the church's battle

[62] *Statuta communis Bononiae* (1250) lib. IV rub. 25, in L. Frati (ed.), *Statuti di Bologna dall'anno 1245 all'anno 1267* (1869), vol. 1, at 406: 'Cuius bonitatis pecunia solve debeat. Statuimus quod si ex causa dotis vel cuiuscumque alio casu legittimo ex preterito tempore peccunia debeatur, cuius bonitatis fuerit contractus eiusdem bonitatis fuit et accipiat ille, cui peccunia debetur.' Cf. also, for Bolognese rulings predating this statute, Taeuber, above n 23, at 243–4.

[63] Pillius perhaps understood this better than his successors.

against the taking of interest; given that the lender could not factor eventual debasements into the calculation of interest, 'it was a workable and fair rule to have the borrower return the "intrinsic" value of the coin received'.[64] This rationale, plausible as it may be, is not to be found in contemporary texts.

The lasting effect of the glossators' approach was to place the issue of debasement firmly within the framework of the interpretation of contracts. But for one small problem, this was a true achievement. Treating the problem as one of interpreting the contract leaves the parties the freedom, and indeed encourages them, to specify, in their contract, which coins should be used. Such clauses, already known in antiquity and still employed in the time of the glossators, raise with the glossators' blessing the problem of 'metallism' versus nominalim. If the law lets the parties decide, the only issue remaining is the default rule. For the glossators, the default rule was that money payments must make good the amount of silver represented by the sum owed, while a contractual provision was required to render acceptable the tender of coins of the same denomination. Later, after the development of nominalism, the situation was reversed, and nominalism needed to be ousted by coinage clauses, like the gold clause, or later on, by index linking the debt. The small problem is that, if one sees the issue as effectively controlled by a sensible interpretation of the contract, there is no solution for obligations arising otherwise than by contract.

The glossators put money on the same level as other instruments used to make measurements (*mensura vel moneta*). The linking of money to units of measurement, typically statutorily defined, is a key feature of the medieval approach to currency issues. It was advocated, most notably, by Thomas Aquinas.[65] We shall meet the money/measurement parallelism again in the texts of canon law.[66] Seeing money as a kind of yardstick has become a commonplace, the story of which has been explored elsewhere.[67] It is sufficient to note that putting money on the same level as other means of measurement is an approach that does not have modern economists' undivided support.[68]

Given the blurring of the distinction between coins and bullion, currency issues were handled on the basis of a few Roman law texts addressing issues of non-cash loans. Solving these issues effectively on the basis of contractual interpretation meant that there was no incentive to develop a specific legal concept of money and provide solutions specifically adapted to the peculiarities of money as distinct from commodities.

It seems reasonable to assume that the nominalist position, described in Azo's brocard by the words *superveniens moneta vel mensura debetur, sive maior sive minor sit* (the reformed money or measurement is owed, whether it be greater or lesser), was not introduced just for the sake of argument, but was or had actually been subscribed to by one scholar or another. We often find that, in the textual transmission of the glossators' writings, minority positions have been very successfully suppressed. The formation of the *ius commune*, requiring the development of new doctrines in great number, some altogether alien to the Roman law, may have involved much more scholarly dissension than we now tend to assume, given that texts such as the *Glossa ordinaria* convey the impression of relative harmony among the glossators.

64 A. Nussbaum, 'Debt under inflation', (1938) 86 *University of Pennsylvania Law Review* 571–601, at 572.

65 Taeuber, above n 23, at 227 fn 648; on Thomas' monetary doctrine(s), see exhaustively Wittreck, above n 31, and Chapter 4 in this volume.

66 See Ernst, above n 1, at 239 et seq., and Chapter 8 in this volume.

67 On this issue, see W. Ernst, '*Mensura et mensuratum*—money as measure and measure for money', in J. von Hagen and M. Welker (eds), *Money as God?* (2014) 60.

68 See, most notably, L. von Mises, *Human Action: A Treatise on Economics* (1949; repr. 1996), vol. 2, at 327–33.

III. The Post-Glossators' Legal Doctrines in the Age of Bimetallism

1. Post-Glossators Defined

Legal history labels the law academics who were working after the consolidation of 'La Grande Glosse' as 'post-glossators', 'commentators', or *consiliatores*. While the introduction of a new label suggests a significant discontinuity in the development of the doctrinal writings around the middle of the thirteenth century, it may be in order to briefly state continuities and discontinuities.

First of all, there was no alteration in the set of relevant sources of civil law, and the doctrines which had been developed in the preceding 150 years to get a grasp on these texts were not set aside. The *Glossa Ordinaria* had, by now, set out carefully selected doctrines taken from the stock of the glossators' work and, by virtue of the overwhelming success of the *Glossa Ordinaria*, these doctrines prevailed, most successfully suppressing previous dissenting views. Those dissenting views are seldom set out, and sometimes are barely hinted at. The *Glossa Ordinaria* thus ended an intellectually stimulating cacophony of scholarly voices and erected a new orthodoxy in the interpretation of the Roman law sources. After the *Glossa Ordinaria* came into widespread use, the scholars' literary production did not continue in the way it had developed in the initial taking up of the Roman law texts, that is, in attaching glosses—explanations, definitions, or cross references—to small units, sentences, or single words of the text. Since the *Glossa Ordinaria* offered these glosses in a quasi-official selection, there was no point in trying to set up a rival apparatus. Hence new law books were written which went beyond the results of a 'close reading' of the Roman law texts. These tried to set out, in a more systematic way, the Roman law as it was to be understood and applied. Another new type of legal literature was the collection of expert statements written to analyse and decide high profile cases. These works offer a new dimension in that they allow us to see how legal doctrine was applied to real-life questions of the medieval environment.[69] The post-glossators developed an intricate set of doctrines regarding monetary obligations, adapting the Roman law texts to the needs of contemporary commerce. We shall mostly rely on Bartolus, whose works served as 'books of authority' well into early modern times.[70]

2. The Monetary Environment

During the second half of the thirteenth century, city-states began to mint heavy silver coins (the Venetian *grosso*, the Florentine *fiorino*, or the French *sou*) and then gold coins like the Venetian *ducat* (since 1284) or the Florentine *florin* (since 1252).[71] These circulated alongside the *denarius*, which was now referred to as the *picciolo* (*picc.*) or *moneta minuta*, whereas the larger coins, made of silver or gold, were called *moneta grossa*. While issues of bimetallism had not been unknown before (because Byzantine gold coins were imported), it was only after coins of silver and gold were issued by the same city that commerce and public bodies were fully affected by the intricate questions of bimetallism.

[69] A great number of expertise statements (*consilia*) relating to monetary issues has been evaluated by E. Stampe, *Das Zahlkraftrecht der Postglossatorenzeit* (1928).

[70] On Bartolus' doctrines in monetary matters, see R. Trifone, 'La variazione del valore della moneta nel pensiero di Bartolo', in *Bartolo da Sassoferrato, Studi e documenti per il VI centenario* (1962), vol. 2, 691.

[71] Sargent and Velde, above n 17, at 79.

Since the coins were characterized by the weight of precious metal used in their production, the background for all the minting activities was the medieval system of standard weights. This was the *libra* system, with a pound, the *libra*, as the key unit.

1 *libra* = 20 *solidi*
1 *solidus* = 12 *denarii*
1 *libra* = 240 *denarii*

This system predated the introduction of the larger coins. For a considerable time, these units had been used, in the absence of corresponding coins, as mere counting aids, denoting neat multiples of the *denarius*, the *solidus* being the term for twelve *denarii*, and the *libra* the term for twenty *solidi* or 240 *denarii*. Thus, instead of using the decimal system throughout, larger numbers of *denarii* were simply stated in dozens (the *solidus*) and sets of twenty dozens (the *libra*). Hence we speak of a *moneta imaginaria*. Contemporaries were well aware that if one referred to sums of money using the *libra*, this was the *libra numeralis*, mere *moneta imaginaria*, a mere money-of-account,[72] not unlike today's 'Special Drawing Rights' (SDR) of the International Monetary Fund. The *libra* and its neat sub-units were specifically employed for purposes of bookkeeping and as such referred to as *libra numeralis*. At this stage, the *libra* was a mere money-of-account. However, there was not one comprehensive, universal money-of-account; we rather find various moneys of account.[73]

The *libra* only became *moneta realis* once *moneta grossa* started to be minted. This was not, however, the end of the *libra imaginaria*. Rather, the neat and well-ordered money-of-account coexisted with a multitude of coins which did not naturally align themselves into a convenient system of multiples. This coexistence of a money-of-account and effective, or coined, money became a persistent characteristic of the European monetary order.

When larger coins were introduced they did not automatically match the key weight units. Rather, the introduction of coins was accompanied by a proclamation as to their relation to pre-existing coins (especially the *denarius*) and/or to the *moneta imaginaria*; these proclamations could also pertain to foreign coins and thus amount to the fixing of an official exchange rate. This state-fixed relation of the smaller to the larger (normally gold) denomination was called the *valor impositus* (*sc. a principe*) on the smaller denomination. Other terms conveying the same concept were *valor extrinsecus* and *valor decretalis.* Another seemingly related term was the *bonitas extrinseca*; we shall revert to this term in due course.

It is important not to confuse the *valor impositus* with what we today name the 'face value' of a coin, namely its denomination, its given unit of account. What we call the face value of the coins was referred to as the *signum publicum impressum*. Unlike the modern coin's face value, *valor impositus* could not simply be established by looking at the coin as such; you had to look it up in some statute. To speak of the *valor impositus* of a coin was meaningful only in the context of a relation to different types of coins. There was, in other words, a 'tariff', decreeing, for example, that so many Venetian *denars* bought a Venetian

[72] The groundbreaking studies are L. Einaudi, 'Teoria della moneta immaginaria da Carlo Magno alla Rivoluzione francese', (1936) 1 *Rivista di storia economica* 1; H. van Werveke, 'Monnaie de compte et monnaie réelle', (1934) 13 *Revue Belge de philologie et d'histoire* 123; F. Seurot, 'Monnaie imaginaire et monnaie réelle de Charlemagne à Napoléon: à propos de la théorie de Luigi Einaudi', in A. Astaing and F. Lormant (eds), *Droit, administration et justice: Mélanges en l'honneur des professeurs Marie-Thérèse Allemand-Gay et Jean Gay* (2011) 581; for a short introduction, see L. Einaudi, 'The Medieval Practice of Managed Currency', in A. D. Gayer (ed.), *The Lessons of Monetary Experience: Essays in Honour of Irving Fisher* (1937) 259.

[73] Lane and Mueller, above n 17, at 106, 333 et seq.

ducat. In a way, this was the (local) 'price' of the *ducat*. As we might say, the *valor impositus* indicated the purchasing power of a coin in terms of one other specific type of coin. The *valor impositus* was a state-regulated 'price' for one coin; we must remember that price regulation was a ubiquitous practice at the time; there was nothing out of the ordinary when the city-state decreed the 'price' of some of its coins. Apart, perhaps, from official, state-imposed conversion rates for foreign exchange currencies, the *valor impositus* has no modern-day equivalent. It should be noted that the *valor impositus*, which establishes a ratio between various coins, has nothing to do with the modern concept of purchasing power.

The fixing of the tariff was a tricky business, since both the larger and the smaller denominations consisted of valuable metal, silver or gold, and the exchange rate was somehow, but not exactly, predetermined by the respective metal value of both coins; differences reflected the cost of minting and the seigniorage, which was the profit made by exercising the minting prerogative.

The glossators acknowledged, and indeed reinforced, the binding nature of the official tariffs. Bartolus even advocated the idea that someone who refused to accept payment in the official coin of the city according to the official tariff was to be punished for counterfeiting.[74]

While the state decreed the official tariff for the relation of various coins, the market could establish another relation, provided that the tariff was not compulsory. Where the state tariff was not compulsory, there was a conversion rate established by the market which operated alongside the official tariff. Normally, the commercially established conversion rate was simply given by adding an *agio* to the official conversion tariff. One could thus speak of the 'effective' (or commercial) rate. Governments often fought against these *agios*, but, sooner or later, had to give in by raising the coin according to what commercial practice had proven to be an effective rate of exchange. The medieval jurists called this the *valor usualis* as opposed to the *valor decretalis* (i.e. *impositus*). It is similar to today's controlled currencies, where we have an official exchange rate alongside a commercial one. The *valor usualis* is not to be taken as the equivalent to the purchasing power, as stated by reference to the CPI.

All in all, it is difficult to disagree with Arthur Nussbaum, who characterized the situation as a 'monetary imbroglio'.[75]

3. The Post-Glossatorian Doctrinal Handling of Monetary Obligations

(a) Moneta in obligatione—moneta in solutione*: separating debt and tender*

To sort things out, the medieval jurists employed a distinction between the *moneta in obligatione* and the *moneta in solutione. Moneta in obligatione* referred to the money used to define the obligation, in terms of the type of coin and the number thereof (in short, the 'money-of-account'). *Moneta in solutione* referred to the coins that could be tendered to obtain an effective discharge of the obligation (sometimes the tender of these coins was compulsory). The currency to be used to discharge the obligation was thus established independently of the currency used to state the amount of money owed. The questions asked with regard to the *moneta in solutione* can be understood as questions pertaining to the law of tender. The dichotomy *moneta in obligatione–moneta in solutione* is used, for

74 Bartolus de Saxoferrato, *Opera Omnia* (Venice, 1585), ad D. 48.10.19 nota 4.
75 Nussbaum, above n 64, at 572.

example, in the work of Albertus Brunus (1467–1541), '*Solemnis tractatus de augumento rebusque additis*' (1506). It enabled him to give some systematic structure to the field of monetary issues. The issue of debasement came to be dealt with systematically under the heading of the *moneta in solutione.* The *moneta in solutione* topic thus became the turning point for most problems pertaining to monetary obligations.[76]

(b) Determining the moneta in obligatione

While there was a multitude of coins, only a limited number of denominations were used, namely the '*libra*', the '*florin*', the '*ducat*' and so forth. Sometimes the same denomination was used for two different coins minted in the same city. This could lead to ambiguities. If a contract stated the sum as '*centum librae*', which *libra* was it to be? This is a question which has survived to the present day and we have no difficulty in understanding the answer given by Bartolus: in case of doubt, the interpretation should prefer the type of coin that is currently in circulation.[77] What if two sorts of coins effectively circulate, both of the same linguistic denomination? If a specific local usage can be established, the contract should be interpreted accordingly, otherwise the more likely understanding should prevail.[78]

Once the *moneta in obligatione* was agreed upon, it could be changed. To do so required both parties' consent. Sometimes an odd problem popped up with regard to long-term obligations. If the creditor had accepted coins other than the ones which were *in obligatione*, did he forfeit the right to insist on payment using the type of coins fixed decades beforehand? We shall not look further into this issue.[79]

Commercial practice developed a number of clauses which could be employed to determine the monetary obligation more closely. These following clauses decisively influenced the way the monetary obligation was susceptible to changes in the coinage situation.

• According to a generally held opinion, the contract could provide that specific coins must be tendered, and in fact such clauses became widely employed. A monetary obligation, which could be discharged only by using the very currency used to state the amount due, was called a *debitum simplex*, a simple debt. While not restricted to the naming of gold coins, the *debitum simplex* can be seen as the early equivalent to the later 'gold clause'.

The *debitum simplex* could be accompanied by a *facultas solvendi aliae monetae*, giving the debtor the option to use coins of another type. Such a *facultas* is a standard instrument from the Roman law of obligations and could therefore be easily activated to refine monetary obligations.

• To contract a *debitum valorem respiciens*, the lender acknowledged that he had received a specific number of coins in order to let him have so many *libra*. The coins paid out to him are not the subject matter of the contract, which is given in terms of *libra* (*moneta imaginaria*),[80] but just the means of allowing the lender to have so many *libra*. From the outset, the contract is meant to be about an abstract value, stated in *libra* (*moneta imaginaria*). In contemporary deeds, sums of money were stated in *librae* and *solidi*, without any reference to a city of origin or expressly stating that any particular coins

[76] The dichotomy as such was not unknown to the glossators, but they did not yet employ it in a systematic way.
[77] Bartolus, above n 74, at 92 (verso), nota 3.
[78] Ibid., at 92 (verso), nota 3.
[79] This issue was dealt with in the decretal *olim causam* (3 Comp. 3.37.5 = X 3.39.20), cf. Ernst, above n 1, 240 et seq., with references; Taeuber, above n 23, at 234 et seq, and Thier below Chapter 8, Section I.2.
[80] See Section III.2 of this chapter.

could be used to make up the amount owed (e.g. '1000 libras in quacunque moneta'). For a debt stated in the units of *moneta imaginaria*, the obligation did not pertain to a specific type of coin. All coins could be used to discharge the debt, but they had to amount to the amount of precious metal stated by using the units of *moneta imaginaria*. Thus, with the *debitum valorem respiciens*, it was the *massa* that counted. Was such a clause lawful? The majority opinion allowed the use of such clauses.[81] It should be noted that the units of *moneta imaginaria* could not be used in this way for all types of contracts; loans required an actual delivery and the sort of coins delivered also defined the coins which were *in obligatione* to be returned.

• The ***debitum aestimatum*** occurred with regard to contracts which were concluded by the use of actual physical coins and thus would have required the return in kind. Examples are loan and dowry. The Roman law principle of *condemnatio pecuniaria*[82] required a debtor who was to be sued to propose an estimate of the money he owed, given in the 'official' local coins. However, this estimate, the *aestimatio communis*, would be given for the time when the payment was due.[83] To avoid the uncertainty that such an estimate might have to be given by a future declaration of a court, the parties could agree to fix the estimate beforehand. By adding an express estimate of the value received, the obligation, while still an obligation for real coins, could only be extinguished if the debtor made good the parties' initial estimate by tendering coins of the same sort.

Debitum aestimatum and *debitum valorem respiciens* obviously both worked as value protection clauses.

(c) Conversion issues regarding the moneta in solutione

Having separated debt and tender through the distinction between money-of-account and money of payment, it became possible to ask *an pecunia una pro alia solvi potest*—whether you could use another currency to discharge your debt. There was a Digest text which was directly on point and served as the *locus communis*, namely D. 46.3.99, then referred to as the *lex Paulus*. Disregarding some textual difficulties,[84] D. 46.3.99 states that one need not accept payment in different coins where that would be to the recipient's detriment (*damnum*). There was a multi-faceted doctrinal dispute as to this detriment clause. Among the glossators[85] the idea had been put forward that this clause was an explanation rather than a material restriction: any refusal of something desirable would be proof that the creditor saw the coins of a different *forma* as detrimental to his interests. According to this view, no creditor could ever be forced to accept coins of *alia forma*. Accursius' gloss held otherwise, arguing that while in general 'something else' (*aliud pro alio*) cannot be forced upon the creditor (D. 12.1.2),[86] the *lex Paulus* presupposed that coins of a different type were not 'something else'.

This was not the end of the dispute. Given that the debtor could tender coins of another type, provided this was not to the detriment of the creditor, one had to ask what amounted

[81] W. Endemann, *Studien in der romanisch-kanonistischen Wirthschafts- und Rechtslehr* (1883), vol. 2, at 220.
[82] See Section I.1 of this chapter.
[83] Bartolus, above n 74, at 92 (verso), nota 10 i.f.
[84] The text deals with the payment of money to a debtor [sic]; on this problem and the text's presumed real life background in the Antiquity, see Ernst, 'Rationalia ad D. 46.3.99', above n 16; but see *contra* B. Kupisch, 'D. 46,3,99', in H. Altmeppen, I. Reichard, and M. J. Schermaier (eds), *Festschrift für Rolf Knütel* (2009) 617.
[85] For the glossators the question had arisen with regard to *denarii* of different cities.
[86] See Section II.4 of this chapter.

to a 'detriment' (*damnum*), which allowed the creditor to repudiate specific coins. A stricter view, taken for example by Petrus de Bellapertica, argued that inconveniences were sufficient to protect the creditor against the tender of unwanted coins. Jacobus de Arena gave the example of someone who has given English sterling coins as a loan and is unwilling to accept continental coins since he is about to return to England.[87] The prevailing opinion, represented by Bartolus, held that it required a *diminutio patrimonii*, that is, an economic loss,[88] and that mere inconveniences were not detriment enough to allow the creditor to refuse coins of a different type.[89] The argument advanced by Bartolus ran thus: the general rule was that the creditor need not take 'something else', as set out in D. 12.1.2, but coins of the same metal but of a different type were not 'something else', but rather the same (*idem*). The creditor thus had to accept all coins of a different type (*alia forma*), provided they contained no less precious metal than those used to state the money-of-account. They would therefore be the same in their weight and fineness. Coins of all *formae* were thus equally fit as legal tender. In retrospect, this decision can be seen as another token of the metallistic approach to coined money. Nowadays, in the absence of a special contractual provision we do not allow the debtor to tender foreign money.

Whenever another sort of coin was used for payment, it became necessary to certify the requirement that it was of the same weight and fineness. It was asked who had to bear the cost of this *approbatio*. A Roman law text was referred to which holds that the cost of ascertaining boundaries must be borne by both neighbours (D. 10.1.4.1 i.f.).[90]

(d) Gold for silver and silver for gold?

It was yet another question whether a debt stated in gold coins could be discharged in silver coins. The discharge using coins of another metal (*moneta alterius materiae*) was a critical case. The Accursian Gloss set out unambiguously that the discharge of debts contracted in *moneta minuta* by payment of *moneta grossa* was not permissible (and *a fortiori* vice versa). Most of the post-glossators, too, held that the creditor was not bound '*de jure*' to accept *moneta grossa* to discharge a debt stated in *moneta minuta*, but assumed that custom had sanctioned this mode of payment (*ex consuetudine*).[91] The glossators had established the doctrine, not without difficulties, that local customs could prevail over the Roman law.[92] Reliance on custom indicates, however, that the post-glossators found a way to a commonsense solution. Albertus Brunus addressed the question of whether the no detriment restriction (*sine damno creditoris*) was authority against the possibility, recognized by custom, of using *moneta grossa* to discharge all monetary debts. He answered this in the affirmative, conceding that the local custom itself could eventually go further and oblige creditors to accept various types of coins even if this meant an economic loss.

To sum up the prevailing view as to the coins fit for legal tender, coins of all sorts could be used, albeit the underlying reasoning was different insofar as coins of the same metallic qualities were, as such, considered to be good tender, even if they were of a different type (*alia forma*), whereas coins of another metal (*alia materia*) could be tendered on the

[87] J. de Arena, *Commentarii in universum ius civile* (Lyon, 1541), ad Inst. 4.6.28 no. 28.

[88] We may safely assume that economic loss referred to metallic content.

[89] Bartolus, above n 41, at 92 (verso), nota 3; a stricter opinion had held that any inconvenience which would come with the acceptance of another type of coin allowed the creditor to repudiate the tender, which would have made all tender of coins of another type repudiable.

[90] Ibid. at 92 (recto), nota 5.

[91] Ibid., at 92 (recto), nota 4.

[92] Lange, above n 41, at 104–6; as to the post-glossators, see Lange and Kriechbaum, above n 57, at 259–63.

strength of a custom, which was allegedly universally recognized and which over-rode the Roman law as read by the post-glossators. One of the late post-glossators, Hieronymus Butigella, tried to go beyond this doctrinal state of affairs. He argued that coins of another metal had to be accepted with the same proviso as coins of another type, namely that there should be no detriment to the creditor.[93] The minority position advanced by Butigella would indeed be trivial in a systematically ordered currency environment.

A side aspect was the question of whether to allow the debtor to discharge a *moneta-grossa* obligation by using *moneta minuta*. The majority view was negative,[94] and in time statutory provisions tended to exclude or limit this possibility; similar provisions accompany today's currencies.

(e) Exchange rate and time for conversion

To state the debt in another coin, one needed to rely on a conversion rate. Due to its binding nature, the *valor impositus* (*decretalis*) gave the conversion rate to use; no recourse could be had to the *valor usualis*. There was a debate, however, whether the *valor impositus* could be so fraudulently wide of the mark that it was permissible to disregard it.[95]

Owing to the changes in the tariff, the relations between two types of coins could be different at different times. Therefore, in order to convert the amount owed in one coin into a number of another type of coin to be tendered, one needed to determine the relevant time for the conversion. According to Bartolus, the relevant moment was the moment of tender,[96] and this became the *communis opinio*. The core of the post-glossators' doctrine may therefore be expressed as follows: the amount owed by the borrower is determined by the amount of precious metal received when making the loan; conversions which become necessary because coins of another type are to be tendered to pay off the debt are calculated according to the respective *valor* (*impositus*) at the time of payment.[97] It is noteworthy that the *valor impositus* was not material for the actual amount of money owed. Only if one sort of coin needed to be converted into another did the *valor impositus* give the exchange rate. Reference to the *valor impositus*, therefore, is not really indicative of a nominalist approach to money, which would require that the monetary obligation is understood as a neat multiple of the currency's unit of account, to be discharged by coins or notes each of which signifies, via its face value, a specific number of units of account.

(f) Mutatio monetae

(i) Introductory overview

Opening up the issue of changes in the monetary environment occurring before payment is made, Bartolus informs us that, first of all, two different kinds of changes affecting the *bonitas* of the coins must be distinguished. These are changes pertaining to type or substance on one hand, and changes as to the (upward) valuation of the *moneta grossa*

[93] H. Butigella, *Repetitorium seu commentatorium in varia iurisconsultorum responsa* (Lyon, 1553), vol. 1, ad D. 12.1.3 fn 28; Taeuber, above n 23, at 273 et seq., has tried to trace this view back to Baldus, but the texts referred to seem spurious; Budelius held the same view, *De monetis* (1591), c. 16.

[94] A minority position acknowledged that all coins were interchangeable, as long as the key proviso 'not to the creditor's detriment' was met; Endemann, above n 81, at 215, with references.

[95] Stampe, above n 69, at 121–2.

[96] Bartolus, above n 74, at 92 (verso), nota 10.

[97] On this double-sided rule, see P. Grossi, *Ricerche sulle Obbligazioni pecuniarie nel diritto comune* (1960), at 217–313.

which happen without any interference with the type or metal content on the other hand.[98] In short, a distinction has to be drawn between debasement, and tariff-changes or the 'raising of the coin'. As to the debasement, we have already seen that the payment must make good the metal value initially received; if debased coins are used, the debtor must compensate the creditor for the debasement by paying proportionally more coins.[99] Another special case was the *reprobatio*, the withdrawal from circulation of a specific coin. Yet another was the vanishing of a specific type of coin.[100] All these sorts of outside intervention could occur either before the debt was to fall due (*ante moram*), or after the debt has entered the default stage (*mora*). In the latter case, the rules pertaining to compensation for creditor's damages suffered by default had to be taken into account. Last but not least, the specific situation could be crucially influenced by the different contract clauses, which have been set out above.

Most questions arose in relation to contractual obligations. Not all contracts could be handled alike, but the basic approach was applicable, by and large, to all types of contracts. However, monetary obligations could also arise from last wills, and fines were also expressed in sums of money. Such bases of obligations could require special approaches to issues of a change in the currency situation.[101]

All these questions were woven into an impressive doctrinal edifice, based on the Roman law texts, but at the same time reflecting the topsy-turvy medieval currency environment. Last but not least, there were not only the prevailing positions, but a number of minority views, some of them paving the way for the return to a nominalist approach.[102] Given these intricacies, the following is but a grossly simplified overview. Only in passing we mention that the place of payment could become a decisive element, since both tariffs and market prices for one and the same coin varied from city to city.

(ii) The impact of the tariff and its changes on the *moneta in solutione*

The post-glossators did not abandon the doctrine, developed by the glossators, that a change in the metallic content of the coins owed had to be compensated for by paying correspondingly more of the now lighter-weight coins.[103] This doctrine applied especially to the *debitum simplex* and also to all other cases where the coins tendered were of the type of the coins in obligation. For the other case, the 'raising of the coin', the *Glossa Ordinaria* did not yet contain a ready solution. We will now turn to this case.

By means of new decrees or proclamations, the *valor impositus* was changed from time to time. Today, we do not expect to see the day when €1 will be equal to twelve 10-cent coins. Their rate of conversion is rigid. By contrast, the *valor impositus* was frequently reset, mostly in one direction. As time went on, people needed more *denars* to buy the local gold coin. The English term is 'raising of the coin'. The change was brought about simply by changing the official tariff. Both coins involved remained physically the same. It should be noted that the gold coins were taken to be of a fixed, eternal value. Changes of the tariff were brought about by restating the amount of *denars* (the smaller coin) that would

[98] Bartolus, above n 74, at 92 (recto), nota 5.

[99] See Section II.5 of this chapter.

[100] See Section III.3.(g) of this chapter.

[101] These issues shall not be addressed separately; it may be sufficient to note the following: (a) For obligations arising out of last wills, the *valor intrinsecus* was reckoned with regard to the time the last will was made. (b) Obligations which were statutorily fixed, officials' salaries and fines, were supposed to be dynamic, so as to refer to the up-to-date tariffs; Durantis, *Speculum Iuris*, lib. IV part. III de obligationibus et solutionibus § 3 nota 9.

[102] Johannes Faber (d. 1340) is taken to be the main nominalist dissenter, who, in short, acknowledged that the public decrees which regulated the ratio between various coins, old and new, should be binding in determining the parties' rights and duties; cf. *Commentarius*, ad Inst. 3.29; ad C. 8.42 aut. post 16.

[103] See Section II.5 of this chapter.

purchase the largest gold coin. The gold coin was considered to be of an invariable value, an assumption which we know to be questionable in view of the flux of supply and demand of gold. To raise the coin therefore meant a devaluation of the *denar*. From the opposite perspective, the gold coin was revalued in an upward direction; it correspondingly increased in its purchasing power against the smaller coin. It will be recalled that prices were normally given as an amount or fraction of gold coins.

We now consider the 'raising of the coin' as a legal issue. What was the impact, it had to be asked, of a change of tariff occurring after the creation of the obligation and before its discharge, leaving aside the case of debtor's default? The doctrinal approach of the medieval jurists developed again from D. 12.1.3, which was then called *lex cum quid*.[104] How should the raising of the coin be dealt with under the 'same kind, same quality' clause? The question was: did a revaluation of the type of coin (vis-à-vis another currency) influence the number of coins the debtor had to tender? We have to look into a variety of cases, since the problem came in variations, depending on the respective currencies in *obligatione* and in *solutione*.

(α) Introduction

The issue of a change of tariff can arise even if the *moneta in solutione* is the same as the *moneta in obligatione*. Let us first look into payment made with coins of the same currency as stated in the obligation. This was the only possible method of discharge if the obligation was a *debitum simplex*, that is, restricted to a specific type of currency. The problem was raised with regard to the contract of loan.

(β) Identical currencies in obligatione *and* in solutione

If the *moneta grossa* had been raised in the meantime, the creditor, who was paid back the very amount due, could convert the coins now received into a larger number of smaller coins (*denars*). If the coins were exchanged into *denars*, the creditor would receive more than he had delivered over. Should the debtor therefore be allowed to reduce the number of coins proportionally? The issue was under debate. For the medieval jurists the solution was far from obvious, not least because any profit made from monetary transactions was frowned upon and scrutinized for a possible breach of the prohibition of usury.[105] Once more, the solution, which the majority of the lawyers finally agreed upon, derived from the structure of the loan and its requirement, taken from D. 12.1.3, that 'same kind, same quality' had to be returned.[106] In order to satisfy the 'same kind, same quality' condition, the item you return does not have to be valued on the market (or by tariff) at the same price as it was valued at when you received the loan. Only the inherent qualities of the objects used to repay the loan must match the inherent qualities of the objects received. If you loan something to somebody else, the amount you have to be repaid is not influenced by a change in the market price of the thing you loaned. One just has to return the same amount in the same quality. If you take the tariff to be the official 'price' of the coin, as measured against another currency, the fluctuation of the price is not a factor which has to be taken into account when selecting the items which are fit for return. The amount to be returned is neither increased nor diminished by reference to the market value of the item loaned. To express this finding in the relevant terminology, the 'price' of the item loaned was excluded from the 'quality' requirement. It was held that an 'external' evaluation of the subject-matter of the loan was not to be considered part of the requirement of matching quality as

[104] See Section II.5.(b) of this chapter.
[105] J. T. Noonan, *The Scholastic Analysis of Usury* (1957).
[106] See Section II.5.(b) of this chapter.

expressed in D. 12.1.3. The external quality, which was held to be irrelevant, was called the *bonitas extrinseca*. This is the very origin of the dichotomy between the *valor extrinsecus* and the *valor intrinsecus*. To explain why the shift in tariff was irrelevant, the lawyers saw the 'price' of the item loaned as excluded from its *bonitas* which, according to the text, had to be matched by the items offered in return.[107] While saying that the price at the time of return need *not* match the price at the time of giving the loan, nothing is as yet said as to which qualities *must* match. These, however, were now called *bonitas intrinseca*. Strictly speaking, *bonitas extrinseca* was not synonymous with *valor impositus*. Rather, *bonitas extrinseca* covered all aspects that were not be taken into account when establishing the necessary inherent *bonitas* for the coins properly returned. One could find, however, that the *valor impositus* was one of the aspects irrelevant in determining the *bonitas*.

This reasoning led to the following result: the *augmentum valoris extrinseci*, the increase in purchasing power with regard to the smaller coins, that is, the 'raising of the coin', was ignored. The person making the loan of the *moneta grossa* made a windfall profit. In the (less frequent) event of a lowering of the coin, the debtor could discharge himself with money that could buy less of the smaller coin, so it was he who made the windfall profit.

The approved rule was thus that discharge was effected by payment of the number of coins which gave the creditor the right amount of silver, disregarding intervening changes of the *valor impositus*. If the obligation was stated in *moneta minuta*, the rule worked in reverse. The debtor discharged himself by the unchanged amount of the smaller coins which, alas, by now 'bought' less of the larger coin. In the (less frequent) event of a lowering of the coin, the debtor had discharged himself with money that could buy more of the larger coins, so it was the creditor who could be seen to make a windfall profit.

(γ) *Different currencies* in obligatione *and* in solutione

Since the payment of *moneta minuta* to discharge a *moneta grossa* debt was not permitted, we only need to look into the case of *moneta grossa* used to discharge a *moneta minuta* debt or a *moneta imaginaria* debt. The assumption that the conversion rate in effect at the time of payment was to be used led to a solution different from the one reached in the case of discharge by coins already *in obligatione*. An intervening 'raising of the coin' meant that it became more costly for the debtor owing *moneta minuta* to discharge the debt by tendering *moneta grossa*. This could not be otherwise, because all switches from the *moneta in obligatione* to another *moneta in solutione* were dependent on the proviso that the tender was not to the creditor's detriment. The raising of the coin thus worked against the debtor who now had to spend more (in terms of smaller coins) to buy the larger coins. We have already seen that measures were at hand to provide against this risk, namely construing the debt as a *debitum aestimatum* or a *debitum valorem respiciens.*

(iii) Changes in the monetary environment during the default stage of the debt

Roman law in general acknowledged the creditor's right to be compensated for both losses suffered due to late payment (*damnums emergens*) and gains which the creditor was prevented from realizing due to the late payment (*lucrum cessans*: 'loss of a chance').[108]

[107] For details, cf. Taeuber, above n 23, at 186 et seq.; Grossi, above n 97, at 315–81.

[108] C. 7.47; for the background of Justinian's constitution, limiting damages to the *duplum*, cf. W. Ernst, 'D. 19,1,43/45 pr./45, 2 Revisited: Annäherung an eine Quaestio des Paulus: Zugleich zum Ursprung der non ultra duplum-Regel (C. 7,47)', in *Festschrift Knütel*, above n 84, 271; for the medieval and modern developments, see J. C. Sonnekus, 'Limitering van renteheffing en die ultra duplum-reël: 'n evaluering van die historiese ontwikkeling van die reël en die vermeende oogmerk daaragter', (2012) *Tydskrif vir die Suid-Afrikaanse Reg* 247 (Part 1) and 387 (Part 2).

In the case of monetary obligations, however, problems arose due to the medieval church's opposition to usury. The reason was as follows: when the debtor defaults on a monetary obligation, the first and foremost damage to the creditor comes in terms of interest, whether meaning that the creditor could have reduced his own debt for which he had to pay interest, or the creditor could have lent out the expected money to earn interest himself. In the case of monetary obligations, the post-glossators curtailed the creditor's entitlement to damages: only the *damnum emergens* could be claimed, not the *lucrum cessans*.[109]

This problem, which must not concern us here, also spilled over into the issue of devaluation occurring while the debtor is in default. The question which arose was which changes in the monetary environment qualified as *damnum emergens*, and which as *lucrum cessans*? If the *valor extrinsecus* fell while the debtor was in default, this qualified as a *damnum emergens* which the debtor had to make good. If, on the other hand, the *valor extrinsecus* rose, the debtor was entitled to reduce his payment accordingly, even though the creditor would have benefited from the change had he been paid on time.[110] Bartolus added another qualification. If *moneta minuta* was owed, not even *damnum emergens* could be claimed, since *moneta grossa* was reckoned in terms of *moneta minuta* and not the other way around.[111] Seen this way, a debt stated in *moneta minuta* could not be affected, even in the default stage, by an intervening resetting of the relation between *moneta minuta* and *moneta grossa*. These doctrines, while obviously adhered to at the time, could not survive once the fixation with usury faded away.

Last, but not least, one needed to address the case where the delay in payment was due to the creditor (*mora creditoris*). Here, all negative consequences of changes in the monetary environment fell on the creditor.[112]

(g) Reprobatio monetae

A specific type of coin could go out of circulation, either because this coin was no longer minted and becoming rarer, was no longer readily available, or because they were demonetized by an official decree. These cases required rules of their own. The discussion goes back to the time of the glossators.[113]

If a coin has been superseded by a new coin and thus gone out of circulation (*si non reperitur*), then, according to Bartolus, the debtor could, and actually must, tender the old coins (*moneta antiqua*).[114] Other authors allowed *moneta nova* to be used to discharge the debt. The *moneta nova* then had to be 'legal tender' in the same territory in which the old coins had held this quality (*moneta currens tempore*). Furthermore, to discharge the debt, so many new coins were needed in order to meet the *bonitas* (*intrinseca*) requirement, that is, the amount of silver had to be matched. In all likelihood, there was no tariff linking the vanished coin to newer types of coins[115] which could have interfered with this solution.

In the case of formal *reprobatio*, coins which matched the debt may still have been available. One has to bear in mind that *reprobatio*, which renders modern day token money worthless, in those days did not take away the metallic content of the coins; hence the creditor could well have been eager to get the coins he was promised. The situation amounted to a fully-fledged conflict between the agreement of the parties, constituting

109 Bartolus, above n 74, ad C. 7.47 notas 22–25.
110 Ibid., ad D. 46.3.99 notas 7–8.
111 Ibid., ad D. 46.3.99 notas 7–8.
112 Endemann, above n 81, at 222, with references.
113 See discussion in n 44 above.
114 Bartolus, above n 74, at 92 (verso), nota 6.
115 The monetary world of the middle ages did not subscribe to Knapp's concept of the 'recurring link', which may be related especially to token money.

an obligation to pay what was now *pecunia reprobata,* and the public law decree depriving the sort of coins agreed upon of their legal tender quality. This made, perhaps, for the most intriguing doctrinal conflict in the field of monetary law, and legists and canonists[116] advanced a number of solutions.

Cynus allowed the debtor to use the *pecunia reprobata*, provided that at the moment of *reprobatio* the debtor had not been in default.[117] He sees the *reprobatio* as an event which cannot be attributed to the debtor (hence the insistence that the debtor may not have been in default). This linked the *reprobatio* to what is known in civil law as 'intervening accidental impossibility', a doctrine somewhat similar to the frustration of contract brought about by 'acts of God or the King's enemy'. Since such events were taken not to change the debtor's position for the worse, the debtor could not be obliged to pay with coins he had not promised.[118] In case the *reprobatio* occurred while the debtor was in default, Cynus assumes that the debtor then owed the *aestimatio*. This was in line with the Roman law rule that the debtor could not invoke 'accidental intervening impossibility' when the 'accident' occurs while he is in default. In reckoning the old coins' value, Cynus advocated the traditional metallistic approach, so that the debtor had to make good, when tendering new coins, the amount of silver that the creditor would have received in case of timely payment of the coins now demonetized. In advocating this solution, Cynus discusses an alternative approach, attributed to some *'moderni'*, involving the then novel concept of 'purchasing power'. The *aestimatio*, these *'moderni'* argued, needed to provide the creditor with the same *bonitas penes usum*, as opposed to the *bonitas penes materiam*.[119]

Bartolus, in line with the decretal *olim causam* (3 Comp. 3.37.5 = X 3.39.20) and making a reference to D. 13.7.24.1, held that the debtor is discharged of his debt, insofar as the old coins are concerned, but owes the *aestimatio* instead, for which he, too, advocates the reckoning according to precious metal content.[120]

Other authors follow a less differentiated approach and advocate a general switch to the *aestimatio*, barring the debtor from using the *moneta reprobata* altogether. Their key argument was that *moneta reprobata* had ceased to be money proper. From this viewpoint, one could argue about the appropriate method in stating the *aestimatio*: should one go by metal value or by the *bonitas usus*, the purchasing power? Stampe considered this conflict to constitute a fundamental fault line in the field of doctrinal writers, separating 'valorists' from 'bonitists'.[121] It is noteworthy that both positions are anti-nominalist, if one takes nominalism to mean that the coin is fit to discharge the number of units of account it stands for according to its face value.

[116] The decretal *olim causam* (3 Comp. 3.37.5 = X 3.39.20) expressly addressed this issue, cf. Ernst, above n 1, 240 et seq., with references.

[117] Commentaria in Codicem, ad C. 2.40.4; Petrus de Bellapertica was of the same opinion.

[118] If the coins vanished altogether, it seems that the debt was extinguished altogether except if the obligation was based on loan, in which case the *aestimatio* had to be returned.

[119] The term '*bonitas usus*' perhaps best translated as 'exchange value' was used already by Odofredus.

[120] Bartolus, above n 74, at 92 (verso), nota 6; cf. also Bartolus, ad D. 12.1.5 the *lex quod te*, nota 6–7.

[121] Stampe, above n 69, at 116–17.

8

Money in Medieval Canon Law

Andreas Thier

I. Ecclesiastical Legal Sources of Monetary Law

1. The Law of the Church

The monetarization of the European economy, which began in the late twelfth century[1] during the so-called 'commercial revolution',[2] was a matter of major concern for the church and its law. Since its earliest beginnings as an institution, the church has, of its own right, issued legal rules[3] named 'canon law'.[4] In Late Antiquity, the word 'canon', which derives from the Greek expression *κανών* ('rule', 'guide'), denoted a dogma with binding force. Thus, biblical texts were considered to be 'canonical'.[5] The early councils,[6] such as the Council of Nicaea of 325, adopted this designation for their decrees. Particularly, early in the ecclesiastical history of Late Antiquity, the councils frequently set canons as mandatory rules of faith as well as disciplinary rules for the church.[7] In the late fourth century, an additional source of canon law came into existence: the letters of the Roman

[1] P. Spufford, *Money and Its Use in Medieval Europe* (1988), at 240–63. For a shorter survey, see M. North, *Kleine Geschichte des Geldes: Vom Mittelalter bis heute* (2009), at 28–37.

[2] R. S. Lopez, *The Commercial Revolution of the Middle Ages 950–1350* (1971); for a recent account on Genoa, see A. Greif, *Institutions and the Path to the Modern Economy: Lessons from Medieval Trade* (2006), at 217–68 and *passim*.

[3] As surveys on the history of canon law: P. Erdö, *Die Quellen des Kirchenrechts: Eine geschichtliche Einführung* (2002); P. Erdö, *Geschichte der Wissenschaft vom kanonischen Recht: Eine Einführung*, ed. L. Müller (2006); P. Landau, 'Kirchenverfassungen', in *Theologische Realenzyklopädie* (1990), vol. 14, 110; A. Thier, 'Canon Law', in *The Max Planck Encyclopaedia of European Private Law* (2012), vol. 1, 133 (hereafter MPEPL); C. Van de Wiel, *History of Canon Law* (1991); a very concise survey on the history of medieval canon law is offered by J. A. Brundage, *Medieval Canon Law* (1995); for the history of Eastern canon law, see W. Hartmann and K. Pennington (eds), *The History of Byzantine and Eastern Canon Law to 1500* (2012).

[4] As a survey on the modern codes of canon law, see T. Duve, 'The Codes of Canon Law (1917 and 1983)', in S. N. Katz (ed.), *The Oxford International Encyclopedia of Legal History* (2009), vol. 1, 352 with further reference.

[5] For a short survey with further reference, see M. Rese, 'Canon', in H. Cancik and H. Schneider (eds), *Brill's New Pauly: Antiquity Volumes* (2006), section V, available at http://referenceworks.brillonline.com/entries/brill-s-new-pauly/canon-e608220. See the seminal contribution by H. Ohme, *Kanon Ekklesiastikos: Die Bedeutung des Altkirchlichen Kanonbegriffes* (1998), at 2–9 and *passim* with numerous references.

[6] T. Duve, 'Church Councils and Conciliar Canons', in Katz (ed.), above n 4, vol. 1, 469; F. R. Gehbauer, 'Synode I: Alte Kirche/II. Mittelalter', in *Theologische Realenzklopädie* (2001), vol. 32, 559; A. Thier, 'Konzil', in *Handwörterbuch zur deutschen Rechtsgeschichte* (hereafter HDR), 3 vols (2008–13), vol. 2, at 161 (see bibliography). For a deeper discussion of practices, procedures, and canons of the early councils, see H. Hess, *The Early Development of Canon Law and the Council of Serdica* (2002, repr. 2005), at 5–89.

[7] For short surveys, see Duve, above n 6, at 470–1; Van de Wiel, above n 3, at 11–12; see in detail Ohme, above n 5.

bishops. The popes,[8] denoted these letters as 'decretals' (*epistola decretalis* or *littera decretalis*),[9] with the earliest known decretal issued in 385.[10] These decretals can be described as 'papal communications offering normatively binding rules'.[11] From the late eleventh century, with the rise of the pope as the head of the church,[12] papal decretals became, at least in terms of quantity, the most important legal source in medieval canon law.[13] Starting in the thirteenth century, the papal dominance in ecclesiastical rule-making found its formal expression in yet another development. The papacy took control of the textual form of canon law. Until then, canon law texts had been collected by individuals more or less according to their own reading of those materials.[14] As a consequence, different versions or even forgeries of papal and conciliar texts were in circulation, such as the Pseudo-Isidorian Forgeries created in the ninth century.[15] The so-called *decretum Gratiani*, created around 1140,[16] marked the apex of this practice of compilation. It was followed by officially unauthorized, but nevertheless widely used, collections of canon law texts. By the end of the twelfth century, these included papal decretals in particular.[17] Beginning with the so-called *Compilatio tertia* in 1209–10[18] and with the later *Liber Extra* (1234) and *Liber Sextus* (1298),[19] the papacy sought to put an end to this practice by establishing compilations and law books, whose textual form would be mandatory for courts and students of canon law. With the promulgation of the *Corpus Iuris Canonici* in 1580–82,[20] a papal text edition of collections such as the *decretum Gratiani*, the *Liber Extra*,

[8] For a general survey, see A. Thier, 'Pope and Papacy', in Katz (ed.), above n 4, vol. 4, 351. For one of the best modern surveys, see H. Fuhrmann, *Die Päpste: Von Petrus zu Benedikt XVI* (4th edn, 2012). See also J. N. D. Kelly and M. Walsh (eds), *Oxford Dictionary of Popes* (2nd edn, 2010, online edn 2012).

[9] For earlier models of decretals, see D. Jasper, 'The Beginning of the Decretal Tradition: Papal Letters from the Origin of the Genre through the Pontificate of Stephen V', in D. Jasper and H. Fuhrmann, *Papal Letters in the Early Middle Ages* (2001) 3, at 13–4.

[10] JK 255. Jasper, above n 9, at 11–12, no. 32, and at 28–32, discussing the dispute about the question whether there is an earlier decretal with the *canones synodi Romanorum ad Gallos episcopos*, JK after 285.

[11] This description suggested by A. Thier, 'Decretals and Decretal Collections', in Katz (ed.), above n 4, vol. 2, 316. For a deeper discussion of the typology of early decretals, see Jasper, above n 9, at 12–3.

[12] C. Morris, *The Papal Monarchy: The Western Church from 1050 to 1250* (1989).

[13] G. Fransen, *Les décrétales et les collections de décrétales (Typologie des Sources du Moyen Âge Occidental, Fac. 2, A-III.1*)* (1972), at 12–5, repr. in G. Fransen, *Canones et Quaestiones: Évolution des doctrines et système du droit canonique* (2002), vol. I.1, 267*, at 279*–82*; see also P. Landau, 'Rechtsfortbildung im Dekretalenrecht: Typen und Funktionen der Dekretalen des 12. Jahrhunderts', (2000) 86 *Zeitschrift für Rechtsgeschichte, Kanonistische Abteilung* 86, repr. in P. Landau, *Europäische Rechtsgeschichte und kanonisches Recht im Mittelalter* (2013) 51, at 52–8, discussing different types of decretals emerging since the twelfth century.

[14] G. Fransen, *Les collections canoniques (Typologie des Sources Du Moyen Âge Occidental, Fac. 10, A-III.1*)* (1973), repr. in Fransen, *Canones et Quaestiones*, above n 13, vol. I.1, at 313*; L. Fowler-Magerl, *Clavis Canonum: Selected Canon Law Collections before 1140* (2005); L. Kéry, *Canonical Collections of the Early Middle Ages (c.400–1140): A Bibliographical Guide to Manuscripts and Literature* (1999).

[15] H. Fuhrmann, 'The Pseudo-Isidorian Forgeries', in Jasper and Fuhrmann (eds), above n 9, at 135.

[16] P. Landau, 'Gratian and the *Decretum Gratiani*', in W. Hartmann and K. Pennington (eds), *The History of Medieval Canon Law in the Classical Period, 1140–1234: From Gratian to the Decretals of Pope Gregory IX* (2008) 22. A. Winroth, *The Making of Gratian's* Decretum (2000, repr. 2007).

[17] C. Duggan, 'Decretal Collections from Gratian's *Decretum* to the *Compilationes antiquae*: The Making of the New Case Law', in Hartmann and Pennington (eds), above n 16, 22; K. Pennington, 'Decretal Collections 1190–1234', in Hartmann and Pennington (eds), above n 16, 293, at 293–308.

[18] Pennington, above n 17, at 308–11; A. Thier, 'Die päpstlichen Register im Spannungsfeld zwischen Rechtswissenschaft und päpstlicher Normsetzung: Innocenz III. und die Compilatio Tertia', (2002) 88 *Zeitschrift für Rechtsgeschichte, Kanonistische Abteilung* 44.

[19] For an overview, see T. Duve, 'Corpus Iuris Canonici', in Katz (ed.), above n 4, vol. 2, 218, at 221–3; and A. Thier, 'Corpus Iuris Canonici', in *HDR*, above n 6, vol. 1, 894, at 896–9. For an extensive discussion, see M. Bertram, 'Die Dekretalen Gregors IX.: Konstitution oder Kodifikation', in C. Longo (ed.), *Magister Raimundus: Atti del Convegno per il IV centenario della canonizzazione di san Raimondo de Penyafort (1601–2001)* (2002) 61; H. Pree, 'Bonifaz VIII. (1294–1303) als kirchlicher Gesetzgeber', in K. Breitsching and W. Rees (eds), *Recht—Bürge der Freiheit: Festschrift für J. Mühlsteiger SJ* (2006) 453.

[20] Duve, above n 19, at 223–4; Thier, above n 19, at 894–5. See in detail M. E. Sommar, *The Correctores Romani: Gratian's* Decretum *and the Counter-Reformation Humanists* (2009).

and the *Liber Sextus*, this development came to an end. The papacy thereby finally established its control over the textual form of ecclesiastical law.

2. Legal Rules on Money in Medieval Canon Law

Given the rich and elaborate culture of ecclesiastical law-making, it might come as a surprise that there were comparatively few rules of canon law dealing specifically with issues of monetary law. It is, however, well known that the church had a long tradition of rules against usury, which also included provisions on the specific value of things owed, or received, by way of a loan. Basically, usury was defined as a transaction where 'you have given money as loan, from which you claim to get back more than you have given', as Augustine put it with particular emphasis on taking interest (*fenus*).[21] The Nicene Council of 325 issued a strict ban on usury involving clerics and defined usury quite precisely. Clerics would be deposed from the clergy if they were 'found . . . to receive usury', in particular by demanding 150 per cent of the sum of money lent.[22] From early on, councils also issued decrees against evasive transactions such as the granting of goods in exchange for money or vice versa.[23] There were also numerous provisions on usury in Gratian's *decretum*[24] and the papal law books, which significantly included whole titles *de usuris*.[25] But apart from those doctrines[26] and rules[27] on usury, the body of canon law provisions on money itself was small in size, because the church took, at least in principle, a neutral stance on money as an instrument of payment.[28] It is consistent with this view that Gratian's *decretum* was nearly silent on questions of monetary law.[29] Gratian adopted a chapter of John Chrysostom[30] pointing

[21] Augustine, *Enarrationes in Psalmos*, 36 III, at 6: 'Si feneraveris homini, id est, mutuam pecuniam tuam dederis, a quo aliquid plus quam dedisti exspectes accipere.' See *Decretum Gratiani*, Causa 14 quaestio 3 cap. 1. On the patristic positions on commerce, see the overview in H. Siems, *Handel und Wucher im Spiegel frühmittelalterlicher Rechtsquellen* (1992), at 679–85.

[22] Council of Nicaea, cap. 17: '. . . ut, si quis inventus fuerit . . . usuras accipiens aut per adinventionem aliquam vel quolibet modo negotium transigens aut hemiolia, id est sescupla, exigens vel aliquid tale prorsus excogitans turpis lucri gratia'. This Latin version is based on the translation by Dionysius Exiguus (around 500 AD), quoted here from G. Alberigo, 'Nicaenum I, 325', in *Conciliorum Oecumenicorum Generaliumque Decreta, Editio critica.* Vol 1: *The Oecumenical Councils: From Nicaea I to Nicaea II (325–787)* (2006) 1, at 29. On Dionysius' collection in general, see for an overview Fowler-Magerl, above n 14, at 29–32, with further references; on Dionysius' translation, see M. E. Sommar, 'Dionysius Exiguus' Creative Editing', in U.-R. Blumenthal, K. Pennington, and A. A. Larson (eds), *Proceedings of the Twelfth International Congress of Medieval Canon Law: Washington DC, 1–7 August 2004* (2008) 209.

[23] See, in general, Siems, above n 21, at 551–91.

[24] *Decretum Gratiani*, Causa 14 quaestio 3–4.

[25] 3Comp. 5.10; X 5.19; VI 5.9. See also Clem. 5.5.

[26] J. T. Noonan, *The Scholastic Analysis of Usury* (1957); K. Weinziel, 'Das Zinsproblem im Dekret Gratians und in den Summen zum Dekret', (1953) 1 *Studia Gratiana* 549.

[27] For surveys, see J. Gilchrist, *The Church and Economic Activity in the Middle Ages* (1969), at 144–54 (index of conciliar rules regarding economical issues); J. Ibanès, *La doctrine de l'Église et les réalités économiques au XIIIe siècle: l'intérêt, les prix et la monnaie* (1967), at 12–33; for a discussion of usury in regional practice, see, e.g., R. H. Helmholz, 'Usury and the Medieval English Church Courts', (1986) 61 *Speculum* 364; G. Rösch, 'Wucher in Deutschland: Überlegungen zur Normdidaxe (sic) and Normrezeption', (1994) 259 *Historische Zeitschrift* 593; on the question of the efficiency of those usury bans in general, see H. J. Gilomen, 'Wucher und Wirtschaft im Mittelalter', (1990) 250 *Historische Zeitschrift* 265.

[28] For a similar approach, see G. Todeschini, 'Usury in Christian Middle Ages: A Reconsideration of the Historiographical Tradition (1949–2010)', in F. Ammannati (ed.), *Religione e istituzioni religiose nell'economia europea, 1000–1800: atti della 'quarantatreesima settimana di studi', 8–12 maggio 2011* (2011) 119, at 122–3.

[29] For a more detailed discussion of this point, see W. Taeuber, 'Geld und Kredit bei Gratian und den Dekretisten', (1954) 2 *Studia Gratiana* 443, at 449.

[30] On John Chrysostom (344/354–407), see generally F. W. Bautz, 'Johannes Chrysostomus', in *Biographisch-bibliographisches Kirchenlexikon*, vol. 1 (1990) 1018 (hereafter *Kirchenlexikon*).

to the general rule that 'a solidus [a gold coin], which does not have the Caesar's stamp on it, is false'.[31]

More important were papal decrees issued in response to debasements or devaluations of the coinage, thus reflecting the dynamics of the new monetary economy. One decretal, the text of which began with the words 'Querelam P. Presbiteri', issued during his pontificate by Urban III (1185–7),[32] determined for the first time which party to an ecclesiastical monetary obligation had to bear the risk of monetary changes. The decretal stated that a priest had to pay a *pensio*[33] to canons for the church held by him. From around 1180 the minted coinage which had been used for these payments began to be replaced by the Paris denier. This new coinage was intended to establish a strong royal currency, which would limit the impact of local coinages and thus gain a stronger value than the former local coins.[34] Nevertheless, the canons demanded the same number of coins, apparently in the hope that they would benefit from this change of currency. Ultimately, Urban III ruled that this demand would be *contra iustitiam* and ordered the canons to remain 'content with their old rent' ('canonicos . . . antiqua pensione . . . manere contentos').[35]

In 1199, Innocent III (1198–1216)[36] issued a decretal beginning with the words *Quanto personam tuam*,[37] which has been discussed frequently in modern literature.[38] Peter II, King of Spain,[39] took an oath to preserve unaltered the coins of his father,

[31] *Decretum Gratiani*, Distinctio 88 cap. 11 § 5: 'solidus, qui non habet caragma Cesaris, reprobus est'; quoted after A. Friedberg, *Corpus Iuris Canonici.* Vol. 1: *Decretum Magistri Gratiani* (1879, repr. 1995), col. 309. For a short overview of this provision, see W. Endemann, *Studien in der romanisch-kanonistischen Wirtschafts- und Rechtslehre bis gegen Ende des 17. Jahrhunderts* (1883, repr. 1962), vol. 2, 163.

[32] G. Kreuzer, 'Urban III.', in *Kirchenlexikon*, above n 30, vol. 15 (1999) 1394; Kelly and Walsh (eds), above n 8.

[33] The *pensio* was a type of annuity, cf. H.-J. Gilomen, 'Rente, -nkauf, -nmarkt, 4. Rentenmarkt', in *Lexikon des Mittelalters*, vol. 7 (1995), 735.

[34] For the historical background, see B. Santiano, *La Monnaie, le Prince et le Marchand: Une analyse économique des phénomènes monétaires au Moyen Âge* (2010), at 268–9; Spufford, above n 1, at 197–9.

[35] JL 15745 (9884), 2Comp. 3.25.3; text of the decretal in A. Friedberg, *Quinque compilationes antiquae nec non collectio canonum Lipsiensis* (1882, repr. 1956), at 89. For a short survey, see W. Ernst, 'The Glossators' Monetary Law', in J. W. Cairns and P. J. Du Plessis (eds), *The Creation of the Ius Commune. From Casus to Regula* (2010, repr. 2012) 219, at 239 with further references. For a deeper discussion, see T. Bisson, *Conservation of Coinage. Monetary Exploitation and Its Restraint in France, Catalonia, and in Aragon (c. A.D. 1000–c.1225)* (1979), at 172–4; W. Taeuber, *Geld und Kredit im Mittelalter* (1933, repr. 1968), at 104–6.

[36] M. Hanst, 'Innocenz III.', in *Kirchenlexikon*, above n 30, vol. 2 (1990) 1281; Kelly and Walsh (eds), above n 8; A. Thier, 'Innocenz III. (Papst)', in *HDR*, above n 6, vol. 2, 1228.

[37] Po. 656, 3Comp. 2.15.4, X 2.24.18; the complete text (based on the executed copy in Archivo de la Corona de Aragón) is edited by T. N. Bisson, '"Quanto Personam Tuam" (X 2.24.18): Its Original Significance', in S. Kuttner (ed.), *Proceedings of the 4th International Congress of Medieval Canon Law: Toronto, 21–25 August 1972* (1976) 229, repr. in T. N. Bisson, *Medieval France and Her Pyrenean Neighbours: Studies in Early Institutional History* (1989) 303, at 313–4. For an abridged version, which was transmitted throughout the medieval jurisprudential discourse, see A. Friedberg (ed.), *Corpus Iuris Canonici.* Vol. 2: *Decretalium collectiones* (1879, repr. 1955), cols 365–6. All literal quotes in the text are taken from this source.

[38] Apart from Bisson's contribution, above n 37, and Bisson, above n 35, at 166–172, see E. Bridrey, *La théorie de la monnaie au XIVe siècle: Nicole Oresme; étude d'histoire des doctrines et des faits économiques* (1906), at 317–24; H. Dondorp, 'Molinaeus und die kanonistische Geldschuldlehre', (2013) 99 *Zeitschrift für Rechtsgeschichte, Kanonistische Abteilung* 418, at 420–23; Endemann, above n 31, at 185–7; G. Hubrecht, 'Quelques observations sur l'évolution des doctrines concernant les paiements monétaires du XIIe au XVIIIe siècle', in *Aequitas und bona fides: Festgabe zum 70. Geburtstag von August Simonius* (1955) 133, at 135; G. Hubrecht, 'La monnaie en droit canonique', (1974) 18 *L'année canonique* 115, at 116–18; P. Landau, 'Die Bedeutung des kanonischen Rechts in der Geschichte der Geldschuld', in G. Dilcher and N. Horn (eds), *Sozialwissenschaften im Studium des Rechts*, vol. 4 (1978) 166, repr. in Landau, *Europäische Rechtsgeschichte*, above n 13, 805, at 809–10; F. Wittreck, 'Conservare monetam: Geldwertstabilität im hochmittelalterlichen Aragon im Lichte der Dekretale "Quanto personam tuam" (1199)', in *Währung und Wirtschaft: Festschrift Hugo J. Hahn* (1997) 103. For an overview, see also G. Barbieri, 'Le dottrina monetarie dal XIII al XVII secolo', in V. Barbagli Bagnoli (ed.), *La moneta nell' economia europea secoi XIII–XVIII: Atti della 'Settimana settimana (sic) di studio' (11–17 aprile 1975)* (1981) 309, at 312–4, and G. Hartmann, *Ueber den rechtlichen Begriff des Geldes und den Inhalt von Geldgeschäften* (1868), at 116.

[39] O. Engels, 'Peter, 2. P. II., Kg. v. Aragón', in *Lexikon des Mittelalters*, vol. 6 (1993), col. 1923, with further references.

King Alphonse II.[40] By doing so, Peter II continued the traditional practice of using solemn oaths to maintain the stability of the current coinage and, moreover, to generate revenues in exchange for his renunciation of the right to introduce new coins of lesser value.[41] Peter II met with resistance from his nobles because his father's coins were of diminished quality. In a later decretal, Innocent III used the words 'moneta diminuta et minoris valoris effecta' to describe the coins. Facing growing financial problems in his kingdom, Peter II asked Innocent III to be released from his oath.

In a complex ruling, Innocent III stressed that the devaluation of money was illegal according to canon law. Thus, had Peter II known that his father's coins represented bad money—the pope used the term 'moneta . . . legitimo pondere defraudata' (money forged in its legitimate weight)—his oath would have been void, because he would have sworn to do something forbidden ('iuramentum fuisset illicitum et nullatenus observandum'). If, however, Peter II did not know about the diminished value of his father's coins, then he would have to keep his oath. But this did not mean that the coins of Peter II's father should remain in circulation, because, as mentioned before, they represented 'moneta . . . legitimo pondere defraudata'.

The pope ordered (*consulimus et mandamus*) that Peter II had to mint a new coinage *sub nomine patris* with a 'legitimate weight'. This *legitimum pondus* was specified by Innocent III as the value *secundum eum statum, quem tempore patris tui habuit meliorem*, that is, as the better value during the lifetime of Peter II's father. Here, the 'legitimate weight' was determined by a comparison between different rates of coinage during the reign of Peter II's father.[42] As this ambiguity indicates, Innocent III's decretal was anything but a precise rule on the constitutional duties of a prince in relation to monetary value. Nevertheless, the decretal had a strong impact on all later discussions of princes' lawful entitlements to deal with money and its value.

The decretal with the incipit *Olim causam*, issued in 1200,[43] dealt with the consequences of currency changes for monetary obligations. The decretal provided the foundation for the dramatic increase in mint production and coinage diversity of the twelfth century.[44] It dealt with a case which one of the most prominent late medieval canonists, Nicolaus de Tudeschis (1386–1445), called Panormitanus,[45] would decribe as *casus notabilis et multum allegabilis*.[46] Even centuries later this text would be characterized by Prospero Fagnani (d. 1678)[47] as *valde*

[40] S. Claramunt and O. Engels, 'Alfons II. "der Keusche", Kg. v. Aragón', in *Lexikon des Mittelalters*, vol. 1 (1977), cols 392–3.

[41] Bisson, above n 35, at 88–90; Bisson, above n 37, at 308.

[42] Dondorp, above n 38, at 421–2, links the term *legitimum pondus* to an oath taken by Peter's father, Alphonse II around 1191 (cf. Bisson, above n 37, at 307–8): legitimacy in that sense would mean that Peter had to restore the coinage to the value confirmed by Alphonse's oath (and not to a value measured by its metal value or other similar indicators). This interpretation is certainly a possible explanation. The formula *statum, quem tempore patris tui habuit meliorem*, in particular the word *melior* (better) does suggest that Innocent in fact pointed to a specific weight of coin instead of an earlier oath.

[43] Po. 1207, 3Comp. 3.37.5, X 3.39.20, in Friedberg, above n 37, cols. 630–1. For an extensive discussion of this decretal, see Dondorp, above n 38, at 423–6; Ernst, above n 35, at 240; Taeuber, above n 35, at 106–13.

[44] On this aspect, see Spufford, above n 1, at 188–9 (for Italy).

[45] I. Riedel-Spangenberger, 'Nicolaus de Tudeschis', in *Kirchenlexikon*, above n 30, vol. 6 (1993) 696; K. W. Nörr, *Kirche und Konzil bei Nicolaus de Tudeschis (Panormitanus)* (1964); for an in-depth discussion of Panormitanus' commentary, see O. Condorelli (ed.), *Niccolò Tedeschi (Abbas Panormitanus) e i suoi Commentaria in Decretales* (2000), in particular the contribution by K. Pennington, 'Nicolaus de Tudeschis (Panormitanus)', in Condorelli (ed.), 9, available at http://faculty.cua.edu/pennington/Canon%20Law/PANORMITANUS.html.

[46] Panormitanus (Nicolaus Tudeschis), *Opera Omnia*. Vol. 7: *Commentaria in tertium librum decretalium* (Venice, 1588, repr. Frankfurt/Main 2008), fo. 314^{vb}, ad X 3.29.20, no. 1.

[47] D. Quaglioni, 'Fagnani, Boni Prospero', in *Dizionario biografico degli italiani*, vol. 44 (1994) 187, available at http://www.treccani.it/enciclopedia/prospero–fagnani–boni_(Dizionario_Biografico).

notabilis,[48] and was still cited by F. C. von Savigny in the nineteeth century as a possible argument for his ideas on monetary obligations.[49] The clerics of the church in Rupo in the Abruzzi had paid the bishop on Spoleto three Pavian denari as a biannual due, a so-called *synodaticum*.[50] The minting of the Pavian denaro ended in 1102[51] and from about 1150 onwards other coinage, in particular the Lucca denari, came to be used.[52] The clerics changed the currency of their payment to Lucca denari and gave the bishop three Lucca denari for each Pavian denaro. Owing to a debasement in 1181, the value of the Lucca denaro against the Pavian denaro decreased[53] so that one Pavian denaro was valued at around six Lucca denari. Against this background the bishop sued the clerics for payment in Pavian denari. The clerics pleaded that the statute of limitations had expired, arguing that since they had paid in Lucca denari for thirty-six years the episcopal claim for Pavian denari had lapsed. Nevertheless, the pope ruled in favour of the bishop, and sentenced the clerics to pay in Pavian denari or their corresponding value (*ad solutionem denariorum Papiensium vel aestimationem eorum*).[54]

The basic consequence of the ruling was that ecclesiastical monetary obligations had to be paid in the currency that had been in use when an obligation came into existence. This argument was confirmed by Gregory IX in the *Liber Extra* in 1234. The pope adopted the decretal *Querelam P. Presbiteri*, but had it edited as part of a new decretal with the incipit *Cum canonicis*. This editing made a slight, but important, addition.[55] Here, it was not only stated that the *canonici* should be *contentos* with payments in the former money. It was also ruled that if the former coin *non sit in usu[,] aestimatione pensionis antiquae*. If the initial currency was out of use, the debtor had to pay in new money, and the amount of his payment had to be assessed on the basis of the original value of its debt.

A canon with the incipit *Si beneficiorum* issued by the council of Vienne (1311–2),[56] on the collection of tithes on benefices, appears to have confirmed the idea that dues had to be paid in current money. A tithe on benefices (not tithes in general) was to be collected *ad monetam currentem communiter*, in that money which was in common in those regions for

[48] Prospero Fagnani, *Commentaria in Primam Partem Tertii Libri Decretalium* (Rome, 1661, copy at the Bavarian State Library, call no. 2 J.can.u. 66–2/3), at 272, ad X 3.39.20, no. 1, available at http://reader.digitale-sammlungen.de/resolve/display/bsb10489493.html.

[49] F. C. von Savigny, *Das Obligationenrecht als Theil des heutigen römischen Rechts* (1851), vol. 1, 476. On Savigny's doctrine in monetary law, see, in general, K.-H. Hütter, Savignys Geldlehre (Ph.D. Dissertation, University of Münster, 1970); H. Kiefner, 'Geld und Geldschuld in der Privatrechtsdogmatik des 19. Jahrhunderts', in H. Coing and W. Wilhelm (eds), *Wissenschaft und Kodifikation des Privatrechts im 19. Jahrhundert* (1980), vol. 5, 27, repr. in H. Kiefner, *Ideal wird, was Natur war: Abhandlungen zur Privatrechtsgeschichte des späten 18. und 19. Jahrhunderts* (1997), 109; see also Dondorp, above n 38, at 418–9. For Savigny's use of canon law in general, see W. Ernst, 'Kanonisches Recht in Savigny "System"', (2010) 96 *Zeitschrift für Rechtsgeschichte, Kanonistische Abteilung* 275, esp. at 306 (on monetary law).

[50] P. Landau, 'Cathedraticum', in *Lexikon des Mittelalters* (1983), vol. 2, cols 1575–6.

[51] A. Ravelli, 'Il denaro di Pavia nell' alto Medioevo (VIII–XI secolo)', (1995) 47 *Bolletino della Società Pavese di Storia Patria* 71; A. Ravelli, 'The Denaro of Pavia in the Early Middle Ages (Eight to Eleventh Century)', in A. Ravelli, *Coinage and Coin Use in Medieval Italy* (2012), no. VIII, 1, at 20, citing the Genoese annalist Caffaro's statement, 'moneta denariorum papiensium veterum finem habuit'.

[52] L. Feller, 'Les conditions de la circulation monétaire dans la périphérie du royaume d'Italie (Sabine et Abruzzes, IXe–XIIe siècle)', in *L'argent au Moyen Âge: idéologie, finances, fiscalité, monnaie (Actes du XXVIIe congrès de la Société des médiévistes de l'enseignement supérieur, Clermont–Ferrand, 30 mai–1er juin, 1997* (1998) 61, at 69. See in detail P. Toubert, *Les structures du Latium médiéval: le Latium méridional et la Sabine du IXe siècle à la fin du XIIe siècle* (1973), at 580–4, 592–600.

[53] M. Matzke, 'Vom Ottolinus zum Grossus: Münzprägung in der Toskana vom 10. bis zum 13. Jahrhundert', (1993) 72 *Schweizerische numismatische Rundschau* 135, at 172–8.

[54] Friedberg, above n 37, at 631.

[55] Po. 9657, X 3.39.26, in Friedberg, above n 37, at 633. See at length Dondorp, above n 38, at 429–30.

[56] M. C. Barber, 'Vienne, Konzil von', in *Theologische Realenzyklopädie*, vol. 35 (2003) 76.

which the benefice in question had been granted.[57] This text was inserted in an official papal collection of decretals and the canons of Vienne, the *Liber Clementinarum* (or simply *Clementinae*),[58] named after its author Pope Clement V (1305–14),[59] and promulgated by his successor Johannes XXII (1316–34)[60] in 1317.[61] It was also Johannes XXII who issued a decree in 1324 beginning with the words *In delictorum diversorum*, which found its way into the so-called *extravagantes communes*, a private decretal collection created in 1501–3, which later formed a part of the *Corpus Iuris Canonici*.[62] The pope ordered that to prevent further forgery of florins, all holders of the privilege to mint florins had to produce within three months evidence for their (papal) *ius cudendi*.[63]

II. Medieval Canon Law Jurisprudence and Money

1. The Science of Medieval Canon Law

It should be clear from what has been said so far that the ecclesiastical authorities did not create a coherent system of monetary law with general rules covering the whole spectrum of possible cases. This was particularly true for the papal decrees, which formed the core element of money-related ecclesiastical legal texts. Rather, this corpus of ecclesiastical legal sources exhibited a strong case-law character, thus illustrating a defining feature of medieval papal decretals,[64] even though there were, at certain times, tendencies towards a more general normative structure of decretal law.[65] But as we have sought to demonstrate, despite their strong focus on the specifics of singular cases, papal decretals nearly always contained some statements expressed in abstract phrasing which could be used as general rules. Consistently with this point, there was a broad consensus in twelfth century canon law that 'as long something is defined by it (i.e. a papal decretal), it has to be applied as general law (*ius generale*), be it general, be it special'.[66] This statement not only highlighted the papal claim of universal legal omnipotence within the church,[67] but it also pointed particularly to the necessity of jurisprudential analysis of papal decretals to ensure that their rulings and rules were applicable as *ius generale*. This was one of the aspects which gave the science of canon law its special importance for the efficient legal governance and functioning of the church. As already mentioned, the church had a long tradition of learned support for the conservation and circulation of conciliar and papal

[57] Council of Vienne, can. 12, text in *Conciliorum Oecumenicorum Generaliumque Decreta* (critical edn, 2013), vol. 2.1, at 420–1.

[58] Cf. Clem. 3.8.2, in Friedberg, above n 37, at 1165.

[59] F. W. Bautz, 'Clemens V', in *Kirchenlexikon*, above n 30, vol. 1 (1990) 1052.

[60] M. Hanst, 'Johannes XXII', in *Kirchenlexikon*, above n 30, vol. 3 (1992) 228; Kelly and Walsh (eds), above n 8.

[61] For an overview, see Duve, above n 19, at 223; Thier, above n 19, at 899–900.

[62] For an overview, see Duve, above n 19, at 223–4; Thier, above n 19, at 900. For a recent study, see S. di Paolo, 'Le Extravagantes Communes nell'età dell'incunabolo: la bolla *Unam sanctam* da Francesco Pavini a Jean Chappuis', in Blumenthal et al. (eds), above n 22, 311, at 353–61, demonstrating the handling of the famous bull *unam sanctam* in the editorial process.

[63] See the text of the decretal in Friedberg, above n 37, at 1254–5, the quote ibid., at 1254.

[64] Thier, above n 18, at 47–50.

[65] See, in particular, W. Holtzmann, 'Die Dekretalen Gregors VIII.', (1950) 58 *Mitteilungen des Instituts für österreichische Geschichtsforschung* 113, at 119; Landau, 'Rechtsfortbildung', above n 13, at 81–7.

[66] Johannes Teutonicus, *Glossa ordinaria on the Decretum Gratiani*, Gloss in Dict. ante Distinctio 19 cap. 1, ad v. *de epistolis* (Venice edn, 1525), fo. 24[ra]: 'sive sit generalis, sive sit specialis, dummodo alliquid diffiniatur per eam (scil. epistolam decretalem), pro iure generali habenda est'. On this statement also Thier, above n 18, at 50.

[67] On the idea of papal *plenitudo potestatis*, see K. Pennington, *Popes and Bishops: The Papal Monarchy in the Twelfth and Thirteenth Centuries* (1984), at 45–58 (focusing on Innocent III), and, more generally, K. Pennington, 'Law, Legislative Authority, and Theories of Government', in J. H. Burns (ed.), *The Cambridge History of Medieval Political Thought c.350–c.1450* (1988) 424, at 427–30.

decrees:[68] since about the fourth century clerics had compiled collections of texts which were deemed to be of special normative importance, including, for example, excerpts from patristic writings.[69] Over time, the compilers of these *collectiones canonum* began to develop techniques of systematization and editing. In applying these techniques to the collected texts, they frequently gave them an interpretation of their own, thus using the collected *canones* as arguments for their own position, such as in the period of the investiture contest.[70] With the emergence of the *decretum Gratiani*, however, the approaches to canon law texts began to change fundamentally: basically, as mentioned,[71] the traditional compilation, the *decretum,* surpassed its predecessors in the consistency of its effort to put the collected materials into a systematic order so as to produce a *concordia discordantium canonum*, 'harmony from canons in dissonance', as the book was named, probably by Gratian himself.[72] In order to achieve this goal, which reveals the rising influence of scholasticism on jurisprudence,[73] Gratian used the scholastic method of the *distinctio* (distinction) as elaborated by Alger of Liège in commenting on canonical sources.[74] Thus it became possible to combine different and dissenting texts on a specific issue, as, for instance, on the election of bishops,[75] in a coherent order, by distinguishing their sense and meaning. This method, supported by the use of commenting *dicta*,[76] paved the way for a strongly analytical approach to the texts of canon law, which were now more dissected in their individual elements. In this regard, Gratian's *decretum* was certainly also inspired by the example of the glossators of Roman Law in Bologna[77] and their methods of teaching,[78] and paved the way for detailed analysis of individual texts. This approach also

[68] See text accompanying n 14 above.

[69] On this kind of collecting, see C. Munier, *Les sources patristiques du droit de l'Église du VIIIe au XIIIe siècle* (1957); for the legal importance of patristic texts in Gratian's *decretum*, see T. Genka, 'Hierarchie der Texte, Hierarchie der Autoritäten: Zur Hierarchie der Rechtsquellen bei Gratian', (2009) 95 *Zeitschrift für Rechtsgeschichte, Kanonistische Abteilung* 101.

[70] For these developments, see C. H. F. Meyer, 'Ordnung durch Ordnen: Die Erfassung und Gestaltung des hochmittelalterlichen Kirchenrechts im Spiegel von Texten, Begriffen und Institutionen', in B. Schneidmüller and S. Weinfurter (eds), *Ordnungskonfigurationen im hohen Mittelalter* (2006) 303; A. Thier, 'Dynamische Schriftlichkeit: Zur Normbildung in den vorgratianischen Kanonessammlungen, (2007) 93 *Zeitschrift für Rechtsgeschichte, Kanonistische Abteilung* 1.

[71] See text accompanying n 16 above.

[72] This assumption is supported by the fact that the term *concordia discordantium canonum* is already present in the so-called first recension of the decretum, cf. A. Winroth, *Decretum Gratiani. First recension,* available at https://sites.google.com/a/yale.edu/decretumgratiani/. For a survey of the recent debates about the complex genesis of the *decretum*, which originated from Winroth's groundbreaking research—above n 16, at 122–45 and *passim*—see A. Winroth, 'Recent Work on the Making of Gratian's Decretum', (2004–6) 26 *Bulletin of Medieval Canon Law* 1 (with a helpful bibliographical survey, at 25–9); C. Larrainzar, 'Métodos para el anàlisis de la formación literaria del Decretum Gratiani: "etapas" y "esquemas" de redacción', in P. Erdö and A. S. Szuromi (eds), *Proceedings of the Thirteenth International Congress of Medieval Canon Law: Esztergom, 3–8 August 2008* (2010) 85, at 85–8.

[73] For a survey on scholastic impacts on medieval jurisprudence, see A. Thier, 'Scholastic Jurisprudence', in MPEPL, above n 3, vol. 2, 1529. For an in-depth discussion, see M. Kriechbaum, 'Methoden der Stoffbewältigung', in M. Kriechbaum and H. Lange, *Römisches Recht im Mittelalter* (2007), vol. 2, 264, at 322–8 and *passim*; see also J. Gordley, *The Philosophical Origins of Modern Contract Doctrine* (1991), at 49–57.

[74] C. H. F. Meyer, *Die Distinktionstechnik in der Kanonistik des 12. Jahrhunderts: Ein Beitrag zur Wissenschaftsgeschichte des Hochmittelalters* (2000).

[75] R. Weigand, 'Das kirchliche Wahlrecht im Dekret Gratians', in G. Köbler and H. Nehlsen (eds), *Wirkungen europäischer Rechtskultur: Festschrift Karl Kroeschell zum 70. Geburtstag* (1997) 1331; S. Chodorow, *Christian Political Theory and Church Politics in the Mid-Twelfth Century: The Ecclesiology of Gratian´s Decretum* (1972), at 189–210.

[76] For an overview, see Landau, above n 16, at 41–2.

[77] See Chapter 7 in this volume.

[78] For the argument that Gratian's method evolved strongly from classroom teaching, see M. H. Eichbauer, *From Gratian's 'Concordia discordantium canonum' to Gratian's 'Decretum': The Evolution from Teaching Text to Comprehensive Code of Canon Law* (Ph.D. Dissertation, Catholic University of Washington, DC, 2010).

shaped the teaching of canon law[79] in the universities, which had now started to spread throughout Europe.[80] So, in teaching as in doctrinal writing, canons and decretals were the subject of permanent analytical discussion, which found its written expression in a fast-growing abundance of literary works. Glosses[81] and summae[82] represented the main types of this new jurisprudential literature. By their textual reference point two groups of authors and their works can be distinguished: the 'decretists' commented on Gratian's *decretum*,[83] while the 'decretalists' were the commentators (and initially collectors) of papal decretal law of the twelfth and thirteenth centuries.[84] In particular, the decretalists formed a large body of jurisprudential doctrines,[85] which would exert a strong influence on the legal traditions of Europe.[86] This was, at least in part, also true for monetary law.

2. Doctrines of Monetary Law

The cornerstones of the canon law doctrines on monetary law were elaborated during the thirteenth, fourteenth, and fifteenth centuries. Even though the most important commentator of the *decretum Gratiani*, Johannes Teutonicus (*c.*1170–1245),[87] discussed some individual aspects of monetary law, a broader discussion of the subject began only after the papacy started to deal with issues in its decretal law. In the course of this dicussion Innocent IV (1243–54)[88] exerted strong influence on further reasoning with his arguments laid out in his commentary on the *Liber Extra*.[89] Henricus de Segusio, called Hostiensis (*c.*1200–71),[90]

[79] For an overview, see A. Thier, 'Canon Law: Courses and Classes', in Katz (ed.), above n 4, vol. 1, 355, at 356–7. For a detailed account, see J. Brundage, 'The Teaching and Study of Canon Law in the Law Schools', in Hartmann and Pennington (eds), above n 17, 98.

[80] H. De Ridder-Symoens (ed.), *A History of the University in Europe*. Vol. 1: *Universities in the Middle Ages* (1992).

[81] R. Copeland, 'Gloss and Commentary', in R. J. Hexter and D. Townsend (eds), *The Oxford Handbook of Medieval Latin Literature* (2012) 171.

[82] H. Zapp, 'Summa (Summula). C. Kanonisches Recht', in *Lexikon des Mittelalters*, vol. 8 (1997) 309.

[83] For an overview, see R. Weigand, 'Dekretisten, Dekretistik', in *Lexikon des Mittelalters*, vol. 3 (1986) 661. For detailed accounts, see K. Pennington and W. P. Müller, 'The Decretists: Italian School', in Hartmann and Pennington (eds), above n 16, 121; R. Weigand, 'The Transmontane Decretists', Hartmann and Pennington (eds), above n 16, 174.

[84] For an overview, see H. van de Wouw, 'Dekretalisten, Dekretalistik', in *Lexikon des Mittelalters*, vol. 3 (1986) 658. For a detailed account, see K. Pennington, 'The Decretalists 1190–1234', in Hartmann and Pennington (eds), above n 16, 211.

[85] R. H. Helmholz, *The Spirit of Classical Canon Law* (1996) presents an excellent overview of a broad spectrum of doctrinal discussions and figures developed by the canonists.

[86] For a general account, see P. Landau, 'Der Einfluß des kanonischen Rechts auf die europäische Rechtskultur', in R. Schulze (ed.), *Europäische Rechts- und Verfassungsgeschichte: Ergebnisse und Perspektiven der Forschung* (1991) 39, repr. in Landau, *Europäische Rechtsgeschichte*, above n 13, 233, at 243–51.

[87] K. Pennington, *Medieval and Early Modern Jurists: A Bio-Bibliographical Listing* (2012), available at http://faculty.cua.edu/pennington/1140a-z.htm#Johannes%20Teutonicus%20(Zemeke). For a recent printed account on Teutonicus' commentary on Gratian's *decretum*, the so-called *Glossa ordinaria*, see R. Weigand, 'The Development of the *Glossa ordinaria* to Gratian's *Decretum*', in Hartmann and Pennington (eds), above n 17, 55, at 82–95.

[88] C. Lefebvre, 'Sinibalde dei Fieschi', in *Dictionnaire de droit canonique*, vol. 7 (1965) 1029; K. Pennington, 'Innocent IV, Pope', in *The New Catholic Encyclopedia*, vol. 7 (2002) 473, available at http://faculty.cua.edu/pennington/InnocentIVBiography.htm.

[89] For a survey on manuscripts and editions, see K. Pennington, *Jurists*, available at http://faculty.cua.edu/pennington/1140a-z.htm#Innocent%20IV. See, in detail, M. Bertram, 'Zwei vorläufige Textstufen des Dekretalenapparats Papst Innozenz IV.', in V. Colli (ed.), *Juristische Buchproduktion im Mittelalter* (2002) 431, repr. in M. Bertram, *Kanonisten und ihre Texte (1234 bis Mitte 14. Jh.): 18 Aufsätze und 14 Exkurse* (2012) 271, at 272–4 and *passim*; see also M. Bertram, 'Angebliche Originale des Dekretalenapparats Innocenz IV.', in S. Kuttner and K. Pennington (eds), *Proceedings of the Sixth International Congress of Medieval Canon Law: Berkeley, California, 28 July–2 August 1980* (1985) 41, repr. in Bertram, *Kanonisten*, 263.

[90] C. Lefebvre, 'Hostiensis', in *Dictionnaire de droit canonique*, vol. 5 (1953) 1211. K. Pennington, 'Henricus de Segusio (Hostiensis)', in K. Pennington, *Popes, Canonists, and Texts 1150–1550* (1993), Art. no. XVI.

Johannes Andreae (*c*.1270–1348),[91] in the fourteenth century, Petrus Ancharanus (after 1330–1416)[92] and his disciple Antonius de Butrio (1338–1408),[93] and in the fifteenth century, Panormitanus[94] were the most important authors in this debate.

The doctrines developed by the canonists evolved in several steps, which will be reconstructed here: the initial point was the analysis of *Quanto personam* by Innocent IV, who was the first in a long line of commentators to establish the argument that, as already indicated,[95] the prince's power over money was limited in terms of procedure and substance. Such a 'constitutional principle' of monetary law, as it might be called, became an essential element of the doctrinal tradition (see Section II.2(i) below). But canonistic doctrine was also—and in terms of quantity, more—about the consequences of currency changes. Beginning with Hostiensis, canonists started to discuss the consequences of devaluation and debasement for monetary obligations. As it will be demonstrated (Section II.2(ii)), several levels of reasoning can be distinguished, which ranged from the case of demonetized money to the situation of changes in the value of an existing currency.

(a) The prince's power over money

Roman law assigned the power to mint money to the emperor, and the glossators of Roman law confirmed this rule.[96] But in the cases of *Quanto personam* and *Olim causam* it was not the emperor but, respectively, the kings of Spain and France who acted. At no point did Innocent III raise any doubt that this power was vested in Peter II or his predecessor. It seems he impliedly accepted a royal *ius cudendi* and thus its contemporary practice.

This principle was generally accepted; as expressed in Petrus Ancharanus' statement, 'the right to mint money is with the kings'.[97] Innocent III, however, had apparently set some limits to this power by using the term *moneta legitimo pondere defraudata* and, moreover, by characterizing the devaluation of coinage by King Peter's father Alphonse as *illicitum*.[98] Early decretalistic commentaries,[99] however, had not focused on the interpretation of the contents of an *illicitum*, but had instead directed their attention to the term *defraudata*. So, they had discussed the sanctions for fraud and the procedures for its persecution. Johannes Teutonicus' *Glossa ordinaria* on the *Compilatio tertia*[100] and the *Glossa ordinaria* on the *Liber Extra* by Bernardus Parmensis[101] had adopted this kind of reading.[102] Given

91 S. Lepsius, 'Johannes Andreae (um 1270–1348)', in *HDR*, above n 6, vol. 2, 1378; G. Tamba, 'Giovanni d'Andrea', in *Dizionario Biografico degli Italiani*, vol. 55 (2001) 667, available at http://www.treccani.it/enciclopedia/giovanni-d-andrea_(Dizionario-Biografico)/.

92 N. Höhl, 'Petrus de Ancharano', in *Lexikon des Mittelalters*, vol. 6 (1993), col. 1962.

93 P. H. Görg, 'Butrio, Antonius de', in *Kirchenlexikon*, above n 30, vol. 30 (2009) 177.

94 See references above n 45.

95 See discussion at n 42 above.

96 Endemann, above n 31, at 171–2; Chapter 7 in this volume.

97 Petrus Ancharanus, *Super secundo Decretalium facundissima commentaria* (Bologna, 1581, copy at the University of Granada library, call no. †2, A7, Aa-Iii6, Kkk3), fo. 279, ad X 2.24.18, no. 5, available at http://hdl.handle.net/10481/9160: 'ad reges spectat cudere monetam'.

98 See above n 37 and the accompanying text.

99 See the glosses, edited by Bisson, above n 37, 317–22 (discussion of these glosses ibid., at 310–2); for an overview, see also Bridrey, above n 38, 325–6.

100 Johannes Teutonicus, *Glossa in Compilationem tertiam*, ad 3Comp. 2.15.4, sub v. *pondere defraudata*, ed. K. Pennington (1981), at 280 (enumerating sanctions and procedural rules for the prosecution of monetary fraud).

101 S. Kuttner and B. Smalley, 'The "Glossa Ordinaria" to the Gregorian Decretals', (1945) 60 *English Historical Review* 97, repr. and augmented by *retractationes* in S. Kuttner, *Studies in the History of Medieval Canon Law* (1990) no. XIII (for *retractationes*, see ibid., at 19–20); S. Kuttner, 'Notes on the Glossa Ordinaria of Bernard of Parma', (1981) 11 *Bulletin of Medieval Canon Law* 86, repr. and augmented by *retractationes* in Kuttner, *Studies*, no. XIV (for *retractationes*, see ibid., 20–1).

102 Bernardus Parmensis, *Apparatus ad Decretales Gregorii IX* (Paris edition, 1501), fo. 151ra, ad X 2.24.18, Gloss sub v. *defraudata*. Cf. also Bisson's discussion of the composition of Bernard's gloss: Bisson, above n 37, 322–3.

the long tradition of ecclesiastical rules against fraud and forgery, which had particularly reached a new stage of development during Innocent III's pontificate,[103] this approach was hardly surprising. Even more remarkable, however, was the fact that Innocent IV turned the canonists' attention in another direction, to the meaning of *legitimum pondus*, in other words, to how the term *illicitum* was to be understood. Innocent answered this question by referring to the term *legitimo pondere defraudari.* He distinguished two cases: in the first, the prince had originally produced coins with a 'certain weight of gold or silver', then later ordered that less of those materials would be used for this coinage, but declared that this new kind of coin should count as money of the same weight as the former money. In the second case, the prince had produced *ab initio* coins with much less 'weight and value' than the 'metal or material' was alleged to have contained, even when the production costs were factored in. Basically, in both cases the 'weight', *pondus*, of the minted coinage was essential to assess the 'value', *valor*, of the coin. So, it might be concluded that in Innocent's argument the dominant view of money was focused on the intrinsic value of coinage. There was, however, an indication of another view on money: Innocent argued that the prince had the right to create (*facere*) 'a little, but not too much value' more than the actual value of the minted coin.[104] This was permitted based on the royal *jurisdictio* and the fact that everything—in this case the coin—received through the image of the king 'a certain kind of authority and communion (*communio scil.* with the royal dignity)'.[105] Walter Taeuber has argued that this part of Innocent's doctrine points to an understanding of money which was shaped by a more abstract perspective on monetary value. In this view, Innocent's doctrine already reflected the emergence of the idea of a *valor impositus*, an issued monetary value.[106] This observation certainly has much merit. The fact remains, however, that this kind of decreed value was expressed by Innocent in the relation of

[103] P. Herde, 'Römisches und kanonisches Recht bei der Verfolgung des Fälschungsdelikts im Mittelalter', (1965) 21 *Traditio* 291, at 323–37; P. Herde, 'Die Bestrafung von Fälschern nach kirchlichen und weltlichen Rechtsquellen', in *Fälschungen im Mittelalter: Internationaler Kongreß der Monumenta Germaniae Historica München, 16.–19. September 1986* (1988), vol. 2, 577; see also C. Duggan, 'Improba pestis falsitatis': Forgeries and the Problem of Forgery in Twelfth-Century Decretal Collections (with Special Reference to English Cases)', in *Fälschungen im Mittelalter*, 319.

[104] Innocent IV (Sinibaldus Fliscus), *Apparatus super quinque libros Decretalium* (Strasbourg, 1478, copy at the Bavarian State Library, call no. 2Inc.s.a.152), n.p., ad X 2.24.18, gloss sub v. *legitimo pondere*, available at http://daten.digitale-sammlungen.de/~db/0007/bsb00074654/image_518:

> De legitimo pondere fraudari dicitur moneta quando ordinatum fuit a principio ut certum pondus auri vel argenti ponderetur in qualibet moneta sed postea minus auri vel argenti apponi mandari & tamen monetam expendi mandavit ac si eiusdem ponderis esset (.) & hoc idem credimus etiam si ab inicio fecit multo minoris ponderis et valoris quam valet metallum vel materia unde sit fabrorum & aliis expensis necessariis & utilibus exinde deductis. credimus tamen . . . aliquantulum, sed non multis minoris valoris possit eam facere quam sit metallum et materia.

This text reveals the problems of the usually used Venice edition of 1570 of Innocent's *commentaria* (repr. in 2008), which have been stressed by Bertram, 'Textstufen', above n 89, at 271: the Venice edition (ibid., at 343) reads 'aliquantulum, sed ___ multis minoris valoris possit', leaving out the word *non* (thus distorting the meaning of this statement). It is interesting to see that this mistake appears already in the Venice edition of 1495 (cf. the copy held by the Bavarian State Library, call no. 2 Inc.c.a. 3103 i [non-paginated], available at http://daten.digitale-sammlungen.de/~db/0004/bsb00048655/image_213).

[105] Innocent IV (Strasbourg edition), above n 104: '. . . propter jurisdictionem et propter hoc quod a persona vel charactere regis aliquam auctoritatem et communionem recipit'. The connection between the image of the king on a thing and the special state of authority of such a thing might be explained by the idea of Distinctio 88 cap. 11 § 5 (see *Decretum Gratiani*, quoted in n 31 above) and the basic idea of the image of a king as representation of the king himself (a concept which was, at least in Distinctio 88 cap. 11 § 5, equated with the idea of the *imago dei*). It should be noted here, too, that this kind of approach appears to be a typical example of a medial strategy, which has been described as 'auratization': see the contributions in U. Beil, C. Herberichs, and M. Sandl (eds), *Aura und Auratisierung: Mediologische Perspektiven im Anschluss an Walter Benjamin* (2014). For the interpretation of Innocent's commentary see Bridrey, above n 38, at 326–7; Dondorp, above n 38, at 422; Taeuber, above n 35, at 260–1; see also Wittreck, above n 38, at 117–8.

[106] Taeuber, above n 35, at 260–1.

different weights and materials. So, it might be said that the intrinsic aspects of money value literally had more weight in Innocent's concept. Nevertheless, he conceded that the prince also had the power to devalue initially good money (i.e. *moneta legitimo pondere*). If the prince intended to devalue money already in circulation, he was allowed to proceed in that way after he had gained the *consensus populi*, because the people of his reign could exercise its 'right' (*ius*).[107] It might be that Innocent IV at this point referred also to a phrase used by Innocent III, who had reported in his decretal that Peter II took his oath without the consent of his people (*irrequisitu assensu populi*).[108] But this term had been without any normative importance in the decretal. For Innocent IV, however, this participation was essential. He probably had in mind the economic consequences of devaluations, which in fact caused losses in value for all participants in the economic process who were affected by this measure. But, as Innocent added, even with the consent of his people the prince was not allowed to devalue money affecting areas and people *extra regnum*.[109] The prince and the people were not able to exercise the rights of another people outside the realm. This idea of a territorialized monetary power reflected the rise of the concept of territorial sovereignty. This had received strong support from the famous decretal *Per venerabilem* of 1202 which argued that each 'king does not accept a superior in temporal affairs'.[110] Moreover, it might be added that Innocent applied a very common canonistic combination of the majority rule and the concept of the *universitas*[111] as a legal entity which was able to act by the will of the majority of its members.[112]

The first canonist to adopt and at the same time refine Innocent's argument was Hostiensis. In his summa, finished around 1253,[113] and in his commentary on the decretals which was finished in its second version around 1271,[114] the influential canonist shaped the legal limitation of the prince's power over money, as it had been introduced by Innocent:[115] in his summa, Hostiensis stated unmistakably, 'he, who changes (coinage) for secular gain to the disadvantage of the people, will be held liable for compensation, even if he should be king . . . so the kings should be careful, when they change money, because they will be put

[107] Innocent IV, (Strasbourg edn), above n 104, ad X 2.24.18, gloss sub v. *legitimo pondere*: 'Unde sit in primo autem casu, . . . quando factam vult minuere non credimus, quod hoc possit eum sine consensu populi; sed cum eius assensu credimus quod possit, cum sit licitum cuicumque renuniciare iuri suo.'

[108] Friedberg, above n 37, at 365.

[109] Innocent IV, (Strasbourg edn), above n 104, ad X 2.24.18, gloss sub v. *legitimo pondere*: 'Item non credimus sufficere consensum populi ut illa moneta communiter expendatur extra regnum.'

[110] Po. 1794, 3Comp. 4.12.2, X 4.17.13, in Friedberg, above n 37, at 714–6: 'rex superiorem . . . in temporalibus minime recognoscat'. On the importance of this decretal for the evolution of the sovereignty concept, see H. G. Walther, *Imperiales Königtum, Konziliarismus und Volkssouveränität: Studien zu den Grenzen des mittelalterlichen Souveränitätsgedankens* (1976), *passim*.

[111] Innocent IV, (Strasbourg edn), above n 104, ad X 2.24.18, gloss sub v. *legitimo pondere*: 'quia negotium regis negocium universitats reputatur, ideo sufficiet consensus maioris partis maiorum regni'. The term *maiorum regni* refers to the nobility and might be also linked to the idea of the *sanior pars* and its decisive vote, which was widespread in the canon law discourse since around the twelfth century (cf. on this aspect Helmholz, above n 85, at 52–5).

[112] On this concept, see O. Condorelli, *Principio elettivo, consenso, rappresentanza: itinerari canonistici su elezioni episcopali, provvisioni papali e dottrine sulla potestà sacra da Graziano al tempo della crisi conciliare (secoli XII–XV)* (2003), at 33–97.

[113] On the manuscript tradition, see K. Pennington, 'A "Quaestio" of Henricus de Segusio and the textual tradition of his *Summa super decretalibus*', (1986) 16 *Bulletin of Medieval Canon Law* 91.

[114] On the textual traditions of Hostiensis' *lectura*, see K. Pennington, 'An Earlier Recension of Hostiensis's *Lectura* on the Decretals', (1987) 17 *Bulletin of Medieval Canon Law* 77; M. Bertram, 'Handschriften und Drucke des Dekretalenkommentars (sog. Lectura) des Hostiensis', (1989) 75 *Zeitschrift für Rechtsgeschichte, Kanonistische Abteilung* 177, repr. in Bertram, *Kanonisten*, above n 89, 319.

[115] E. Stampe, *Das Zahlkraftrecht der Postglossatorenzeit (Abhandlungen der Preussischen Akademie der Wissenschaften, philosophisch-historische Klasse, Jahrgang 1928)* (1928), at 40, appears to attribute this idea to Hostiensis.

under obligation by God and in the court of penitence ... if this change is not approved by the people, which is affected'.[116] The background to this statement was the rule 'that no one should gain profit from his office nor inflict damage', as Hostiensis later put it in his commentaria.[117] It was also here that he discussed different cases of monetary fraud. He made clear that 'fraud is committed ... by those who hold the power over the land ruling it by themselves, if they produce coinage of diminished value (*minoris valoris*) and force to acceptance it alongside money of greater weight (*moneta maioris ponderis*)'.[118] Another type of fraud was committed when the prince demonetized strong currency, but kept another currency with equal or slightly lesser value. This resulted in a 'good market' (*bonum forum*) for the demonetized coins, which were then purchased by the prince for a modest price and afterwards recoined with the initial or even less weight.[119] But this enumeration of abuses of monetary power was not exhaustive. In fact, it was crucial for Hostiensis that 'in all these and in similar cases ... money is forged', inflicting damage to the people.[120] From this perspective, the ban on fraud was used as a limitation against any kind of unilateral monetary intervention by the prince intended to produce fiscal profits.

In the further discourse this concept was broadly adopted. Johannes Andreae's approach was typical in this regard, as he was by and large merely reporting Innocent's and Hostiensis' arguments.[121] In Petrus Ancharanus' commentary, the rising influence of the famous rule, *quod omnes tangit est ab omnibus approbare*,[122] in the learned discourse[123] was revealed: the Tuscan canonist included the reference to *quod omnes tangit* in the arguments for the rule that 'a superior cannot inflict causeless damage to his subjects

[116] Hostiensis (Henricus de Segusio), *Summa* (Lyon, 1537, repr. 1962), fo. 182^{vb}, ad X 3.29, no. 8 (see also Stampe, above n 115, at 41–2):

> is qui mutavit pro lucro temporali in gravamen populi, tenetur ad satisfactionem, etiam rex sit ... caveant ergo sibi principes [Stampe reads here 'principos'] mutantes monetam. nam apud deum et in foro poenitentiali astringuntur ... nisi forte fiat populo cuius interest approbantur.

It might be added here that Hostiensis made an exception to this rule of necessary consent for the Roman emperor, and discussed the same exception for the "rex francie" referring to the decretal *Per venerabilem* (see text accompanying n 110 above). However, although Hostiensis agreed to the basic principle of this decretal, he demanded, however, that the *populus sibi eadem potestatem dederit quae imperatori data est* (Hostiensis, *Summa*, fo. 182^{vb}, ad X 3.29, no. 8); so, apparently, Hostiensis re-introduced a distinction between imperial and royal power at the level of monetary rights: the emperor's power had a special quality, because he—contrary to all other kings—did not need the consent of the people if he wanted to change the currency.

[117] Hostiensis (Henricus de Segusio), *Commentaria et lectura in Decretalibus* (Venice edn, 1581; repr. 2009), fo. 130^{rb}, X 2.24.18 sub v. *legitimo pondere*, no. 3: '... ex officio nec compendium habeat, nec etiam damnum incurrat'. On the Venice edition of 1581, see Bertram, 'Handschriften', above n 114, at 338–41.

[118] Hostiensis, above n 117, fo. 130^{rb}, ad X 2.24.18 sub v. *legitimo pondere*, no. 3: 'Per illos ... qui tenent dominium terre & ipsam regnant fraudatur quando monetam minoris valoris faciunt et cogunt recipi cum moneta maioris ponderis.'

[119] Ibid., fo. 130 $^{rb–va}$: '... quando bonam ... monetam reprobant (scil. domini terre) & aliam et aequivalentem ... & minoris approbant, ut de [re]probata habeant bonum forum, & postmodum ipsam conflari faciant & cudi in eodem ponderi, vel etiam minoris sub caractere approbate monete.' On these kinds of currency interventions, see Spufford, above n 1, at 289–90.

[120] Hostiensis, above n 117, fo. 130va: '... in quibus omnibus casibus & similibus ... fraudari moneta'.

[121] Johannes Andreae, *In Decretalium librum novella Commentaria, in secundum librum* (Venice, 1612, copy at the Bavarian State Library, call no. 2 J.can.u. 8 m-2), fo. 189^{vb}–190ra, ad X 2.24.18, sub v. *legitimo pondere*, nos. 4–6, available at http://reader.digitale-sammlungen.de/resolve/display/bsb10489395.html.

[122] Cf. C. 5.59.5.2: 'Tunc etenim, sive testamentarii sive per inquisitionem dati sive legitimi sive simpliciter creati sunt, necesse est omnes suam auctoritatem praestare, ut, quod omnes similiter tangit, ab omnibus comprobetur.' This rule was transformed in a general maxim of political participation by Boniface VIII in his *liber sextus*, VI 5.12.29: 'quod omnes tangit debet ab omnibus approbari'.

[123] G. Post, 'A Roman-Canonical Maxim, Quod omnes tangit, in Bracton', (1946) 4 *Traditio* 197, augmented repr. in G. Post, *Studies in Medieval Legal Thought, Public Law and the State* (1964) 163; Y. Congar, 'Quod omnes tangit, ab omnibus tractari et approbari debet', (1958) 36 *Revue historique de droit français et étranger* 210; A. Marongiu, 'Il principio della democrazia e del consenso (quod omnes tangit, ab omnibus approbari debet) nel XIV secolo', (1962) 8 *Studia Gratiana* 555.

without their consent'.[124] Following Johannes Andreae, Petrus Ancharanus also discussed another limit on the permissible devaluation of coins with popular consent by adding the remark that the prince was allowed to devalue 'if he is in need of money'.[125] It appears, however, that this additional limitation may not always have been accepted by the other canonists: Antonius de Butrio confined himself to reporting Innocent's and Hostiensis' doctrine without adopting Johannes Andreae's and Petrus Ancharanus' idea.[126] Panormitanus agreed with this approach.[127] He, however, introduced another innovative principle to the debate. Discussing the necessity of the people's consent to a debasement of money, Panormitanus objected to Innocent's application of the majority rule, because such action would potentially damage individual persons,[128] so that a decision by majority would be impossible. On the other hand, Panormitanus defended Innocent's argument, against objections raised by Bartolus, that the prince was allowed to deduct the production costs from the value of new coin: Bartolus had argued that the production costs for new coin had to be considered as something paid by the community, and not by the prince. As a consequence, the prince could not factor these costs into the value calculation of new coin.[129] Panormitanus, however, argued that *de consuetudine* the opposite principle would be in use; therefore Innocent's rule had to be observed.[130] This reference to custom might be seen as an indicator that the rules had definitely been established as legal custom, owing in particular to the development by Innocent IV and Hostiensis. It was telling in this regard that Martinus Garatus Laudensis (around 1410–53)[131] observed that the canonists' 'opinio est de consuetudine approbata', 'approved by legal custom'.[132] This statement applied, however, to the general principles of the prince's limitations in monetary power. Laudensis, for instance, summarized the canonists' consensus that the prince was entitled to produce coinage of slightly less value, 'quam esset materia cum deductis expensis'. He also agreed with the argument that the prince was not allowed to change currency 'sine consensu populi', even though Laudensis considered it possible that this consent could be dispensed with if the prince used to make these changes without participation of the people.[133]

[124] Petrus Ancharanus, above n 97, fo. 279, ad X 2.24.18, no. 2: '... quod praeiudicium inferre non potest superior sine causa absque subditorum consensu'.

[125] Ibid., fo. 280, no. 8: '... si est inops moneta'. Johannes Andreae had already used a similar formula, 'if he is needy' (*si indiget*), cf. Andreae above n 121, fo. 190ra, ad X 2.24.18 sub v. *legitimo pondere*, nos. 4–6.

[126] Cf. A. de Butrio, *Lectura super secundo libro decretalium* (Venice, 1503, copy at the Colegio Mayor de San Ildefonso (Alcalá de Henares), call no. ant. pos. BHI BH DER 3205), fo. 89^{vb}–90ra, ad X 2.24.18, available at http://books.google.ch/books/ucm?id=LWMNoEZWBhUC&hl=de&pg=PP1#v=onepage&q&f=false. In this regard, Stampe, above n 115, at 106, tends to overestimate Antonius's contribution when describing it as a 'teilweise ... systematisch gegliederte Darstellung'; Antonius adopted this kind of systematic account from his predecessors.

[127] Panormitanus, *Opera Omnia*. Vol. 4: *Commentaria in Secundum Librum Decretalium* (Venice, 1588), fo. 211ra, ad X 2.24.18, no. 11. Panormitanus, after reporting the formula *si indiget* (cf. also Andreae above n 121), concluded, 'hoc verum (est)', 'this is true', and then introduced the exception that such kind of debasements could not apply to currency floating *extra regnum*.

[128] Panormitanus, above n 127, fo. 211ra, ad X 2.24.18, no. 11: 'Sed ego de hoc (scil. Innocent's argument) dubito, cum tractetur de praeiudicio singulorum.'

[129] On this argument, see Endemann, above n 31, at 177; Chapter 7 in this volume.

[130] Panormitanus, above n 127, fo. 211ra, ad X 2.24.18, no. 11: 'Fatetur tamen, quod de consuetudine servatur contrarium, & dic, quod servatur dictum Inn(ocentis) tam in expensis quam in modico lucro.'

[131] I. Baumgärtner, *Martinus Garatus Laudensis: Ein italienischer Rechtsgelehrter des 15. Jahrhunderts* (1986).

[132] Martinus Garratus (sic) Laudensis, 'Tractatus de monetis', no. 6, in G. A. Tesauro (ed.), *De monetarum augmento, variatione et diminutione tractatus varii* (Turin, 1609, copy at the Bavarian State Library, call no. 4 Num.ant. 180) 55, at 58, available at http://reader.digitale-sammlungen.de/resolve/display/bsb10685087.html. On the transmission of this treatise in manuscripts and early prints, see Baumgärtner, *Laudensis*, at 347, above n 131, a short survey on this treatise.

[133] Martinus Garratus Laudensis, 'Tractatus de monetis', no. 7, and see nos. 7–8, in Tesauro (ed.), above n 132, 59.

The spread of the canonistic doctrine throughout the late middle ages and the early modern period can be traced though the treatises on the politics, the policy, and the law of money of the fifteenth and sixteenth centuries. The reason for this success was not so much the authority of names like Innocent and Hostiensis. Rather, the canonists' argument for the necessary consent of the people in currency changes conceptualized the participation of the estates in the prince's power over money, which became a highly contested issue in the thirteenth, fourteenth, and fifteenth centuries.[134] As one of the consequences of these conflicts, in treatises like Nicholas Oresme's (*c*.1320–82)[135] *Tractatus de Origine, Jure, et Mutacionibus Monetarum*[136] or Gabriel Biel's (d. 1495)[137] *De Monetarum Potestate, et Utilitate Libellus*,[138] the canonists' doctrine was expanded to a general argument against fiscally motivated debasements. So, the idea that money belonged to the community, as Oresme elaborated it,[139] and that the prince was obliged to compensate for the damage inflicted on the community by his monetary fraud, as demanded by Biel,[140] enhanced the canonistic doctrine,[141] which was, tellingly, referred to frequently in Biel's treatise.[142] But the medieval tradition remained stable in canon law jurisprudence of the early modern period, even though the rise of the sovereign power of the prince was becoming ever more obvious: Agostinho Barbosa (1590–1649),[143] commenting on *Quanto personam*, agreed to the necessity of the people's consent, even though he did not report the complex exemptions from this rule.[144] In Emanuel González Téllez (d. 1649),[145] however, the medieval tradition appeared to erode slightly under the impact of the sovereignty doctrine: the prince's monetary rights were attached to his sovereignty, for 'the supreme power to coin and to change money has been said by many to be attributed to the prince . . .'.[146] The idea that the prince was bound by the people's consent in the use of this supreme right

134 P. Spufford, 'Assemblies of Estates, Taxation and Control of Coinage in Medieval Europe', in *Studies presented to the International Commission for the History of Representative and Parliamentary Institutions* (1966), vol. 31, 115; Spufford, above n 1, at 301–18.

135 For a survey, see P. Bourgain, 'Oresme, Nicole, I. Leben und Werk', in *Lexikon des Mittelalters,* vol. 6 (1993) 1447.

136 See *The* De Moneta *of Nicholas Oresme and English Mint Documents*, ed. C. Johnson (1956), at 1–48.

137 M. Schulze, 'Biel, Gabriel', in *Lexikon des Mittelalters*, vol. 2 (1983) 127. See further Chapter 5 in this volume.

138 Printed, inter alia, in Tesauro (ed.), above n 132, at 1.

139 On this idea and its conceptual background in Oresme, see C. J. Nedermann, 'Community and the Rise of Commercial Society: Political Economy and Political Theory in Nicholas Oresme's *De moneta*', (2000) 21 *History of Political Thought* 1. For Oresme's adoption of scholastic traditions in his monetary doctrine, see A. Lapidus, 'Metal, money, and the prince: John Buridan and Nicholas Oresme after Thomas Aquinas', (1997) 29 *History of Political Economy* 21, available, with updates, at <http://econpapers.repec.org/RePEc:hal:journl:hal-00344926>.

140 G. Biel, 'De monetarum potestate, et utilitate libellus', conclusio 2, in Tesauro (ed.), above n 132, at 5: 'Mutans monetam in damnum Reipublicae, tenetur damnum restituendo compensare.'

141 For both approaches in detail, see H. Mäkeler, 'Nicolas Oresme und Gabriel Biel: Zur Geldtheorie im späten Mittelalter', (2003) 37 *Scripta Mercatura* 56.

142 Cf. Biel, above n 140, 'et utilitate libellus', at 2, 4, 7, 8, 9, 10: in particular, Biel frequently referred to Hostiensis, Panormitanus, and Innocent IV.

143 L. Sinisi, 'Le "imprudenze" di un grande canonista della prima metà del Seicento: Agostinho Barbosa e la Congregazione dell'Indice', in *Itinerari in comune: Ricerche di storia del diritto per Vito Piergiovanni* (2011) 307.

144 A. Barbosa, *Collectanea Doctorum, Tam Veterum Quam Recentiorum, In Jus Pontificium Universum* (Lyon, 1716, copy at the Bavarian State Library, call no. 2 J.can.u. 29-1/2), vol. 1, at 589–90, ad X 2.29.18, no. 3 sub v. *irrequisito populi*, available at http://reader.digitale-sammlungen.de/resolve/display/bsb10628606.html: 'Ergo Princeps absque populi assenso, vel sine justa causa moneta non mutare.'

145 K. Pennington, 'Sovereignty and Rights in Medieval and Early Modern Jurisprudence: Law and Norms without a State', in H.-G. Justenhoven and J. Turner (eds), *Rethinking the State in the Age of Globalisation: Catholic Thought and Contemporary Political Theory* (2003) 117, at 126–36.

146 E. Gonzaléz Téllez, *Commentaria perpetua in singulos textus quinque librorum decretalium* (Venice, 1699, copy at the Bavarian State Library, call no. 2 J.can.u. 213–2), vol. 2, at 438, ad X 2.29.18, sub v. *assensu populi*, no. 3, available at http://www.mdz-nbn-resolving.de/urn/resolver.pl?urn=urn:nbn:de:bvb:12-bsb10489718-5: '. . . ad Principis suprema potestatem spectare cudere, ac mutare monetam, pluribus . . . docuerunt'.

contradicted this concept of supremacy. So González Téllez turned against the traditional doctrine regarding the necessity of popular consent to monetary changes: 'The opposite is more correct, namely that the royal powers refer to the power to coin and to change money'.[147] The only acceptable limitation on this power remained rather vague, as González Téllez pledged the prince to keep monetary changes only within the limits of 'just weight' (*intra iustum pondus*).[148]

(b) Monetary changes and money debts

It has been argued that the limitations on the prince's monetary power were comparatively weak, because even a violation of the rules, described above, would have had no impact on the legal validity of the altered money.[149] In fact, there were no statements about the sanctions for kings and princes breaching the rules. This absence of explicit sanctions did not mean that there were no consequences at all. The deliberate use of counterfeit money was judged to be a crime.[150] At least in principle, then, the parties of monetary obligations were not allowed to tender or to receive coins whose production constituted monetary fraud by the prince. As a consequence, the use of counterfeit money had no liberating effect on debts.[151]

But apart from this more or less rare situation the general impact of currency changes on the performance of monetary obligations was of special importance for the canonists: as mentioned before, the majority of the decretals dealt with cases of annuities, which usually had a long duration. It was particularly obvious in the context of such obligations (e.g., tithes, *pensiones,* leases) that a change in currency and its consequences for monetary value could have serious economic consequences for all parties. So, essentially starting with Hostiensis, canonists developed a doctrinal arrangement of rules and principles. As a result, the jurisprudence of canon law also adopted the legists' approaches and, indeed, more so than on the issue of legal limitations of the prince's monetary power. In this way, a complex of doctrines came to existence, in which, as Prospero Fagnani noted in the seventeenth century, 'the variety of opinions is huge'.[152] As the following account will demonstrate, apart from the normative substance of the papal decretals, the evolution of the basic rules for these cases was essentially influenced by the canonists' interpretation of monetary value, where the legists' interpretations became more and more important (below i). The rules that developed concerning contractual monetary obligations were, at least in part, expanded beyond contracts and annuities to other kinds of money debts, such as last wills or debts imposed by statutes or judicial acts (below ii). With their concept of prescription

[147] Ibid., at 437: 'Sed contrarium verius est, scilicet inter iura regalia referendum esse ius cudendi, mutandique monetam.'

[148] Ibid., at 440, no. 11. [149] Endemann, above n 31, at 190.

[150] For an overview, see Martinus Garratus Laudensis, 'Tractatus de monetis', no. 11, in Tesauro (ed.), above n 132, at 60.

[151] Similar perspective in Stampe, above n 115, at 61 and 121.

[152] *Commentaria In Primam Partem Tertii Libri Decretalium* (1661), at 272, ad *Olim causam* (X 3.39.20), no. 2: '. . . in hac materia ingens est opinionum varietas'. For a survey of perspectives, arguments, and concepts, see A. Gabrielli, *Communes conclusiones et opiniones*, on *De solutionibus et liberationibus III* (Frankfurt, 1616, copy at the Bavarian State Library, call no. 2 Decis. 351–1/2#Beibd.1), at 275–82, conclusions 1–7, available at http://reader.digitale-sammlungen.de/resolve/display/bsb10811016.html. On this kind of literature (collections of *sententiae*) in the context of early modern jurisprudence, see E. Holthöfer, 'Die Literatur zum gemeinen und partikularen Recht in Italien, Frankreich, Spanien und Portugal', in H. Coing (ed.), *Handbuch der Quellen und Literatur der neueren europäischen Privatrechtsgeschichte.* Vol. 2.1: *Neuere Zeit (1500–1800). Das Zeitalter des gemeinen Rechts–Wissenschaft* (1977) 103, at 418–9 with further references.

for monetary changes, however, canonists took a new approach (below iii). The canonists' ideas also appeared to find their way into the practice of the *ius commune* (below iv).

(i) Changing views on *valor monetae* and the distribution of currency risks between creditor and debtor

In an economic environment shaped by a huge variety of coinage, the question of convertibility was essential for the functioning of commercial transactions. It was against this background that both canonists and legists maintained as a basic principle that it was legally possible to pay debts in a different coinage. So, when Antonius de Butrio raised the question, 'if [an obligation] can be fulfilled against the creditor's will by one coin (*moneta*) instead of the other', he gave the answer, 'the creditor is obliged to accept' this kind of payment.[153] Hostiensis applied this rule to the debtor stating that the creditor 'must not claim payment from the debtor in another coinage to his disadvantage'.[154] These statements, however, described only a general rule.[155] The normative basis for its validity was formed by the idea of customary law.[156] Correspondingly, the canonists approved the legists' idea in this regard of a *consuetudo loci*,[157] which could apply even when the creditor would suffer losses by the acceptance of the coinage chosen by the debtor.[158] In general, however, this kind of damage suffered by the creditor limited the possibility of the debtor unilaterally choosing the coinage, because the creditor was 'not to be injured in such a way that his wealth is diminished', as Antonius de Butrio put it.[159] Moreover, the parties to contractual obligations were perfectly free to stipulate specific coinages as a reference point for the performance of the contract. So they could, as Hostiensis put it, agree to pay 'money (*pecunia*) of the same material, the same value and weight and at the same rate'.[160]

The term 'value and weight' in this statement was an indication of the predominant perspective on monetary value in the canonists' discourse around the middle of the thirteenth century: at this time, the value of money was assessed mainly by its substance and thus by the intrinsic value of the coinage. But, as demonstrated above, this idea was perceived merely as an exception to the basic rule that the prince was bound to a *pondus legitimum* of coinage. This approach would change only after the introduction of the *libra* system with the *aestimatio* and the *valor impositus* imposed as instruments of public monetary policy.[161] In this perspective, two steps in the evolution of the canonists' doctrines on money debts can be distinguished, with a strong focus on *pondus monetae* during the first stage and an increasing focus on the *bonitas extrinseca* in the second stage. Both phases had, however, one question in common, which formed the starting point for all doctrinal

[153] De Butrio, above n 126, fo. 90^{vb}, ad X 2.24.18: '... an invito creditore alia pro altera moneta possit solvi ... creditor compellitur recipere'.

[154] Hostiensis, above n 117, fo. 130^{va}, ad X 2.24.18 sub v. *legitimo pondere*, no. 4: '... nec debet exigere a debitore, ut cum damno sui in aliam formam solvat'.

[155] As general legal rule with reference also to the legists' doctrines expressed in Martinus Garratus Laudensis, 'Tractatus de monetis', no. 5, in Tesauro (ed.), above n 132, at 58: 'quod una pecunia possit solvi pro alia'.

[156] On the doctrine of free convertibility as a kind of global legal custom in the legistic discourse, see Endemann, above n 31, at 213–7; Taeuber, above n 35, at 270–1, with further reference.

[157] As survey on Bartolus' arguments, which were dominating in this regard, see Stampe, above n 115, at 46–7, which also includes Bartolus' statements.

[158] See, e.g., Johannes ab Imola, *In Decretalium Commentaria, prima super Secundo Decretalium* (Venice, 1575), fo. 158^{va}, ad X 2.24.18, no. (1)9: 'nisi consuetudo loci haberet'.

[159] de Butrio, above n 126, fo. 90^{vb}, ad X 2.24.18: '... non damnificetur: ita quod diminuatur eius patrimonium'.

[160] Hostiensis, above n 117, fo. 130^{va}, ad X 2.24.18, sub v. *legitimo pondere*, no. 4 (with regard to loans): '... faciunt apponi in instrumento quod sibi reddatur pecunia eiusdem materie & eiusdem valoris & ponderis & in eodem cursu'.

[161] Taeuber, above n 35, at 251–76; for a short overview, see Stampe, above n 115, at 6–7.

debates and which reflected the dynamics of the monetary economy in the period from the late thirteenth to the fifteenth centuries: This was the question of how to allocate potential losses (and to a certain extent also potential gains) caused by alterations of coinage and its rates between the parties to monetary obligations. In order to provide a solution to this question, canonists discussed different dimensions of currency changes and asked how the changing monetary environment would influence the contents of the debtor's duty of payment.

In the twelfth century a singular early gloss had argued in favour of the debtor in claiming that 'if stronger coin circulated first and now lighter coin is circulating by order of the prince: I shall be freed from my obligation by paying with the light one'.[162] It appears as if the power of the prince led to the result that the use of lighter money was possible, since the payment with this kind of money had in effect been ordered by the prince.[163] But in the ongoing discourse of decretists and early decretalists, the argument became dominant, as a gloss on *Olim causam* expressed it, that 'it must be performed at the old rate, not at the new one, and by old money, even though the new one might be better'.[164] It was a telling indication of the weakness in the older position that the reference to the prince's command had vanished in Guido de Baysio's (1250–1313)[165] account of Gratian's *decretum*.[166] It might be that—apart from the conflicting rule in *Olim causam*—the limitation on the prince's monetary power, as discussed above, had weakened the position of the early glossator.

It was not, however, the above-mentioned gloss on *Olim causam*, but, again, Hostiensis, who set the basic standards for all further discussions and who represents the doctrinal positions of the first stage. In commenting on *Quanto personam* he distinguished between three different types of debasement. Given the importance of weight and material for the value of coin, it did not come as a surprise that Hostiensis referred to a *reprobatio ex materia*—if the coin was not 'whole in silver or gold as it used to be'—and a *reprobatio ex pondere*. He added, however, a third case, a *reprobatio ex cursu,* when coin 'does not run or is not accepted as it used to be (*sicut consuevit*)'.[167] Analysing the consequences of this kind of *reprobatio* for money debts, Hostiensis referred in a first step to contractual clausula, which guaranteed the creditor payment *eiusdem materie & eiusdem valoris & eiusdem cursus*. In the absence of such clauses, however, Hostiensis distinguished two cases: in the first the devaluation was nothing more than an adjustment to the deterioration of coinage under the *pondus legitimum* caused by its ordinary use. Here, the debtor had to bear the risk of this devaluation, *periculum est debitoris & non creditoris*: he had to pay with coin of that value, which existed at the time of the formation of the contract.[168] Hostiensis referred particularly to *Olim causam* in this regard.[169] As mentioned, this decretal had put the

[162] Anonymous gloss as cited in the *Glossa ordinaria* (Venice edn, 1504) on Gratian, Causa 32 quaestio 4 cap. 6, sub v. *tempori nostro*, fo. 506va: 'quod si primo currebat fortior moneta et modo currit vilior de mandato principis liberor solvendo viliorem'. For a slightly different translation of this text, see Ernst, above n 35, at 241.

[163] Similar view in Ernst, above n 35, at 241–2, focusing on a potentially 'nominalist position'.

[164] Vincentius Hispanus, Gloss ad 3Comp. 3.37.3, Ms Bamberg, can. 20, fo. 161^{r}, edited by Taeuber, above n 35, at 227–8 and fn 652: '…ad veterem mensuram solvendum est, non ad novam, et ad veterem monetam, licet nova melior sit…'; on this gloss and similar interpretations, see Dondorp, above n 38, at 427–9, and Taeuber, above n 35, at 238–40.

[165] F. Soetermeer, 'Guido de Baysio', in *Kirchenlexikon*, above n 30, vol. 22 (2003) 466.

[166] G. de Baysio, *Rosarium sive enarrationes super decreto* (Lyon, 1559, repr. 2008), fol. 347va, ad Causa 32 quaestio 4 cap. 6, where this argument is not mentioned any more.

[167] Hostiensis, above n 117, fo. 130va, ad X 2.24.18 sub v. *legitimo pondere*, no. 4: 'moneta tribus modis consuevit reprobari (scilicet) ex materia, quia non est tota argentea vel aurea, ut consuevit, & ex pondere quo defraudata est, & ex cursu, quia non currit nec recipitur sicut consuevit'.

[168] Ibid, fo. 130va, no. 5.

[169] See Friedberg, above n 37, at 631.

obligation on the debtor to pay in that currency which existed at the time when the debt had been constituted. The second case discussed by Hostiensis demonstrates the impact of the rules on the limitations of the prince's monetary power: Hostiensis referred to the situation of monetary fraud committed by the prince. If he demonetized coinage in order to gain revenues (by receiving the former coinage at very low prices and producing new coins with its metal), then the debtor was allowed to pay with coinage 'of the same kind with the same weight and the same value regarding the weight, even though it has been diminished with respect to the rate'. Only if the debtor was aware of the prince's fraud or *in culpa* did he have to bear the risk of this kind of intended devaluation.[170] In this case, he had to tender coinage of the former (better) rate. Hostiensis' approach was adopted by Johannes Andreae[171] and also remained an important reference in the further discussion.

Nevertheless, the introduction of gold coinage and the *libra* system[172] with its connection of *grossa* and *minuta*, the beginning of the contraction in the bullion supply,[173] and the 'scourge of debasement' of the fourteenth and fifteenth centuries[174] all posed new challenges for jurisprudential reasoning on money debts. With new means of monetary operation coming into existence the relation between different coinages—and thus the currency rates—gained additional importance. This was even more true as communal and territorial superiors frequently decreed specific values of money. As a consequence the external value, *bonitas extrinseca*, decreed by superiors as *valor impositus* or determined by the market, developed a strong significance in addition to the indicators of weight and material which already existed.[175]

These developments were increasingly mirrored not only in the legists' discourses,[176] but also in the doctrines of the canonists, in which by this stage the *valor monetae* was also discussed from the perspective of external value indicators. Petrus Ancharanus was one of the early representatives of this kind of approach, if not the first. It might have been already indicative of this expansion of the doctrinal scope that Petrus Ancharanus used the word *valor pecuniae* instead of *pondus monetae* when he raised the question whether, 'when the value of coinage has been diminished,... the debtor tendering this dimished coin is liberated from the creditor who declines to accept this [diminished coin)]'[177] Petrus distinguished here between a devaluation *in qualitate extrinseca*, where the debtor had to pay with former money, and the situation where *qualitas* and *quantitas* were the same, but the *aestimatio* was decreased. For this situation Petrus Ancharanus preferred a distinction, which went by the criteria of default: the defaulting party had to bear the risk of devaluation. As a consequence, 'if the creditor was in default of acceptance, and the florin has a higher value now... the debtor is not obliged to render florins at this higher rate (*aestimatio*)'.[178] In this argument the perception of money and coinage had apparently widened: the

170 Hostiensis, above n 117, fo. 130va, nos. 5–6 (see ibid., no. 6: 'reddat pecuniam in eodem genere & in eodem pondere & in eodem valore quoad pondus licet diminuta sit quo ad cursum').

171 Johannes Andreae, above n 121, fo. 190^{ra-rb}, ad X 2.24.18, sub v. *legitimo pondere*, nos. 7–8, who used Hostiensis' commentary more or less literally.

172 See Taeuber, above n 35, at 251–76; Stampe, above n 115, at 6–7, and see text accompanying n 161 above.

173 North, above n 1, at 38–44; Spufford, above n 1, at 283–6, 348–50, and 354 and table 7

174 Expression in Spufford, above n 1, at 289, and see in detail, ibid., at 289–95; P. Spufford 'Münzverschlechterung und Inflation im spätmittelalterlichen und frühneuzeitlichen Europa', in M. North (ed.), *Geldumlauf, Währungssysteme und Zahlungsverkehr in Nordwesteuropa 1300–1800: Beiträge zur Geldgeschichte der späten Hansezeit* (1989), at 109; for an overview, see also North, above n 1, at 44–9.

175 On the terms *bonitas extrinseca* and *valor impositus* in this context, see Taeuber, above n 35.

176 See Chapter 7 in this volume; Stampe, above n 115, at 12–46.

177 Petrus Ancharanus, above n 97, at 280, ad X 2.24.18, no. 10: '... si valor pecuniae est diminitus utrum debitor solvendo de illa pecunia diminuta liberetur a creditore ipsam recipere recusante'.

178 Ibid.: '... si creditor fuit in mora recipiendi, & florenus plus valet modo... non teneatur debtor tradere florenos in illa maiori aestimatione'.

category *extrinsecus* (extrinsic), which referred to the rates set by the relation of different currencies to each other, was introduced here; and it was distinguished from an assessment of monetary value by the weight or the material of the coinage in question.[179] It corresponded to the idea that Petrus Ancharanus described elsewhere in his commentary the *bonitas extra rem* as *pretium maius, vel minus*.[180]

In the course of the further debate this perception of external monetary value would gain more and more importance, and, eventually, even result in a partial deviation from Hostiensis' concept of risk allocation in the case of fiscally motivated demonetizations. That did not mean a departure from the idea of intrinsic value. On the contrary, a change of monetary value due to the deterioration of coinage, that is, a change in the intrinsic value of coinage, was still determined the same way as before: the debtor had to bear the risk.[181] As Panormitanus put it of this case, 'it is held by canonists and also by legists that the loss (*damnum*) is with the debtor, because the coinage does not have the intrinsic quality of the time of the mutual contract'.[182] Moreover, there was a broad consensus that the debtor's default put him at risk of every kind of monetary change: 'omne periculum spectat ad ipsum debitorem', as Panormitanus expressed it referring to the situation of the debtor's *mora*.[183]

In other cases, however, perspectives and approaches shifted. This was particularly true for artificial devaluation and demonetization. In the case of monetary interventions by the prince, Hostiensis and Johannes Andreae had, as mentioned before, drawn a distinction depending on the guilt of the prince and the debtor. If the prince's actions had been driven by fiscal motives which the debtor had known about, then the consequences of this kind of manipulation were to lie with the debtor; the same should apply in the case of the debtor's default. Otherwise, the creditor had to bear the consequences of the prince's acts,[184] because this kind of devaluation was perhaps seen as representing something akin to a collective currency risk for all participants in the market. Antonius de Butrio, however, chose another approach, which was the consequence of his reasoning about the relation between *aestimatio, obligatio*, and *bonitas extrinseca*. In describing the problem of money debts, Antonius compared two contractual situations: if the contract parties had fixed the contents of the obligations in *numero, pondere et mensura*, the subject of the contract and its quality, then the obligation of the debtor was described *in eadem substantiali bonitate*. And in this case a change *in quantitate estimationis*

[179] In his commentary on the canon *Si beneficiorum*, issued by the council of Vienne (for this canon see Council of Vienne, cap. 12, above n 57 and text accompanying nn 56 and 57) Petrus shaped this perspective. He distinguished three cases *in obligatione pecunie debita ex contractu*: the situation in which the *bonitas intrinseca* was changed by mutations in the weight or the material of coinage; the situation of a change in the *bonitas extrinseca* in terms of *existimatio* (valuation); and, finally, the demonetization as *reprobatio in totum*. See Petrus Ancharanus, *Lectura super Clementinis* (Venice 1483/1493), copy at the Bavarian State Library), fo. 72^{rb}, ad Clem. 3.8.2, available at http://nbn-resolving.de/urn:nbn:de:bvb:12-bsb00058744-7.

[180] Petrus Ancharanus, *Super tertio Decretalium facundissima commentaria* (Venice edn, 1581, copy at the University of Granada Library, call no. +2, Aaa-Zzz6, Aaaa-Ssss6, Tttt5), at 458, ad X 3.39.26, n. 4, available at http://hdl.handle.net/10481/9161.

[181] Cf. de Butrio, above n 126, fol. 90^{rb}, ad X 2.24.18: In this case the debtor had to pay in new money but *secundum estimationem antique*; Johannes ab Imola, above n 158, fo. 158ra, ad X 2.24.18, no. 18: Martinus Garratus Laudensis, 'Tractatus de monetis', no. 16, in Tesauro (ed.), above n 132, at 62–3. For a survey with a broad range of sources from both canonists and legists, see Gabrielli, above n 152, at 275–6, conclusion 1 (on this question, ibid., at 275: 'moneta valor, si decrescat ob deteriorationem materia, vel forma, quomodo solvi debeat').

[182] Panormitanus, above n 127, fo. 211va, ad X 2.24.18, no. 12: 'communiter tenetur per Canonistas & Legistas, quod damnum pertinet ad debitorem, quia moneta non habet suam bonitatem intrinsecam, quam habebat tempore contractus mutui'. This quote also in Stampe, above n 115, at 110.

[183] Panormitanus, above n 127, fo. 211va, ad X 2.24.18, no. 12.

[184] See Hostiensis, above n 117, fo. 130va, nos. 5–6 and text accompanying n 170 above.

extrinsece did not have consequences.[185] In the case of a money debt the situation was different owing to the absence of indications as to the *bonitas extrinseca*. In this context Antonius elaborated a doctrine on the valuation of money:

> ... Money exists as money only for the purpose of valuation (*estimandi*). Therefore money is insofar better (money) as it is higher valuated. Under "valuation" several things can be understood.... Herein material and authority cooperate at the same time: that valuation remains possible. And this is the principal reason, why money has been introduced in the first place: as means to valuate. It is in itself not subject of valuation, only in an indirect mode.... And note that the valuation of one coinage (*pecunia*) is compared to other things. Think for example that one coin is compared to another coin, and one coin is a reference for valuation of another as (for example) the grosso for the minuta. For the (golden) bolognino values ten denari....[186]

In this statement, monetary value was distinguished from commodities, as a matter of principle. It was instead described as a mere *indicator* of value (and was thus not to be valued). Antonius, however, did not argue for a concept of money as a mere media of value decreed by a superior: money could not perform its valuation task based on authority alone; it also needed a certain kind of *materia*. Aside from that, money could be valuated by money, as Antonius made clear by the reference to the relation between grosso and minuta, and the bolognino to the denaro. Here, money came close to being an object of exchange in the sense of bargain and sale, and the initial tendency of Antonius' statement towards a more abstract concept of monetary value vanished. This might be explained by Antonius' understanding of contemporary monetary practice, and, moreover, by the fact that particularly Bartolus, who was an important reference for Antonius,[187] had given the relation of minuta and grosso special importance. Antonius' discussion (and rejection) of Bartolus' idea that the minuta could not be valuated by the grosso points in this direction.[188] And in this context Antonius' idea of money as an object of purchase became even clearer, when he argued 'just as for littles (i.e. minuta) florins are bought, so can littles be bought for the florin'.[189] This idea of monetary value brought Antonius close to Odofredus' idea of monetary value as *bonitas usus*, that is, an indicator of purchasing power.[190] And it was this understanding of money which guided Antonius's approach to devaluations and the description of intrinsic monetary value:

> value (*bonitas*) in money with regard to money consists only with regard to its use and valuation. And this can be called intrinsic value (*intrinseca bonitas*), which is about the reason and the main effect of money.

[185] De Butrio, above n 126, fo. 90^{rb}, ad X 2.24.18: '... in obligationibus que re contrahunt in consistentibus: numero, pondero et mensura et res ipsa et bonitas rei et designat ad quid obligatio contrahatur ... unde sufficit in eadem substantiali bonitatem rem reddi et licet varietur ...'. This passage is not used in Stampe, above n 115, at 106–8.

[186] De Butrio, above n 126, fo. 90^{rb}, ad X 2.24.18:

> [P]ecunia ut pecunia est propter solum finem estimandi. Unde intantum est melior in quantum plus estimatur. et sub eius estimatione possunt plures comprehendi ... hoc operant materia et auctoritas simul: ut valeat estimare. ideo cum pecunia principaliter sit inducta: ut estimet. non estimatur nisi in indirecto modo ... et hoc puta estimatio pecunie comparatur ad alias res. puta una pecunia comparatur ad alia. una pecunia estimat aliam quam grosso minutam. Nam bononenus videlicet x denarius....

This passage is not in Stampe, above n 115, at 106–8.

[187] Same view in Stampe, above n 115, at 107–8.

[188] See ibid., at 48–9 (with Bartolus' texts); Chapter 7 in this volume.

[189] De Butrio, above n 126, fo. 90^{rb}: '... sicut pro parvis emitur florenus, ita pro floreno possunt emi parvi'.

[190] Stampe, above n 115, at 43; see in detail Chapter 7 in this volume. For the quote which follows see n 192.

In this statement the traditional understanding of intrinsic value—as more or less the absolute value of its material and weight—was replaced by an idea of relational value, which rested on the basic function of money as an instrument of commercial valuation. This kind of relational value, which other authors named *valor extrinsecus*, was, as Antonius explained in accordance with his general argument cited above,[191] based in the material, the authority and the form of coinage. But these elements did not, of themselves, constitute monetary value. Instead it was the 'appreciation' (*appreciatio*) of money that was essential. When the coinage was demonetized so that its use was banned and its official rating cancelled, the prince deleted the *materia* of money. And, so concluded Antonius, it was commonly agreed that deteriorations of monetary substance had to be borne by the debtor. Therefore, it was the debtor who had to bear the consequences of demonetization and devaluation decreed by the prince.[192] This concept became dominant in the late medieval discourse of the canonists. It was encouraged by the fact that its specific results were consistent with the gist of the papal ruling in *Olim causam*,[193] even though in that case the demonetization had not concerned a change in the *valor extrinsecus*.

Martinus Laudensis, however, objected to Antonius' approach. He insisted on the former solution with the debtor being obliged only to pay *eandem pecuniam in materia & forma, licet sit mutata aestimatio*[194] (without, however, giving a reason for this demand). And, in the long run, Laudensis' position prevailed: the distinction between the *valor extrinsecus* and *intrinsecus*, which had been merged by Antonius and Panormitanus, remained in the majority opinion of the learned discourse of the early modern period. As a consequence, most authors held that the change of the money rate by the prince, executed by demonetization or devaluation, led to the result that money had to be tendered at the rate which was valid at the time of payment.[195] As Prospero Fagnani noted, this solution rested on the argument that *bonitas monetae intrinseca non mutatur, sed tantum bonitas extrinseca, idest valor*. And in this case the *valor tempus solutionis* was applicable, as Fagnani added with reference to the Roman law rules.[196] As a consequence the creditor had to bear the risk of devaluations caused by actions of territorial superiors. We can only speculate as to the reasons why this approach finally became accepted by the majority opinion. One reason may be the underlying intention to grant debtors protection in a period of more or less permanent financial turmoil, at a time when financial institutions were not given much encouragement to grant new credit. Another explanation

[191] See n 186 above and accompanying text.

[192] De Butrio, above n 126, fo. 90va, ad X 2.24.18:

> Odofredus dicit (et hoc plus mihi placet), quia debet reddi in estimatione antique . . . quia bonitas in pecunia: respectu pecunie: est solum respectus usus: et estimationis. et hoc potest dici in intreseca bonitas: que est de fine: et principali effectu pecunie. et in illa bonitate debet eam restituere: materia enim ibi pro nihilo est considerando pecuniam ut pecuniam, appreciatio enim pecunie est bonitas eius, que causatur ex materia et auctoritate et forma pecunie.

Text also in Stampe, above n 115, at 107, where, however, Antonius' basic idea on the function of money is a little bit undervalued.

[193] See the concurring statements in Johannes ab Imola, above n 158, fo. 158ra, ad X 2.24.18, no. 18, who even expanded Antonius' idea with the argument that the changing *valor extrinsecus* of money debts should also be factored into the debtor's obligation, if he or she got into default: then, Johannes demanded, the debtor had to pay also for the losses inflicted on the creditor by currency devaluations ('si post moram diminitus esset valor', ibid. fo. 158^{rb}). Panormitanus, above n 127, fo. 211^{rb}, ad X 2.24.18, no. 12, with the summarizing conclusion, 'moneta magis consideretur respectu cursus, quam respectu materiae'.

[194] Martinus Garratus Laudensis, 'Tractatus de monetis', no. 18, in Tesauro (ed.), above n 132, at 64.

[195] Gabrielli, above n 152, at 278, conclusion 2, no. 1; ibid., at 278–9, no. 2, Panormitanus, Johannes ab Imola, and Antonius de Butrio are listed as representatives for the opposite position.

[196] Fagnani, above n 48, at 274, ad X 3.39.20, no. 23. On the Roman law position, cited by Fagnani, see Ernst, above n 35, at 234–5, and Taeuber, above n 35, at 184–93 and 229.

appears more likely: even though Antonius de Butrio's doctrine appeared to be highly innovative, it stood more or less against a broad doctrinal tradition of learned law.

(ii) Money debts beyond contracts

As indicated above, when monetary changes were at issue, the transactions of contracting parties were the first point of reference for the canonists. Against this background it was only consistent that in situations of unilateral legal acts the will of the person acting became the point of reference. This was obvious in the situation of last wills: here, the reference point was the currency rate at the time when the will had been drawn up, 'because the testator had had it in mind', as Panormitanus expressed it.[197] Moreover, Peter Ancharanus stressed the point that, particularly in the case where there were long delays between the execution of the will and the testator's death, that rate 'which was in force at the time of the will, not of the death' was to apply.[198] The same rule should apply to judicial rulings, condemning a person to pay a certain amount of money: the operative date for the applicable rate of money is the time of the ruling.[199] In both situations there were legal remedies in case there was an error. This was not the case, however, when the prince granted a person money by way of privilege or mandate. Therefore, a specific solution became necessary. Antonius de Butrio held as a basic rule that the relevant currency rate was again that at the time when the monetary grant was decreed. If, however, the prince did not know this rate, the monetary value in force when the money was actually to be paid should apply.[200] In the case of statutes, however, there was no human intent to be enforced. As a consequence, this question became—and remained—disputed. Guilelmus Durantis (around 1230–96)[201] had posited the case of a change in currency rates after the enactment of statutes ordering monetary penalties and salaries for public officials. He had argued for the relevance of the currency rate in force at the time when the relevant law came to be applied: 'salaries and condemnations are to be paid at the present monetary rate'. This thesis rested on the idea 'that, if money has been changed, the statute has to be understood by the new money and not by the former one'.[202] Apparently, Durantis understood the change of currency rates as implicit in the legal rule which defined the figures for fines and salaries. Moreover, he made sure that the statutory provisions were, at least in principle, always adjusted to their economic environment. On the other hand, Durantis had to neglect the

[197] Panormitanus, above n 127, fo. 211[va], ad X 2.24.18, no. 13: '... attendi valor extrinsecus tempore testamenti, quia de eo videtur testator sentisse ...'.

[198] Petrus Ancharanus, above n 180, at (449) 452, ad X 3.39.20, no. 12: '... quae vigebat tempore testamenti, non mortis'. Petrus here built the case of a testator who wanted to bequeath someone 200 libra, but outlasted his will 'multis annis' (ibid.).

[199] Cf. Panormitanus, above n 127, fo. 211[va], ad X 2.24.18, no. 13. For an overview, see Gabrielli, above n 152, at 282, conclusion 6, with distinction between the time of sentencing and the time of execution of the judgment.

[200] De Butrio, above n 126, fo. 90[va], ad X 2.24.18. For an overview, see Angelus Carletus, *Summa Angelica de casibus conscientie* (Nuremberg, 1488, copy at the University and State Library Düsseldorf, call no. ISTC ia00717000), fo. 278[ra], sub v. *solutio*, no. 2, available at http://nbn-resolving.de/urn:nbn:de:hbz:061:1-31076: 'si dominus ignorabat valorem monetae sic fiet secundum cursum currentis ... si dominus sciebat eius valorem sic fiet eius solutio secundum existimationem temporis ipsius mandati seu gratie facte'. On Angelo Carletti (*ob.* 1495), the author of this encyclopedic compendium that included canon law but was basically a handbook for confessors, published for the first time in 1486, see S. Pezzella, 'Carletti, Angelo', in *Dizionario biografico degli Italiani*, vol. 20 (1977), available at http://www.treccani.it/enciclopedia/angelo-carletti_(Dizionario-Biografico)/.

[201] S. Lepsius, 'Durantis, Guilelmus (um 1230–96)', in *HDR*, above n 6, vol. 1, 1168 with further references.

[202] Guilelmus Durantis, *Speculum Iuris, IV/3: De obligationibus et solutionibus* (Basel 1574, repr. 1975), at 362, § 3: *Nunc*, no. 9: '... Secundum praesentem monetam debere salaria et condemnationes solvi: quia mutata moneta debet statutum intelligi secundam illam & non de veteri.'

original legislator's intent as to his monetary calculations. Antonius de Butrio even described Durantis' approach as the idea that 'as a consequence of the money being changed it is as if the statute is changed'.[203] Panormitanus, however, was not prepared to follow this kind of dynamic connection between statutory rule and monetary value: 'I have serious doubts about that. For what if the Florin had a much higher value at the time when the statute was decreed than today—shall we say then that it is to pay so little, because the statute intended to measure the punishment of the crime in that way that it has to be committed'?[204] Against this background, Panormitanus argued strictly in favour of the consideration of the initial monetary value both for salaries of public servants and for fines.[205]

Panormitanus's argument might have been closer to economic realities in a time when debasements were common devices of fiscal policy. But it was also in accordance with the regulatory approach in *Olim causam*, which was quoted by Panormitanus as a reference. On the downside, however, his explanation could result in a kind of monetary petrification of statutory law, with a growing distance between legislation and economic order. This might explain why Panormitanus's position found no endorsement in the later doctrinal development.[206] Moreover, Panormitanus found himself in opposition, at least in principle, to the conciliar rule about the tithes on benefices, which were to be paid at current rates.[207] Even though Panormitanus had stressed the fact that this rule did not concern tithes themselves and was thus an exceptional provision,[208] he could not impede the growing consensus that in legally ordered payments the rule for the monetary value was *inspicitur tempus solutionis*, as Laudensis expressed it.[209]

(iii) *Praescriptio* and money debts

Basically, the case in the decretal *Olim causam* was one where the rules of devaluation following from a change of coinage would apply: the debtors had tendered a different kind of coin from the one they had actually been obliged to tender (Lucca denari instead of Pavian denari). This was possible only if the creditor agreed—which he usually did not—or if the creditor did not sustain a loss due to a change in the currency rate—which he often actually did, owing to the debasement of Lucca denari. There was an additional complication in that the coinage initially owed was now no longer in existence. Thus, this former coinage was only a virtual reference to calculate the amount of new coin which was now owed.

This situation, however, was covered by the rules discussed above. So the canonists approved the papal decision that the debtors had to tender the coins initially owed, and, in the absence of these coins, they had to pay in current coinage the equivalent of their initial

[203] De Butrio, above n 126, fo. 90^{vb}, ad X 2.24.18: 'mutata moneta consequenter videtur mutatum statutum'.

[204] Cf. Panormitanus, above n 127, fo. 211va, ad X 2.24.18, no. 14 (also in Stampe, above n 115, at 110): 'De quo ego multum debito. Quid nempe si tempore statuti Florenus valebat longe plus, quam hodie, dicesmusne, quod debeat solvi ita modicum, cum statutum voluerit mensurae poenam delicti, quod fieri debet?'

[205] Panormitanus, above n 127, fo. 211va, ad X 2.24.18, no. 14: '. . . in salario constitutio officiali, et casus judicio meo videtur in contrarium'.

[206] As a summary: Gabrielli, above n 152, at 281, conclusion 5: '. . . ut in legibus, vel statutus attendatur tempus solutionis, non autem statuti, vel conditae legis'.

[207] See above nn 56 and 57 and accompanying text on the Vienne canon *Si beneficiorum*.

[208] Panormitanus, above n 127, fo. 211va, ad X 2.24.18, no. 14 (also in Stampe, above n 115, at 110): 'nam solum ibi dicitur, quod, si alicui conceditur decima beneficiorum, potest solvi de pecunia currenti'.

[209] Martinus Garratus Laudensis, 'Tractatus de monetis', n. 27, in Tesauro (ed.), above n 132, at 69.

currency debt based on an *aestimatio*:[210] as the initial coinage was perceived as *rem in obligatione*,[211] it was thus the object of the debt.[212]

Another problem of the case, however, attracted more attention from the canonists. As mentioned above, the debtors had over a long period tendered a coin different from what was owed, and had therefore claimed that the principle of prescription entitled them to continue with this practice. Even though it turned out that the period in question had been less than forty years and thus too short,[213] the canonists discussed the question whether and to what extent the rules on prescription could apply in such cases. In the early decretalists' commentaries a consensus had already emerged that after forty years of payment with the same coinage the debtor acquired the entitlement to continue with this practice.[214] But then the question arose of how this result could be justified. Already Innocent IV raised some concerns: it would be *mirabile* that 'the payment of the same thing introduced prescription for both parties.' The effect would be that the creditor was freed from the obligation to accept the initially owed coinage, and the debtor was free to tender the new coinage.[215] The essential question was whether the same prescription could actually create, as Petrus Ancharanus put it, an *obligationem in una & liberationem in alia specie monetae*, an obligation to tender one specie and the release from the obligation to tender another.[216] Petrus Ancharanus, however, developed an argument, which was apparently accepted by the canonists' community.[217] He made an argument based on the idea of tacit consent: every obligation could be alterated by tacit consent. In money debts, however, such consent was improbable if the debtor did not in fact make the payment or paid an insufficient amount. If, however, 'a determined specie is substituted by another . . . it is easier to concede such a commutation' of obligation. As a consequence, there was then a presumption 'that the other (coinage) has come into the obligation since its beginning'.[218] This interpretation of prescription as a device of contractual change also worked for Petrus in his discussion of another argument against the majority opinion. Hostiensis had argued that obligations like the annuities in *Olim causam* could not be the subject of prescription, because the parties would always act *mala fide*. In his view the situation was parallel to the case of taxes and duties. The basis of that situation was that the taxpayer was always aware of his debt and could therefore not gain legal protection by prescription, which required all parties to have acted in good faith. This was, as Hostiensis concluded, true at least for the

[210] See the papal rule in *Olim causam* that 'ad solutionem denariorum Papiensium vel *aestimationem* eorum', cf. Friedberg, above n 37, at 631.

[211] Innocent IV, (Venice edn), above n 104, fo. 536[ra], ad X 3.39.20, sub v. *Ad Papiensium*: 'quia erat in obligatione, quamvis si non inveniantur, possit de alia pecunia satisfieri, sic etiam quando agitur ex empto ad rem venditam, nam bene agitur, quia res in obligatione est' (referring to the Roman law *actio empti*).

[212] Johannes Andreae, *In Decretalium librum novella Commentaria*, *in tertium librum* (Venice, 1612, copy at the Bavarian State Library, call no. 2 J.can.u. 8 m-3), fo. 210[ra] ad X 3.39.20 sub v. *Papiensium*, no. 5, available at http://www.mdz-nbn-resolving.de/urn/resolver.pl?urn=urn:nbn:de:bvb:12-bsb10489396-1: 'ergo Papienses sunt in obligatione'. For an overview, see Fagnani, above n 48, at 272, ad X 3.39.20, no. 6: 'secundum monetam antiquitus constitutam persolvendum esse annuum censum'.

[213] On the rules of prescription in canon law, see Helmholz, above n 85, at 174–99; as a short survey Dondorp, above n 38, at 425 and fn 41.

[214] See Dondorp, above n 38, at 426–7 in particular for the gloss on the *Compilatio Tertia* and the *Liber Extra*.

[215] Innocent IV, (Venice edn), above n 104, fo. 536[ra], ad X 3.39.20, sub v. *Papiensium*: '. . . & est mirabile quod solutio eiusdem rei pro utraque parte praescriptionem inducit'.

[216] Petrus Ancharanus, above n 180, at 451, ad X 3.39.20, no. 4.

[217] See in particular the reference in Fagnani, above n 48, at 273, ad X 3.39.20, no. 15, where he first reported Innocent's concerns and then referred to Petrus Ancharanus, 'de hoc plenius'.

[218] Petrus Ancharanus, above n 97, at 452, ad X 3.39.20, no. 8: '. . . si solutio certae speciei in alia subrogatur . . . facilius enim talis talis comutatio (sic) conceditur'. Ibid., at 451, no. 3: '. . . illa alia (pecunia) a principio praesumitur venisse in obligatione'.

question of reductions of obligations by prescription.[219] It might be said that, in this view, the extension of prescription in the field of recurring debts was highly dangerous, as it might favour the debtor who was trying to evade his or her payment obligation. But, as Panormitanus later noted, rather laconically, when he reported Hostiensis' argument, *communiter tenetur oppositum*.[220] The main objection to Hostiensis' idea was that the clerics in *Olim causam* had actually acted in good faith.[221] As Petrus Ancharanus had observed, it was not a (numerical) reduction, but an alteration of the money debt which was in question. Moreover, in *Olim causam* there had been a conscious act to accept a coinage other than that owed, rather than mere negligence by the creditor, which might have indicated *mala fides* on the debtor's side. And this fact pointed towards a tacit consent,[222] which, as already mentioned,[223] altered the obligation by substituting one coinage for another.

So, by the end of the Middle Ages canonists had created a doctrinal approach which had a special importance going beyond the internal monetary transactions of the church. In a society where annuities of long duration, such as tithes, were of particular importance, and where elaborate administrative structures for collecting them were more or less absent, the existence of legal remedies for a peaceful settling of conflicts concerning currency changes could become crucial. It might even be said that the canonists' doctrine of devalued money on the one hand and the concept of prescription on the other balanced the interests of creditors and debtors: it supported both parties, with the creditor's interest in receiving money with stable intrinsic value on the one side and the debtor's interest in protection of legitimate expectations as to the mode of payment on the other.

(iv) Canon law doctrines of money and legal practice

It was a defining mark of the legal culture of the late Middle Ages and the early modern period that learned jurists worked not only as teachers at the university, but also as legal experts in the context of legal disputes.[224] In rendering their expert opinions, which were frequently printed as *consilium*, leading jurists like Bartolus or Baldus shaped legal practice strongly. These *consilia* are also of interest, as they might prove whether and to what extent academic teachers were able to apply and enforce their doctrines in the treatment of specific cases. It is impossible in this chapter to undertake systematic cross-border research into all transmitted *consilia*. Nonetheless, the aim will be to analyse whether canon law doctrines were present in the handling of such cases, and the extent of their influence.

The first case to be discussed here has been analysed by Erich Stampe.[225] Nevertheless, it is interesting in the present context, as it concerned a legal dispute between two

[219] Hostiensis, above n 117, fo. 155^{vb}, ad X 2.39.20 sub v. *legitimo pondere*, nos. 6–7: 'Tu dicas quod non est prescriptum propter malam fidem . . . nam sicut census praecribi non potest . . . sic non diminutio, qui malam fidem habet.'

[220] Panormitanus, above n 46, fo. 315$^{ra–rb}$, ad X 3.29.20, no. 6.

[221] See, on this conclusion in Henricus Bohic (*ob.* 1350), Dondorp, above n 38, at 427, and the report in Fagnani, above n 48, at 273, ad X 3.39.20, no. 18.

[222] Petrus Ancharanus, above n 97, at 452, ad X 3.39.20, no. 8 (Venice 1581):

> . . . praescriptio causatur a solo negligentia non petentis. Sed in casu nostro causatur praescriptio non a negligentia: sed a facto proprio: recipiendo . . . tanto tempore scienter aliam monetam, quod in obligatione devenerit, ut consensu partium tacito obligatio in aliud comutata [sic].

[223] See Petrus Ancharanus, above n 97, at 452, ad X 3.39.20, no. 8 and at 451, no. 3. See also text accompanying n 218 above.

[224] For an overview, see H. Gehrke, 'Konsilien, Konsiliensammlungen', in *HDR*, above n 6, vol. 3, 117. See further, in detail, U. Falk, *Consilia: Studien zur Praxis der Rechtsgutachten in der frühen Neuzeit* (2006).

[225] Stampe, above n 115, at 65–78.

monasteries and thus the doctrines discussed above. Two monasteries became embroiled in a conflict with each other in the first half of the fifteenth century.[226] The monastery St Anton had to pay an amount of 1,300 libra as an annuity to the monastery Montis Majoris. Due to a devaluation, however, the intrinsic value of the tendered money declined. Now, the creditor, Montis Majoris, demanded payment at the initial rate (and thus payment with better money), while the debtor, St Anton, wanted to tender only coinage of new—lower—value. Three canonists delivered their expert opinions. They make clear that, as the rest of this section shows, there was a comparatively broad spectrum of canon law argument on the point, but they also indicate a certain kind of doctrinal consolidation. Panormitanus worked with the basic idea that the annuity was *ex dispositione legis inductum*, because the pope had approved the agreement between both monasteries. Given the character of the annuity as a legal obligation, the solution of the case was as good as predetermined. In accordance with Panormitanus' position on legal obligations as mentioned before,[227] he argued that the relevant monetary value was that which prevailed at the time when the obligation had come to existence.[228] As a matter of fact, he discussed the majority opinion as expressed by Durantis[229] and repeated his objection that Durantis' idea would mean a violation of the principle that *poena esse commensurabilis delictio,* adjusted to the crime.[230] But, surely, Panormitanus was aware of the fact that he held a minority position in that regard. Therefore he added another argument claiming that Durantis' rule would not in fact apply in the case in question: Durantis' rule would apply only for cases with an obligation coming into existence after the law had been issued, such as in crimes. In the situation at hand, however, the obligation had come into existence with papal approval (*tempore provisionis papalis acquisita*). This, and another element of the case which is not of relevance here,[231] led Panormitanus to conclude that St Anton had to pay with money of the initial rate. In so concluding, it might be said that Panormitanus had put himself in a difficult position. Although he was essentially focused on the idea of a legal obligation, he had to cope with the fact that his own position—that for legal obligations the monetary value at the time of legislation was relevant—did not correspond to the majority opinion. So, he tried to give additional arguments, which, however, made his original arguments weak. The second expert, Ludovico Pontano (1409–39),[232] argued in another direction:[233] in his view the obligation in controversy was basically established as *obligatio ex constitutione*. As a consequence Durantis' rule would apply and the obligation had to be paid in money based on the devaluated rate. In the alternative, Ludovico argued that even if the obligation was established merely by way of rescript, the same rule as for an obligation introduced by legal provisions would apply; moreover, there could be a special customary law in favour of the creditor. Again, the strong influence of Durantis' rule becomes clear. This is even more true for the third legal opinion by Dominicus de Sancto Geminiano (1379–1425):[234] he

[226] On the facts of the case, see ibid., at 65–6.

[227] See Panormitanus, above n 127, fo. 211va, ad X 2.24.18, no. 14, quoted at n 204 above, and see accompanying text.

[228] See on the following also the report in Stampe, above n 115, at 66–7.

[229] See Guilelmus Durantis, above n 202, and see accompanying text.

[230] Panormitanus (Nicolaus Tudeschis), *Consilium II/56*, in Panormitanus, *Opera Omnia*. Vol. 8: *Consilia Iuris, Quaestiones, et Praxis* (Venice, 1588) 275.

[231] See in detail Stampe, above n 115, at 67 (a part of the disputed agreement concerned additional compensation for the creditor).

[232] T. Woelki, 'Pontano, Lodovico', in *Kirchenlexikon*, above n 30, vol. 34 (2013) 1146.

[233] For the contents of his expert opinion, see Stampe, above n 115, at 67–8.

[234] D. Quaglioni, 'Domenico da San Gimignano', in *Dizionario biografico degli Italiani*, vol 40 (1991), available at http://www.treccani.it/enciclopedia/domenico-da-san-gimignano_(Dizionario-Biografico)/.

highlighted the point that the obligation had been established by papal statute and thus that Durantis' rule had to be applied.[235] Even though Domenico used an alternative argument, which has no immediate connection to issues of monetary law, his opinion confirmed quite clearly that as early as the first half of the fifteenth century there was a strong majority opinion favouring Durantis' approach. Taken together, however, all three *consilia* proved the fact that the doctrinal rules developed by the canonists were more than mere academic theory.

Another *consilium* demonstrates the impact of two other doctrines of the canonists' discourse: In 1511 the so-called *Collegium Papiense* rendered a legal opinion[236] in a dispute between the city of Casale Monferrato and the marquess of Montferrat. In this case the marquess had changed the currency rates for payments, which were to be collected by his administration. The city of Casale, his debtor *supra annos centum*,[237] had rendered, however, money at another rate, valid in the whole territory. Basically, the *consilium* dealt with the unilateral change of monetary rate by a superior. In fact, the *collegium* conceded that the marquess had the power to set the rates for monetary transactions: *Ad principem enim pertinet approbare vel reprobare monetam*, explained the *collegium*, citing Hostiensis and Johannes Andreae on *Quanto personam*.[238] But the *collegium* also applied the rule that consent was necessary to this kind of measure, because *non potest princeps monetam approbare vel reprobare sine consensu populi qui ex hoc l(a)ederetur*.[239] So, the mere monetary power of the marquess did not justify his actions. Moreover, the prince would be bound by a contract with the city of Casale. But even without such a relation, the city of Casale was protected by the idea of prescription. The *collegium* was, however, aware that the application of this rule in the case of annuity payments was contested. But given the very long period of payments, which had lasted much longer than the period necessary for prescription, the city had 'acquired something, what could not be acquired by prescription'.[240] Therefore the city of Casale was entitled to continue its payments at the same rate as before.

In the structure of its argument, this legal opinion resembles the other *consilia* previously discussed: again, elements of the learned doctrine—here the idea of the limitations of monetary power and the concept of prescription concerning the mode of payment—were explicitly applied and used. But like the other legal experts, the *collegium Papiense* made an effort to base its decision on several doctrinal bricks. This kind of reasoning strategy applied in particular, when legal experts referred to disputed legal arguments such as the rule of Durantis on the relation between statutes and monetary changes or, in the case at hand, the prescription rule, which had found its opponent in Hostiensis. On the other hand, all legal opinions proved one fact. The doctrines and rules, developed in the enduring debates and discussions of the canonists, were always present in legal practice. They were always the starting point for every kind of judicial reasoning.

235 For Domenico's legal opinion see the edition by Stampe, above n 115, at 69–71.

236 Collegium Papiense, 'Consilium in materia augmenti monetarum', in Tesauro (ed.), above n 132, at 199; for an analysis, see Stampe, above n 115, at 103–5.

237 Collegium Papiense, above n 236, at 200.

238 Ibid., at 204, no. 4.

239 Ibid., at 212, no. 12.

240 Ibid., at 208, no. 9: '. . . ex cursu tanti temporis acquirunur etiam ea quae praescribi non possunt'.

III. Appendix: Legal Sources of Ecclesiastical Monetary Law in the Middle Ages

1. Cap. *Quanto personam tuam*, Po. 656, 3Comp., X 2.24.18, 2.15.2, Latin text in: A. Friedberg (ed.), *Corpus iuris canonici*, Vol. 2: *Decretalium collectiones* (1879; repr. 1955), cols. 365–6 (suggested translation)

Innocent, bishop, servant of God's servants, offers his well-beloved son in Christ, the glorious king of Aragon, his greetings and his apostolic blessing.

The more we esteem your person under all other christian princes with sincere affection, the more we want to beware the sereness of your realm with even more diligent care, so that it is not, God forbid, threatened by something, which is able to overflow danger of the soul or damage of the earth. From the tenor of your letters and of many prelates—not to mention those of many and much of being in your realm—we have learnt that you in order to wage war against the enemies of the christendom, who had occupied by the size of their power the land of Spain at that time, and to help our very beloved son in Christ, the king of Aragon, do haste with a multitude of armed. Several of your counselors—or rather deceiver—have set the idea in your mind that you would swear, without asking your people for consent, to keep your father's coinage for a certain length of time, which, however, was defrauded in its legitimate weight since around the death of your father. But because this coinage was diminished due to this fact and with a minor value effective, which generated serious scandal with the people, you intended to revoke something, that you had enacted indiscriminately, and to satisfy the needs of your people, you have asked us suppliantly to be absolved from the observation of the foresaid oath, by which you and your realm is threatened with serious danger.

In this affair a diligent observer had, after the truth had come to light, been able easily to consider that just as an absolution was not necessary, interpretation is required. For when you took the oath you believed that the coinage was false or legitimate. If you believed it was false—which we do not believe given your royal dignity—you would have sworn something illicit and must not observe it; and for this penitence would have to be imposed on you, because the oath has not been established so that it would be a bond of injustice. If, however, you believed the money was legitimate, you took a licit oath and it is utterly to preserve. And in order to keep it blameless, we suggest and order that you demonetize that coinage, which has been defrauded from the legitimate weight, and that you coin other mint under your father's name, which you bring back to its legitimate weight in that state, which it had during your father's reign at best, so that also the old coinage, which has not been defrauded at this state, is set in circulation; by this approach expenses can be avoided and the oath can be preserved. If, however, you believed when taking the oath, it was diminished in its legitimate weight, and your conscience torments you, confess your sin with humility to the bishop of Zaragoza, our venerable brother, whom we will write in this affair, and accept and be studious in the the penance, imposed on you for your illicit oath. (5 April 1199).

2. Cap. *Olim causam*, Po. 1207, 3Comp., X 3.39.20, 3.37.5, Latin text in Friedberg (ed.), *Decretalium collectiones*, 630–31 (suggested translation)

Innocent to the bishop of Spoleto

Once we have entrusted our venerable brother, Tudertinus and his colleagues with a case, which you brought before us and which was against the clerics of the commune of

Rupo on a synodaticum [i.e. a duty owed to the bishop]. You had argued before them from your side that these clerics had once upon a time paid your predecessors each year three Pavian denari on christmas and three on Easter as synodaticum. Now they paid three Lucca denari for each single Pavian denaro, although one Pavian denaro is valid six Lucca denari. Therefore you claimed that we force them with authority to tender in Pavian, because, even though you accepted Lucca denari in the first year, you have always proclaimed your right afterwards. But the clerics party has argued on the contrary that they, even though they might have tendered your predecessors Pavian denari as synodaticum, have tendered you as well as others forty–five years and longer Lucca denari. And so they claimed that their party maintained that way by prescription. (And further:) So we granted the procurators, on your side Jacobus and presbyter Johannes on the opposite side our beloved son cardinal presbyter P. of the twelve apostles basilica as auditor. As they did not want or could not plead anything new in front of him (the auditor), because both had renounced in that regard, and as he himself all proceedings had recollected in front of us and our brethren, we have understood that by your witnesses it has been proven that at the time of your predecessor of venerable memory Lothar and also after his decease Pavian denari have been rendered for the synodaticum and that henceforth three Lucca denari, two of them would be worth five of those, which were in use at that time, at a certain time were presented. And because since the time of Lothar a period of thirty-three, thirty-four, or thirty-five years has passed, we also questioned the statements of the witnesses of the other side, by whom they wanted to prove that for forty years and more three Lucca denari or three medals for the synodaticum had been rendered for each single Pavia denaro, because earlier Pavian denaro had been tendered. An advocate of this party also made a confession in law, and his confession was brought in written form and not revoked or corrected by the foresaid clerics: namely that those clerics had tendered three Pavian denari as synodaticum at the time of your predecessors Henry and Lothar two times a year and since then for each Pavian denaro three Lucca denari. So, it is now proven perfectly for us by witnesses of both parties that initially Pavian denari had been rendered as synodaticum. And it results from this that later Lucca denari has been rendered for them, because this appears by the statements of your witnesses and the confession of the other party's advocate, which has not been revoked later, that at the time of your predecessor L. as synodaticum Pavian money has been tendered. And because by testimonies from both parties it is proven that at the time of the predicted L. not more than thirty-six years had been passed, and as it is by your witnesses legally proven that three Luca denari, which after the death of this L. were rendered for one Pavian denaro, were valid five or six of those denari, which are in use today: considering from this that the deterioration of money had the effect that until your time Lucca denari had been rendered as they were in use, advised by our brothers by final judgment we condemn the procurator of the opposite party under the name of the clerics of the aforesaid commune to tendering Pavian denari or their equivalent.

3. Cap. *Querelam P. presbiteri*, JL 15745 (9884) 2Comp. 3.25.3, Latin text in A. Friedberg (ed.), *Quinque compilationes antiquae* (1882; repr. 1956) 89 (suggested translation)

Urban III

To the cantor and master of the school Re.

We have received the complaint of P., presbyter of St Peter, that he has paid the canons of Dehor a certain amount of money as pension of his church for several years, and that those canons have demanded from him to pay them that amount in sound Parisian coin, even though it (this coin) might be better than that one, which he used to pay for the predicted pension. But because this presbyter is oppressed herein against justice, we give charge to your discretion that you, if it is true what is asserted, without appeal force those canons to remain satisfied with their former pension.

4. Cap. *Cum canonicis*, Po. 9657, X 3.39.26, Latin text in Friedberg (ed.), *Decretalium collectiones*, 633 (suggested translation)

Gregory IX

As you have for several years paid a certain amount of money to the canons of the maior church as pension of your church, and because (now) those (clerics) demand to pay them the same amount of money in better coinage, we give you by this letter the mandate to make those canons to remain satisfied with the aforesaid tendering of the former coinage, or if it does not exist, with the equivalent of the old pension.

5. Can. *Si beneficiorum* Council of Vienne, can. 12, Clem. 3.8.2, Latin text in Friedberg (ed.), *Decretalium collectiones*, 1165 (suggested translation)

Clement V in the council of Vienne

If the collection of the tenths of someone's benefice has been simply granted for a fixed term, the tenth can and shall be levied according to those rules of assessment of the tenth, which apply in those regions, for which the grant of the tenth shall be valid, and based on the common currency rate. And we do not want that by collectors, lifter, or oppressors of the tenth chalices, books and other valuables which are dedicated for church service, are grabbed or taken in another way as security or for sale, nor that they are sold separately or howsoever occupied.

9

The 'Reduction' of Money in the Low Countries *c.*1489–1515

Alain Wijffels

I. Introduction

The political crisis in the Low Countries which followed the death of Charles the Bold in 1477 lasted until the early 1490s, when, eventually, the Habsburg regime was effective in affirming its authority.[1] During those years of crisis, revolts against the prince and ensuing civil war contributed to the unsettling of trade and the economy. By the last decade of the fifteenth century, several cities were lastingly weakened as political actors and were more strongly subordinated from then on to the Habsburg central authority. Their weakness was partly reflected in (and at the same time caused by) the long-term effects of their borrowing in politically and economically unsettled circumstances. Records of frequent litigation during the last years of the fifteenth century and the first years of the sixteenth[2] concerning

[1] The present chapter is a partly revised and updated version of a longer article: A. Wijffels, 'Le contentieux entre les villes hollandaises et leurs crédirentiers sous Maximilien d'Autriche et Philippe le Beau', (2006) 62 *Mémoires de la Société pour l'Histoire du Droit et des Institutions des anciens pays bourguignons, comtois et romands* 63. Abbreviations: GCM for General Archives of the Realm, Great Council of Mechlin, Brussels; EA for GCM—First-instance Proceedings; BH for GCM—Appeals from Holland.

[2] The survey in this chapter draws exclusively from the records of what was effectively the Low Countries' supreme court at the time, the Great Council (during this period, of the Habsburg rulers in the Netherlands). On the Great Council during the fifteenth century, see J. van Rompaey, *De Grote Raad van de hertogen van Boergondië en het Parlement van Mechelen* (Brussels: Paleis der Academiën, 1973); and A. J. M. Kerckhoffs-de Heij, *De Grote Raad en zijn functionarissen 1477–1531* (Amsterdam: Faculteit der Rechtsgeleerdheid, 1980); see also A. Wijffels, 'Grote Raad voor de Nederlanden te Mechelen (ca. 1445–1797)', in E. Aerts et al. (eds), *De centrale overheidsinstellingen van de Habsburgse Nederlanden (1482–1795)*, vol. 1 (1994) 448. The main records I have relied upon have been calendared by the Werkgroep Grote Raad (Amsterdam, 1959–89) under the direction of Prof. J. Th. de Smidt. These include, on the one hand, the registers of 'extended judgements', see J. Th. de Smidt et al., *Chronologische Lijsten van de Geëxtendeerde Sententiën en Procesbundels (dossiers) berustende in het archief van de Grote Raad van Mechelen*. Vol. 1: *1465–1504* (1966); and on the other hand, the fragments of case files, for which several volumes of inventories with regard to cases from Holland have been published, together with supplements, all mentioned in full in my review essay: A. Wijffels, 'Dutch litigation before the Great Council of Mechlin: An additional calendar of the "Appeals from Holland"', (2009) 77 *Tijdschrift voor rechtsgeschiedenis* 539.

the payment of rents (or annuities: *renten* in its generic sense) show how the cities, mainly as debtors of such rents, were affected by the instability of currency rates.

During the 1480s, this instability was mainly due to the progressive debasement of the predominant currency, while in 1489, a revaluation of the currency led to more controversies between creditors and the cities as rent-debtors.[3]

II. Maximilian's Ordinance of 14 December 1489

During the troubled first years of Maximilian's reign in the Burgundian Netherlands, inflation increased substantially.[4] By 1489, the official rate for the Saint Andrew's *guilder* had reached 120 *groten*; it had been forty groten at the time of Philip the Good's ordinance of 23 May 1466 (a statute sometimes attributed to the policies of his son Charles). Within little more than twenty years, the rate was at a mere third of what it had been when the duke of Burgundy's powers and prestige were at their height and when the duke had attempted to establish a certain parity between 'real money' and the most commonly used currency unit. Until the early 1480s, inflation had only had a limited eroding effect on the money's currency, reaching a rate of approximately sixty *gr* to the *guilder*.[5] During the late 1480s, when Maximilian gave up on a strict monetary policy, the debasement of the currency was accelerated. In his ordinance of 1489, the sovereign attempted, with the assistance of the Estates, to rehabilitate anti-inflationist policies.[6]

The 1489 ordinance[7] (see Figure 9.1) had been prepared in several stages by the prince's political advisers and experts in financial affairs.[8] History mainly remembers it because it brought about a 'reduction of the money' (*réduction de la monnaie*, according to a contemporary phrase), which aimed to restore the currency to its rate of 1466 by trebling the value the currency had reached shortly before the ordinance was enacted. In addition, the ordinance also dealt with several other consequences of a process that was effectively intended to be a revaluation of the currency to the level of 'strong' money. The ordinance provided for the exchange rate with various other (foreign or ancient) currencies, the

[3] A specialized study on partly the same material as here was published by J. G. Stuurman, 'Met gelijke munt betalen eind XVe eeuw: het volle pond', in H. de Schepper (ed.), *Miscellanea Consilii Magni II: Bijdragen over rechtspraak van de Grote Raad van Mechelen* (1984) 1, including transcripts of several documents from the Great Council's records.

[4] On the social and economic context of those years of inflation, considered from a long-term perspective, see R. van Uytven, 'Sociaal-economische evoluties in de Nederlanden vóór de Revoluties (veertiende-zestiende eeuw)', (1972) 87 *Bijdragen en mededelingen betreffende de geschiedenis der Nederlanden* 60, who assesses the inflation rate during the period 1466–86 at an average of 8.8% per annum. According to P. Spufford, *Monetary Problems and Policies in the Burgundian Netherlands, 1433–1496* (1970), at 9, 26, 51–2, long-term inflation was hardly prevented by the 1489 ordinance.

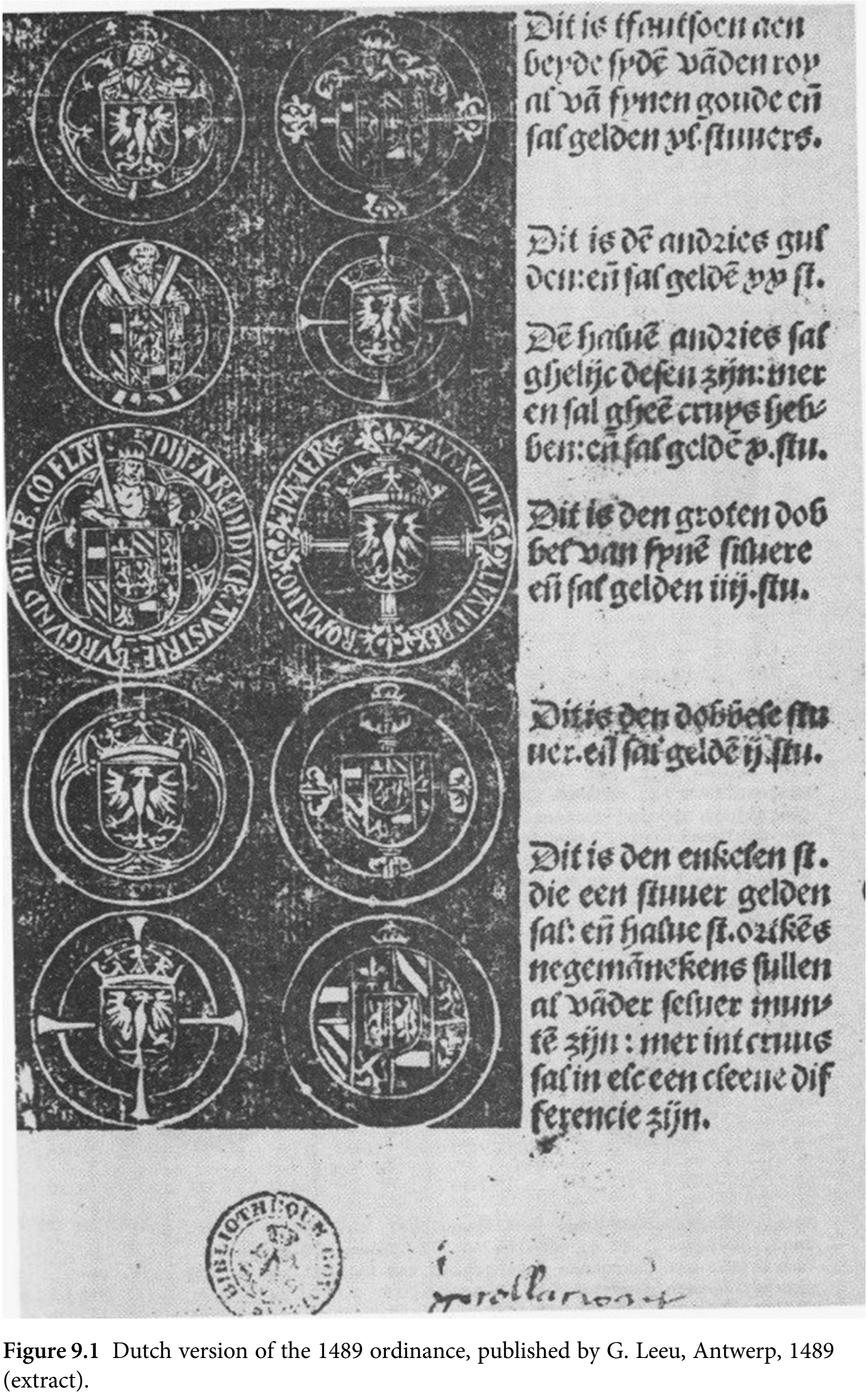
[5] See the diagram in Stuurman, above n 3, at 10, to be compared with van Uytven's estimation, above n 5.

[6] Contemporary sources often give the date of 24 December for the 1489 ordinance.

[7] Because there is no modern critical edition of the ordinance, one usually relies on the French text published in: *Groot Placaet-Boeck, Inhoudende De Placaten Ende Ordonnantien vande Hoogh-Mog. Heeren Staten-Generael der Vereenighde Nederlanden, ende vande Ed. Groot Mog. Heeren Staten van Hollandt ende West-Vrieslandt, Mitsgaders vande Ed. Mog. Heeren Staten van Zeelandt* (The Hague, By de Weduwe ende Erfgenamen van Wijlen Hillebrandt Iacobsz. van Wouw, Ordinaris Druckers vande Ho. Mog. Heeren Staten Generael der Vereenighde Nederlanden, ende vande Ed. Groot Mog. Heeren Staten van Hollandt ende West-Vrieslandt, 1651) cols 2578–605 (hereafter *Groot Placaet-Boeck*); for the Dutch text, see the comparatively rare edition printed by G. Leeu in Antwerp, 1489.

See J.-M. Cauchies, *La législation princière pour le comté de Hainaut: Ducs de Bourgogne et premiers Habsbourg (1427–1506)* (1982), esp. at 241 et seq. (monetary issues), with citations to most of the earlier relevant literature. For the Dutch perspective, see especially H. Enno van Gelder, 'De muntpolitiek van Philips de Schone (1482–1496)', (1951) 38 *Jaarboek van het Koninklijk Nederlandsch Genootschap voor munt- en penningkunde* 42.

[8] The preamble of the ordinance refers to meetings at Lier in October, and subsequently at Breda in December 1489, where it was enacted and 'published' (*Groot Placaet-Boeck,* above n 7, cols 2578–9); see also Cauchies, above n 4, at 248, 272, 282.



Dit is tsauitsoen aen
beyde syde vāden roy
al vā fynen goude eñ
sal gelden xl. stuuers.

Dit is dē andries gul
den: eñ sal geldē xx st.

Dē halue andries sal
ghelijc desen zijn: mer
en sal ghee cruys heb-
ben: eñ sal geldē x. stu.

Dit is den groten dob
bel van fynē siluere
eñ sal gelden iiij. stu.

Dit is den dobbele stu
uer. eñ sal geldē ij. stu.

Dit is den enkelen st.
die een stuuer gelden
sal: eñ halue st. ortkēs
negemānekens sullen
al vāder seluer munt
tē zijn: mer int cruus
sal in elc een cleene dif
ferencie zijn.

Figure 9.1 Dutch version of the 1489 ordinance, published by G. Leeu, Antwerp, 1489 (extract).

Photograph by the author of the copy held at the Royal Library in Brussels.

organization and monitoring of the mints, the regulation of various professional groups which, directly or indirectly, were associated with the mints, the circulation of coins and of precious metals, and, not least, the effects of the revaluation on different types of obligations and contractual relations between private individuals. It also included a regulation on the purveyance of essential goods.[9] With regard to creditors' claims, the ordinance established[10] the applicable rate of conversion, which depended on the date at which the debt was due for payment and on the nature of the claim.[11]

In that latter part of the ordinance, several provisions dealt with specific issues relating to the payment of rents.[12] The ordinance took the date of 24 June (the Feast of St John) 1487 as the standard date of reference. For payments which had accrued before that date, when the debasement of the currency had still remained comparatively limited, the payment of rents (or possibly, the redeeming of a rent covenant) would have to take into account the nominal parity of the currency, a choice which favoured the rent-creditors. However, for rents established after that date (and before the 1489 ordinance) the currency used as the reference would be the one applicable at the time the rent was sold, a choice which provided more protection to the rent-debtors, at least if they wished to exercise their option of redemption, and in so far as such an option had been agreed at the time of the covenant. For future payments of rents, the new currency was to be applied.

The ordinance has therefore been seen as an example of a policy adhering in general to the 'nominalist' approach, but at the same time deviating from and correcting the nominalist principle for the two-and-a-half-year period of high inflation which had immediately preceded the revaluation of the currency. In so far as long-term debtors (such as rent-debtors) were usually deemed to receive or generate an income which enabled them to pay the periodic instalments of the rent,[13] such a system was, if not altogether neutral, at least in accordance with the basic principles of an anti-inflationist policy aimed at restoring a stable currency. The correction that was allowed for the years 1487–9 was meant to attenuate the excessively onerous effects for those debtors who would otherwise have seen the trebling of the real value of their debt, and perhaps was also intended to cancel out any speculative gain which moneylenders who had been expecting a revaluation would have tried to achieve during the ordinance's period of gestation.

III. Particular Grants

1. The Disputed Issues

It appears that some rent-creditors tried to use the 1489 ordinance to compensate for the failure of their debtors to pay for losses due to delayed payments by insisting on being paid, after the ordinance had been enacted, in the new, revalued currency. Further, some rent-covenants explicitly stipulated that payments should be made in the currency which would

[9] Most of those issues are mentioned in the title of the ordinance as it appeared in *Groot Placaet-Boeck*, above n 7:

> Ordonnance, touchant l'évaluation d'aulcuns deniers d'or et d'argent, nouveaulx et vieulx: ensemble une Instruction bien ample sur le faict des monnoyes et de tout ce qui en dépend, comme des Maistres generaulx, Monnoyes, Monnoyeurs, Changeurs, Orfebures, Affineurs, Assayeurs, Merciers, Banquiers, Taffetiers, Rongeurs, Rentiers, fermiers etc. Avec la réduction des vivres.

[10] The text of the ordinance does not always make it clear whether the provisions apply by default or were to be regarded as imperative. For some transactions, the text specifies that its provisions will apply 'saulf toutteffois que si par aucunes lettres ou convenances vaillez, il estoit aultrement dict ou traictié[,] en ce cas l'on sera tenu de payer selon la teneur desdictes lettres et convenances' (ibid., col. 2602, 'au regard des payemens des termes a venir [. . .] deues pour raison de marchandise, deniers empruntez, deniers de change, deniers permiz & autres choses semblables'), but it would be speculative to infer that, *a contrario*, such a subsidiary applicability should not be extended to other transactions.

[11] Ibid., cols. 2600 et seq.

[12] Ibid, cols 2601–2. See Section IX of this chapter

[13] Stuurman, above n 3, at 23, referring to the interpretation by M. Bloch, *Esquisse d'une histoire monétaire de l'Europe* (1954).

apply at the time the rent had accrued.[14] Several towns tried to thwart those claims by seeking to obtain a grant (*octroi*) allowing them to continue to pay rents which had been bought at the time of 'light money' in the same currency—a relief which the sovereign had already provided for rents settled on his own domains.[15]

Rent-creditors wishing to counter such moves had to devise new strategies with which to attack their debtors. Their arguments were partly drawn from conventional lines of argumentation widely used against the quasi-statutory or quasi-executive orders whereby the prince's authority would grant delays of payments. Thus, the creditors would challenge the lawfulness of the proceedings through which such a grant had been obtained or they could challenge the validity of such orders for reasons relating to either form or substance.[16] Moreover, the losses suffered by the towns as rent-creditors were said to be

[14] GCM 804.66 (25 October 1501), where the rent-creditor argued against the city of Delft that the covenant provided:

> zoe wanneer zy de voors. rente van thiene ponden grooten lossen souden willen, dat zy dat een half jaer te voeren seggen souden ende kennelyc laeten weten ende betalen voer elken ponde grooten twintich ponden in sulken gelde ende tot sulken prijse als dan by den heer ofte staten van den lande gevaluert soude wesen ende mitte verschenen rente die nae beloop des tyds alsdan verschenen soude zyn . . .

and that the court should reject the counterargument proposed by the city, which submitted that there was no justification for paying in revalued currency a rent which had been acquired at the time of the 'light' currency, because that acquisition had been made

> omme weder thebbene ponden grooten in penningen van sulke weerde het waere licht ofte laghe gelt als loop ende ganck hebben soude telken termyne ende dat de munte zichtent vele hooger gegaen hadde dan doe de voors. renten gecocht waeren, gelyck de vieryzer up thiene grooten Vlaems.

The latter argument appears to have been explicitly confirmed in the decision of the extended judgment, at least for the period up to the grant of the *octroi*:

> condempneren de voorn. impetranten up te leggene ende te betalene . . . navolgende de letteren van de constitucie van de voors. rente in sulke penningen ende weerde als de munte loop hadde ten tyde van de payementen van de voors. principal ende achterstellen van de voors. rente tote dage van de leste impetractie van den lesten ottroy by voorn. impetranten vercregen.

[15] See, e.g., GCM 804.66 (25 October 1501), and also the rebuttal by a rent-creditor of an application (*requête-civile*) by the city of Amsterdam in GCM 803.29 (3 February 1497 ns) with regard to a grant (*octroi*) in 1495. An application which may have aimed at obtaining the same advantage was also submitted by Amsterdam in the case GCM 803.128 (December 1498, text in Stuurman, above n 3, at 62–64), but where reference is made to

> sekere ordonnancie by ons gemaect in der maent van meye int jaer XCV lestleden inhoudende dat de loop van de renten by tyden van den lichten gelde gecocht betaelt souden zyn in sulke munte ende gelde als de coopers huere penningen daervooren gegeven ende betaelt soude zyn in sulke munte ende gelde als de coopers huere penningen daervooren gegeven ende betaelt hadden ofte dat tprincipael vandien gereduceert soude wesen tot munte nu ter tyd loop hebbende omme daernae te diminueren den loop van de voors. renten nietjegenstaende alle ordennancien, voorwaerden ende renunciacien gedaen ter contrarien ende de brieven ende obligacien die daerup gemaect ende gegeven mochten wesen in wat manieren dattet ware' (ibid., at 1075–6).

That application was also rejected.

[16] BH 159, doc. *a*; GCM 802.24 (25 October 1493), where Amsterdam relied on a grant of 27 August 1492, by which the ruler had allowed the Dutch cities, taking into account their welfare and after careful deliberation,

> te mogen betalen de principale lossinge ende achterstellen vand. renten op hemlieden vercocht zichtent St. Jans dage in jaer zevenentachtich, up zulcken gelde en alsulcken prise als die loop hadde ten dage vander vercoopinge vand. voirs. renten ende als vand. renten vercocht zundert tvoirs. jaer zevenentseventich totten voirs. St. Jans dage zevenentachtich, zy souden de selve mogen lossen ende quyten met sulcker munte als doe vercocht geweest hadden de voir. ordennancie vander munte ende de pointen daer inne gevoert blivende in hueren wesende aengaende die achterstellen vand. selver renten (GCM 802.24, 179–80).

But the rent-creditors challenged the validity of the grant, which, they argued, should only have been given upon advice of the Great Council, the Council of Finance, and other councils; moreover, they said, such advice would then have had to be mentioned in the official document of the grant, which would have to be confirmed by a majority in Holland (presumably, they meant: by a majority in the estates of the county): GCM 802.24, 182. In GCM 803.29 (3 February 1497 ns), Amsterdam requested (unsuccessfully) that a grant obtained in 1495 be added to its case-file during the appeal proceedings: there the city's opponent challenged the request by pointing out that the official letters of the grant had neither been published nor confirmed, and that the grant in question only inherent in the risk of rent covenants; inevitably, the creditors would insist on the binding force of contractual obligations and the need to comply with lawful rights acquired by another party.[17] On behalf of the towns, counsel would argue that the authority of the prince expressed in their grants, even when previous statutory provisions were being adjusted or put aside,[18] prevailed over private interests, all the more since those grants were deemed to be justified by the superior interest of the commonwealth[19] (as in the case of *moratoria* formally allowed by the prince). Such arguments were highly conventional in the learned, Roman-canonical legal tradition, and were not necessarily linked to any considerations of monetary or economic policy.[20]

2. Cases

For example, in their proceedings against the city of Edam (1494–5) the creditors' counsel were able to put forward several of those arguments at once. With regard to the lawfulness and validity of the grant, they submitted that it failed to establish that there had been a proper application, and that neither the required confirmation nor its publication had taken place.[21] Moreover, in at least three of the major and most ancient cities of Holland, the prevailing practice was contrary to such a grant[22]—an argument which duly led to a judicial investigation into such practices.[23] The creditors also claimed that the council proceedings through which the grant had been obtained had failed to apply the *et audi alteram partem* principle,[24] the result of which was that their lawful rights (acquired, *inter alia*, by contracts)[25] had been disregarded, even with respect to instalments which had already accrued.[26] They also relied on the ordinance itself, which, they argued, had provided that in the case of a life annuity (*rente viagère*)—as in this particular case—payments were to be made in 'heavy' money.[27] The argument also pointed out that because

affected rents sold in the ruler's domains (and not those affecting cities or individuals). See GCM 804.25, at 94: grant agreed to without taking into account third parties' rights; GCM 804.66 (25 October 1501): the same, but also because the grant had been obtained by other cities (viz. Amsterdam, Leyden) and could not be extended to Delft.

[17] See, e.g., GCM 802.24 (25 October 1493): following a judgment which the rent-creditors wanted to execute; GCM 804.66 (25 October 1501): the grant is said to be void 'ende hemlieden niet prejudicieren en mochte want deselve ottroy priveerde eenen van zynen vercregen rechten hem ongehoort'.

[18] GCM 804.25 (24 October 1500):

> gelyckerwys alst in onser machte was int voors. jaer negen ende tachentich die ordenancie te maken vand. munte sonder daer over te roupen die grootelicke daerby gequetst waren zoe wast ooc wel in onse macht verclaringe ende interpretacie daerup te doene want wy onse gracie ende octroy altyt gonnen ende verleenen mochten den genen die ons beliefde.

[19] See, e.g., GCM 802.24 (25 October 1493), at 179: 'omme te beletten de verderffenisse ende depopulacie vand. voirs. steden ende begheerende de welvaert vand. gemeenen oerboire van dien'.

[20] Occasionally, the records also contain an implicit management strategy, for example in the case where a rent-creditor suggested that a city was pursuing a sale policy at an advantageous rate, so that it could redeem old rents (GCM 801.65 [12 November 1491], at 475)—an allegation which was denied by the city (ibid., at 476).

[21] GCM, BH 159, doc. *a*, at 12. According to the argument, the estates of the province had not duly requested or approved the grant.

[22] Ibid., doc *a*, referring to: 'Dordrecht, Haerlem ende Delft, die welcke drie steden die ouste ende opperste zyn van die groote steden van Hollant', and to other cities and villages, which, however, are not mentioned by name.

[23] Ibid., doc. *c*.

[24] Ibid., doc. *a*, at 10 (with references to D. 1.7.6 and to Guilelmus Durantis' *Speculum*).

[25] Ibid., doc *a*, at 4 (Bartolus ad D. 12.1.27), 11 (D. 16.3.1.6, from which the litigant infers that the instrument upon which his opponent relied was void: C. 10.32.61; C. 1.19.7).

[26] The last part of the memorandum, GCM, BH 159, doc. *a*, lists the reasons why the grant was to be considered 'obrepticious and subrepticious'.

[27] Ibid., doc. *a*, at 11, art. 22:

> gemerct dat die voirs. ordonnancie alhier in desen lande inden jaere van lxxxix Kersavonde gepubliceer[t] inhoudende ende verclaerende datmen alle die lijfrenten betalen sal in zwaeren munte te weten in munte nader zelver ordonnantie gepublieert welcke ordonnancie gemaict es geweest mit ripe

life annuities were legitimate aleatory contracts, the creditors could not be accused of any usury.[28] At least some of these arguments may have satisfied the judges of the Court of Holland because the city of Edam appealed (in early 1495) against its decision to the Great Council.

In a case decided by the Great Council on 13 October 1503 in favour of the city of Amsterdam, the judgment reiterates some of the arguments in favour of the city-debtor.[29] In that argumentation, the 1489 ordinance (upon which the rent-creditor relied in order to obtain the payment of his rents at the revaluated rate)[30] is presented as a consequence of the wars during the preceding years, and whose effects on the (Dutch) cities had been miscalculated. That was the reason why a grant by the prince had ordered that payments should be made at the rate which applied at the time when the rent had been established, provided a majority of the cities agreed.[31] That grant had been justified by considerations of public interest, while the payment of the rents at the new rates would have been unreasonable[32]—to such an extent that the cities would have been unable to meet their obligations.[33] The clause requiring the agreement of a majority of the cities nevertheless had created difficulties, and in 1497, Leiden and other towns had obtained a new grant which no longer included such a condition.[34] The Great Council's judgment in favour of Amsterdam[35] took into account the balance of the interests at stake: it confirmed that the city could at least

> deliberacie van Raiden byden prince met zynen edelen ende Raidstluyden alst blyct byd. contenue van dien. Endelick ontfanghen alhier in desen zynen landen que dicta constitutio ab omnibus inviolabiliter est observanda l. humanum et l. leges sacratissime C. de legi. [C. 1.14.8–9] et iuxta ea que habentur in auc. ut fac. no. consti. al. in rubro et nigro [Auth. 5.16 (Nov 66)].

[28] Ibid., doc *a*, at 14–15.

[29] GCM 804.163 (13 October 1503).

[30] Ibid., fo. 597r.

[31] Ibid., fo. 596r:

> . . . Nu eist zoe dat de meeste menichte van de steden van Holland ziende dat bij alsoe zij betalen souden moeten in stercke munte de loop ende achterstellen van den renten bij tijden van den lichten ghelde vercocht omme de beschermenesse van den lande dattet wesen soude de gheheele verderffenesse ende destructie van de voors. steden, zy hadden ons dat te kennen gegeven by huer supplicatie omme daerinne voorsien te zyne mit behoorlike provisie. Waerup wy hadden verleent ende gedaen expedieren onse openen letteren van ottroy ende by dien geconsenteert ende gewillecoert de loop ende achterstellen van de renten up de lichamen van de voors. steden vercocht by tyde van de lichte munte te mogen betalen in sulke munte als deselve renten gecocht hadden geweest by alsoe de meeste deel daerinne consenteren soude.

[32] The same argument *contre raison* occurs in GCM 804.66 (25 October 1501), where Delft argued that the system of the 1489 ordinance would be

> tot groot scade van onse landen germerct dat zy drie penningen voer eenen penninck betalen souden ende mits dien souden de coopers rerembourseert wesen van huer principale penningen binnen drie ofte viere jaeren twelke onredelic wesen soude, hadden by vorme van edicte gewillekoort ende geconsenteert den Staten van onse landen van Brabant ende Hollant den loop ende die achterstellen van de renten up de voors. landen vercocht te mogen betalen mit sulker munte als deselve renten gecocht hadden geweest. Ende gelycken edict hadden wy gemaict angaende de betalinge van de renten vercocht up onse demeine.

[33] GCM 804.163, fo. 597v:

> indien de steden van Hollant betalen moesten in stercke munte de renten ende achterstellen up hemlieden gecocht ten tyde van den lichten gelde zy souden drie penningen voer eenen geven twelcke ware de geheele verderfenesse van denselven steden ende jegens de gemeenen oorboir ende ooc den voorn. impetranten soude onmogelic wesen dat te volbringen waerby tvoors. ottroy was in alle redene ende rechtvaerdichede gefondeert ende mits dien duechdeliken verleent.

[34] Ibid., fo. 598r. Amsterdam succeeded with its application aiming at having the grant (and a moratorium from 1498) included in the case file.

[35] In contrast to the outcome of the previous litigation, see above n 15, GCM 803.29 (3 February 1497 ns) and GCM 803.128 (December 1498).

partly rely on the benefit of the grants, whilst providing that the rights of the rent-creditors which had previously been acknowledged and acted upon would be upheld.[36]

IV. Claims for Payment in 'Heavy' Money

In spite of the fairly detailed regulation for different categories of payments contained in the 1489 ordinance, litigation between rent-creditors and rent-debtors with regard to payment in 'light' or 'heavy' money (those were the common phrases used in written legal arguments produced in court, probably reflecting a widespread usage among the classes of litigants involved) raised several legal issues, either directly or indirectly.[37] As a preliminary issue, it could be argued that the regulation was not absolutely binding, or that it was only applicable by default, namely in the absence of any conventional terms to the contrary.[38] No doubt some of the rents which had been acquired during the months immediately preceding the enactment of the ordinance could have been instigated by speculation. The arguments exchanged in court show that the cities emphasized the exorbitant costs they would incur if they had to pay the rents they had sold according to the new rates after the revaluation; they claimed that the losses they would suffer would qualify as *laesio* in law, that is, grounds for rescinding a contract when there was an excessive

[36] GCM 804.163, decision, fo. 598v:

> ... condempneeren de voors. van Amsterdam up te leggene ende te betalene ... ter cause van de achterstellen van drie jaerscharen verschenen int jaer XCIII in sulcken goude ende gelde als loop gehad heeft telken termyne van betalinge. Ende als van den loop van derselver rente ende achterstellen verschenen zichtent de voors. vonnesse van Delft ende die hierna verschijnen sullen, wij interinerende de requeste civile by de voorn. van Amsterdamme vercregen, condempneren deselve van Amsterdam te betalene de voors. rente ende achterstellen navolgende toctroy die zy daervan vercregen hebben int jaer XCVII ende na den staet by hemlieden verworven int jaer XCVIII ....

Compare with the decision in the case of Delft, GCM 804.66 (25 October 1501), referred to above n 15.

[37] Those issues can also be found in litigation between private individuals with regard to rents settled before the 1489 ordinance: see, e.g., the Zeeland case decided by the Great Council on 7 September 1498 (GCM 803.112), which related to a rent covenant of 1486: the rent-creditor opposed the offer of being paid in 'light' currency. As in other cases involving cities, here, too, the Great Council's judgment details in its decision which rate applies to the instalments due by the debtor (ibid., at 966).

[38] Inevitably, the terms of a contract could be open to contrasting interpretations: see, e.g., the observation in GCM 803.128 (December 1498):

> gevende ter goeder trouwe hoere brieven ende obligacien sprekende op ponden grooten Vlaems ofte Rijns guldenen sonder meer te specifficieren of te verclaren of dat pont groot te verstane was voer zess current of Andries guldenen of die Rijnssche guldenen gerekent voer zess gouden guldenen of zes currente guldenen hoewel nae rechte ende redene men behoorde den gulden te verstane als hy doen loop hadde.

In the course of litigation relating to a rent settled in 1489, and which gave rise to proceedings in 1498, the offer by Rotterdam to pay according to the currency which applied before the revaluation (following the terms of the ordinance) was rejected by the rent-creditor who relied on an implicit term of the covenant, which would have favoured the rate applicable at the time of the actual payment (GCM, BH 197; see the copy of the indebture, which said a.o.: 'mit alsulcken paymente als dan loep hebben zal nader valuacie ende ordinancie vanden prince vanden lande', GCM, BH 197, doc. *b*; see also in the same file, doc. *f*, at 3, art. 5, and at 9, art. 10). In those proceedings, the rent-creditor argued that the executory force of the covenant made between the parties, together with the provision in the ordinance, had to prevail over any order the opponent might have obtained:

> ... bysonder gemerct dat die zyn tegens tpact vanden eysschers ende haeren voirsaeten ende directelycken vand. ordonnancie van mijnen aldergenadigden heere, die welcke oick by expres seecht hoe ende in wat manieren dat men betalen ende lossen zall moegen met lichten gelde, ten zy dat anders by brieven ende voirwairden tusschen partyen versproicken ende gepacisceert es, sic hic in causa nostra de welcke partien obligatien ende verbanden mijn aldergenadichen heere geachtervolcht ende onderhouden wil hebben gelyck byder ordonnancie blijct (GCM, BH 197, at 9–10, art. 11; in the same sense, see GCM, BH 197, at 14, art. 33).

disparity between the value of what had been conveyed and the price agreed.[39] Conversely, in the case of life annuities (*rentes viagères, lijfrenten*), the rent-creditors emphasized that these were aleatory contracts which did not a priori bestow an advantage on one or the other party.[40]

A case appearing in 1491 is especially interesting because, at the time, the city-debtor (Amsterdam) could not yet refer to the benefice of a grant.[41] The rents at issue dated back to 1488 and 1489. The creditors, apparently following a general trend,[42] insisted on being paid in 'heavy' money, whereas the city wanted to pay the newly accrued annuities, or even to redeem the rents,[43] at the rate applicable at the time the rent contracts had been made.[44] The rent-creditors, conversely, insisted on applying the rate applicable at the time the payment was due.[45] The Court of Holland ordered Amsterdam to provide sureties pending the

[39] The same difficulties also occurred in controversies about rents between private litigants. A good example is case GCM 803.69 (27 November 1497, text in Stuurman, above n 3, at 58–61) *iuncto* GCM, BH 148, the more so because the surviving case file contains extracts from several statutes and other acts from the ruler dating from the same period (see, e.g., GCM, BH 148, doc. *m*). An order of 27 August 1492 had imposed the payment of rents according to the rate applicable at the time of the covenant, notwithstanding any term to the contrary (see GCM, BH 148, doc. *e*; Stuurman, above n 3, at 48–50). In this particular controversy, the rent-debtor claimed that he could deduct from his debts the amounts which he had paid in excess in 1490–2, when he paid the rent in 'heavy' money. The claim was opposed by the rent-creditor, who relied on the 1489 ordinance. The rent-debtor then referred to grants, which he called 'new ordinances', and which were deemed to have allowed the payment according to the standing rate at the time of the covenant (GCM 803.69, at 645). Nevertheless, the Court of Holland ordered the rent-debtor to pay according to the new currency, a decision later confirmed by the Great Council. See GCM 803.69, at 646:

> omme uut crachte van de voirs. executorie upten voirs. verweirder ende zynen goeden geexecuteert te wesen de somme van vyftich ponden van XL grooten tpont verschenen achtervolgende de voirs. acte van condempnacie up Kerssavont anno XCII lestleden ende dat in penningen van goude en zilvere als doetertyt gancbaer waeren.

Similarly, in another dispute between private individuals, the judgment of the Delft court in favour of the rent-debtor (who claimed that 'by law' he was entitled to pay in the currency applicable at the time of the covenant) was reversed on appeal by the Court of Holland in favour of the rent-creditor (who relied mainly on the terms of the covenant); after the second appeal proceedings the latter judgment was confirmed by the Great Council: GCM 804.51 (9 July 1501). Litigation between private individuals sometimes also included controversies about the currency to be used in other contracts: see, e.g., the case of a sale on behalf of a third beneficiary, GCM 802.64 (24 October 1494).

[40] See, e.g., the argument of a rent-creditor according to whom, before the revaluation, the city had benefited from the inflationist surge:

> Ende aldair zy seiden dat de renten voorscr. mit lichte gelde gecocht waeren, daerup andwordden de voorn. gedaechde dat de voorn. wylen Jan Jacobss. ponden grooten in renten gecocht hadde omme weder thebbene ponden grooten in penningen van sulke weerde het waere licht ofte laghe gelt als loop ende ganck hebben soude telken termyne ende dat de munte zichtent vele hooger gegaen hadde dan doe de voors. renten gecocht waeren gelyck de vierijzer up thiene grooten Vlaams (GCM 804.66 [25 October 1501]).

[41] GCM 801.65 (12 November 1491, text in Stuurman, above n 3, at 37–40) *iuncto* GCM, BH 138. Amsterdam sought to compensate the lack of a grant by learned legal opinions in its favour (GCM, BH 138, docs. *g* [text in Stuurman, above n 3, at 35–6] and *h*).

[42] GCM 801.65, at 473:

> Nu waest zoe dat vele van de coopers van de voors. renten hadden de voors. supplianten willen bedwingen up te leggen ende te betalen den loop ende lossinge van derselver renten mit zwaeren gelden sustenerende dat by der evaluacie van den munt alsoe behoorde te geschiene in twelcke doende zy van lijfrenten van twee deen ende van erfrenten van vier deen wat meer of myn betalen souden moeten.

[43] An understanding of the phrase 'tloop ende lossing' as the possibility of redeeming at the rate applicable prior to the revaluation would have obviously been detrimental to the rent-creditors forced to reinvest their capital after suffering a substantial loss of its real value.

[44] GCM 801.65, at 474: 'betalende en upleggende tloop ende die lossinge van de voirs. renten in sulcker munte ende tot sulken prijse als cours ende ganc hadde ten tijde als die vercocht waeren'.

[45] According to their argument, based both on the covenant and on the ordinance:

> . . . betalinge te doene tot sekere termijnen begrepen in de voors. rentbrieven met Vlaemscher munte als ten dage van betalinge loop hebben soude twelke te verstane was mit sulker munte als by den heere van de lande geevaluert soude zyn ende sekeren tyd daernae wy hadden gedaen publicieren overal in onsen

proceedings ('without prejudice') for the accrued annuities at the rate of the 'heavy' currency.[46] The Great Council dismissed the city's appeal against the order and sent the case back to the Court in The Hague.[47] Two years later, the litigants were back before the Great Council, in appeal proceedings against a new decision of the Court of Holland. By then, Amsterdam was able to rely on a grant (of 17 August 1492), but the Great Council once again dismissed the city's appeal and sent the case to The Hague, nonetheless allowing Amsterdam to argue its case on the strength of the grant it had obtained.

Even several years later, Dutch cities occasionally still faced claims by rent-creditors who wanted to be paid at the revalued rate of 1489, although the rents had originated before the ordinance: witness a judgment of the Great Council in 1503 in appeal proceedings involving the town of Schiedam.[48] The circumstances and the settlement of the rent were unusual. In 1489 (when, as counsel for the city argued, 'the money had reached its highest level'), the creditor had given a loan of £160, which was to be paid back after a period of one year at the currency rate which would apply at the exchange or *bourse* (in the Dutch source: '*in buerse*').[49] After the 1489 ordinance, Schiedam proved unable to pay back its debts at the new rate, and the claim at issue was converted into a life annuity settled on the lives of two persons. Later, the town tried to free itself from the obligation and applied to have the contract rescinded, claiming that their agents who had negotiated and signed the contract had been 'mistaken' (a reference to the legal notion of *error*) and 'simple minded'. They also claimed that payment in heavy money would amount to *laesio*.[50] Counsel for the rent-creditor relied on the conventional defence of the rent's aleatory character,[51] a line of argumentation which led the litigants to debate several additional issues, such as the speculative nature of a rent-settlement[52] and the assessment of a person's life expectancy.[53] The Court of Holland eventually fixed the rates of the rents to be paid (both accrued and future annuities) according to the terms of the convention. Schiedam appealed against that decision, but the Great Council agreed with the Court of Holland's judgment.

> landen die reductie by ons gemact up tstick van der munte ende by dien geordeneert dat alrehande lijfrenten verschenen naer der voors. publicacie betaelt souden werdden in sulker munte als de voors. reductie inhoudende was, te wetene voer den Sint Andries gulden XX stuvers ende voor tpond groot sess Andries guldenen (ibid., at 474).

[46] Ibid., at 476. [47] GCM 802.24 (25 October 1493). [48] GCM 804.152 (11 August 1503).

[49] Ibid., fo. 563r: 'sulke penningen als dan in buerse gaen soude'. On the other hand, the creditor also claimed that the repayment would be funded by the income the city would generate through its taxes (*accises*), and therefore at the rate applicable when those taxes would be levied (ibid., fo. 564r).

[50] Ibid., *passim*; see, e.g., ibid. fo. 563:

> zoedat die buerchmeesters van Schiedam doe wesende geen raed om gelt wetende waeren uuyt simpelhede mitten voors. Jan Pietersz. overcommen ende hem vercocht ende versegelt onder der stede segel van Schiedam LXXXIIII guldenen tsjaers tot XL grooten Vlaems tstuck up desselfs Jan Pietersz. ende zijnre huusvrouwen lijven ende den lancstlevende van hen beiden daerup de voors. van Schiedam den voors. Jan Pietersz. betaelt hadden sekere loopende renten ende alsoe de voorn. scout ende gerechte hem daerby bevoelden grootelicken bezwaert te zyne want de voors. LXXXXIIII Rijns guldenen lijfrente up twee lyven den scuytkin tot III scellingen grooten gerekent niet meer beloopen en soude dan den penning drie oft nae dese extimacie IIII [en half] of daeromtrent twelke onredelick was.

See also ibid., f. 564v. The action aimed at having the contract rescinded was probably also based on equity: ' . . . te voersien van sulke remedie ende provisie van justicien ende oic van gracie indient van noode waere als zy bevinden souden ter materie dienende ende zy ons in huerlieder consciencie souden raden van doene' (ibid., fo. 563v).

[51] Ibid., *passim*, esp. fo. 564r, arguing that if there had not been a revaluation, the loss would have fallen on the rent-creditor, and Schiedam would have enjoyed the advantage. Likewise, if the rent-creditor and his wife had died, the city would have profited from the sale.

[52] Ibid., fo. 564v: Schiedam, in the course of a significant counterargument, challenged the alleged 'fortuitous' nature of the rent: 'want die penningen waren zoe hoech dat die niet hooger loopen en mochten ende was ooc gemeen sprake dat men die penningen reduceren soude'.

[53] Schiedam referred to the civil law according to which 'a man can live one hundred years' (ibid., fo. 564v), whereas the rent-creditor noted that 'people no longer reach an advanced age as they used to in previous times' (ibid., fo. 564v–565r).

V. The Redemption of Rents

Rent-debtors who were facing payments at the revalued rate could be tempted either to exercise their option of redemption or to seek the right to exercise such an option. Redemption of the rent would of course only be attractive to them if the price to pay were fixed at the rate applicable before the 1489 ordinance. Conversely, from the vantage point of the rent-creditors, the redemption of a rent which had been created at the time of 'light' money would be attractive if the price were fixed at the rate of the revalued currency. Because of this conflict of interests, court records show that litigants often relied on the same arguments and strategies as in litigation relating to the payment of annuities. However, in some cases, a city that appeared as rent-debtor (as in the case of Schiedam mentioned earlier) would seek to obtain some form of *restitutio in integrum*, but the legal effects of the remedy are not always clearly stated in the records. Thus, when a litigant applied for rescission or annulment, for relief from *laesio*, or more generally to be discharged (*relevé*) from his duties, the aim was often to obtain a remedy which would have—at least for the capital sum—retrospective effects, so that for the purpose of terminating the rent-covenant, the court would take as a reference the rate applicable at the time when it was established.[54]

The litigant who wished to redeem the rent faced a more difficult task, as in such a case, the problem of determining the rate of reference had to be decided.

In a case where a cautious rent-creditor had settled a rent with the city of Amsterdam (in May 1486), the contract provided that if the city wished to redeem the rent, it had to give the creditor three years' advance notice.[55] From 1486 until 1489, payments were apparently made at the rate applicable at the time the annual payment accrued; after the revaluation of the currency, a controversy arose about the applicable rate.[56] In about 1504, Amsterdam deposited a sum intended to cover the redemption of the rent (but, it seems, failing to take into account the three years' notice). The rate proposed by Amsterdam was below the rate which the creditor (by then the original creditor's successor) claimed.[57] First-instance proceedings took place in the county of Zeeland, which, on technical grounds, led to an appeal before the Great Council in Mechlin. Although the appeal dealt mainly with procedural issues, the parties were able to present their case with regard to the redemption of the rent. From the records which have survived, it appears that the rent-creditor relied mainly on the terms of the contract to justify the higher rate.

In another case, The Hague had obtained a grant allowing the municipality to redeem any rent on land within its territory.[58] The grant also fixed the rate at which the redemption

[54] See, e.g., GCM 801.65 (12 November 1491), at 475–6.

[55] GCM 807.20 (27 November 1506) *iuncto* GCM, EA 228. On the advance notice, see GCM, EA 228, doc. *i*, at 7, 12, 20, and 33, and also GCM, EA 228, doc. *b*.

[56] GCM, EA 226, doc. *i*, at 13.

[57] GCM, EA 228, at 18, 21–2, 33. See ibid., at 21–2, arts 11–2:

> Item Dautre part ladicte rente avoit esté constituée aladvenant du double a deux lions a quatre gros vi ds. pieche et ledit namptissement estoit fait aladvenant de cinq gros et par ce estoit insouffisant. Item pour paier le cours de ladicte rente ainsi que les deniers avoient cours au jour de la constitution dicelle par ce que ledit feu Guillaume Biscop soustenoit quil devoit estre paié aladvenant de quatre gros vi ds le double et lesdits d'Amsterdam aladvenant de cinq gros . . . .

[58] GCM 805.4 (3 May 1504), fo. 13r (judgment, in Dutch) *iuncto* GCM, EA 2660 (memorandum on behalf of The Hague, in French), doc. *a*, at 3: the grant had been given upon positive advice from the *stadhouder* and from the Council of Holland, and it allowed the municipality to:

> racheter les rentes quilz avoient sur ledit villaige de Le Haye non admorties ne a eulx donnees pour leur anchienne fondacion, les rentes heritieres alavenant du denier seize, et les viagieres, celles a deux vies, a ladvenant du denier dix, et a une vie, alavenant du denier huit.

had to be fixed. The grant's justification was typical of the circumstances at the time, referring to the ruin of real estate and the ensuing damage to the commonwealth[59] and general public interest.[60] The rent-creditor, an ecclesiastical institution, tried to oppose the redemption by referring to its privileged status and to a rule of its internal corporate governance which prohibited agreeing to such a redemption.[61] The Hague relied on the authority of the grant and its purpose for the general interest,[62] as well as on its own local custom.[63] The municipality also defended the validity of the redemption it sought on the grounds that the rate which had been fixed reflected current market prices, whereas any higher rate would have tainted the contract with usury.[64] The Great Council nevertheless decided in favour of the rent-creditors.[65]

Far more complex litigation was pursued by the city of Delft following its ineffective offer, in 1497, to redeem a rent which had been created in 1488.[66] According to the terms of the offer (which had been confirmed by the city's deposit of a sum matching its proposal) the rate to be applied for redeeming the rent was to be the same as at the time of the rent's creation.[67] In spite of a grant obtained in 1499,[68] in its judgment of 25 October 1501 the Great Council ordered the city to apply the currency applicable at the time each instalment had accrued until 1499, when the grant had been obtained.[69] The order gave rise to an interpretatory judgment,[70] the execution of which led Delft to appeal before the court. The city's resilience proved successful: in a new judgment (dated 9 November 1504), the court decided to reduce ('moderate') the burden of the rent in favour of the city.[71]

[59] GCM 805.4 (3 May 1504), fo. 13r; GCM, EA 2660, doc. *a*, at 6; 'que icelles maisons estoient fort chargies de rentes que lon les abandonnoit pour icelles et quelles alloient du tout a ruyne et que par ce ledit villaige alloit du tout a destruction'.

[60] '...bien public': a recurrent phrase in the memorandum GCM, EA 2660, doc. *a*.

[61] GCM 805.4 (3 May 1504), fo. 16r et seq.

[62] GCM, EA 2660, doc. *a*, p. 15.

[63] GCM 805.4 (3 May 1504), fo. 18r: 'oec by den costume van den voirs. dorpe van allen tyde geobserveert men en mochte aldaer geen erfrenten vercoepen sonder lossinge up de voers. huysen'; GCM, EA 2660, doc. *a*, at 14: 'Aussi par la coustume dudit villaige de Le Haye de tout temps observee lon ne peult illecq vendre rente heritiere sans rachat sur maisons estans oudit villaige.'

[64] GCM, EA 2660, doc. *a*, at 13: the grant had been given by the ruler with due knowledge and in the public interest, allowing the redemption 'au denier seize qui est le commun pris du rachat de toutes rentes heritieres et non ledit denier vingtquatre ou vingtsix sans rachat, qui de droit est reputé pour usure et par ce deffendu'.

[65] GCM 805.4 (3 May 1504), fo. 18v.

[66] GCM 805.36 (8 November 1504).

[67] Ibid, fo. 188r and, more specifically, fo. 190r.

[68] The grant was said to have allowed the redemption of rents from 1487–9, according to the 'price' applicable at the time of the sale of those rents (ibid., fo. 190v).

[69] Ibid., fo. 191r.

[70] Ibid., fo. 191r:

> ...interpreterende de voirs. sentencie geseyt ende verclaert hadde geweest in onsen voorn. grooten raedt dat vulcomende ende vuldoende by de voirs. appellanten de twee honderd ponden grooten by hemliden geleyt ende geconsigneert onder de voirs. wet van Middelburg in lichte munte up den v[en] dach in januario XIIIIc ende XCVII voir de lossinge ende trpincipael gelt van de rente van X ponden grooten den penninck XX in zulker munte als die loop ende ganck hadde ten dage van de voirs. consignacie ende oic mede vuldoende dach[ter]stellen van desselve rente te wetene degenen die vervallen ende verschenen waeren totten dage toe van den voirs. octroy in zulcker munte als loop hadde ten dage van de verschenen payementen. Ende degenen die verschenen waeren zichtent deselve octroy totten dage toe van de voirs. sentencie mit zulken goude ende gelde als loop hadde ten dage van de coopinge van de voirs. rente. Ende insgelix betalende dachtrstellen van de zes ponden grooten lijfrente verschenen ten dage van de voirs. octroy in zulker munte als die loop hadde ten dage van de voirs. octroy zy zouden van doe voertaen quijte wesen mits betalende die achterstellen verschenen zichtent tvoirs. octroy ende oic mede de loep van de voirs. rente mit zulken gelde ende tot zulken prijse als deselve rente vercregen ende gecocht hadde geweest.

[71] Ibid., fo. 193v (decision), which also allowed Delft to waive the redemption, an issue which had been highly controversial during the proceedings:

VI. Interim Conclusion

Litigation about rents in the aftermath of the 1489 ordinance provides a striking example of the effect of that ordinance on legal practice. Several (Dutch) cities were affected as rent-debtors and became involved in litigation during the subsequent years, which means that the records of the Great Council of Mechlin provide a significant sample of cases where the issue of which currency would apply at the time of payment was raised. The records occasionally yield the legal arguments submitted by counsel in the course of litigation before the Court of Holland or the Great Council, while the extended judgments also provide context and references to considerations of policy. Even so, the manifold other legal issues which were routinely raised in the course of litigation about rents were not all related to monetary questions. When the issue of the currency was at the heart of the controversy, several other legal issues were raised, so that, in the end, considerations other than those on monetary law could play a decisive role in the judges' reasoning when reaching their judgment. The judgments, however, did not as a rule include any explicit legal grounds or express the reasoning on which they were founded. Therefore, it is not possible to infer with certainty from the records the extent to which legal principles on the issue of the currency or on monetary law in general were applied or established, or whether any form of consistent case law on such issues was developed.

VII. From Legal Practice to Legal Doctrine: Nicolaus Everardus' *Consilium* 105

1. Other Transactions

Rent covenants were not the only legal titles which were affected by monetary statutes. Contracts entailing a deferred payment or instalments, gifts to be executed in the future, wills, and other transactions also gave rise to the issue of the currency to be applied after the 1489 ordinance, and litigation on such transactions also appears in the records of the Great Council during the last decade of the fifteenth century and the first decade of the sixteenth. At the time, even though a few handwritten collections of legal consultations and perhaps some elementary forms of reports related to the courts' practice in the Low Countries may have been circulating by the beginning of the sixteenth century, very little of that legal practice appears to have produced legal authorities in any formal sense. For the Southern and Northern Netherlands, consultations only started to appear in print during the second half of the sixteenth century, and extensive case reports appeared from the following century onwards. By then, much of the material included in those publications had superseded the legal practice of the earlier generations. One exception is the collection of consultations by Nicolaus Everardus (from Zeeland, d. 1532), first published by his sons in 1554.[72] Later editions of the collection show that, at least until the mid-seventeenth

[R]educeren ende modereren de voirs. rente van thien ponden grooten daer questie af es tot vyf ponden grooten sjaers van den dage dat de voirs. IIc £ geconsigneert by de voirn. appellanten voir de principale lossinge ende quijtinge gelicht hebben geweest by de voirs. wedewe ende voochden van de voirs. kinderen van wijlen Jan Jacobsz. Ordonnerende dat de voirs. van Delft en zullen egeensins gehouden zijn ter lossinge ende afcoep van de voirs. rente maer zullen dat mogen doen als hemlieden believen zal den penninck twintich ende in munte tot zulken prijse als gancbair zyn zal ten dage dat de voirs. lossinge gedaen werd . . . .

[72] I have used the edition: Nicolaus Everardus (a Middleburgo), *Consilia sive responsa* (Frankfurt, 1594), and, for *Consilium* 105, the text published by C. M. G. ten Raa, *Consilium nr. 105 van Nicolaas Everaerts* (1978). On Everardus and his work, including a reliable bibliography, see O. M. D. F. Vervaart, *Studies over Nicolaas Everaerts*

century, these opinions from the first quarter of the sixteenth century could still retain the interest of legal practitioners.[73]

Consilium 105 by Everardus is specifically relevant to the history of monetary law.[74] In its printed—and only surviving—version, the consultation is undated, but it is possible that it goes back to the early sixteenth century, perhaps some time between 1505 and 1515. It is linked to legal proceedings, but the court, the specific circumstances of the litigation, and the outcome of the proceedings are unknown. The case appears to have arisen from the death of a man who, in 1488, had made in his will financial provision for his three illegitimate daughters. The provisions included the daughters' maintenance, and, upon their acquiring an ecclesiastical or temporal status, the payment to each of a sum of sixty pounds of Flemish *groten*. It was that payment which, at the death of their father, presumably around 1500 or a few years later, became controversial, since by that time, after the 1489 ordinance and the relative stability and prosperity of the following years, the nominal amount mentioned in the will represented a much more substantial capital than it had been in 1488, when the will was made. The three bequests together would have considerably reduced the value of the estate devolved to the heirs.

Everardus' consultation deals specifically with the issue of the currency to be applied to the three bequests: were those to be paid out according to the currency at the time when the will was drafted, or at the time when the bequests had to be executed? Everardus argues in favour of the first solution. As a legal consultation, the argumentation does not state what the actual difference in value may have been. The author was of course aware of the interests at stake, as he refers at the beginning of his opinion to the year 1488 as 'a time when the money was light' ('quo tempore pecunia erat levis'), and he states further: 'However, at the time when the bequest had to be executed, the money was heavy and worth more than it was at the time when the bequest was made' ('Modo tempore quo cessit dies legati, pecunia fuit ponderans et plus valens, quam valeret tempore legati facti'). The change in the value of the money is nonetheless only a premise of the opinion's argument, not its object ('. . . tempore conditi testamenti valor pecuniae fuit minor, ut patet in themate').

The consultation follows a conventional structure, arguing in favour of payment in the currency at the time the will was made, and therefore in 'light' money. Everardus builds his argument around three types of authorities: (a) *iuribus*, i.e. specific texts from the primary sources of civil and canon law (the *corpora iuris*); (b) *rationibus*, i.e. deductive reasoning based on legal authorities; and (c) *auctoritatibus*, i.e. opinions of learned legal authors.

(1462–1532) en zijn Topica (1994). See also C. M. G. ten Raa, *Geldwaarde-schommelingen, nominalisme en geldlening* (1984), with a summary of the earlier publications on Everardus at 9–11.

[73] See the detailed list of editions in Vervaart, above n 72, at 281–5.

[74] Its reception was comparatively late, no doubt because the *consilia* were not published until the second half of the sixteenth century. It appears to be absent from the authorities (even in the works by sixteenth-century authors) in: *Tractatus varii atque utiles de monetis, earumque mutatione, falsitate in gratiam studiosorum ac practicorum collecti* (Coloniae Agrippinae, Apud Theodorum Baumium, sub signo arboris, 1574). However, the full text of the *Consilium* 105 is included in: Renerus Budelius Ruremondanus (author et collector), *De monetis et re numaria, libri duo: quorum primus artem cudendae monetae, secundus vero quaestionum monetariarum decisiones continet. His accesserunt tractatus varii atque utiles, necnon consilia, singularesque additiones tam veterum, quam neoteoricorum authorum, qui de monetis, earundemque valore, liga, pondere, potestate, mutatione, variatione, falsitate, ac similibus scripserunt* (Coloniae Agrippinae, Apud Ioannem Gymnicum, sub Monocerote, 1591), at 699–701. As a result, Everardus' *consilia* became a standard reference in legal literature *de moneta*: see, e.g., M. Lipenius, *Bibliotheca realis iuridica*, vol. II (1757; repr. 1970), at 53.

2. Authoritative Texts of the *Corpora Iuris*

These authorities were conventional in the context of discussion on monetary changes. Reference is made to D. 32.41.4, D. 32.34.1, and D. 34.2.40 (all dealing with a case involving a testament), and to the canon law texts X 3.39.20 and X 3.39.26. Both decretals address the issue of monetary changes, although not in the context of a will: the first considers a case of taxes, while the second considers the case of periodic payments due according to some covenant. The latter case may be construed in the present consultation as an argument 'a contractibus ad ultimas voluntates'.[75] By contrast, the three Roman law texts discuss the construction and execution of bequests, as in the present case, but in none of those three texts (except perhaps in the third) was the object of the bequest a monetary value. That does not mean that an amount expressed in monetary currency would have to be regarded *eiusdem generis* as other property, such as, in the authorities referred to, slaves, claims, or travel silver. These civil law authorities are therefore to be regarded, entirely in accordance with the prevailing method at the time and in Everardus' professional environment, as being used as analogies or expressions of a general underlying principle (such as 'the original time of the legal title needs to be considered').

3. *Rationes*: Logical Reasoning Explicitly Drawing from Legal Authorities

Three arguments are briefly developed. None of these bear directly upon intrinsic monetary considerations, but, again, characteristically of the methods prevailing in legal practice at the time, they focus on principles of construction. The first argument concerns the bequest as a form of compensation for the maintenance the testator would have owed to his illegitimate daughters. Because such bequests are deemed to call for a restrictive interpretation (viz. so as to be the least onerous to the testator's heirs), the conclusion is that the testator's intention is supposed to have been to have the bequests paid out in light money. The second argument is based on the same premise of the bequests as a compensation for the obligation of maintenance to the children. Such a compensation, Everardus argues, can only be executed 'per pecuniam certam et invariabilem'.[76] For those reasons, he infers that the testator's intention at the time he made the provisions was that the payments should be made 'de moneta tunc currente'. The third argument buttresses the two previous ones by referring to the general rules of law which favour the most probable or usual solution, which, in this case, would be that the testator had in mind the currency applicable at the time when the will was drafted. Such general rules are also specifically said to be applied to provisions in wills.

4. Doctrinal Authorities (*Auctoritates*)

These are, again, largely conventional authorities referring to various types of legal literature: Oldradus de Ponte's *Consilium* 31; an addition by Johannes Andreae to the *Speculum*; Nicolaus de Tudeschis' commentaries on the decretals; and Jason Mayno's commentary on the *Old Digest* (building on previous commentaries by earlier authors). Those authorities represent the binding 'common opinion'. At that stage, Everardus dismisses in disparaging terms (but within the literary conventions of the genre) the dissenting view defended by Ludovicus Romanus.

[75] Which would appear (with some twenty qualifications) as one of the *topoi* in N. Everardus (a Middelburgo), *Loci Argumentorum Legales* (Lovanii: Excudebat Servatius Sassenus sibi, et haeredibus Arnoldi Birckmanni, 1552), at 129–31.

[76] In ten Raa, *Consilium nr. 105*, above n 72, at 29, the last word is wrongly reproduced as 'variabilem'.

(a) The communis opinio

The first authority, *Consilium* 31 by Oldradus, is a standard reference[77] on the issue and the case corresponds to that of Everardus' consultation: a testator had made a pious legacy of £200 and died ten years later. The issue was whether for the value to be paid, the time of the bequest or its execution at the time of the testator's death had to be taken into account, and, referring to the same texts, Oldradus had argued for the first solution. The second authority cited is an addition to the *Speculum* that became a set reference (mentioning a case where a periodic payment was due and the currency was revalued by the ruler), the more so because, in later editions, successive layers of other authorities were added to the annotations by Johannes Andreae and Baldus.[78]

In his commentaries, Nicolaus de Tudeschis, also known as Panormitanus, considered many more possibilities than the cursory reference in Everardus' consultation would suggest. The original commentary on X 3.39.20 initially considers taxes, but also discusses contracts where payment has been delayed. In order to reinforce the argument that money has to be paid out at the value which applied at the time of the promise, Panormitanus refers to Oldradus' *consilium* in the case of a will.[79] Panormitanus' commentary on X 2.24.18 includes a more elaborate and systematic discussion of the issues based on monetary considerations,[80] although external elements such as the presumed intention of the parties or the testator, or the modalities imposed by a particular statute appear to be relevant here too. In his commentary, Panormitanus considers the case of a contract where, before the payment takes place, the money has diminished in value, whether because the coinage has been debased or because the currency (independent of the coinage) has been reduced.

A special (and controversial) hypothesis which the author discusses is that of the ruler who has prohibited a coinage from being used in his territory. When the coinage is still circulating, but its value has diminished, Panormitanus differentiates between a situation where the loss in value is permanent and one where the decrease may be only temporary, depending on fluctuations in the market. In the former situation, Panormitanus notes that opinions are divided whether, barring any fault of the debtor, the creditor should bear the loss. In the latter case, Panormitanus contends that a purely nominalist approach should prevail, as the risk may turn out either way. When the reduction of the value is linked to the coinage itself, Panormitanus appears to follow the criticism against Bartolus' distinction between coinage of large and small denomination. The risk again appears to be carried by the creditor, unless the delay in payment is due to the debtor's fault.

In this second commentary, the case of the bequest in a will appears to be considered in its own right; moreover, the issue in the case of the will considers explicitly the situations

[77] The printed version is very short: see Oldradus de Ponte (Laudensis), *Consilia, seu Responsa, & Quaestiones Aureae* (1576), Cons. XXXI, inc. 'Thema tale est. Quidam condens testamentum', fo. 15r. Oldradus probably quotes the testament more or less verbatim, including the passage 'Lego. . . . 200. li.', and remarks: 'non dixit de qua moneta'. The issue is therefore: 'de qua moneta debeant solvi dictae 200. li. an de moneta, quae currebat tempore conditi testamenti. An de moneta, quae currebat tempore mortis testatoris?' Oldradus opts for the former solution, relying on civil law texts for wills, on civil and canon law texts for an analogous solution with regard to contracts. He finally refers to Azo's authority: 'Et haec fuit sententia domini Azonis in Brocardicis in rubricella eadem mensura, vel moneta debetur, quae erat tempore contractus.' Other consultations by Oldradus often quoted on issues of the currency to be applied are *Consilium* 13 (ibid., fo. 5v–6r: the time when a judgment is rendered) and *Consilium* 168 (ibid., fo. 82v–83r: the time when a benefice is granted).

[78] See [Gulielmus Durandus], *Speculum iuris, cum Ioan[nis] Andreae, Baldis, reliquorumque praestantiss. I.-V. Doctorum Theorematibus*, Partes III et IV (Basileae: Apud Ambrosium et Aurelium Frobenios fratres, 1574; repr. 1975), Lib. IIII, Partic. III, 'De obligationibus et solutionibus', § Nunc aliqua, at 362, 'Ex contractu' and 'Olim'.

[79] Nicolaus de Tudeschis, *Commentaria in Tertium Decretalium Librum* (Venetiis: Apud Iuntas, 1588), ad X 3.39.20, fo. 314v–315r.

[80] Nicolaus de Tudeschis, *Commentaria Secundae Partis in Secundum Librum Decretalium* (Venetiis: Apud Iuntas, 1588), ad X 2.24.18, Nos. 12 et seq., fo. 211r–212r.

where the value of the money has diminished and where it has increased. The value to be applied should be that at the time of the drafting of the will, a point for which Panormitanus refers to some of the same authorities mentioned by Everardus. Here again, however, the reason given is the interpretation of the testator's will, rather than any economic considerations.[81]

Finally, the consultation refers to Jason de Mayno's commentary on D. 12.1.3, which is presented as the outcome, in Everardus' time, of the opinions expressed by several earlier generations of legal authors.[82]

(b) Ludovicus Romanus' dissenting view

In the scholastic tradition of refuting the opposite thesis, Everardus targets dicta by Ludovicus Romanus in favour of taking into account the currency at the date of the execution of the legal title. One dictum referred to appears in Ludovicus Romanus' *Singularia.*[83] In fact, the brief text mentions opinions by Bartolus and Baldus, and also the conventional *loci* in the *Liber Extra*. For bequests, Romanus refers to conflicting authorities supporting either the time the will was made or the time of its execution.[84] In Romanus' *Consilium* 123,[85] the issue is whether a payment due by statute in Tours currency can be made in the currency (or its equivalent) prevailing at the time of the payment, when the currency has diminished in value ('in bonitate extrinseca deteriorata'). Romanus considers first that it would appear that the currency applicable at the time the statute which created the obligation was made should remain the reference. The argument is based on comparing the situation with a will, a judgment, and a contract. Ultimately, however, Romanus opts here for the time of the payment, relying on a different argument with regard to the principle applicable in the case of a will. The latter argument refers to D. 34.2.9, on a construction of the statute in the light of its continuous normative enforceability ('constitutio ipsa continue loquitur') and its adjustment to changes in the currency ('mutata

[81] Ibid., ad X 2.24.18, No. 13, fo. 211v:

> Quid autem, si ex testamento, ut quia tempore testamenti plus, vel minus valebat moneta, quam hodie valeat? Et intellige de perpetua alteratione, et dic, quod debet attendi valor existens tempore testamenti, qui de eo videtur testator sensisse, ut in l. uxorem, §. testamento, ff. de leg. 3. et l. fi. in prin. ff. de au. et arg. leg. tenet Io. And. in add. Spe.in d. §. nunc aliqua, ver pone, et ita consuluit Oldr. ut recitat Petr. de Anch. in d. c. olim.

[82] Iaso Maynus, *In Secundam Digesti Vet. Partem Commentaria* (Venetiis: Apud Iuntas, 1598, repr. 2008), ad D. 12.1.3, Nos. 27 et seq., fo. 9v, esp. No. 28 on wills (including the gloss's distinction between general and specific legacies: for the former, the time of the testator's death ought to be considered, for the latter, the time when the will was made).

[83] The numbering of the *singularia* appears to be different in various editions, and it seems that the reference therefore varies in some of the editions of Everardus' consilia. In the 1591 edition, the reference is to *Singulare* 518; in the 1543 edition, it appears as No. 513. See *Singularia plurimorum doctorum, Utillissima ac admodum necessaria Singularia praeclarissima profundissimorum in memoria et excellentissimorum iurisconsultorum dominorum: videlicet. Singularia Ludovici Romani cum additionibus Jo. Baptiste Castellonei* . . . (Lugduni, apud Jacobum Giuncti, 1543) No. 513, inc. 'Quod tempus inspeciatur', fo. 49r.

[84] *Singularia*, 1543 edn, above n 83. The issue with respect to the will considers the case where the value of the money has increased:

> . . . Modo quaero legantur mihi decem floreni, qui tempore testamenti valent minus quam tempore solutionis. Quod tempus inspiciatur. Videtur quod in dubio tempus inspiciatur testamenti, l. si ita, de auro et argen. lega. [D. 34.2.7] et l. medico, eodem tit. [D. 34.2.40], l. fi. §. indivisam, de legat. ii. [D. 31.1.89.1], preterea numis legatis minores debentur, de le. iii. l. numis [D. 32.1.75], ergo etc. In contrarium tamen est casus singularis quod tempus solutionis attenditur, in l. cum certum, ff. de aur. et argen. le. [D. 34.2.9], nisi heres fuerit in mora, ut l. vinum, ff. si certum peta. [D. 12.1.22].

The construction of the opposition between 'videtur' and 'in contrarium' may imply that the latter solution is advocated, albeit perhaps only under special circumstances.

[85] See Ludovicus Romanus Pontanus, *Consilia sive responsa* (Venetiis, 1568), fo. 86r–88r, inc. 'Circa primum dubium'.

pecunia intelligitur ad novam mutationem mutata constitutio'). The *consilium* suggests that the solution would differ in executing a contract. The legal argumentation is also buttressed by the assertion that such payments applying the currency at the time of the payment was a general practice (a binding practice, as the term *consuetudo* implies) for payments of recurrent taxes, accepted by the Holy See itself.

Everardus' *Consilium* 105 reflects the same pattern and methods as the practitioners' general arguments on issues related to the effects of the 1489 ordinance, in so far as they can be found in the records of the Great Council of Mechlin. The consultation, once it circulated in printed version, may have been an authority for applying in cases of testaments the currency at the time the testament was made as opposed to the time of its execution. It may also indicate that, by the early sixteenth century, this may have been the common opinion, or at least the opinion held by a majority of legal authors before Everardus. Several, if not most, of the authorities discussed by Everardus remained standard references in discussions on similar issues well into the seventeenth century. Therefore, the same civil law and canon law texts, and (perhaps to a lesser degree) the authors' commentaries on these texts and other doctrinal authorities, would continue to be used as materials and arguments for dealing with these issues. Everardus' opinion was not intended to be an original contribution to the controversy, but it did add a new layer of authority—by giving a more recent testimony of a learned opinion in legal practice, especially in a northern European jurisdiction—to what he presented as the prevailing common opinion. Since the edited version of the consultation remained very general on the 1489 ordinance and on any other particular features of the case, but concentrated mainly on *ius commune* authorities, its potential interface with legal practice in other civil law jurisdictions was enhanced.

VIII. Concluding Remarks

This brief survey of cases from the Low Countries around 1500 illustrates how the line of argumentation and the outcome of controversies around monetary issues (and in that particular context, around the issue of the effects of a revaluation of the currency on legal claims which originated before the revaluation) could be influenced by a wide range of legal questions which bore only indirectly on monetary considerations. Any inference with regard to monetary theories should therefore be regarded with great caution. Both the authorities of the *iura propria* and those of the *ius commune* show that the decisions on the currency to be taken into account in the case of deferred or periodic payments were the result of neither a purely nominalist or realist approach. The 1489 ordinance may have mainly followed a nominalist approach, but it has been pointed out that it was also prepared to make allowance for other interests in order to attenuate excessively unbalanced results in some circumstances. More exceptions could be allowed in practice if a party could show the legitimacy—based on contractual terms, on special exemptions, or on general policy arguments—of his interests. The learned civil and canon law authorities occasionally show a principled legal choice (such as *caveat creditor* or *caveat debitor*), or even a preference for a particular category of interests (such as the heirs versus the legatees). The practice observed at the Court of Holland and at the Council of Mechlin during the years following the 1489 ordinance, and also in Everardus' consultation, appear to comply generally with the ruler's statutory policies, but at the same time to adjust to the many possibilities of deviating from the nominalist approach opened up by the special provisions in the ordinance itself, by the ruler's special grants, and by the fairly abundant authorities of the Roman and canon law traditions.

IX. Appendix: Ordinance of December 1489

Ordinance of December 1489, extract: provisions on rents:

. . . Item, Qu'a l'entree de ceste ordonnance, toutes les rentes heritables & viagieres, qui ont esté vendues a libures de gros monnoye de Flandres, devant: la saint Jehan quatre-vingtz & sept, se payeront en coure a libure en groz: a sçavoir six Florins d'or, telz qu'ilz sont forgez par ceste ordonnance. Et s'il advenoit que cy apres lon en voulsist aulcune rachepter, lon payera pour chascune libure de gros, six Florins d'or. Et si cestoyent aulcunes rentes sur maison ou corps de ville, ou personnes particulieres qui feussent chargez a libures de quarante gros, lon payera pour le cours de ladicte rente de quarante gros la libure un Florin d'or. Et aussi si aulcunes rentes estoyent vendues comme dessus, a libures parisiz dicte monnoye pour la libure, lon sera tenu de payer demy florin d'or pour le cours de la rente de chascune libure parisis; & ainsi de toutes aultres rentes a l'advenant.

Item, que toutes les rentes heritables & viagiers, qui sont vendues au pays de Hollande, Zeelande, & Frise a Guillelmus d'or, se payeront de cy en avant pour chascun Guillelmus un Florin d'or, ou vingt pattars de la nouvelle monnoye: pour ce qu'il est dict par ceste ordonnance que ledict Guillelmus n'aura plus de cours.

Item, Des rachaptz de toutes manieres de rentes, lesquelles ont esté vendues depuis le jour de sainct Jehan quatre vingtz & sept, que par convenances lon peult rachapter, payera lon en telle monnoye comme furent achatteez lesdictes rentes, ou la valeur en aultre monnoye ayant cours par ceste ordonnance.

Item, Et au regard du cours desdictes rentes pour le temps advenir, apres la publication desdictes ordonnances, elles se payeront de tels deniers qu'ils auront cours par ceste [. . .] ordonnance. Mesmement est a entendre que les rentes achettees a deniers d'or se payeront a telz deniers d'or comme le contienent les lettres desdictz achetz, ou en aultres deniers a la valeur & selon icelle ordonnance. . . .

(French text in *Groot Placaet Boeck*, above n 7, vol. 1, cols 2601–2)

. . . Item, That from the commencement of the present statute, all rents on immoveables and life rents which have been sold in pounds of *groten* in Flemish money before St John's feast 1487 will be paid out in pounds of *groten*, viz. of six gold *florins*, as will be minted according to the present statute. And if henceforward anyone wants to redeem any such rent, he will have to pay for each pound of *groten* six gold *florins*. And if these are rents settled on a house or town-building, or individual persons at a rate of pounds of forty *groten*, one will pay for the said rent of forty *groten* the pound one gold *florin*. And if any rents have been sold as mentioned here above in *parisis* pounds of that money for the pound, one will have to pay half a gold florin for the course of the rent for every *parisis* pound; and likewise for all other rents in the same way.

Item, that for rents settled on immoveables and life-rents, which have been sold in the countries of Holland, Zeeland, and Frisia in gold *Guillelmus*, those will from now on be paid at the rate of one gold florin for each *Guillelmus*, or twenty *pattars* of the new money, as in the present statute it has been ordered that the said *Guillelmus* will no longer be legal tender.

Item, for the redemption of all kinds of rents, which have been sold since St John's feast 1487 and which may be redeemed according to the terms of the contract, one will pay in such money for which those said rents were bought, or the value in another money which is legal tender according to the present statute.

Item, and with regard to the duration of the said rents in future, after the publication of the present statute, those rents will be paid out in such moneys as will be legal tender according to the present statute. Likewise, it is to be understood that the rents bought in gold moneys will be paid out in gold moneys as provided in the written instruments drafted for their sale, or in other moneys, at the rate and according to what is established by the said statute. . . .

PART II

MONEY IN THE EARLY MODERN PERIOD: THE TRIUMPH OF NOMINALISM

I

MONETARY ENVIRONMENT

10

Monetary Reforms in the Holy Roman Empire in the Fifteenth and Sixteenth Centuries

Michael North

I. Introduction

Traditionally, the monetary reforms of the Holy Roman Empire have been regarded by monetary historians and numismatists as a failure. This chapter will elucidate the communication processes between the Imperial Estates (*Reichsstände*), especially the Princes and cities in Northern Germany, and the reformers working on behalf of the Emperor. In particular, the different interests between princes and cities, and their strategies to gain support on the Imperial Diet (*Reichstag*) will be examined. Despite these struggles the monetary policy of the Roman Empire and its institutions—such as Imperial Circles (*Reichskreise*) and Imperial Diets on coinage—contributed to the monetary stability of the Holy Roman Empire.

II. The Empire and the Estates

The Empire differed in a number of ways from the Western European monarchies, both constitutionally and administratively. Unlike England or France, the electorally constituted empire lacked any dynastic continuity, core land, or residential capital. Every switch between the potential royal dynasties—Habsburg, Luxembourg, and Wittelsbach—meant a change in the centre of gravity of rule. The result was that the coherence of royal action and its ability to implement policy differed from one region to the next. Hence the King's chances of success were greater in his dynastic lands. However in the areas 'remote from the King', such as the northern part of the Empire, he had virtually no influence.[1]

These institutional limitations explain why the long-established practice in the Empire was for the royal court to finance itself through its own dynastic domain. The Imperial Domain (*Reichskammergut*), which in the early days of the Hohenstaufen dynasty had provided a financial basis for rule, was gradually alienated during the thirteenth century owing to gifts made by potential candidates for the throne to their constituents. Although the revindications carried out by Rudolf of Habsburg were to some extent successful, his

[1] For an overview, see M. North, *The Expansion of Europe* (2012), at 164–72.

successors continued the old practice of making generous distributions of parts of the Imperial Domain amongst their followers.

By the fifteenth century there was an ever-diminishing area of land to dispose of so the rulers turned to granting temporary mortgages of parts of their royal domains. This restricted their financial leeway even more. They also devised new means of generating income. King Sigismund had already mortgaged the taxes paid annually by the imperial cities for years in advance, so the Emperors were forced to impose general imperial taxes, such as the Hussite tax of 1427 and the Turk tax of 1471–4. These were not always easy to collect. By comparison, the 'Jewish taxes', which from 1342 were levied on the Jewish population as vassals of the royal treasury (*Kammerknechte*), provided a more secure source of income. This head tax of one florin, the so-called *Goldener Opferpfennig*, was levied upon all Jews above the age of twelve. The King obtained additional income from coronation fees, extraordinary wealth taxes, special letters of protection for Jews, and fines. Besides these sources of income from taxation, the remaining royal privileges that had not been transferred to territorial rulers were expanded.[2]

The limited resources and the growing demands in defending the Empire against Hussites and Turks fostered a number of reforms. King Sigismund was not alone in wishing to 'bring the affairs of the Holy Church and of the Holy Roman Empire into good and fair order';[3] the theologians Job Vener and Nicholas of Cusa also made numerous suggestions for reform. Thus, Job Vener, who had served as a proto-notary and counsellor to King Rupert, believed that the Imperial Estates (*Reichsstände*) should elect an Imperial Council. Nicholas of Cusa went a step further, and sought to limit the power of the Princes and for this purpose institute an independent judiciary, which would be occupied by the clergy, nobles, and commoners. A standing army was to uphold the perpetual public peace and strengthen the royal authority. The anonymous author of the *Reformatio Sigismundi* sought, in the context of ecclesiastical reform, to abolish the feudal rule of church dignitaries. Early initiatives for royal reform are also documented for the 1430s. At the *Hoftag* (a representative court assembly) held at Frankfurt in 1434, and Eger in 1437, Sigismund was presented with demands for reform which were primarily concerned with abolishing feuds and improving the judiciary, but also with the stabilization of the coinage. However, it was not until the 1495 Imperial Diet of Worms that a permanent compromise could be reached with the princely opposition led by Berthold von Henneberg. The King not only encountered opposition in implementing these reforms; he also had partners such as the imperial cities.[4] Accordingly, Berthold von Henneberg met with most success in reforming the judiciary. The royal chamber court was reorganised, received a permanent venue, and was separated from the King's entourage. While the King still appointed the President of the Imperial Chamber Court, he and the Imperial Estates jointly determined the composition of the body, which consisted of sixteen assessors, half of whom were of noble and half of common origin.[5]

An additional demand was to secure domestic peace. This was proclaimed by the King in 1495 as the perpetual public peace (*Ewiger Landfriede*), which made feuds punishable. However, its implementation required a monopoly on the use of force, which only the

[2] M. North, 'Finances and Power in the German State System', in B. Yun-Casalilla and P. K. O'Brien (eds), *The Rise of Fiscal States: A Global History 1500–1914* (2012) 145.

[3] D. Kerler (ed.), *Deutsche Reichstagsakten* (1411), No. 38, at 56.

[4] H. Angermeier, *Die Reichsreform* (1984); for a critique, see P. Moraw, 'Fürstentum, Königtum und "Reichsreform" im deutschen Spätmittelalter', in W. Heinemeyer (ed.), *Vom Reichsfürstenstande* (1987) 117. For an overview of the literature, see K.-F. Krieger, *König, Reich and Reichsreform* (1992), at 114–8.

[5] See B. Diestelkamp, *Das Reichskammergericht* (2003).

princely states could provide. Without the approval of the Imperial Diet (*Reichstag*), or of the so-called Imperial Estates from 1500, the King could neither declare war nor conclude alliances that might burden the Empire. Moreover, the financial foundations of the Empire were to be improved by means of a tax, a head tax or wealth tax known as the common penny, the success of which was to be guaranteed by the electors, the Princes, and the cities. Nonetheless, the income from this direct imperial tax proved considerably less than expected, for the electors and Princes collected it only reluctantly, fearing that it would make them financially subordinate to the King.

Two paragraphs of the Imperial Decree (*Reichsabschied*) of 1495 were devoted to gold coinage and silver coins. It recommended a pause in gold mining and decreed that the estates who wanted to mint Florins had to keep a fineness of 19.5 carats according to the standard of the *Rhenish guilder* (florin). As regards the silver coinage, manipulations of the coins by clipping were forbidden.[6]

From 1495 onwards the Empire functioned as a co-operation between the Emperor and the Imperial Estates which were represented at the Imperial Diet. Economic and monetary policy was structured on the imperial and the territorial level, and in this the Imperial Diet and the Imperial Circles (*Reichskreise*) played a crucial rule. These imperial institutions, which have been largely neglected by economic historians, provided the institutional framework, trust, and confidence. Their role should not be underestimated. With the exception of Switzerland and Bohemia, the six Imperial Circles into which the Empire north of the Alps was divided were originally conceived as electoral districts for the counsellors of the imperial regime. They were increased to ten in 1512 and later developed into bodies with authority over the estates. They were supra-territorial, geographical subdivisions of the Empire and responsible for the publication of imperial laws, maintenance of the eternal peace declared in 1495, and defence.

Moreover, they had supervisory competence in economic matters, taxation, and minting. Although minting was as territorially scattered as the Empire itself, the Imperial Circles created stable currency zones in the North and South of Germany.[7]

III. Negotiations on Imperial Monetary Reforms

Negotiations on imperial coinage and imperial monetary reforms continued throughout the early sixteenth century. The central German silver mining boom and the minting of large silver coins or *talers* affected the monetary system, as the *talers* replaced the florins in monetary circulation. In this early phase, the *taler* was still referred to as a *guldengroschen* ('a groschen for a gulden'), until the extensive coinage production from the *Joachimstal* mint gave the *taler* its own distinctive name. In the Imperial Ordinance on coinage (*Reichsmünzordnung*) of the Esslingen Diet (1524), the Imperial Estates tried to accommodate the new silver coins within the existing system by creating an imperial heavy silver coin, the *guldiner*. Since the *guldiner* contained more silver than the Saxonian *talers*, it came to be rejected by the silver minting Imperial Estates in Saxony and the Habsburg territories. Furthermore, as a consequence of the Reformation, confessional disputes, and the long

[6] Reichsabschied 1495, copp. Coev.—RTA MR 5-1, 1593, p. 1142, Teilfotos: Ausstellungskatalog 1495, S. 349–50, in L. Weinrich, *Quellen zur Reichsreform im Spätmittelalter* (2001), 469–70.

[7] Traditionally, the monetary reforms of the Holy Roman Empire have been regarded as a failure by monetary historians and numismatists. See M. North, *Kleine Geschichte des Geldes* (2009), at 81–3; K. Schneider, 'Reichsmünzordnungen', in M. North (ed.),*Von Aktie bis Zoll: Ein historisches Lexikon des Geldes* (1995) 336. Up to now, research has ignored or has not recognized this point adequately. The two 'circle histories' (*Kreisgeschichten*) by Udo Gittel and Thomas Nicklas deal with coins only marginally and furthermore foster old legends.

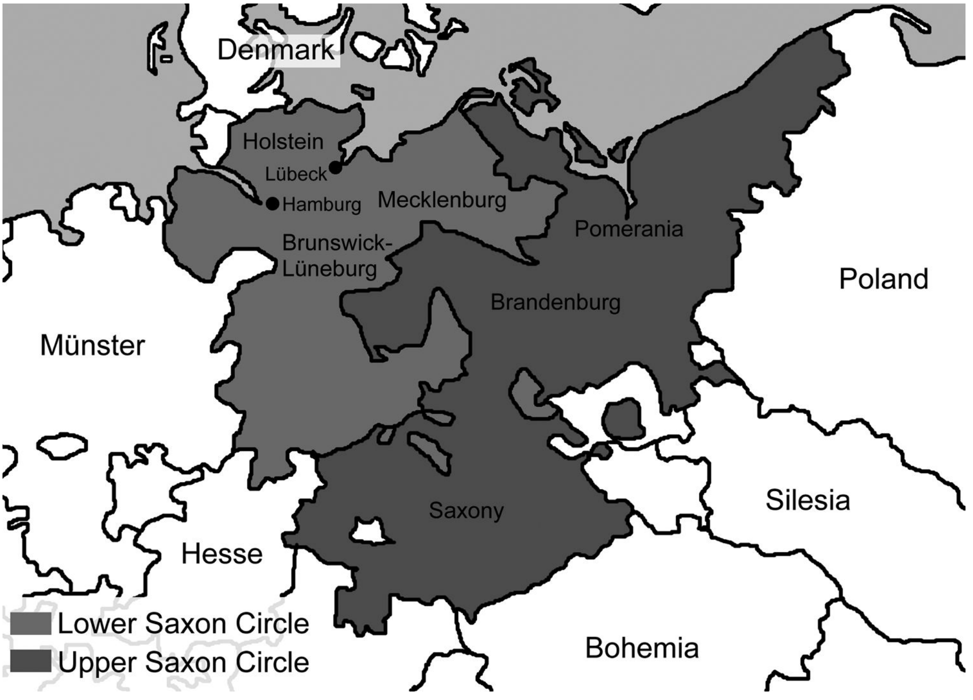


Figure 10.1 Lower and Upper Saxon Imperial Circles

absence of Emperor Charles V from the Empire—he was fighting the Turks at Mohacs and in the Mediterranean—an imperial monetary reform was postponed.

In the second half of the sixteenth century the debates on implementing the 1495 Imperial Ordinance on coinage in the Lower Saxon and Upper Saxon Circles (see Figure 10.1) were at their most intensive.[8] It is therefore possible to develop a more differentiated picture of the entire system by examining the communications between the Circles and the Empire, and the practice of coining in the territories. Communication took place in multiple ways: Circle Diets and Imperial Diets on coinage (*Reichsmünztage*) were often more important for the different Imperial Estates than Imperial Diets (*Reichstage*). After the Diet at Worms in 1545, a debate over a new Imperial Decree on coinage developed. This debate dominated Imperial Diets, in this case Imperial Diets on coinage, as well as Circle Diets and Probational Diets (*Probationstage*), for the decades that followed. The topics discussed were the introduction of a new imperial heavy silver coin (*Reichs (grob)münze*), the provision of low denominations of coin, and the import and export of foreign and domestic coins. The Diet at Worms, to begin with, sought the expertise of the silver mining territories (*Münzstände*), which was summarized in a recommendation of the coinage committee and finally resulted in an interim decree on coinage.[9] Because coinage was always a bargain (sometimes also a losing bargain), different interests clashed. Moreover, these interests had to be asserted in a global environment since no other commodity flowed as fast across international boundaries as coins. While the towns made arguments based on common practice and the interests of the Empire, the mine operators (who had

[8] U. Gittel, *Die Aktivitäten des Niedersächsischen Reichskreises in den Sektoren 'Friedenssicherung' und 'Policey' (1555–1682)* (1996); T. Niklas, *Macht oder Recht: Frühneuzeitliche Politik im Obersächsischen Reichskreis* (2002).

[9] R. Aulinger (ed.), *Deutsche Reichstagsakten unter Kaiser Karl V. Der Reichstag zu Worms 1545* (2003), at Nos. 66–89, 872–978.

gradually decreasing resources at their disposal) put their own interests to the forefront of their argument. In contrast, the Emperor and the coinage committee sought to balance these competing interests, and initiated steps towards standardization.[10] These controversies were reflected in the conflicting communication structures that operated between the Circles.

IV. Circle Politics

It is helpful to consider the reception of the Imperial Decree on coinage in the individual Imperial Circles. The Pomeranian activities will be considered first,[11] and then the Lower Saxon Circle will be addressed. The example of Pomerania shows that even smaller coinage Estates could gain by attending Imperial Diets on coinage, while a major coin-producing territory like Saxony, which would be heard at an Imperial Diet in any case, did not have to act in the same way. A crucial issue for the Pomeranians was their country's supply of coins with small face value—the Pomeranian copper *pfennig* (*Kupferpfennig*). They were anxious to prevent a ban on this kind of coin, such as had happened to the Frankish *Heller*. By attending the Imperial Diets on coinage at Speyer in 1549 and Nuremberg in 1551, the Pomeranian representatives, Jacob von Zitzewitz and Johannes Scharmer, succeeded in securing the recognition of the *pfennigs*. Several means were employed to achieve this aim. A letter by Duke Philip I to the Emperor (a draft of which has been preserved) warned of the negative consequences that would result from banning the *pfennig* in Pomerania. In addition, Jacob von Zitzewitz authored several memoranda that were delivered, definitely in Nuremberg and possibly also in Speyer, which found their way into the Imperial Decree on coinage of 1551. They declared the Pomeranian *pfennigs* as the legal local coins alongside the *Mecklenburgian* coins, so that they fell under the authority of the Lower Saxon Circle.

There was no representative from the Lower Saxon Circle present at the Diets in Speyer and Nuremberg. Moreover, the copy of the decree on coinage, which was addressed to the Lower Saxon Circle, did not, in fact, reach its intended addressee, the chapter of Magdeburg. It had accidentally been sent to the Archbishop of Bremen by the Chancellery of Vienna. Only regional agreements, initiated by Duke Heinrich the Younger of Braunschweig-Wolfenbüttel, were made,[12] whereas the Wendish towns of the Hanse (Lübeck, Hamburg, Lüneburg, and Wismar) saw no reason to question the Wendish Currency Union (*Wendischer Münzverein*) based on the Lübian Mark (*Lübische Mark*).[13] The formation of that union was the reason for the failure of the plan of the Mecklenburgian Dukes who had proposed to join themselves with the Pomeranians and the Hanse towns in a currency union. At the same time there were references to the discussion on imperial coinage in the draft of the decree on coinage of 1558. Prevention (*Verhinderung*) of the Imperial Decree on coinage, and the adjournment from meeting to meeting, were said to be the cause of the initiative. The agreement on coinage of the estates mentioned above was supposed to be reckoned temporarily, 'until a unanimous compromise in the Holy Roman Empire could be achieved'.[14]

[10] Ibid., Nos. 87–9, 961–78.

[11] Here I follow J. Krüger, *Zwischen dem Reich und Schweden: Die landesherrliche Münzprägung im Herzogtum Pommern und in Schwedisch-Pommern in der frühen Neuzeit (ca. 1580–1715)* (2006), at 42–4, 53–6.

[12] M. von Bahrfeld, *Niedersächsisches Münzarchiv: Verhandlungen auf den Kreis- und Münzprobationstagen des Niedersächsischen Kreises 1551–1625*, 4 vols. (1927–30), vol. 1, Nos. 39–92, at 41–87.

[13] W. Jessen, *Der Wendische Münzverein* (1968); M. North, *Geldumlauf und Wirtschaftskonjunktur im südlichen Ostseeraum an der Wende zur Neuzeit (1440–1570)* (1990).

[14] Bahrfeld, above n 12, vol. 1, No. 289, at 215.

The discussion took place at the Imperial Diet on coinage in Speyer in 1557 and finally led to the Imperial Decree on coinage in 1559.[15] This decree authorised a new imperial coin in the form of a silver guilder (*Silbergulden*), and various other kinds of coin, which were to be coined only in the Empire. In the Circles, officials (*Münzwardeine*) were to be elected to control the circulating money as well as the mints. Probational Diets on coinage (*Münzprobationstage*) analyzed the defects of the coinage from the point of view of each Circle, and discussed measures for remedying them. The implementation of the Imperial Decree on coinage encountered resistance which was expressed in a memorandum (*Bedenken*) to the Emperor in 1561.[16] Since they did not receive an immediate reply, the Wendish towns negotiated their issues on coinage among themselves, 'because they [the negotiations] were to be adjourned to the next Imperial Decree and therefore remained on the waiting list for a long time'.[17] When the Emperor's answer arrived, it affirmed the introduction of the Imperial Decree on coinage for the hereditary lands (*Erblande*). Concerning the memorandum on coinage mentioned earlier, it remained 'somewhat obscure'.[18] In 1564, the Emperor demanded the strict enforcement of the Imperial Decree on coinage in the Lower Saxon Circle. The following Circle Diet, nonetheless, agreed to wait for the debates to be held on the upcoming Imperial Decree.

V. The Imperial Decree of 1566

In 1566 the final Imperial Decree of Augsburg (*Reichsabschied*) led to changes within the Imperial Decree on coinage of 1559 and marked the turning point in the organization of coinage in the Lower and Upper Saxon Circles. With the re-admittance of the old *taler*—the coinage had been banned to encourage the circulation of the silver guilder—the acceptance of the new decree on coinage grew, which provided a basis for decrees on coinage in both Circles in 1568 and 1571.[19]

The Circle Diet of the Lower Saxon Circle approved the decree in 1568 and commanded all Circle Estates to observe it. Two local officials were appointed to supervise the mints and to give an account of the coinage twice a year at the Diets. As in all decrees on coinage, the regulations covered net weight and fineness, lists of approved coins, rules for converting prohibited coins into approved ones, and the coinage of small denomination coins. Even though the Hanse towns hesitated and tried unsuccessfully to maintain their special position, the Lower Saxon Circle implemented the *Augsburgian* decree and the Imperial Decree on coinage of 1559, and was one of the first Circles to do so. According to the Imperial Decree of Speyer, the number of mints was reduced to four in 1571 (Brunswick, Lübeck, Magdeburg, and Bremen); in 1572 Hamburg and Rostock, as towns of maritime trade, were added to the approved mints. The mints of silver mining territories continued to be tolerated.

Regarding the Upper Saxon Circle, in 1570 the Imperial Diet of Speyer was necessary for the adoption of the Imperial Decree on coinage.[20] However, the mints of Pomerania had already acted within the authority of the Imperial Decree on coinage because of their privilege to coin copper. Saxony, in contrast, acted silently on the basis of the Imperial

[15] J. Leeb (ed.), *Deutsche Reichstagsakten. Reichsversammlungen 1556–1662: Der Kurfürstentag zu Frankfurt 1558 und der Reichstag zu Augsburg 1559* (1999), Nos. 804, 1953–88.

[16] Bahrfeld, above n 12, vol. 1, Nos. 336–9, 267–82.

[17] Ibid., Nos. 267–82. [18] Ibid., Nos. 351, 290. [19] Gittel, above n 8, at 302–3.

[20] M. Lanzinner, *Deutsche Reichstagsakten. Reichsversammlungen 1556–1662. Der Reichstag zu Speyer 1570. Zweiter Teilband: Akten und Abschied* (1988), Nos. 120–51, 1242–50. See also M. Lanzinner, *Friedenssicherung und politische Einheit des Reiches unter Kaiser Maximilian II. (1564–76)* (1993), at 381–93.

Decree on coinage of 1559/66. At the Circle Diet of Jüterbog in 1571, it was decided to summon a probational diet in Leipzig for the same year. It is interesting, again, to follow the approach in Pomerania. Pomerania-Wolgast and Pomerania-Stettin attended the diet. Pomerania made three demands, which can be summarized as follows:

1. Stettin was unconditionally to become one of the Circle mints.
2. The copper *pfenning* was to remain legal as an official regional coin, despite the ban on its circulation enacted at Speyer.
3. The ban on the importation and exportation of coins, which was also enacted in Speyer, was to be weakened or handled pragmatically.

Johann Friedrich of Pomerania-Stettin instructed his representative that the third demand should be accepted because it would be impossible to prevent an influx of foreign money into the country due to its location and its links with the Baltic trade. Both the Pomeranian and Brandenburg arguments were heard. It was declared that merchants were allowed to import and keep foreign coins but they were not permitted to spend them within the Empire. Because of their joint operation, the Pomeranian representatives successfully campaigned that Stettin, as well as Berlin and Leipzig, be given the status of a Circle mint. This was allowed, even though Stettin and Berlin did not fulfil the requirement of acting as a precious metal store, as the Imperial Decree on coinage required. In contrast, a mint for the silver-producing county of Mansfeld was not permitted, and Mansfeld's mint in Hettstedt was demolished. The Ernestines succeeded in having their mint at Saalfeld promoted to the status of a Circle mint. The only Pomeranian demand that did not succeed was that they be allowed to coin copper.[21]

It is often claimed that the reasons for the Pomeranians' decision not to avail themselves of their privilege to coin money in Stettin were their own mistakes or the failure of the Imperial Decree on coinage. The true reasons lie elsewhere. The crash of the Loitz banking house and the death of the Polish King Sigismund II in August 1572 resulted in the amortization of a Pomeranian loan to the Polish crown of over 100,000 Imperial *taler* (*Reichstaler*), which drove the Pomeranians into bankruptcy. In 1575, the Pomeranian Dukes finally obtained a privilege allowing them to coin copper *pfennigs*, which was confirmed at the Circle level in 1577. In 1580, the minting of silver finally began, without causing problems with the Imperial Decree on coinage or conflicts within the Upper Saxon Circle. The minting of silver coins, however, only played a minor role in the Duchies of Pomerania-Wolgast and Pomerania-Stettin since it ranked last in the Circle and did not compete with the other mints. The coinage activity at Circle level appears to have declined considerably in the 1580s and 1590s, which was consistent with the imperial measures in force.

Despite these measures, the estates continued to experience problems arising from the inflow of foreign coins, the export of imperial coins, and the increase of small money. But these problems were typical of most late medieval and early modern economies, and could not be easily overcome by administrative measures of the kind attempted by the estates.

The first estates to acknowledge this difficulty were the Hanse towns. In 1577, Lübeck pointed out in a letter to the town diet that money unavoidably flowed in and out of the town in the course of ordinary, essential trade movements:

> The same opportunity brought to me a score of grain and other commodities from the Polish kingdom, from Prussia, Livonia, and other realms and countries, item salt from France not only for the livelihood and nourishment of the neighbouring princedom, country, and town, but to

[21] Krüger, above n 11, at 53–7.

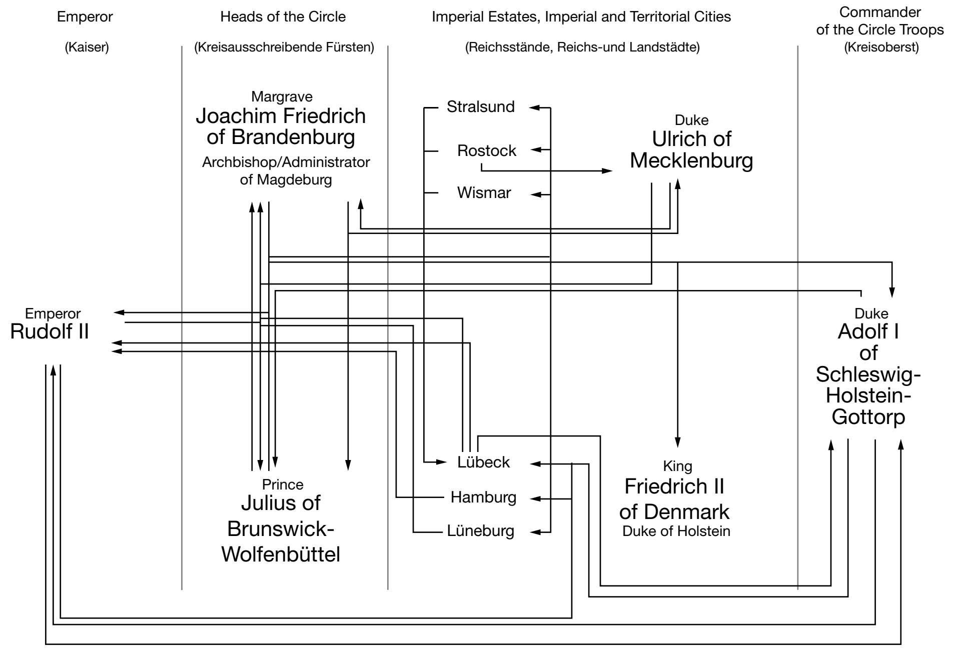


Figure 10.2 Communication structures of the Lower Saxon Imperial Circle for 'Monetary Issues' 1579–81.

Draft by Dr Robert Riemer.

> meet the needs of all Germany. These have to be paid for with ready cash just like other commodities, such as wax, tallow, flax, skins, and hemp. Besides, those goods are useful and necessary for the body's livelihood and a lack of them could not be sustained in the Holy Empire and in the mines, and which are imported from Russia and other remote places.[22]

Lübeck's argument was similar to that made by Thomas Mun a century later in his posthumously published treatise *England's Treasure by Forraign Trade, Or, The Balance of our Forraign Trade is the Rule of our Treasure* (1664). Mun argued in defence of the English export of money, especially for imports from Asia, against the monetary regulations imposed by the government. In 1579 at the latest, Hamburg and Lübeck decided to take measures to control international monetary flows, such as altering the valuation of foreign gold coins and the Imperial *taler*. The Lower Saxon Circle, in contrast, ignored the problem. The two Hanse towns explained their policy to the Circle and to Emperor Rudolf II, after complaints made to him by the Circle. In 1580–1 more than twenty letters on this issue were exchanged among members of the Circle. These letters are an important source of information about the communication structure in the Circle on coinage matters

[22] Dieselbig Gelegenheit hat es mir allerlei Getreide und anderer Notturft, welche aus dem Reiche Polen, Preußen, Liefland und anderen Reichen und Landen, item dem Salz, welches aus Frankreich nicht allein zu dieser benachbarten Fürstenthumb, Land und Städt Underhaltung und Nahrung, sondern des ganzen Deutschlands Notturft anhero gebracht, mit barem Gelde bezahlt werden, wie imgleichen auch die andern Waren als Wachs, Talch oder Unzelig, Flachs, Häute, Hanf neben obbestimbten Gütern zu Leibs Underhaltung dienlich und nötig und deren man im hlg. Reich und auf den Bergwerken nicht zu entraten, aus Reußland und andern abgelegenen Ortern hereingebracht warden.

Cited after Bahrfeldt, above n 12, vol. 2, at 474. M. North, 'Reich und Reichstag im 16. Jahrhundert—der Blick aus der angeblichen Reichsferne', in M. Lanzinner and A. Strohmeyer (eds), *Der Reichstag 1486–1613: Kommunikation—Wahrnehmung—Öffentlichkeiten* (2006) 221.

(see Figure 10.2). The arguments made in them only make sense in the light of the structures by which they were communicated.

The action taken by the Hanse towns probably won out over the protests of the Circle Estates. In their communications, the towns rightly pointed to the terms of the Imperial Decree on coinage, the passivity of the Circle, and to developments in the international political situation which forced them to act quickly on the Emperor's behalf. They emphasised the effect of the Dutch revolt on their trade connections with the Netherlands and their export of silver coins there. Lübeck also skilfully connected the coin issue with other points of discussion between the Hanse towns, the Emperor, the Imperial Estates and the Imperial Diet, such as the monopoly-like trade of the Merchant Adventurers in the territory of the Empire.[23]

VI. Conclusion

Monetary ordinances and negotiations on the different levels of the Holy Roman Empire are best seen as part of a series of institutional reforms in the seventeenth century, which included the debt moratoria of the German states and the Holy Roman Empire after the Thirty Years War. These contributed to the restoration of post-war Germany. A major motive behind the reforms was institutional competition. The German territorial states competed with others for immigrants and flows of trade. By issuing privileges for settlement and religious tolerance they tried to attract human capital, such as Dutch Calvinists after the Dutch revolt, and later French refugees after the revocation of the Edict of Nantes in 1685. Moreover, toll exemptions and exchange ordinances aimed to promote the states' participation in the commercial and financial growth happening in other parts of Europe. One aspect of this was the codification of exchange laws in cities such as Frankfurt (1578), Hamburg (1601), Nuremberg (1621), Lübeck (1662), Augsburg (1665), Leipzig (1682), and Cologne (1691), which played a crucial role in improving the integration of the international exchange system. Despite temporary monetary turbulences, the Imperial Circles also restored or maintained trust in the purchasing power of their money. And, by comparison, they achieved a greater monetary stability than the French homogeneous currency system ever managed in the same period.

[23] 1580 März 18. Lübeck an die kreisauschreibenden Fürsten. Antwort auf den Brief vom Jan. 21, in Bahrfeldt, above n 12, vol. 3, No. 63, at 53; for the correspondence between Lübeck and Hamburg, the Emperor, and the Imperial Estates, see ibid., at 48–70.

II

COMMON LAW

11

The Enforcement of Nominal Values to Money in the Medieval and Early Modern Common Law

David Fox

I. Introduction

The common law rules on the performance of monetary obligations show an unbroken pattern of development throughout the High Middle Ages and the early modern period.* The evidence of a range of relevant legal sources strongly suggests that, from at least the late thirteenth century, the common law took what would nowadays be called a 'nominalist' approach to the valuation of money. Monetary obligations were expected to be paid at their money of account value using coins which were current at the date of payment. Any change to the monetary standard between the dates of contract and payment was generally irrelevant to the performance of the obligation. It seems that the common law courts would not revalue the obligor's debt to allow for any adjustment to the monetary standard during that time.

Although this statement summarizes the position at common law in the pre-modern period, the words 'nominal' or 'nominalism' do not figure in any of the legal sources from that time.[1] The common lawyers' conception of money was not expressed as an abstract idea, embodied in a rule of substantive law. Rather, it emerged from the interstices of the constitutional relations between the sovereign and the common law courts, and from the pleading and enforcement of actions based on monetary obligations. These formed a network of structures that generally allowed the common law judges to enforce debts at their nominal value despite the many changes to the monetary standard throughout the long period between Edward III's first reduction of the weight of the penny in 1346 and Elizabeth I's restoration of the coinage in 1561 after the debasements of Henry VIII and Edward VI. The period covered by this chapter begins in 1343, when there are clear legal records governing the issue of Edward III's first issue of penny coins, and runs through to the end of Elizabeth I's reign in 1603. Although the chapter refers to cases decided after that date,

* This chapter is condensed from the author's article, 'The Structures of Monetary Nominalism in the Pre-Modern Common Law', (2013) 34 *Journal of Legal History* 138.

[1] The closest we get is the statement that debts denominated in English money-of-account values had a 'name known': see *Rastell v. Draper* (1605) Yelv. 80, 80 discussed in Section II.2 of this chapter.

these later cases tend to affirm or clarify an understanding of the rules that was already in place. The reports of common law litigation throughout this period give us some indication of how litigation on monetary issues might have been resolved. The early period of the study is covered by the printed Year Books, and the latter part by the earliest series of nominate law reports.[2]

The common law's analysis of money appeared to take a new turn in 1604. In that year, the Chief Judges of the Privy Council decided the case of *Gilbert v. Brett* (1604), which arose from Elizabeth I's debasement of the Irish coinage in 1601.[3] The report of the case explained the common law's approach to the valuation of money and monetary obligations using theories developed by the jurists and political philosophers of continental Europe. *Gilbert v. Brett* (1604) affirmed the main legal elements of what would nowadays be called a 'nominalist' conception of money. The right to assign a value to money was the sole prerogative of the sovereign. The sovereign was free to debase the fineness of the coinage, reduce its weight, or proclaim that it should have a new legal value. The relevant value of a debt was its value at the agreed date for payment, rather than when the parties first contracted the obligation. This meant that the obligor was entitled to a discharge if he or she tendered coins with a legal value equal to the sum expressed in the payment clause on the agreed date for payment. Any debasement of the coinage between the date of the contract and the agreed date for payment made no difference to the obligor. It was the extrinsic value of the coins expressed in the sovereign's legally assigned valuation which mattered, rather than their intrinsic value in terms of gold or silver.

Despite its prominence in the reports, *Gilbert v. Brett* (1604) merely confirmed the legal structures for the valuation of money and monetary obligations that were accepted long before the decision in the case. Section II of this chapter begins the path through the structures which tended to ensure that money passed at nominal rates. Foremost among these was the mint indenture made between the sovereign and the mint, which defined the sovereign's legal valuation of the coins struck pursuant to it. The common law courts recognized the sovereign's prerogative to issue and value money by enforcing the values specified in the indenture in payments made between private parties. The sovereign also had prerogative penalties available to him or her to help support the circulation of money at the rates in the mint indenture. The public was regularly reminded of these penalties whenever the monetary standard was changed.

Section III turns to the common practice among legal practitioners in drafting payment clauses in conveyances and the pleading formulae by which monetary debts were enforced before the common law courts. Monetary obligations in common forms of payment clause were expressed as generic sums denominated in monetary units of account. They were not interpreted as stipulating for any particular kind of coin with a defined intrinsic content. The obligor was thus free to tender on the payment date any lawfully issued coins which had a legal value equal to the generic sum expressed in the debt. The same approach was taken to the action of debt by which monetary obligations were enforced. The debt which the obligor was alleged to owe was expressed as a generic sum. The obligor owed an abstract monetary amount rather than any defined quantity of precious metal. The combined consequence of these drafting and pleading practices was to prevent a court from considering the effect of any change in the monetary standard between the dates of contract and

[2] For the sampling of the reports on which the study in Section IV of this chapter is based, see D. Fox, 'The Structures of Monetary Nominalism in the Pre-Modern Common Law', (2013) 34(2) *Journal of Legal History* 138.

[3] *Gilbert v. Brett* (1604) Davis 18. The background and reasoning in the case are considered in detail in the author's 'The *Case of Mixt Monies*', (2011) 70(1) *Cambridge Law Journal* 144, and in Chapter 12 below.

payment. The intrinsic content of the coins tendered was generally immaterial to the performance of the obligor's duty.

The result was that issues of monetary valuation seem to have been very rarely litigated in the common law courts. This may explain why so few cases on the point are reported in the Year Books and the early nominate reports. Section IV of the chapter gives an account of these cases. The English monetary standard was altered markedly at three main stages between 1463 and 1526. But these alterations seemed to generate hardly any litigation before the common law courts. The same was even true of the extreme, fiscally motivated debasements of 1542–6 under Henry VIII. It seems that the structures that had enforced the legal value of money over the previous two centuries held up during the debasement period. What did seem problematic for the courts, judging by the number of reported decisions, were the 1551 proclamations by Edward VI crying down the silver coinage. These were partial attempts to restore the coinage to its previous pre-debasement standard. Revaluations by proclamation raised special problems that tended not to figure when the bullion content of the coinage was altered. The possibility of claiming additional damages in a debt action perhaps made it possible for the courts to ascertain and allocate the economic loss resulting from the crying down of the coinage to one or other of the parties. The present chapter thus provides the legal background to understanding the reasoning which was set out more fully in *Gilbert v. Brett* (1604). A full account of that case and the legal sources which informed its development come in the following chapter of this book.[4]

II. Judicial Observance of the Prerogative Law

1. Preliminary

The point so strongly affirmed in *Gilbert v. Brett* (1604) was that the striking and valuation of money was a prerogative power of the sovereign. It therefore lay in the sovereign's power to change the monetary standard by altering the weight or fineness of the coinage, or by assigning it a new legal valuation. The legal foundation for this view was already in place long before its affirmation in *Gilbert v. Brett* (1604). It seems to have been accepted since at least the 1280s that the mint indenture made between the sovereign and the mint determined the valuation of the sovereign's own money in payment transactions. From time to time, indications appear in the reports that judges considered themselves duty-bound to take notice of these values when they enforced the monetary obligations litigated before them. The issue was explicitly reported in *Dixon v. Willoughs* (1696)[5] which comes after the main period of this study. But, like *Gilbert v. Brett* (1604), that decision was only declaring a point which was already held to be true. There is also reason to think that this sovereign power to make money pass at its value in the indenture was directly enforced by agents of the king or queen, outside the common law courts.

2. The Status of the Mint Indenture in Private Transactions

Our earliest source for the relevance in private transactions of the sovereign's power to assign a value to the coinage is the anonymous *Tractatus Nove Monete* of *c.*1286–7, which followed Edward I's re-coinage of 1279. The author wrote:

[4] See Chapter 12 in this volume.

[5] *Dixon v. Willoughs* (1696) 2 Salk. 446; 3 Salk. 239.

> In the first place then, before there is any money, there must a statute [*constitutio*] clearly and distinctly determining the proportion of alloy, the weight and number of the coins. It must then be put in hand and finished by the order [*edictum*] or special licence [*licentia*] of the prince and must be made generally known by public proclamation in the accustomed way by the prince's crier. It will then be ready for use and may not be refused by any of the public without public penalty.[6]

The author contemplated that the sovereign would issue a statute defining the money-of-account value of the new coins in terms of their weight and fineness. The specification in the statute would then be published by a proclamation. The coins thus issued would carry the status of the sovereign's 'lawful money of England'. The monetary value assigned to them was an integral part of that status. The public at large was then obliged to accept a tender of this money at the legal valuation fixed in the statute. A person who refused to accept the money on those terms was liable to a public penalty.

The description given by the author of the *Tractatus* differed in certain details from the actual practice in England. Although the Parliaments of Edward I did in fact enact statutes on money, they were more concerned with protecting the general integrity of the English monetary system than with the precise specification for the current coin of the realm. They thus sought, among other things, to control the circulation of foreign and underweight coins.[7] The closest we get to a specification for the coinage is an undated statute on weights and measures, which defined the weight of the sterling penny at thirty-two grains of corn.[8] In 1343 a statute of Edward III noted that it was agreed 'to make a Money of good Sterling in England of the Weight and Allay of the ancient Sterling; which shall be current in England, between the great Men and Commons of the Land'.[9]

The actual specification for the new coinage was defined in the mint indenture (*edictum* or *licentia*) made between the sovereign and Master and Worker of the Royal Mint. The indenture would specify the names and money-of-account values of the coins to be struck, and the number of coins to be cut from one Tower pound of silver or gold of standard fineness. The mint indenture either stated the money-of-account value of each denomination of coin, or it gave an aggregate value of all the coins that were to be cut from a pound of metal. Either way, the indenture fixed the monetary value of the coins authorized by it.

It was explicitly established early in the sixteenth century that the mint indenture was directly relevant to the valuation of coins tendered and accepted in private transactions. Henry VII's Statute of Coin of 1503–4 provided that the King's gold and silver coins were to 'go and be current in Payment, for the sum that they were coined for'.[10] The reason for the enactment was that the coins had lost much of their original weight by clipping and natural abrasion. The public was refusing to accept them, or at least refusing to accept them without making a deduction for the loss of weight. The effect of the statute and the proclamation which accompanied it was that the public was bound to tender and accept

[6] C. Johnson (ed.), *The* De Moneta *of Nicholas Oresme and English Mint Documents* (1956), at 65. A second edition was published in 1290–1324. On the *Tractatus*, see M. Allen, *Mints and Money in Medieval England* (2012), at 75.

[7] Statute of Money, 20 Edward I, stat. 3–4 (1291–2); Statute of False Money, 27 Edward I, stat. 3 (1299).

[8] Quoted under *Tractatus de Ponderibus et Mensuris* under heading 'Statutes uncertain in their Times' in T. E. Tomlins and J. Raithby, *Statutes at Large of England and of Great Britain from Magna Carta to the Union of the Kingdom of Great Britain and Ireland* (1811), vol. 1, at 221.

[9] Statute 17 Edward III (1343).

[10] Statute 19 Henry VII, c 5 (1503–4).

silver coins at the legal rate fixed in the mint indenture even though they might have lost as much as 20–25 per cent of their intrinsic value.[11]

Although the enactment of the Statute of Coin came relatively late in our period, it seemed to confirm the existing legal practice. By the 1450s, we see explicit indications in the reported case law that common law judges realized they were bound to follow the coinage values defined in the mint indenture when they considered the discharge of debts in private transactions. The money-of-account value of English money was something of which they were required to take notice. The value was fixed by law rather than as a matter of fact to be ascertained by evidence. This view was again articulated late in the sixteenth century, by which time England had undergone the monetary upheavals of the Tudor debasement and restoration of the coinage.

Thus an anonymous 1455 decision on the enforcement of a sealed bill for the payment of 6 *l.* Flemish laid down the view of common law judges regarding coins issued or adopted by the English sovereign.[12] Prysot CJ said that they were apprised of the value of 100 English nobles whereas they were not apprised of any fixed value for foreign coins. In *Bagshaw v. Playn* (1595), the Justices of the King's Bench put the point more clearly in proceedings for error in an action on debt on a bond for payment of Flemish currency. Coins which were current in England had a value 'known' to the judges. From this, there developed the expression that sums denominated in English currency had a 'name known', which was tantamount to saying in modern terminology they had an ascertained nominal value.[13] Their value did not need to be ascertained by evidence presented to a jury. In this respect, the common law was in line with the European civil law of the Roman tradition. Both Carolus Molinaeus in France (1546) and Renerus Budelius in Cologne (1591) described how a litigant was not allowed to swear by oath as to the value of money passing in a payment transaction.[14] In its own state of issue, the value of money was always certain. It was identified with its legal valuation fixed by the sovereign.

The contrast was with money issued by a foreign state. The English courts of the late medieval and early modern periods were familiar with enforcing English transactions denominated in foreign currencies.[15] But unlike the English sovereign's coins, foreign moneys did not have a value which a judge could—let alone must—recognize.[16] Their value in terms of English currency was always a question of fact for the jury. Indeed, it would eventually be said that foreign money was no different from bullion in legal estimation.[17] This was not to say that a debt to pay foreign money could be discharged by tendering uncoined bullion (*massa*). The point was that both bullion and foreign coin had to be valued by evidence presented to a jury.

The same distinction between the valuation of English and foreign money was borne out by the pleading of actions in debt. When the plaintiff sued in debt for foreign money, he

[11] Proclamation 54 (5 July 1504), Henry VII; and A. E. Feavearyear, *The Pound Sterling: A History of English Money* (1931), at 44.

[12] YB (1455) Mich. 34 Henry VI, pl. 23, fo. 12a.

[13] *Bagshaw v. Playn* (1595) Cro. Eliz. 537; *Rastell v. Draper* (1605) Yelv. 80, 80; *Ward v. Ridgwin* (1625) Latch 84 (sub nom. *Ward v. Kedgwin* (1625) Palmer 407). See also *Pope v. St Leger* (1693) Holt KB 550, 551 (in argument): 'the Court cannot take notice that guineas are above the value of 20 *s.*', and *Dixon v. Willows* (1696) Comberbeach 387, 387 per Holt CJ where it was said that the value of English money was something of which the court would take 'conusance'.

[14] C. Molinaeus, *Tractatus contractuum et usurarum* (1546), para. 697; R. Budelius, *De Monetis et Re Numaria* (1591), 2.1.15 (citing D. *de in lit iur l. nummis depositis iudicem* [D. 12.3.3]).

[15] In addition to the cases cited below, see *Anon* YB (1355) Pasch. 29 Edward III, fo. 19 (bond for 1,000 French écus); *Anon* YB (1455) Mich. 34 Henry VI, pl. 23, fo. 12 (bill for 6 *l.* Flemish).

[16] *Bagshaw v. Playn* (1595) Cro. Eliz. 537.

[17] *Ward v. Ridgwin* (1625) Latch 84, 84 per Doderidge J; sub nom. *Ward v. Kedgwin* (1625) Palmer 407, 407.

often pleaded its corresponding value (*ad valentiam*) in English currency as a guide to the jury.[18] But coins issued by the sovereign as the lawful money of England only ever had one relevant value so the plaintiff had no need to add an *ad valentiam* clause to his pleading: 'Un home ne declara *ad valenciam* quand est pur English money'.[19] Nor did it need to be pleaded in a trespass action for the unlawful taking of a quantity of coins. In *Benger v. Pert* (1553) the defendant wrongfully took from the plaintiff '20 old ryals, 60 half sovereigns, 80 half angels and six double ducats'. The plaintiff was not expected to plead their value 'since it is money and its value is known'.[20]

The principle that the mint indenture fixed the legal value of coins was settled beyond doubt in *Dixon v. Willoughs* (1696), a decision of Holt CJ in the King's Bench. The problem arose from the inflation in value of the gold guinea coin relative to that of the silver currency, which became particularly acute early in the 1690s. When the guinea was first issued by Charles I in 1663, the mint indenture set its legal value at 20 *s*.[21] At this time, the English monetary standard was not fully bimetallic in its operation: the silver coinage still served as the primary standard, and the gold coins took their value in terms of it. By the 1690s the badly worn state of the silver currency put a premium on gold coins. Guineas began to float at a market value that was anything between 7.5 and 50 per cent greater than their legal value in the mint indenture.[22]

Nonetheless, in *Dixon v. Willoughs* (1696), Holt CJ of the King's Bench affirmed the traditional basis of monetary valuation. He delivered his judgment in Michaelmas 1696, concerning a transaction that must have taken place at the height of the guinea inflation in the summer of 1695. In Salkeld's reports, he is recorded as holding:

> Though there is no Act of Parliament or order of State for these guineas as they are now taken, yet being coined at the mint, and having the King's insignia on them, they are lawful money, and current at the value they were coined and uttered at the mint.[23]
>
> Any piece of money coined at the Mint is of value as it bears a proportion to other current money, and that without proclamation. The unit was the old piece, which was 20 *s.* In King James the First's time, the unit was by proclamation raised 16 *d.*, which was the reason and occasion of the coin of guineas, and of their being 16 *d.* short of the unit.[24]

It will be remembered that the author of the *Tractatus Nove Monete* (*c.*1286–7) said that any new issue of coins was made 'generally known by public proclamation in the accustomed way by the prince's crier'.[25] As expressions of the sovereign's prerogative over the coinage, proclamations were both the means of publicizing the legal values which the sovereign assigned to each new issue of coins in the indenture, and also direct acts of prerogative law-making.

In *Gilbert v. Brett* (1604), where the new issue of coinage was duly proclaimed, the Privy Council is reported as holding that proclamation was essential to giving coins their status as the lawful money of England and fixing their valuation in law.[26] This probably overstated the point, at least in relation to new issues of coins from the mint. The later dictum of Holt

[18] *Bagshaw v. Playn* (1595) Cro. Eliz. 536; *Rastell v. Draper* (1605) Yelv. 80; *Ward v. Ridgwin* (1625) Latch 84, sub nom. *Ward v. Kedgwin* (1625) Palmer 407.

[19] *Ward v. Ridgwin* (1625) Latch 84 *per curiam*. See also *St Leger v. Pope* (1693) Holt KB 550, 552; sub nom. *Pope v. St Leger* (1693) 1 Lutwyche 484, 488 (*in arg.*).

[20] *Benger v. Pert* (1553) 'Dalison's Reports', (2007) 124 *Selden Society* 35.

[21] For an extract from order to the mint (24 December 1663), see PRO MINT 1/4, fo. 52.

[22] See *St Leger v. Pope* (1693) Holt KB 550, 552; sub nom. *Pope v. St Leger* (1693) 1 Lutwyche 484, 488 (*in arg.*); *Dixon v. Willoughs* (1696) 2 Salk. 446; 3 Salk. 239.

[23] *Dixon v. Willoughs* (1696) 3 Salk. 239.

[24] *Dixon v. Willoughs* (1696) 2 Salk. 446.

[25] See Section II.2 of this chapter.

[26] *Gilbert v. Brett* (1604) Davis 18, 19.

CJ in *Dixon v. Willoughs* (1696) implies that the mint indenture alone was constitutive of the legal valuation of coin, and that the proclamation only publicized it. There is reason to think that some new issues of coin were not in fact proclaimed.[27]

A proclamation was, however, directly constitutive of the coin's valuation when it altered the valuation of a coin which was already in circulation. This happened frequently in England throughout the sixteenth and seventeenth centuries, and notably in 1551 when Edward VI cried down the value of the silver coinage before his attempt at a partial restoration of the debased currency, and in 1561 when Elizabeth I completed that process of restoration. Proclamations were also directly constitutive of a coin's valuation when a foreign coin was adopted as the lawful money of England at a fixed rate in terms of sterling. During the sixteenth and seventeenth centuries a great variety of French, Imperial, Spanish, and Portuguese coins were permitted by proclamation to circulate in England on the same legal footing as the coins minted by the sovereign himself.[28] The King's Bench confirmed in *Wade's Case* (1605) a point which was by then already a settled practice: an obligee who was owed a sum denominated in the 'lawful money of England' was bound to accept foreign coins which the sovereign had adopted by proclamation into the local monetary system. Aside from these cases, the proclamation was mainly relevant as a means of publicizing the values of the coinage fixed in the mint indenture.

3. Prerogative Penalties

The final point of the quotation from the *Tractatus Nove Monete* was that the sovereign's money must 'not be refused by any of the public without penalty'.[29] The public owed a duty directly to the sovereign to tender and accept his or her money according to the legal valuation. Breach of this duty was punishable as contempt. Requirements to this effect often appear in the proclamations published with each new issue or revaluation of the coinage. The first clear example in the legal record appears in the 1351 mint indenture made by Edward III for a new series of silver and gold coins of reduced weight. The indenture threatened forfeiture of all the obligees' 'gold and silver and their bodies at the king's pleasure' if they refused the new coins at their legal valuation.[30]

A 1526 proclamation of Henry VIII, which accompanied the issue of his new reduced coins, laid down the consequences for an obligee who refused a valid tender of the King's money:

> Wherefore his highness straightly chargeth and commandeth all mayors, justices of the peace, sheriffs, bailiffs, constables, and all other his faithful subjects and officers of what estate, degree, or condition soever he or they be, that if any person or persons do refuse or deny to obey and follow the effect of this his ordinance and proclamation, or any part thereof in form above specified, forthwith to take and arrest the same person or persons so refusing or denying, and to commit him or them to ward and prison, there to remain without bail or mainprize unto such time as the King's determinate pleasure be further known in that behalf.[31]

[27] For example, there are no proclamations recording the new issues after Elizabeth I's restoration of the coinage in 1561.

[28] See, e.g., the proclamations issued during the reign of Queen Mary: Proclamations 406 (4 March 1554), 408 (8 March 1554), 412 (4 May 1554), Mary.

[29] Johnson (ed.), above n 6, at 66.

[30] Mint indenture (20 June 1351) enrolled at (1351) 25 Edward III, Cl. M. 15d. If the proclamation was in fact issued, there is no record of it in the roll.

[31] Proclamation 112 (5 November 1526), Henry VIII. See also Proclamation 25 (15 April 1491), 38 (5 September 1497), Henry VII; Proclamations 95 (24 November 1522) and 180 (27 July 1538), Henry VIII; and Proclamation 379 (16 August 1551), Edward VI, where the further penalty was added that coin accepted other than at the

It is hard to know how rigorously these prerogative penalties were policed and enforced. There is reason to think that coinage offences might have been tried in local mayoral courts or in the Court of Exchequer. We have records of related offences of spreading rumours of a coinage devaluation, or of exchanging coins above the legal rate being tried in that way.[32] In *Gilbert v. Brett* (1604), the reluctant seller who refused the buyer's tender of Elizabeth I's new debased Irish currency was held liable for contempt.[33] He may well have been imprisoned. His was a test case, and there were many other similar cases before the Irish session courts. In any event, the imposition of prerogative penalties affirmed that the public at large was required to accept the sovereign's own money at the legal values in the mint indenture. It seems unlikely that, in any transaction substantial enough to require enforcement by the courts, the parties would have successfully evaded those values.

III. Legal Practice in Drafting and Pleading

1. Preliminary

The enforcement of nominal values for money seems to have been embedded in the transactions made between private parties. The references to debts in the Year Books consistently refer to generic sums expressed in money-of-account figures rather than to quantities of any particular variety of coin.[34] The evidence for this practice becomes clearer by early in the sixteenth century, when we can read the common forms of payment clause gathered in the collections of conveyancing precedents. The clauses would provide, for example, that the obligor was to pay 20 *l.* or 30 *s.* on certain dates, rather than twenty sovereigns, or four noble coins and thirteen groats (those being coins with money-of-account values totalling 20 *l.* or 30 *s.*). Since the nominal value of English money was fixed by law, an obligor would make a valid tender if he proffered coins with a legal money-of-account value equal to the obligation in the transactional document. It therefore made no difference whether the sovereign had changed the intrinsic standard of the coinage between the dates of agreement and performance. All that mattered was that the coins tendered by the obligor and the payment clauses equated to each other in terms of money-of-account.

2. Payment Clauses

The main evidence for the drafting of payment clauses comes from the precedent books setting out standard forms of documents for routine legal transactions. The anonymous *Carta Feodi*, published in 1510–15 and 1543, reproduces some 100 precedents of documents for leases, conditional bonds, acquittances, and wills. Occasionally, the precedents are dated to the reigns of Edward IV or Henry VII, which implies that the collection contains a sample of transactional forms commonly in use late in the fifteenth and early sixteenth centuries. The 1543 edition reproduces the same documents as in the 1510–15 edition, with only a few additions.

proclaimed legal tender rate would be forfeit to the Crown. The Statute of Coin, 19 Henry VII, c 5 (1503–4), provided a general penalty of imprisonment for refusing to accept the King's coin which, although light, was still within the permitted range of tolerance.

[32] R. W. Heinze, *The Proclamations of the Tudor Kings* (1976), at 262–5, 278–9.

[33] *Gilbert v. Brett* (1604) Davis 18, 28.

[34] Sometimes debts were denominated in nobles: e.g., *Anon* YB (1451) Mich. 33 Henry VI, fo. 55a, pl. 47; YB (1469) Pasch. 9 Edward IV, fo. 1, pl. 11; 'Note', (2003) 120 *Selden Society* 134, pl. 120. These were probably not in fact references to noble coins but to the unit of account equal to one half of a mark.

In none of the clauses requiring the payment of money or acknowledging its receipt is there any reference to particular denominations of coins. All the clauses speak of generic sums in English money of account. The standard form is for payment of sums such as *viginti solidos sterlingorum*,[35] *xxx s.*,[36] or *x libras*.[37] Occasionally, the clauses are more explicit and stipulate for sums of 'lawful money of England', as in *xx libras legalis monete Anglie*.[38] The forms in the later precedent books indicate that this form of payment clause became more common and possibly supplanted the stipulations for sums 'of sterlings' or *sterlingorum*.[39] 'Lawful English money' was a legal term of art. It meant coins issued by the sovereign's own mint or the foreign coins expressly adopted by him into the domestic monetary system.[40]

The stipulations for payment of lawful English money commonly appeared in the payment clauses in penal bonds, indentures of bargain and sale, or in the *reddendum* clauses of indentures of lease. The payment clauses required the obligor to tender the money to a named person, at an identified place on a designated day. So the payment clause in the condition of a bond provided:

> The condition of the obligation is such that, that if the within bounden AB . . . do well and truly pay, or cause to be paid unto the within named CD . . . x li of lawfull English money upon the first day of October next insuing the date hereof, at, or in the south porch of the parish Church of R in the said county of Y That then this present Obligation to be utterly void and of none effect, or else to stand, remain, and be of full force, strength, power and vertue.[41]

An obligor who failed to make a valid tender of 10 *l.* of lawful English money on 1 October became liable to pay a larger, penalty sum.[42] But if he paid the right money on the right day, he could not be liable to the penalty.

If an obligor was bound to pay 'lawful English money' then he was bound to pay it at its legally established rate. The specification of values in the mint indenture meant that the legal value of a coin was an integral part of its status as the sovereign's own money. An obligee could not consistently stipulate for coins issued by the sovereign without also accepting them at the established rate. Equally, an obligor would be left exposed unless he could assume that a court would treat his tender of money as made at the then prevailing nominal rate. If a payment clause for 10 *l.* of lawful English money did not mean that a tender of coins valued at 10 *l.* was good, then the obligor could never know what was required to avoid the penalty stipulation contained in a bond, or a forfeiture or distress under a lease.

[35] *Carta Feodi firme facte per dominum capitalem*, 1510–15 edn; 1543 edn, at 3.
[36] *Alienatio liberi redditus cum homagio et et servitiis*, 1510–15 edn; 1542 edn, at 11.
[37] *Indentura firme rectoris*, 1510–15, edn; 1543 edn, at 16.
[38] *Recognitio per statutum*, 1510–15 edn; 1543 edn, at 22. Sometimes the stipulation was for *bone et legalis monete Anglie* as in *Patentum factum receptori et supervisori*, 1510–15 edn; 1543 edn, at 36. For examples from the reported case law, see *Manser v. Annesley* (1574) Benloe 238 ('one hundred pounds of lawful money of England'); leases: e.g., *Paley v. Luce* (1557) Benloe 62 (*sex libras xiiii s. & iv d. legalis monetae Angliae*); *Swane v. Searles* (1569) Benloe 150 (*quinque libras legalis monetae Angliae*); *Slyfield v. Sibille* (1567) Benloe 177 (*quatuor libras sex solidos et octo denarios legalis monetae Angliae*); *Shaw v. Norton* (1575) Benloe 271 ('vii *l.* vi *s.* iv *d.* of current money of England').
[39] The payment clauses in William West's *First Part of Symboleographie* (1598, 1647); Thomas Phayer's *Book of Presidents* (1611, 1621); and Edward Henden, William Noy, and Henry Fleetwood's *The Perfect Conveyancer* (2nd edn, 1655), generally refer to some variant of 'lawful money of England' rather than *sterlingorum*.
[40] *Wade's Case* (1601) 5 Co Rep 114a.
[41] Precedent for 'Condition to pay a sum of Money at a certain day', West, above n 39, section 111.
[42] On penal bonds, see generally A. W. B. Simpson, 'The Penal Bond with Conditional Defeasance', (1966) 82 *Law Quarterly Review* 392; E. G. Henderson, 'Relief from Bonds in the English Chancery—Mid-Sixteenth Century', (1974) 18 *American Journal of Legal History* 298; J. H. Baker, *The Oxford History of the Laws of England* (2003), vol. 6, at 824–32.

The express penalties provided in the transactional documents thus held the parties to the nominal monetary rates fixed by the sovereign. An obligee could not refuse a valid tender of money made at its nominal rate and hold out for payment of a larger penalty sum contained in a bond or forfeit a lease. If the tender was valid and properly pleaded, then the court would not enforce the penalty or forfeiture against the obligor. It made no difference that the sovereign might have lowered the monetary standard between the dates of the contract and the tender so that the obligee would now receive less silver from the obligor. Conversely, if the sovereign had cried down the nominal value of the coinage or restored it to a higher intrinsic standard, then the obligor had to pay at the new rate. Otherwise, he would be liable to the penalty in the bond or the forfeiture in the lease. These penalties operated at private law, separately from any public penalties enforced by the sovereign under his royal prerogative.

3. Pleading in Debt

Throughout our period, debt was the form of writ commonly brought to enforce liquidated money claims. The form of pleading in the writ tended to preclude inquiry into any change in the monetary standard between the dates of contract and payment. The argument that debt actions denominated in money-of-account sums were an essential element in the common law's enforcement of nominal values has been developed by Christine Desan.[43]

The action came in two pleading forms known as debt in the *debet et detinet* and debt in the *detinet*.[44] Debt in the *debet et detinet* was the standard form used to enforce contract claims for liquidated sums of English money. It lay for amounts of fungible money expressed in so many units of the English money of account. For example, a plaintiff, P, suing the defendant, D, on a sealed bond for payment of 20 *l.* would count in his writ: '*praecipe D quod . . . reddat P 20 l. quos ei debet et detinet ut dicit*'.

Debt in the *detinet* enforced claims to the delivery of fungible chattels other than English money. 'All things that consist in number (except money), weight or measure' were to be demanded by action of debt in the *detinet*.[45] The action was commonly brought to enforce the delivery of grain or animals due as rent.[46] Since the defendant had the option of paying damages for his failure to deliver, the plaintiff had to plead the price or value of the fungibles. The court would order an inquiry into their proper monetary value.[47]

The pleading formula in the *debet et detinet* for money claims tended to block an inquiry into any change in monetary values. As the formula above shows, the action lay for the enforcement of obligations expressed in monetary units of account—so many pounds, shillings, and pence—rather than for the delivery of coins of any particular type, weight, or standard of fineness. The monetary units of account were unchanging and irreducible measurements of valuation. It was only the coins tendered and accepted in payment of the debt that were variable in terms of their intrinsic content or money-of-account values. It was therefore difficult for the obligee to raise an issue about a change in the intrinsic value of the money between the dates of contract and performance. Even supposing, for example,

[43] C. Desan, 'From Metal to Money: Producing the Just Penny' (unpublished draft chapter, on file with author).

[44] See generally A. Fitzherbert, *La Novel Natura Brevium* (*c.*1537), at 119–20; A. W. B. Simpson, *A History of the Common Law of Contract: The Rise of the Action of Assumpsit* (1975), ch 2; and Baker, above n 42, vol. 6, at 852–60.

[45] Note (1310) 3 Edward II, pl. 23(I); *Spert v. Abbot of Chertsey* (1534) 120 *Selden Society* 100, pl. 36.

[46] E.g. *Anon* (1309) 19 *Selden Society* 79, pl. 147; *Anon* (1311) 26 *Selden Society* 11, pl. 8; *Warren v. de la Poyle* (1320) 104 *Selden Society* 59, pl. 17.

[47] *Anon* (1495) Hil. 11 Henry VII, fo. 5, pl. 20.

that the obligee had been owed 20 *l.* before the intrinsic standard of the coinage was reduced, and now wanted to have the debt paid in the old coins, he would be hard-pressed to plead this in the debt action. The same would be true if he pleaded that he wanted more coins to compensate him for the reduction in intrinsic values. If he took either course, he would be demanding more than the money-of-account sum stipulated for in the original transactional document. He might be met by the objection that there was an unacceptable variance between the demand in the writ and the terms of the transaction he wanted to enforce.

These features of transactional drafting and pleading practice may explain why the nominalist approach to monetary obligations was reached more easily in the common law than in the civil law. In the civil law, the prevailing view throughout the Early and High Middle Ages was that the value of a debt was fixed by the intrinsic value of the coins in circulation when the obligation was first contracted.[48] Common law debts, however, were expressed in generic monetary units abstracted from any real coins. The pleading alleged that the obligor owed and detained a certain sum rather than any particular coins. So if the obligee owed 20 *l.*, he could avoid liability in the action if he had properly tendered and produced to the court coins with a legal value of 20 *l.*; he would have done all that the terms of the transaction and the writ required of him. Thus, judges and juries rarely needed to inquire into any changes in the monetary standard.

We reach the same conclusion through the principle that debt in the *debet et detinet* lay for a sum certain. The gist of the action was not to make good the losses that resulted from a breach of duty. If the obligor had tendered coins equal to the sum certain pleaded in the writ, then he was not liable on the action. To be sure, simply tendering coins nominally equivalent to that sum did not in fact extinguish the debt.[49] But by making a valid tender and paying the money into court, the obligor had nothing more to do. The obligee had no real option but to accept those coins. The outcome as to who bore any loss that might have arisen from the change in the monetary standard thus depended on which way the standard had moved. If the sovereign had reduced the weight of the coinage, debased its fineness, or cried up its nominal value, then the obligee bore any intrinsic loss. He had to make do with the coins that the obligor paid into court. If the sovereign had cried down the coins, as Edward VI did in 1551, or restored them to a higher intrinsic standard, as Elizabeth I did in 1560–1, then any intrinsic loss would already have lain with the obligor. He could not have tendered money equal to the nominal sum certain unless he had proffered coins which contained more silver per unit of nominal value.

This analysis leaves open one hypothetical situation where the court might have inquired into changes in the monetary standard even in an action in the *debet et detinet*. If the obligor could not plead and prove a valid tender, then he would be liable in the debt action. The most common instance would be where he had been late in tendering the money or perhaps where he had tendered it to the wrong person. The obligor would be liable to judgment for the sum due, but also to any additional damages suffered by the obligee that followed from his failure to tender the money correctly. Quite how these might have been quantified is unknown. The assessment of damages was regarded as a pure question of fact, within the jury's exclusive purview.[50] But it is interesting to speculate whether any change in the monetary standard between the due date for payment and the date of judgment in the debt action might have led to an award of additional damages.

[48] See Chapter 7 of this volume.
[49] *Paynell v. Nevel* (1556) Benloe 54.
[50] Baker, above n 42, vol. 6, at 375–6.

We take first the cases of a debasement or reduction in weight of the coinage. Despite initial appearances, it may be that the obligee would not actually suffer any damage in consequence of the reduction in the intrinsic content of the coinage. Provided that the new coins received by the obligee had the same purchasing power as the old ones, then the monetary value of any loss of silver would have been neutral to the obligee. This would be particularly true in relation to a reduction in weight of the coinage since, as we shall see, weight reductions in new issues of coins were intended to allow for abrasion on the old coins and the general inflation in bullion values.[51] The obligee might only suffer a loss if the reduction in the intrinsic value of the coinage led to a general inflation in prices. The obligee's loss would represent the diminished purchasing power of the new coins. But such a loss would be inherently difficult to quantify, and we might legitimately doubt whether a jury would ever have awarded damages on such a speculative basis.

The analysis might have differed if the value of the coinage had been altered by proclamation between the dates for due payment and judgment. The evidence of some problematic cases considered in the next section indicates that this might have been thought to raise an arguable issue, or at least one that needed special consideration by the court.[52] The cases arose from Edward VI's crying down of the silver coinage in 1551. The complicating fact common to them all was that one or other of the parties was at fault. Either the obligor was late in tendering the money or the obligee did not properly accept the obligor's first tender of the money when it fell due. One reading of the cases may be that a party who was at fault could not exploit for his own advantage any change in the monetary standard occurring after the due date for payment. Thus if the obligor failed to pay on the due date, and the legal value of the coinage was subsequently cried down by proclamation, then the obligee would suffer a clearly ascertainable loss if he had to accept the original number of coins at their now-reduced legal value. The obligor would have to make up the difference by paying more coins. Whether we analyse this outcome as the obligor simply paying the nominal value of the debt with coins that were current by the time of judgment, or paying damages in addition to the coins he should originally have paid would make no difference to final sum. Either way, the obligee would not bear the monetary loss arising from the crying down of the coinage.

It is also interesting to conjecture what might have happened if the parties had drafted around the risk of a change in the monetary standard by stipulating for payment of a specific kind of coins rather than generic amounts. Judging by the extended analysis given to such obligations *in specie* in the writings of the continental jurists, this seems to have been a regular practice in mainland Europe throughout our period.[53]

There is reason to think that such an attempt would have failed at common law and that the obligor might still have been free to tender any coins with a legal value equal to those originally stipulated for. A stipulation for specific coins rather than a generic sum would have changed the nature of the obligation, and possibly also the action by which it was enforced. Debt in the *detinet* might have been the more appropriate action since the coins were treated more as fungible commodities than as representations of abstract money-of-account values. If so, the remedy awarded would have defeated the obligee's attempt to avoid the change in the monetary standard. An obligor who was sued in debt in the *detinet* had the option of paying monetary damages instead of delivering up the very kind of

[51] See Section IV.2 of this chapter. [52] See Section IV.3 of this chapter.
[53] E.g. Budelius, above n 14, 2.8 and 2.11.

property which was the subject-matter of the debt.[54] It may be, therefore, that the obligor would simply be ordered to pay new coins according to the nominal rate of exchange between them and the old money.

In these various scenarios, therefore, it seems that the action in debt held the parties to the monetary obligations at their nominal rates. It is difficult to imagine cases where any change in the monetary standard would have affected the obligor's performance of the obligation.

IV. Common Law Cases Considering Changes in the Monetary Standard

1. Preliminary

Having considered the main structures of England's monetary law, we now review the thin scattering of cases where the changes in the monetary standard raised legal issues for the courts. The entire period is divided between the High Middle Ages and the Tudor period since different kinds of change to the monetary standard tended to figure in each stage.

2. The Late Medieval and Early Tudor Period

The years 1343–1526 marked the period between Edward III's first penny issue and Henry VIII's first reduction of the weight of the penny and revaluation of the gold coinage by proclamation. Throughout this period, the standard of the silver and gold coinage in England was changed in three main stages.[55] These changes were concentrated into about 120 years between 1346 and 1465.

Most of the changes during this first stage involved a reduction in the weight of the gold and silver coinage, with its intrinsic fineness remaining unchanged. Silver coins continued to be minted at the classical sterling standard of 11 *oz* 2 *dwt* silver to the Tower pound (92.5 per cent fine); and gold coins at the standard of 23 carats, 3.5 grains fine gold to 0.5 grain alloy (99.5 per cent fine). The difference was that the coins were made lighter with each new issue. They thus circulated at the same legal rate as the coins they replaced but were physically smaller and thus contained less silver. Taking the figures in the mint indentures at face value, these reductions in weight appear quite substantial. The percentage reductions for the silver coinage were 12–13 per cent (1346–51); 20 per cent (1411); and 25 per cent (1464). It might be expected that they would have generated considerable litigation.

It seems surprising therefore that the Year Books report only one case where these changes in the monetary standard were litigated. This is *Copley v. Davers* (1470),[56] which followed from Edward IV's coinage revaluations of 1464–5. In 1464, Edward IV reduced the weight of the silver penny by 25 per cent, and issued a proclamation raising the nominal value of the noble coin from 6 *s.* 8 *d.* to 8 *s.* 4 *d.*, an increase of 25 per cent relative to its intrinsic content.[57] He completed the process a year later. In 1465, he issued new noble

[54] R. Brooke, *La Graunde Abridgement* (1573), 'Dette', para. 211, referring to the cases cited in *Copley v. Davers* YB (1470) Hil. 9 Edward IV, fo. 49, pl. 6.

[55] For the details, see Fox, above n 2, section I and Appendix.

[56] YB (1470) Hil. 9 Edward IV, fo. 49, pl. 6.

[57] Mint indenture (13 August 1464) Pat. 4 Edward IV, m. 15–16; Proclamation (29 September 1464) Cl. 4 Edward IV, m. 20, cried up the value of existing noble coins from 6 *s.* 8 *d.* to 8 *s.* 4 *d.* so that they would circulate on a par with the new nobles.

coins valued at 10 *s.* In all, therefore, the nominal value of the noble was raised by 35 per cent relative to its intrinsic gold content during these two years.

Copley sued in debt as executrix of the obligee, Greenfield. Greenfield had lent 40 *l.* in silver groats (i.e. 4 *d.* coins) and gold nobles (6 *s.* 8 *d.* coins) to the obligor, Davers, in 1462–3 (2 Edward IV). The obligee seems to have anticipated the change in the monetary standard. The indenture required the obligor to repay 40 *l.* in coins of the same intrinsic standard as they were in 1463–4 or, possibly, to pay a sufficient number of new coins as would give him the quantity of silver and gold in the original groats and nobles. He is reported as stipulating that the defendant 'is obliged to repay the said 40 *l.* of the same metal at the value they were in the said second year etc'.

Sjt Genney for the obligor objected that there was a variance between the demand in the writ and the terms of the indenture. The writ claimed 40 *l.* payable in coin which was then current ('for he demands 40 *l.* which is of the same coin as is now current') whereas the indenture required him to pay 40 *l.* in coins of a superseded intrinsic standard ('it must be repaid according to the value as they were in the second year'). In technical terms, the pleading by the obligee's executrix was defective: oddly, she is reported as suing for less than she was literally entitled to under the indenture.

Aside from the variance in pleading, Littleton J and Danby CJ seemed to have more fundamental objections to the claim:

> Littleton.... for since he had bound himself to pay the 40 *l.* as a certain sum it is right that it be demanded in the same way, etc, in which Moile concurred. ¶ Danby. If he demands more than is in the writ, that will be unwarranted etc. See Mich. 34 H. 6 debt for [20] *s.*[58] and counted on a sealed bill that the defendant was obliged to pay 6 *l.* Flemish, etc and alleged that the 6 *l.* amounted to 20 *s.* English and the count was challenged since he must demand the same thing in the writ as is provided in the specialty, as if he was obliged to pay noble coins, or 6 *l.* of blanks or of Scottish money... See the case in the time of Edward I in debt on a deed for 30 quarters of barley at a price of 20 *l.* It was found for the plaintiff, and they made an inquiry into the price at the time of payment and it was found that at the time of payment one quarter was worth 32 *s.* but at the time of making the deed it was 3 *s.* less. The plaintiff recovered 18 *l.* for the corn, etc according to its price at the time of the payment.

As Littleton J put it, debt lay to enforce a 'certain sum'. He implied that the plaintiff's claim for the revalued equivalent of the original 40 *l.* would not have been a claim for a liquidated amount, as the action in debt required. It is difficult to know what to make of this statement. The simple conversion of a past coin value into a current equivalent should not have been a problem since the courts were familiar with the conversion of foreign coin values to sterling currency. There was no problem about the action in debt lying to enforce debts denominated in a foreign currency.[59] Foreign currency debts were regarded as certain sums even though a jury was needed to assess the equivalent sterling value of the debt. More likely, the uncertainty arose because the ratio of groats to nobles in the original loan was unknown. If the nominal value of groats had arisen by 25 per cent and nobles by 35 per cent relative to their intrinsic value, then it was impossible to ascertain the percentage change in the intrinsic value of the original debt. It could have been anywhere between 25 per cent and 35 per cent.

Danby CJ rejected the claim for different reasons. The value of the debt, it seemed, had to be ascertained at the date of payment rather than the date it was contracted. He drew an analogy with an action of debt in the *detinet* for non-delivery of fungible barley in the time

[58] The report says 40 *s.* here, which cannot be right.

[59] See Section II.2 of this chapter.

of Edward I. The price of barley had risen between the date of the deed and the agreed date for performance. The judges in that case seem to have held that the buyer was entitled to a money judgment for the price of the corn at the agreed date for delivery rather than the date of the deed. If this same reasoning were applied in *Copley v. Davers* (1470), then the value of the obligation to pay money was to be assessed at the agreed date of payment. The obligor could tender coins which, at that date, had a nominal value equal to the amount of the debt. It seems unlikely that the original debt of 40 *l.* contracted in groats and nobles would have been revalued so that the obligee could have demanded new coins with an intrinsic value equal to 40 *l.* of the old money. That might have rendered the amount of the debt uncertain, as Littleton J held, since, as we have seen, the ratio of groats to nobles in the payment was unknown. It would also have gone against the sovereign's policy in revaluing the currency since it would have condoned the circulation of the old and new coins at different nominal values. The new coins would have circulated at a discount from the old. Edward IV's proclamation of 1464 for raising the value of the noble from 6 *s.* 8 *d.* to 8 *s.* 4 *d.* indicated his intent to prevent any action which might have hampered the circulation of his new currency:

> [D]ivers persons for private lucre sow divers seditious language, to the intent to let the said ordinance [crying up the noble], and so hurt the welfare of this land, wherefore he chargeth that from henceforth no man take upon him by such language or otherwise to hurt, trouble or let or occasion of let give unto the said ordinance upon the peril that he may fall in towards the king and upon pain of all that he may forfeit.[60]

The proclamation was an attempt to suppress public dissent against the crying up of the currency. Faced with this, it seems very unlikely that a common law court would have allowed an obligee to hinder the sovereign's policy by allowing him to recover the original intrinsic value of the debt. The obligee's attempt to evade the enforcement of monetary nominalism seemed unlikely to succeed.

We may conjecture why so few cases are reported when the changes made to the intrinsic value of the currency throughout the period 1343–1465 seemed so substantial. The reasons might have been as much economic as they were legal. It is notable that all the changes involved a reduction in the size and weight of new coins. They were, in the sense described in the recent literature, 'defensive' alterations and undertaken for legitimate monetary reasons.[61] They were necessary to compensate for natural wear and abrasion in the coins. Commodity monies gradually lost some of their bullion content simply by being handled in payment transactions,[62] with the wear on silver coins being estimated at 10–16 per cent over 50 years.[63] Since the English practice of the fourteenth and fifteenth centuries was not to call in and demonetize old coins when a new issue was produced, there was a

[60] Proclamation (29 September 1464) Cl. 4 Edward IV, m. 20.

[61] J. H. Monroe, 'The Coinages and Monetary Policies of Henry VIII (r 1509–1547)', University of Toronto, Department of Economics Working Paper 417 (2010); J. H. Monroe, 'The Technology and Economics of Coinage Debasements in Medieval and Early Modern Europe: with Special Reference to the Low Countries and England', in J. H. Monroe (ed.), *Money in the Pre-Industrial World: Bullion, Debasements and Coin Substitutes* (2012), ch 1.

[62] C. C. Patterson, 'Silver Stocks and Losses in Ancient and Medieval Times', (1972) 25 *Economic History Review*, 2nd ser., 205, models the rate of loss. For the relevance of wear and other reasons leading to a reduction in the monetary standard in England, France, and Italy during the medieval period, see C. M. Cipolla, 'Currency Depreciation in Medieval Europe' (1963) 15 *Economic History Review*, 2nd ser., 413.

[63] N. J. Mayhew 'Numismatic Evidence for Falling Prices in the Fourteenth Century', (1974) 27 *Economic History Review*, 2nd ser., 1, at 3; M. A. Archibald, 'The Attenborough, Notts (1966) Hoard', (1969) 38 *British Numismatic Chronicle* 50; Johnson (ed.), above n 6 , at xi, puts the rate of wear as high as 20% over 30 years but does not cite direct numismatic evidence to support this figure.

period of overlap when the old and new coins circulated alongside each other. The new coins were therefore issued at about the same average weight as the old coins had fallen to by years of use.[64] The period of the 1346–1465 weight reductions also saw a marked rise in the market price for silver relative to goods, or, in converse terms, a marked deflation in the price of goods relative to the coins used to buy them. One contributing reason was the gradual depletion of European silver stocks after the middle of the fourteenth century. The volume of coinage in circulation fell.[65] By lowering the silver content of the coinage relative to its nominal value, the sovereign was in effect raising the value of the coinage to reflect the increased price for bullion. The money was literally stretched to compensate for the diminution of silver stocks available for minting as coins.

Seen in terms of silver content, the change in the official monetary standard was probably less drastic to the parties to a debt than the simple change in official weights derived from the mint indentures might imply. Once we take into account the wear on the old coins, the obligee might receive a similar quantity of silver whether he accepted old coins which were worn or new coins which were minted to a reduced weight standard. In a period of general deflation in prices, the official reduction in coinage weight might also have mattered less to an obligee than it would have when prices were rising. Even a party to a long-term contract, such as a landlord, might find that the real purchasing power of the new, reduced coins paid by the tenant was not markedly less than that of the old coins paid by the tenant many years earlier when the lease was first granted.

The net effect was that it was relatively easy for commercial parties and the common law courts to accept a rule which allowed an obligor to repay a debt according to its nominal value on the date of payment. The pleading formula in debt, the enforcement of the sovereign's monetary policy by prerogative proclamation, and the rising price of silver throughout much of the late medieval period supported the circulation of money on what would nowadays be called a nominal basis.

3. The Later Tudor Period

The Tudor changes in the monetary standard were more drastic. In 1526, Henry VIII reduced the weight of the silver coinage by 20 per cent as part of a programme to align the nominal value of all the existing and newly minted coins of gold and silver with international bullion prices.[66] As a way of changing the monetary standard, this adjustment was not fundamentally different from the changes made during the earlier period. But events took a new turn in 1542 when Henry VIII began a programme for the systematic debasement of the English currency.[67] Between 1542 and 1551, the fineness of silver and gold in the English currency fell with each new issue of coins. The avowed reason for the debasements was to increase the King's seigniorage revenues generated by the reminting, with a view to funding his ruinous appetite for military expenditure. The changes can thus be described as 'aggressive' and fiscally motivated, in contrast to the defensive changes that

[64] M. Allen, 'Interpretation of Single-Finds of English Coin', (2005) 75 *British Numismatic Journal* 50.

[65] Mayhew, above n 63; J. Day, 'The Great Bullion Famine of the Fifteenth Century', (1978) 79 *Past & Present* 3; M. Allen, 'The Volume of the English Currency 1158–1470', (2001) 54 *Economic History Review*, 2nd ser., 595; and see generally P. Spufford, *Money and Its Use in Medieval Europe* (1988), ch 15; and J. L. Bolton, *Money in the Medieval English Economy 973–1489* (2012), chs 6 and 8.

[66] Proclamations 111 (22 August 1526) and 112 (5 November 1526), Henry VIII.

[67] See J. D. Gould, *The Great Debasement* (1970); and C. E. Challis, *The Tudor Coinage* (1978), at 81–112.

had previously been made.[68] In just five years, the nominal value of the silver coinage rose by 196 per cent relative to its intrinsic content.

The exception to all these downward changes in the monetary standard was Elizabeth I's 1560–1 restoration of the currency to the old pre-debasement level of fineness. The amount of silver per penny unit of the money of account was more than twice what it had been under the last debased issue of Henry VIII when a pound of silver only 4 *oz* fine yielded 2 *l.* 8 *d.* in coin. Even so, Elizabeth I's coins were still lighter by about one third than the old pre-debasement coins.

Between the debasement and the restoration of the currency many proclamations were issued which cried down the nominal value of debased coins as the first step towards introducing a new issue of coins with a higher intrinsic standard. This happened on two notable occasions in the Tudor period. The first was in 1551 during Edward VI's partial attempt to restore the currency after the ten years' progressive debasement that had preceded it. The next was in 1560–1 when Elizabeth I completed that task of restoration.[69] Either way, changes by proclamation caused sudden, and sometimes drastic, changes in the monetary standard. The public could find the nominal value of its money altered, literally overnight, by as much as 25 per cent. Again, the legal question that arises is how the debasement and the crying down of the currency were treated in litigation before the common law courts.

The debasements of Henry VIII seem to have no trace at all in the Year Books or early nominate reports. Neither does the restoration of the currency by Elizabeth I in 1560–61. The inference is that debts were enforced according to their money-of-account values despite the change in fineness of the coins that the obligors must have tendered in payment of them. It seems that the existing common law and prerogative structures for the enforcement of nominal values were established firmly enough to withstand the abrupt shocks passing through the monetary system during this period. The very strength of these existing structures was perhaps what enabled Henry VIII's programme of debasement to proceed.

What does figure, however, is a cluster of cases partially recorded in *Dyer's Reports* that arose from Edward VI's proclamations for crying down and withdrawing the silver coinage in 1551. Early in 1551 Edward VI's advisers made plans for restoring the badly debased silver coinage to a higher intrinsic standard.[70] The first step was to cry down the nominal value of the existing base coins. They would then circulate more closely to their true intrinsic value and on a par with the new coins that were to replace them. The nominal values of the shillings and groats were changed by three main proclamations. The first, issued in London on 30 April 1551, proclaimed that from 31 August the shillings were to be reduced from 12 *d.* to 9 *d.*, and the groats from 4 *d.* to 3 *d.*[71] The King responded on 8 July and issued a second proclamation that the devaluation was to take effect immediately.[72] Overnight, the public found the nominal value of its holdings of shillings and groats reduced by 25 per cent. The King continued the process with a third proclamation on 16 August, which reduced the shilling to 6 *d.* and the groat to 2 *d.*[73] He halved the value of the other small silver coins at the same time.

[68] Monroe, 'The Coinages and Monetary Policies', above n 61; and Monroe, 'The Technology and Economics of Coinage Debasements', above n 61.

[69] Proclamation 471 (27 September 1560), Elizabeth I. Other proclamations followed throughout the recoinage: Proclamations 472 (9 October 1560) and 473 (1 November 1560), Elizabeth I, which, in consequence of the crying down of the sovereign's own coins, also cried down the legal tender values of the adopted French crowns, and Spanish, Venetian, and Florentine *pistolets*; Proclamation 475 (23 December 1560), Elizabeth I, which clarified the dates for demonetizing the 4.5 *d.* and 2.5 *d.* testons; Proclamation (19 February 1561), Elizabeth I, which called in the 1.5 *d.* and three-quarter *d.* pieces; Proclamation (12 June 1561), Elizabeth I, which called in the remaining small change.

[70] See Challis, above n 67, at 104–10.

[71] Proclamation 372 (30 April 1551) Edward VI.

[72] Proclamation 376 (8 July 1551) Edward VI.

[73] Proclamation 379 (16 August 1551) Edward VI.

In *Barrington v. Potter* (1552),[74] Barrington sued her tenant's executors in debt for rent due in 1546 and 1547 from the lease of a manor. The executors pleaded that on each of the rent days they had made a valid tender of the monies due, and remained ready (*uncore prist*) to pay them. This was a standard plea of tender. Assuming that their tender was good, they would have paid the money into court.[75] All other things being equal, the tender would have barred the debt action. The complication was that their tenders in 1546 and 1547 had been made in the debased shilling coins that were then current. By the time of the action, the nominal values of those same coins had been cried down to half their original worth. If the landlady were then to accept those same shillings in payment, she would receive only half the nominal sum due to her at their new current rates. If the tenant had to pay the rent with the new shilling coins that were then current, he would have to part with nearly twice the quantity of silver.

As reported, the question was whether the landlady or the tenant had to bear the depreciation in the currency. Although the court made no finding on the point, the landlady was arguably at fault in failing to accept the tenant's tenders when the money fell due. She could not throw the intrinsic loss arising from the change in the monetary standard on to the tenant if she had been at fault in failing to accept the coins when they were actually due. Dyer reports that the landlady simply 'took the money at the rate aforesaid [i.e. 12 *d.* per shilling], without any costs or damages on the one part or the other'. It is unclear whether she backed down in her argument and settled, or whether the court ordered this result.

As addenda to *Barrington v. Potter* (1552), Dyer noted five other anonymous cases that turn to some degree on the fault of the obligor or obligee.[76] The reports are brief in the extreme. It is unclear whether they all arose out of the 1551 crying down of shillings and groats. Only one of them refers explicitly to the dates of the 1551 proclamations. The note of that case provides:

> A receiver-general or treasurer having a warrant dormant, or being appointed by statute, as the receiver-general of the court of wards, to deliver annually from his receipt or treasury by a certain day to the cofferer of the king's household, and having a large sum of money in his hands of the king's revenue, after the day that it ought to have been delivered, the coin is debased on the 9th of July in the fifth year, and 17th of August in the same year; Whether the receiver or the treasurer in the said case shall be allowed for the loss, or not?[77]

This and the other cases imply that the obligor should bear the loss if he had been late in tendering the money. He would have to make a fresh tender of new coins. The nominal value of the coins had to equate to the obligation, although by that stage the coins might have contained fewer monetary units of account for the same quantity of silver.[78] Conversely, if he had tendered the money on the due day and the obligee wrongly refused, then, as in *Barrington v. Potter* (1552), there was at least a doubt whether he had to pay at the new rate.[79] The court might refuse to recognize that the obligee had suffered any loss or damage from the change in the monetary standard.

The last case for this period, *Sheldon v. Horton* (1555),[80] records an obligee's attempt to hedge against the risk of Edward VI's crying down of the shillings and groats in 1551. As it

[74] *Barrington v. Potter* (1552) 1 Dyer 81b, pl. 67. [75] *Paynell v. Nevell* (1556) Benloe 54.
[76] 1 Dyer 82b–83a, pl. 72–5. [77] *Anon* 1 Dyer 83a pl. 73.
[78] See also *Anon* 1 Dyer 82b pl, 72 et seq.; 83a pl. 75. [79] *Anon* 1 Dyer 83a, pl. 74.
[80] *Sheldon v. Horton* (1555) noted in (1993) 109 *Selden Society* 119. See also the depositions in a tender case arising out of the 1551 crying-down in *Bostock v. Crymes* (1552) noted in (1898) 89 *Selden Society* 193.

turned out, his attempt was unnecessary. Unbeknown to him and the obligor, the coins had already been revalued by the time they reached their agreement.

Sheldon sued Horton for 15 *l.* 16 *s.* 9 *d.* in an action in debt. At the start of the transaction, Horton appears to have owed about 63 *l.* 7 *s.* to Sheldon under an indenture for the sale of wool. On 8 July 1551, Horton paid Sheldon a sum of money in shilling and groat coins. Sheldon must have suspected that the date for crying down the shillings and groats might be brought forward from 31 August. He therefore gave Horton a bill of acquittance which provided that he was accepting the shillings and groats for 47 *l.* 10 *s.* 3 *d.* in part payment of the whole sum due. He went on to provide: 'If the shillings and groats be not set out by this day to go after less rate than xii *d.* the shilling or iv *d.* the groat that then he knowledge to receive the said shillings and groats for the sum of threescore three pounds seven shillings.' In other words, if the coins had not in fact been revalued, he agreed to accept them at their original values of 12 *d.* and 4 *d.* each and give an acquittance for the full 63 *l.* 7 *s.*

As we have seen, Sheldon's suspicions proved right. On the very day of the acquittance, Edward VI authorized the proclamation at Greenwich which revalued the coins to 9 *d.* and 3 *d.* with immediate effect.[81] It seems from the report that the proclamation was not read locally in Gloucestershire until 9 July. Regardless of the risk-allocation provisions in the acquittance, the money accepted by Sheldon was already worth just 47 *l.* 10 *s.* 3 *d.* The result was to leave one quarter of the original debt outstanding. So it was that Sheldon sued for 15 *l.* 16 *s.* 9 *d.*, which is nearly one quarter of the original balance due of 63 *l.* 7 *s.*[82]

The Court of Common Pleas held that the acquittance was bad and that Horton was liable for 15 *l.* 16 *s.* 9 *d.* The real reason may be that the acquittance was simply irrelevant since the sovereign's revaluation of the coins had already come into effect. The court therefore did not need to rule on whether the parties' attempt to ascribe a private value to the coins was effective.

What do these decisions show about the common law's treatment of changes in the monetary standard during the Tudor period? The first point to note is that none of the reported decisions touches directly on what might be considered the core case where the parties had not expressly anticipated the change in monetary standard by contracting around it, and where neither of them was at fault in making or accepting the tender. On this issue, the silence of the common law reports may indicate that the point was not seen as raising a legal problem worth arguing. The courts perhaps took for granted that the obligor was entitled to proffer whatever coins were current on the due date for payment, at whatever legal value was then ascribed to them. This seemed to continue the practice accepted in *Copley v. Davers* (1470). There was no question of the original intrinsic value of the debt being revalued in new coins to allow for the debasement of the coinage between the dates of contract and payment. Such a recalculation might have been feasible when debasements were made at short intervals and the extent of the loss of intrinsic value was readily ascertainable. As we have seen the reasons for recalculating the intrinsic value of the original debts were less compelling in cases where the coinage was reduced in weight for defensive reasons. New coins might often have had a similar weight to old coins that were worn down by years of abrasion. For whatever reason, however, the common courts seemed generally unwilling to revalue debts after a debasement of the coinage or an alteration of its value by proclamation.

[81] Proclamation 376 (8 July 1551) Edward VI.

[82] Since this sum is not exactly one-quarter of the 63 *l.* 7 *s.* it may be that some of the coins tendered by Horton were bad and had lost their legal tender status.

But when one of the parties was at fault, the judges might recognize that the monetary standard had changed. The cases noted by Dyer indicate that there was at least an issue worth arguing but they are imprecise about what the judges' solution would be. *Barrington v. Potter* (1552) may indicate that the party at fault would be barred from exploiting the change to his own advantage. Perhaps an obligee could not insist on payment at the new nominal rate if he failed to accept a valid tender of money on the due date. If, conversely, the obligor was late in tendering the money and the coinage was then cried down, he might have to make up the difference to the obligee. We saw in an earlier section that this difference might have represented an amount of damages suffered by the obligee after the obligor's late tender, or possibly payment of the nominal value of the original debt using coins at the new legal value. Since the loss would represent a readily ascertainable amount, namely the difference between the original and the newly proclaimed value of the coins, there might have been fewer practical objections to awarding it. This perhaps represents the main difference between changes from crying down of the coinage and changes involving the reduction in fineness or weight. There, as we have seen, the real economic value of the obligee's loss, if any at all, would have been difficult to ascertain.[83]

In the converse case where the obligee failed to accept a valid tender of money from the obligor, his action in debt would fail. He would be left to accept the coins that the obligor tendered and paid into court. He could not claim any damages for the nominal loss he suffered when the value of the money was subsequently cried down. This analysis fits with the result in *Barrington v. Potter* (1552). There, as we saw, the landlady seems not to have come to collect the rent payments when they fell due. She might therefore have been at fault in failing to accept the tenant's tenders. In the end, she had to accept the money paid into court by the tenant, even though its legal value had by that stage been cried down. The result seems justifiable: it would have been harsh for the tenant to be made liable to pay damages for the subsequent crying down of coins which he had properly tendered when they were due.

We may ask how the analysis would differ if the obligee sued in assumpsit instead of debt, a development which emerged during the 1540s in time for the monetary dislocations of the 1540s–60s.[84] The gist of assumpsit lay in the damage caused by the obligor's wrongful failure to pay as he promised rather than in the failure to pay a certain sum denominated in monetary units. In principle, the obligee's economic loss arising from the change in the monetary standard might have been argued to be 'damages' recoverable in assumpsit.

Without undertaking an exhaustive study of the plea rolls of the later sixteenth century, it is difficult to know how a court and a jury would have dealt with this issue. But three tentative reasons can be suggested for why the rise of assumpsit might not have affected the principle of monetary nominalism enforced by the action in debt. First, if the rules for tendering a valid tender of money in assumpsit were the same as would bar an action in debt, then an obligee might find that he could not raise the issue of a change in the monetary standard. In assumpsit, the obligee sued on an undertaking to pay which would have been denominated in monetary units of account. If the obligor made a valid tender by proffering money with the same nominal value in money of account, he would have done all that the undertaking required of him. A valid tender would block any inquiry into any losses caused to the obligee by the change in the monetary standard, just as it would with

[83] See Section III.3 of this chapter.

[84] See D. J. Ibbetson, 'Assumpsit and Debt in the Early Sixteenth Century', (1982) 41(1) *Cambridge Law Journal* 142; Baker, above n 42, vol. 6, at 852–60.

the action in debt. Secondly, as we saw in an earlier section, even if the obligor had not made a valid tender of money in payment of the debt, then the obligee would be hard pressed to prove that the change in standard caused him any quantifiable damage. The only cases where he might have done were where the legal value of the money was changed by proclamation.[85] Thirdly, the rise of assumpsit may have come too late to undermine the common law's support for nominalism. After the decision of the King's Bench in *Slade's Case* (1602),[86] assumpsit came into its own as an action for enforcing voluntary undertakings to pay liquidated sums. Just two years later, *Gilbert v. Brett* (1604) confirmed that the common law rules of tender only had regard to the legal value of money. The availability of assumpsit, instead of debt, to recover the loss on the change of standard might have come too late to make any real difference to the enforcement of monetary obligations.

V. Conclusion

Until the decision in *Gilbert v. Brett* (1604), the common law seemed to lack any explicit theory about the nature of money or monetary obligations. But from the late thirteenth century onwards, there seems to have been a clear understanding that money was a special kind of property in bilateral payment transactions, and that it had a legal status different from the precious metal from which it was struck. Its value was fixed by law in the mint indenture at a certain rate expressed in units of the money of account. It was this value, rather than any intrinsic value based on its bullion content, which mattered to the payment transactions enforced by the common law courts.

What we might now call 'monetary nominalism' was an expression of the sovereign's prerogative in monetary matters, and the common law courts' acceptance of that constitutional fact. It was an assumption embedded in the practices of the lawyers who drafted payment clauses and then enforced them by actions of debt before the common law courts. Lawyers and courts treated monetary debts as generic sums rather than as obligations to deliver quantities of precious metal. The general effect was therefore that any change in the monetary standard—whether by reducing the weight of the coinage, debasing its fineness, or giving it a new value by proclamation—made very little difference to the performance of monetary obligations. This may explain why litigation arising out of changes in the monetary standard seems to have been rare in England in the pre-modern period, despite the abrupt changes that occurred. In this respect, the English common law seems to have reached a nominalist view of money sooner and with less difficulty than the civil law jurists of continental Europe.

[85] Late payment of a debt, followed by the crying up of the coinage, might have been analysed as causing some ascertainable damages to the obligee. If in an assumpsit action the obligor were simply ordered to pay the debt with a smaller number of uprated coins, then the obligee would suffer a loss consisting in his failure to secure the nominal uplift in value of the coins that should have been paid on the due date. This issue might have arisen in 1611 when the value of the existing coinage was cried up: Proclamation 122 (23 November 1611) James I.

[86] *Slade's Case* (1602) 4 Co. Rep. 91a.

12

The *Case of Mixt Monies* (1604)

David Fox

I. Introduction

Gilbert v. Brett (1604),[1] commonly known as the *Case of Mixt Monies* (and referred to here as 'the *Case*'), is the only reported common law decision which considers squarely how the debasement of a commodity currency should affect the performance of a monetary obligation. It has long been treated as the leading common law authority for the proposition that money is tendered and received at nominal rates in discharge of debts. The *Case* holds that an obligee, who is owed a monetary debt, bears the risk of changes in the monetary standard between the date of contract and the date it falls due for performance. If the obligee sued on the debt, then he would only be entitled to be paid money with a legal value equal to the nominal value of the debt when it was first contracted. No allowance would be made for the change in the weight or fineness of the coinage, or any consequential change in its purchasing power.

The *Case* arose out of Elizabeth I's debasement of the Irish currency in 1601. It was referred to London for a ruling from the assembled Chief Judges of the Queen's Privy Council. It established a point of general importance to the English government's project to empty Ireland of its old intrinsically valuable coinage and to replace it with new debased silver coins and copper tokens.[2] The purpose of the debasement was to assist in the suppression of the rebellion led by Hugh O'Neill, Earl of Tyrone. By depriving the rebels of their supplies of hard currency, it was thought that they would be unable to buy armaments from abroad. The English finances needed to pay for the war could be stretched further by paying wages to the troops in debased coin.[3] The debasement of the currency presented the English administration with many problems, particularly in enforcing the exchange rules for remitting currency between England and Ireland, and in forcing the

[1] *Gilbert v. Brett* (1604) Davis 18; an English translation of the *Case* appears as (1604) 2 *Howells State Trials* 114, and the translations in this chapter are taken from that report. The author has published an earlier version of this chapter as D. Fox, 'The Case of Mixt Monies', (2011) 70(1) *Cambridge Law Journal* 144, which concentrates on the more general relevance of the *Case* in establishing the principle of monetary nominalism in the common law.

[2] See, generally, C. E. Challis, *The Tudor Coinage* (1978), at 268–74; H. S. Pawlisch, *Sir John Davies and the Conquest of Ireland* (1985), ch 8.

[3] *Calendar of State Papers for Ireland* (1601–3): 'Discourse on the standard of Ireland' (21 December 1601), at 225, 226–7; 'Memorandum on the benefits conferred on Ireland by the New Standard' (December 1601), at 247; 'Memorandum on the Irish Coinage' (April 1601), at 383; 'Important considerations which moved our late Queen to restrain the movement of sterling monies from hence into Ireland' (*c.*1603) British Library MS TOW 20461P, fo. 152a–157b, esp. fo. 152b–154a.

public to accept the debased currency without also increasing their prices.[4] The legal issue exemplified in the *Case* was one part of that larger picture.

Seen purely from the perspective of common law doctrine, the *Case* is surprising. It was, in one sense, unnecessary. Long before 1604 the common law had legal structures in place to ensure that English money issued by the sovereign generally passed at nominal rates.[5] These seem to have been enforced during the fourteenth, fifteenth and sixteenth centuries on the occasions when the English sovereign reduced the intrinsic content of the silver and gold coinage. They even held up during Henry VIII's and Edward VI's aggressive debasements of the English and Irish coinages between 1542 and 1551.[6] These structures for enforcing monetary nominalism existed in the interstices of the common law: they followed from the way that practitioners drafted payment clauses in transactional documents, and from the pleading and enforcement of actions in debt. Monetary nominalism was enforced by public law penalties and by direct government coercion. If one of the parties did suffer some real economic loss through the change in the monetary standard, then it may be that the question rarely reached a jury for determination.

What the common law lacked, however, was an explanation of the substantive reasons why monetary obligations should be enforced on a nominal basis. That is what the *Case* provided. Very few of the reasons given by the judges in the *Case* depended on institutional reasons peculiar to common law practice and procedure. Instead, they are reported as drawing on an eclectic range of sources: the sparse case law generated by the sovereign's earlier changes to the monetary standard in England; some works of political history which described, as matters of constitutional fact, the King's exercise of his sovereign power over the monetary standard; and, surprisingly, the writings of European jurists of the civil law on the performance of monetary obligations. These linked the reasoning in the *Case* with the long tradition of European scholarship on the legal nature of money.

The purpose of this chapter is to explain how the *Case* used those earlier works of authority. On a superficial reading, the *Case* might seem to be a reception of civil law principles into the common law. But a close reading of the authorities cited in the *Case* shows that that was not so. The nominalist view of monetary obligations endorsed by the *Case* was at odds with the *communis sententia* of the European jurists in the 16th century. The report shows that those authorities were used selectively. The outcome was strongly consistent with the nominalist, minority view of the sixteenth century French jurist, Carolus Molinaeus.[7] The report duly referred to Molinaeus' writings. They supported the common law view that the substance of money was its legal valuation ascribed by the sovereign. It was therefore within the sovereign's power to require existing monetary obligations to be discharged by payment of debased money. But the *Case* did not in fact adopt the technical points of Molinaeus' argument as to the proper date for assessing the substantial value of a monetary obligation. The *Case* purported to find support from civil law jurisconsults for a nominalist interpretation of the transactional documents in the dispute. But the writings of those same jurisconsults argued for the very opposite result: monetary obligations were to be valued in terms of the intrinsic gold or silver content of the coins in circulation when the

[4] See Irish Proclamation (Elizabeth I) (24 January 1602) (the relevant Irish proclamations are collected in J. Simon, *Simon's Essay on Irish Coins, and the Currency of Foreign Monies in Ireland* (1810)); *Calendar of State Papers for Ireland* (1601–03): 'Note of the gain of the merchants' (*c.*31 December 1601), at 249–50; Morgan to Watson (*c.*14 January 1602), at 280–2; Carew to Buckhurst (16 October 1602), at 501; 'Memorandum of the gain of merchants who trade in Ireland' (1602), at 547–8; 'Memorandum on the debasement of the coinage in Ireland' (*c.*1602), at 636.

[5] See Chapter 11 in this volume.

[6] J. D. Gould, *The Great Debasement* (1970).

[7] See further Section IV.3 below.

parties concluded the transaction between them. If the sovereign debased the currency, then the obligor had to discharge the debt according to its original intrinsic value, not its nominal value.

There are real questions as to the reality of the reasons reported in the *Case*. No official record of the Privy Council's decision survives. Nearly all the Registers and Books of the Council for the period 1602–5 were destroyed by fire in 1619.[8] Our only record is therefore the report first published in 1615 by Sir John Davies.[9] Davies was appointed the Solicitor-General in Ireland in 1603, and the Attorney-General in 1606. He probably had a part in presenting the *Case* before the Privy Council. It is unclear how much of the reported decision represents the reasoning of the judges, or even material which Davies put before them. It is probably a combination of the two, but with very heavy embellishment by Davies, after the event, in writing up the report. There is internal evidence in the *Case* for Davies' own contribution to the report. One of the works cited, Marquardus Freherus' *De Re Monetaria* of 1605, could not have been available the summer of 1604 when the Privy Council handed down its decision.[10] Davies had a keen interest in all matters antiquarian, and was an early member of the Society of Antiquaries in London. His law studies at Oxford and a visit to Leiden in 1592 to Professor Paul Merula would have made him familiar with the civil law. The presence of material drawn so clearly from outside the common law tradition makes the report very unusual, and bears the stamp of Davies' own interests. Davies' report on the *Case of the Royal Fishery of the Bann* showed the same blend of civil law and common law authorities.[11]

Professor HS Pawlisch has written how Davies used his reports as political statements to justify the Tudor administration's imposition of English legal and social practices upon Ireland.[12] The report of the *Case* fits that pattern. The Queen's proclamations of 1601, which authorised the circulation of the new debased currency, were binding acts of prerogative law. They were explicit in requiring all parties to receive the new debased coins 'at such values and rates as they are coined for'.[13] On their face, they should have been a sufficient answer to the legal issue in the *Case*. But Davies' report aimed to go further. It provided a reasoned legal justification for the proclamation, and the sovereign's prerogative power over the Irish coinage.

II. The Transaction in the *Case*

The defendant, Brett, was a merchant in Drogheda near Dublin. Gilbert appears to have been a London grocer who regularly sold goods to customers in Ireland, probably to supply the English troops stationed there. By 1602, he had built up substantial balances due from

[8] HMSO, *Acts of the Privy Council of England 1613–14* (1921), preface by H. C. Maxwell Hyte.

[9] *Le primer report des cases & matters en ley resolues & adiudges en les courts del Roy en Ireland* (Dublin, 1615). References in this chapter to the report are to the 1674 edition, reproduced in the *English Reports* series.

[10] Other internal evidence of Davies' work in embellishing the Privy Council's decision is his reference to a *Tractatus de Moneta Angliae* in the time of Edward I which he consulted in the library of the antiquary and book collector Sir John Cotton (1571–1631): *Gilbert v. Brett* (1604) Davis 18, at 26. (The work may be the *Tractatus Nove Monete* of *c.*1286–7, which accompanied Edward I's re-coinage of 1279, as to which see M. Allen, *Mints and Money in Medieval England* (2012), 75. It is reproduced in *The* De Moneta *of Nicholas Oresme and English Mint Documents*, ed. C. Johnson (1956).) Cotton opened his library for consultation by scholars and those interested in political history. Cotton, like Davies, was an early member of the Society of Antiquaries. See, generally, K. Sharpe, *Sir Robert Cotton* (1979), chs 1–2.

[11] *Case of the Royal Fishery of the Bann* (1610) Davis 55. Similarly, Davies' work on tax, *Jus imponendi vectigana, or, The learning touching customs, tonnage, poundage, and impositions on merchandizes, asserted as well from the rules of the common and civil law* (2nd edn, 1659).

[12] H. S. Pawlisch, *Sir John Davies and the Conquest of Ireland* (1985).

[13] Irish Proclamation (Elizabeth I) (20 May 1601).

Irish customers arising from transactions before the debasement of the currency, and he regularly remitted money from Ireland to England through the government exchanges. Like many other merchants, he exploited the official exchange rates in his own favour, to the cost of the Crown.[14] He was a prominent mercantile figure and one for whom the Crown might have felt no particular sympathy.

In April 1601, Brett bought certain wares from Gilbert in London. Brett's debt from the sale was expressed in the common form of penal bond: he would become liable to pay the larger sum of £200 unless by the due date he paid 'sterling, current and lawful money of England, at the tomb of Earl Strong-bow in Christ-church, Dublin'. This was a typical form of payment clause contained in the condition of a bond or in the conveyancing documents of the time.[15] It differed slightly from the usual forms by explicitly stipulating both for 'sterling' and for 'lawful money of England'. The evidence of the precedent books indicates that it was perhaps more common by the early seventeenth century for obligees to stipulate simply for 'lawful money of England', and that the older practice of requiring payment of 'sterling' money was on the wane. In any case, these terms had a double function in law. They identified the national currency in which the obligation was denominated, and also the real coins that had to be proffered if the obligor was to make a valid tender.

The proclamation declaring the new debased coin current was issued on 20 May 1601, that is, after Brett entered into the bond but before the due date for performance.[16] On the payment date, Brett tendered £100 of the debased Irish currency. On its face, this was a good tender which Gilbert should have accepted. The stipulation that the tender be made in 'money of England' was construed as a reference to the place where the money had been minted and not to the country that had issued it. The coins tendered by Brett were minted at the Tower of London, which satisfied the description in the payment clause.[17]

The question was whether Gilbert could insist upon payment of £100 in coins of a higher intrinsic standard. These would either be English coins minted to the traditional sterling standard of 11 *oz* 2 *dwt* fine, or the old Irish coins which, in their most recent issue, were 11 *oz* fine.[18] The proclamation had required the public to exchange the English coins and the old Irish coins for new debased coins. The old Irish coins were demonetized. The argument that Brett should pay in English sterling coin was not wholly implausible, given that the contract itself was concluded in England. We return to the significance of this later in the chapter.[19]

The Privy Council ruled that Brett's tender of the debased money was good. It was the sovereign's prerogative to fix the intrinsic fineness of the coinage, and to assign it a legal valuation in terms of money of account. Public necessity, such as the war in Ireland, entitled the Queen to debase the currency without seeking any authorization from her subjects.[20] The Judges interpreted the payment clause in the bond as allowing Brett to tender £100 in any coins which were lawfully issued for circulation in Ireland on the agreed date for payment.[21] The debasement of the currency between the dates of the bond and the

[14] E.g., *Calendar of State Papers for Ireland* (1601–3): 'Memorandum of what is Due by Her Majesty in the Three Exchanges' (6 February 1602), at 291; 'Collection of Sums due by Merchants of Ireland to Merchants of England' (5 June 1602), at 406; 'Memorandum on the Abuses of the English Merchants committed in Her Majesty's Exchange' (4 November 1602), at 508.

[15] See Chapter 11 in this volume.

[16] Irish Proclamation (Elizabeth I) (20 May 1601).

[17] *Gilbert v. Brett* (1604) Davis 18, at 25. See further Fox, above n 1, at 164.

[18] Although of similar fineness to the English coins of the sterling standard, they were lighter in weight: see the details of the mint indenture dated 26 March 1561 in Challis, above n 2.

[19] See Section IV.2 of this chapter.

[20] *Gilbert v. Brett* (1604) Davis 18, at 20.

[21] Ibid., at 26–7.

date of payment made no difference to the performance of the obligation. They were reported as holding that their decision was consistent with the cluster of English cases, reported by Dyer, which arose from Edward VI's crying down and demonetization of the English silver coinage in 1551.[22]

III. Works Cited in the *Case*

We can form a view about the reasoning in the *Case* by comparing it with the works of authority cited in the report. A careful reading of these works reveals the extent to which the judges used them selectively or adapted them to support their nominalist conclusion. This section therefore gives a brief account of the civil law writings cited in Davies' report and the works on monetary matters which appear there. It explains them in terms of their importance to the reasoning reported in the *Case*, rather than in chronological order. In general the report does not delve deeper than one level of citation. That is to say, it refers to a small number of civil law writings but does not cite back to the many jurists whose works of authority were referred to in those writings. The report thus links to the civil law tradition, without drawing deeply upon it.[23]

The main civil law treatise figuring in the report is the *De Monetis et Re Numaria* by Renerus Budelius (cited here as '*Budelius*'). The work was published in Cologne in 1591 as the first part of a compilation of sixteenth century treatises on monetary law called *De Monetis et Re Numaria Varii Tractatus*.[24] A reader of Budelius would therefore have had access to the full text of the works which he cited. Budelius was a jurisconsult, who served as mint warden of the city of Roermand in the Low Countries and as the director of money to the Duke of Bavaria.[25] Budelius' own *De Monetis* was a work of two books. The first provided a general account of the minting of money, the different monetary standards in force in the states of Europe, and a history of monetary evolution which followed the classical account formulated by Aristotle in his *Nicomachean Ethics,* and Paulus in Justinian's *Digest*.[26] The second book of the work was devoted to the monetary law which had been formulated by jurisconsults from the period of the glossators through to the mid-sixteenth century.

Some of the civil law writers cited by Budelius in his own *Tractatus* were also mentioned directly in the *Case*. Foremost among them was Carolus Molinaeus (1500–66), the Parisian jurist and legal practitioner.[27] His *Tractatus contractuum et usurarum* of 1546 (cited here as '*Molinaeus*' in the edition of 1584) contained a section on changes to the monetary standard and their effect on the performance of legal obligations. This section of the *Tractatus* was reproduced in Budelius' compilation of treatises, so Davies would have had access to its actual text. Budelius was clearly impressed by Molinaeus (he praised him as a most ingenious man),[28] and he devoted four chapters of his second book to

[22] Ibid., at 27. The cases (notably *Barrington v. Potter* (1552) 1 Dyer 81b, pl. 67) are considered in Chapter 11 in this volume.

[23] The exception is an enigmatic reference at (1604) Davis 18, at 25 to Baldus 'l. Singulari' for the proposition 'In pecunia potius attenditur usus & cursus quam materia'. Although there is a paragraph on *pecunia* in Baldus' *Repertorium de singularibus dictis textuum glossarum et doctorum iuris civilis et canonici*, it is not authority for this proposition. I am grateful to Wolfgang Ernst for this reference.

[24] See further Chapter 13 in this volume.

[25] 'Budel, René', in *Biographie universelle ancienne et moderne* (1812); and A. Nussbaum, 'The Idea of a World Money', (1949) 4 *Political Science Quarterly* 420, at 420–1.

[26] R. Budelius, *De Monetis et Re Numaria* (1591), 1.3. See further Section IV.3 of this chapter.

[27] On Molinaeus, see J. -L. Thireau, *Charles Du Moulin* (1980). For his views on the nature of money, see W. Taeuber, *Molinaeus' Geldschuldlehre* (1928); and Chapter 13 in this volume.

[28] Budelius, above n 26, 1.7.6.

summarizing Molinaeus' arguments.[29] Molinaeus, as we shall see, was notable for making a sustained case for a novel view of money in the law. The true substance of money, he argued, was the nominal valuation assigned to it by the legal act of the sovereign rather than any intrinsic value based on its content of precious metal. Monetary obligations should be discharged according to the nominal value of the money which was in circulation when the obligation was first contracted. Their performance should not be affected by debasement of the intrinsic content of the currency between the dates of contract and payment.

A second authoritative writer cited by Budelius and in Davies's report was Diego del Covarruvias (1512–77), the professor of canon law at Salamanca and Archbishop of San Domingo. His *Veterum Collatio Numismatum* (cited here as '*Covarruvias*') was written in about 1561 and published in 1594. It, too, was included in Budelius' 1591 compilation. *Covarruvias* explained the history of money from Greek, Roman, and Hebrew antiquity, and its use in Spain. Chapter seven of *Covarruvias* was a neatly worked summation of the civil law on the performance of monetary obligations after a change in the monetary standard, arranged as a series of *conclusiones*. The work was up to date for its time: Covarruvias referred to Molinaeus' *Tractatus*,[30] which would have been published about fifteen years earlier.

The report of the *Case* refers twice to Covarruvias. He was the named authority for the sovereign's power to debase the currency for reasons of public utility, especially to meet the necessity of a war.[31] He also provided authority for the judges' fanciful historical inquiry into the origin of the word 'sterling' as the name for the English currency, which figured in the payment clause in the bond.[32] But aside from these direct references, much of Covarruvias' chapter seven was directly relevant to the issue of debasement and discharge of debts before the Privy Council, even if it was not directly cited on this issue.

The significant influence of one other unnamed work is detectable in the *Case*. This is the *Tractatus Insignis Augmenti et Diminutionis Monetarum* of 1506 by Albertus Brunus (*c.* 1467–1541), a jurisconsult in the Italian city of Asti. As we shall see, Budelius relied particularly on Albertus Brunus' analysis of so-called 'generic obligations' for the payment of money, and of the forms of transactional words which would displace the general rule about the date when monetary obligations were valued. Albertus earned an oblique reference in Davies' report of the *Case* even if he was not named in person. Like Molinaeus and Covarruvias, Albertus' *Tractatus* was included in Budelius' compilation. The full version of its original text would have been available to Davies.

The report of the *Case* referred to three other major works as authority on matters of numismatics and the regulation of currency. Such understanding as Davies had of minting coinage standards in antiquity and the Middle Ages was perhaps derived from the writings of the French scholar and librarian, Gulielmus Budaeus (1467–1540), whose *De Asse et Partibus eius Libri Quinque* was first published in 1514. The report cites Budaeus' description of the variability in the talent unit of weight, which supported Davies' view that it lay in the sovereign's arbitrary power to assign whatever monetary value he pleased to that weight.[33]

29 Ibid., 2.1–2.4.

30 D. Covarruvias, *Veterum Collatio Numismatum* (1594), cap. 7.6; cap. 7, unicus, *prima conclusio*.

31 *Gilbert v. Brett* (1604) Davis 18, at 22, referring to Covarruvias, above n 30, cap. 2.12, and W. Lyndwood, *Provinciale seu Constitutiones Angliae, continens Constitutiones Provinciales quatuordecim Archiepiscoporum Cantuariensium* (1674), (first published 1496) 'De Testamentis', discussed in Section IV.2 below.

32 See Section IV.4 below.

33 *Gilbert v. Brett* (1604) Davis 18, at 20 in the context of a discussion of *R v. Bateman (Bishop of Norwich)* YB (1347) Mich. 21 Edward III, fo. 60b, pl. 7. The English translation of the report misattributes the reference to Budelius.

The report referred twice to *Les Six Livres de la République* (first published in 1576) by the French jurist and political philosopher, Jean Bodin (1530–96). Bodin's *République* was subsequently republished in Latin as *De Republica Libri Sex* (first published in 1586).[34] The third chapter of Bodin's sixth book was devoted to monetary matters, and included a long discussion of the *libra* standard in many different European coins. The report referred to his use of the term *pes monetae* as the weight and purity assigned to a coin by the sovereign.[35] But in his opening discussion of the incidents of princely power, Bodin also described the sovereign's legal right to fix and, if need be, to alter the monetary standard by changing the intrinsic content of the coinage or by assigning a different monetary valuation to it.[36]

The third general work cited in the report of the *Case* was the *De Re Monetaria* (1605) by the jurist and diplomat Marquardus Freherus (1565–1614).[37] The work was a two-volume history of money in antiquity and a description of the coinages of the European states at the turn of the seventeenth century. As we shall see, it provided the judges with a shaky foundation for their view that even the debased Irish currency of 1601 warranted the legal description as 'sterling' money.[38]

The question then is how those works were used to formulate the Privy Council's reasons as Davies reported them in the *Case*.

IV. The Reported Reasoning

1. *Tempus Contractus* and *Tempus Solutionis* in the Civil Law

Even a cursory reading of *Budelius* Book 2, *Molinaeus* Quaestio 92, and *Covarruvias* Chapter 7 would have given Davies a clear understanding of the civil law's starting point in analysing the performance of monetary obligations after a change in the monetary standard. Covarruvias stated the point with precise concision:

> When money is changed in its *bonitas intrinseca* (most obviously in its metallic composition or in weight), it is to be paid in accordance with the same *bonitas* which it had at the time of the contract rather than in accordance with that which it had at the time of discharge. This follows from reason.[39]

Budelius described and accepted the same view,[40] and although Molinaeus' nominalist view of money led him to argue for a different conclusion, he nonetheless recognized that this was the *communis sententia* among the civil law writers.[41] This was the very opposite of the Privy Council's conclusion in the *Case*.

Bonitas intrinseca was a legal term of art. The term *bonitas* developed in the context of the civil lawyers' analysis of the contract of *mutuum*, which required that a loan of fungible

[34] Citations to the French version are to the 1629 Geneva edition; and the Latin version, to the 2nd edition of 1591. The work is known in English from Richard Knolle's 1606 translation as *The Six Books of the Commonweale*, but Davies seems to have been working from the original French work or its Latin translation.

[35] *Gilbert v. Brett* (1604) Davis 18, at 21, 22.

[36] J. Bodin, *De Republica Libri Sex* (1591), 1.9.

[37] Marquardus Freherus, *De Re Monetaria Veterum Romanum et Hodierni apud Germanos Imperii* (1605) (misnamed in the report as *De Re Nummaria*).

[38] See Section IV.4 of this chapter.

[39] 'Pecunia mututa in bonitate intrinseca: nempe in materia, vel pondere, soluenda est secundum eam bonitatem, quam habuerat tempore contractus, non autem secundum illam quam habet tempore solutionis, probatur ex ratione': Covarruvias, above n 30, cap. 7, *conclusio* 3.

[40] Budelius, above n 26, 2.2.11–15 summarizing C. Molinaeus, *Tractatus contractuum et usurarum* (1584), at 693.

[41] Molinaeus, above n 40, at 693. For the development of Molinaeus' argument, see Section IV.3 below.

goods be discharged by returning goods of the same *bonitas* as those first lent.[42] Since even fungible goods would differ slightly from unit to unit, the contract required the obligor to restore goods of the same substantial quality, with a monetary claim being allowed to the obligee if the goods returned were defective in some incidental aspect.[43]

In money transactions, the legal terminology was more specialized but its meaning was much the same. Money had two values: its *bonitas intrinseca* (also known as its *valor intrinsecus*), and its *bonitas extrinseca* (or *valor extrinsecus*). Davies was fully aware of this specialist terminology. The report cites the definitions from Budelius.[44] As we shall see, the report went on to use them as elements in the argument for adopting Molinaeus' nominalist definition of money, which reversed the conventional understanding of monetary obligations proposed by the civil law writers.[45]

Referring to the *communis sententia*, Budelius defined the *bonitas intrinseca* of money as a function of its weight (*pondus*), and its fineness in terms of precious metal and alloy (*preciositas materiae* and *liga*).[46] He defined the *bonitas extrinseca* as its *valor impositius*. This was the valuation assigned to a coin in terms of abstract units of account, or in terms of the primary coins which were the foundational reckoning units of a national monetary system. A common synonym for *valor impositius*, which appears in the writings, and in the *Case*, was *aestimatio*.[47] Together these terms signified a monetary reckoning of a coin's value which was imposed by the the public authority of the sovereign. In modern terminology, we might call the *valor impositius* or *aestimatio* of a coin its 'nominal value'. This however, was not a term which would have been recognized at the time. Money had to be priced, like any other commodity. But the act of assigning a value to it also transformed its status. The money became a definitive standard by which the value of other commodities could be measured. The price expressed the value of the commodities in terms of money.

The consequence of Covarruvias' *conclusio* and the *communis sententia* was that the value of a monetary obligation was fixed at the time the parties concluded their transaction in terms of the intrinsic value of the coins then in circulation. The rubric, 'the intrinsic value at the time of the contract is considered' (*bonitas intrinseca tempore contractus attenditur*) summed up the approach. The rule applied whether the transaction arose from a *mutuum,* where the obligation would have arisen from the advance of actual coins to the obligor, or from a sale or hire, where the obligor's duty to pay the price would not have been grounded in the receipt of coins referable to an ascertainable quantity of precious metal.[48] The corollary of the *tempus contractus* rule was that the value of the obligation was not left open until the agreed date of discharge (*tempus solutionis*). The obligor could not get a good discharge by tendering money with the same *bonitas extrinseca* as the coins originally in circulation if by that stage their *bonitas intrinseca* had been lowered, owing to a reduction in their weight or fineness.

[42] D. 12.1.3 (Pomponius).

[43] Molinaeus, above n 40, at 693: 'a *mutuum* must be performed by delivery of something of the substance and quantity (quantity being determined by number or measure) and in the same intrinsic quality *bonitas* (ie substantial quality) as was first delivered in exchange'.

[44] *Gilbert v. Brett* (1604) Davis 18, at 24, citing Budelius, above n 26, 1.7.

[45] See Section IV.2 of this chapter.

[46] Budelius, above n 26, 1.7.2. His usage was consistent with those of other contemporary writers in Budelius' compilation: F. Curtius, *Tractatus Monetarum Practabilis ac Utilis* (1482), ch 4; Johannes Aquila, *De Potestate et Utilitate Monetarum Tractatus Perutilis* (*c* 1516) in Budelius, above n 26, at 452–3; Henricus Hornmannum, *Disputatio Monetarum* (1565) in Budelius, above n 26, at 667; Molinaeus accepted that this was the conventional understanding of the terms, although he argued that it should be otherwise: Molinaeus, above n 40, at 696.

[47] E.g., Budelius, above n 26, at 21, 2.1.3 (citing Curtius, above n 46, *quaestio* 11); Budelius, above n 26, at 25, 2.1.3 (citing Covarruvias, above n 30, cap. 7, *unicus*, 3 (*conclusio* 4)); and Molinaeus, above n 40, at 696–7.

[48] Budelius, above n 26, 2.2.21.

The *tempus contractus* rule even applied when the monetary obligation was generic (*in genere*) rather than specific (*in specie*). As Budelius explained, a generic obligation bound the obligor to pay an amount expressed in a 'universal and collective name' for a genus of money.[49] He gave examples of 100 *librae* of *grossi*, or 100 *librae* of Brabant currency or florins of Cologne. From a modern day perspective, we might understand a generic obligation as one expressed in monetary units of account rather than as one which required the delivery of a certain number of coins of a particular variety (*species*). That analysis, however, would not be true to the analysis of the time, when the two functions of money as a unit of account, and money as a physical medium of payment were less clearly distinguishable. '100 *librae* of Cologne florins' was at once an amount identified in terms of Cologne monetary units as well as 100 real coins issued by the monetary authority of that city.[50] The distinctive feature of a generic obligation was that the obligor could expect a discharge if he tendered any coins lawfully issued in Cologne with a collective value equal to 100 Cologne florins. In other words, it was not an obligation to pay 100 florins or any other particular kind of coin *in specie*.

Consistently with the general *tempus contractus* rule, the value of a generic monetary obligation was fixed in terms of the *bonitas intrinseca* of the relevant currency at the time the parties concluded the transaction. The obligor bore the risk that the *bonitas intrinseca* of the currency might be reduced between the dates of the contract and payment. If there was a debasement, the obligor had to pay more coins to ensure that the intrinsic value of his performance equalled that of the obligation when it was first contracted. The aggregate *aestimatio* or *bonitas extrinseca* of the coins tendered by him would thus exceed 100 florins at the time of payment.

On this point Budelius cited Albertus Brunus, who explained that a generic obligation left the obligor free to pay with intrinsically weaker coins.[51] All that mattered was that the coins had the same intrinsic value as 100 florins at the time of the contract. The main effect of framing the obligation generically was to prevent the obligor from having to seek after old coins (which might have been withdrawn from circulation after the debasement) in order to secure his discharge. It gave the obligor greater freedom in choosing the means of paying the obligation but it did not affect the substantial value of the obligation. It was the original *bonitas intrinseca* of 100 florins which was the subject matter of the obligation (*in obligatione*).

The parties were free to limit the terms of the payment clause so as to alter the effect of the general *tempus contractus* rule. We shall see that this point is important to understanding the rule laid down in the *Case*. Budelius cited a body of writings analysing the effect of adding the words 'current money' (*moneta currens*) or 'money current at the time of payment' (*currens tempore solutionis*) to a payment clause.[52] He recognized that the parties might anticipate and seek by express drafting to avoid the effect of a debasement. His view was that this would not involve a breach of a subject's public duty to tender and accept money only at the *valor impositius* decreed by the sovereign. The parties were free to define the content and value of their obligation so long as any coins actually tendered and accepted at the *tempus solutionis* passed at the sovereign's publicly decreed value.[53]

49 Ibid., 2.2.5
50 P. Spufford, *Money and Its Use in Medieval Europe* (1988), at 408.
51 Budelius, above n 26, 2.2.30 referring to A. Brunus, *Tractatus Insignis Augmenti et Diminutionis Monetarum* (1506), *declaratio* 6.2.
52 Budelius, above n 26, 2.10–2.14.
53 Ibid., 2.3.3.

Budelius proposed that the parties could leave open the value of their obligation until the date of discharge by adding the words 'current at the time of payment' (*currens tempore solutionis*) to the payment clause. He borrowed Albertus Brunus' example of a generic payment clause for '20 *librae*, or 20 Milanese or Sabaudian florins current at the time of payment'.[54] Here the *tempus contractus* rule was displaced. The obligor got his discharge by paying any lawfully issued coins which equated to twenty *librae*, or twenty Milanese or Sabaudian florins at the agreed date for payment. He recognized that this form of words was common among merchants, and argued that it should apply even if the *bonitas intrinseca* of the relevant currency had been reduced between the dates of contract and payment. The obligee thus assumed the risk of a debasement.

This displacement of the usual *tempus contractus* rule for valuing the obligation required the parties to be very precise about the form of words used in the payment clause. It was not enough for them simply to provide that the obligor must pay a generic sum of 'current money' (*currens moneta*). That form of words would be interpreted as referring to the means of payment rather than the valuation of the obligation.[55] The obligor would be free to tender any coins which were lawfully in currency at the *tempus solutionis*. But the quantity of those coins that the obligor had to tender to get the discharge was nonetheless fixed in terms of the *bonitas intrinseca* of the coins at the *tempus contractus*. Unless the parties indicated their intention in full by saying 'current at the time of payment' (*currens tempore solutionis*), they would not change the date for valuing the obligation to the *tempus solutionis*.

2. *Tempus Contractus* and *Tempus Solutionis* in the *Case*

The question now is how those civil law principles were applied in the *Case*. Davies reports the judges as using these civil law analyses about the nature of monetary obligations to reach a conclusion that was the opposite of the *communis sententia* summarized by Covarruvias in the last section. Davies explained the Privy Council's conclusion:

> [A]lthough at the time of the contract and obligation made in the present case, pure money of gold and silver was current within this kingdom, where the place of payment was assigned; yet the mixed money being established in this kingdom before the day of payment could well be tendered in discharge of the said obligation, and the obligee is bound to accept it . . . and the obligor is not bound to pay other money of better substance, but it is sufficient if he be always ready to pay the mixed moneys according to the rate for which they were current at the time of the tender . . . And this point was resolved on consideration of two circumstances, viz. the time and the place of payment; for the time is future, that if the said Brett shall pay or cause to be paid one hundred pounds sterling current money, etc. And therefore such money shall be paid as shall be current at such future time; so that the time of payment [*temps del payment*], and not the time of contract [*le temps de contract*] shall be regarded. Also, the future time is intended by the word current for a thing which is past is not *in cursu*; and therefore all the doctors who write *de re nummaria* agree in this rule, *verba currentis monetae tempus solutionis designant*.[56]

Thus the report found that the obligation was to be discharged at nominal rates with any money which was current at the agreed date of discharge. The reasons were divided into a

[54] Ibid., 2.13.1–2.13.9, citing Brunus, above n 51, *declaratio* 17, *limitatio* 8.
[55] Budelius, above n 26, 2.14,1–13, citing Brunus, above n 51, *declaratio* 17, *limitatio* 8.
[56] *Gilbert v. Brett* (1604) Davis 18, at 26–7.

consideration of the place at which the value of the obligation was fixed; and the time at which it fell to be discharged.

Turning first to time, the report began by drawing the distinction between the *tempus contractus* (‘*temps del contract*’) and the *tempus solutionis* (‘*temps del payment*’) which was familiar from the civil law writers. But the judges clearly did not accept that the value of the obligation was fixed by the *bonitas intrinseca* of the money in circulation when the parties concluded the contract. The obligor’s tender was good if it was made in money which had an *aestimatio* (‘rate’) equal to the obligation at the agreed date for payment. This was the main element of their nominalist argument. At this stage, the report relied more on the interpretation of the payment clause in the bond than on a general principle of substantive law. It attached weight to the words ‘current money’ in the bond. The obligor’s duty was thus expressed in the future. The valuation of the obligation was suspended until the *tempus solutionis*. This meant that the obligor could get a discharge by paying whatever lawful money was current at that time.

The ‘doctors’ mentioned in the report who allegedly agreed that ‘the words current money referred to the time of the discharge’ (*verba currentis monetae tempus solutionis designant*) were presumably Budelius and Albertus Brunus. They, as we have seen, proposed that the parties to a contract could displace the *tempus contractus* rule by inserting express words in their payment clause. In their view, however, a simple reference to *moneta currens* was not sufficient to defer the time for fixing the value of the payment obligation. The parties needed to spell out that intention more fully with the formula *moneta currens tempore solutionis* if they were to displace the general rule.[57] According to the analysis of Budelius and Albertus Brunus, the payment clause in the *Case* would be read as saying that Brett was at liberty to pay the debt with coins current at the *tempus solutionis* provided that the aggregate of their *bonitas intrinseca* equalled that of £100 in the pre-debasement coins. The words would only define the acceptable means of payment. They would not fix the value of the obligation at the date of payment.

The report presented other, more general, arguments from the interpretation of statutes and wills for their view that the value of the obligation was fixed at the *tempus solutionis*. But in the light of the civil law writings cited in the report, these were of questionable authority in interpreting the proper time for fixing the value of a contractual obligation.

One key authority was William Lyndwood’s *Provinciale* or *Constititutiones Angliae*, which was a commentary on the ecclesiastical decrees published in English provincial councils under the Archbishops of Canterbury between 1207 and 1443.[58] In Lyndwood’s chapter on wills, he commented on a constitution of Archbishop Simon Mepham regarding the valuation of deceased estates. The constitution decreed that no fee would be payable to the local ordinary for publishing the estate of a pauper if the estate was worth less than 100 *solidi*. Lyndwood said that the original *solidus* was a gold coin circulating at a rate of seventy-two to the *libra*. But the common usage of the term *solidus* in England was as a unit of reckoning equivalent to eleven *denarii* or sterling pennies (this was perhaps a misprint for twelve pennies). He noted also that the English penny had been reduced in weight from twenty-six to thirty-two in the ounce.[59] The question was whether deceased estates should be assessed according to the value of the *solidus* in terms of pennies when the constitution was first decreed between 1328 and 1333, or when the assessment fell to be made. Lyndwood opted for the date of assessment: ‘when a transaction depends on a

[57] See Section IV.1 of this chapter. [58] Lyndwood, above n 31.

[59] This may be a reference to Edward III’s reductions of the penny between 1343 and 1351. See Chapter 11 in this volume, and, generally, R. Ruding, *Annals of the Coinage of Britain* (2nd edn, 1819), vol. 2, at 138–213.

statute, notwithstanding that the money may have been reduced in value (*valor*), it should be read as referring to the new money in circulation and not the old money. For it is as if the statute is amended by the change to refer to new rather than the old money'.[60]

Budelius supported this view of statutory interpretation. The value of statutory debts and penalties was fixed at the *tempus solutionis*, and it made no difference if the *bonitas intrinseca* of the money had been diminished since the statute was enacted.[61] But he did not see this as detracting from the usual *tempus contractus* rule that applied to contractual dispositions. Indeed, the two different approaches to valuation are reconcilable. The executor's debt for publication of the will would only have arisen when the testator died, which was equivalent to the *tempus contractus* fixing the value of a contracting party's obligation. The executor owed no debt at the much earlier time when the constitution was decreed. So the analogy with Lyndwood's analysis did not compel the conclusion that the value of a contractual obligation was fixed according to the *aestimatio* of the money in circulation at the *tempus solutionis*.

The common law cases cited in the report were better authorities for this conclusion, although the analogy was imperfect. The report referred to *Copley v Davers* (1470),[62] which was an action in debt brought after Edward IV's reduction in the weight of the gold and silver coinage in 1464 and 1465. The case is considered in detail in an earlier chapter.[63] The Court of Common Pleas held that the obligor could repay the bond with the new coins at the nominal value of the debt. He was not bound to tender the old, heavier coins, or sufficient new coins to equate to the original intrinsic value of the debt. Debts were to be performed according to their monetary value on the agreed date for payment. The report in the *Case* drew an analogy with actions in debt in the *detinet* for the delivery of fungible corn.[64] The principle in those cases was that damages for the non-delivery of the corn were assessed according to its value on the date of delivery rather than the date of the contract. This supported the reasoning in the *Case*. But the analogy was only partial. In debt actions for the delivery of fungible goods, the court would award money as a substitute for the obligor's failure to perform his or her primary obligation to deliver the goods. Money was the measure of the obligor's duty to deliver the fungibles. The value of that duty could therefore vary between the dates of contract and performance. With a monetary obligation, however, the payment of the money was the very subject matter of the obligation. In both the common law and civil law analyses, money debts for a named amount were always for a fixed and certain sum. Their value could not vary, precisely because money was the very measure of the obligation itself.

The second main reason given in the report for allowing the debt to be discharged with debased Irish money arose from the fact that Ireland was expressly named in the bond as the place of payment. This brought into play certain rules which would nowadays be regarded as aspects of private international law. Indeed, in *Adelaide Electric Supply Company Ltd. v Prudential Assurance Co Ltd.* (1933), the House of Lords treated the *Case* as authority on the performance of contracts with a foreign element.[65] The House of Lords

[60] Lyndwood, above n 31, 3.2 ('De Testamentis'):

> [Q]uia ubi dispositio surgit ex Statuto, ubi hic, licet Moneta sit diminuta in valore, tamen debet considerari respectu Monetae novae currentis, & non respectu antiquae: nam mutata Moneta, per consequens videtur mutari Statutum, ut scil intelligatur de nova & non de veteri.

[61] Budelius, above n 26, 2.19.1–10, especially at 2.19.4.

[62] YB (1470) Hil. 9 Edward IV, fo. 49, pl. 6.

[63] See Chapter 11 in this volume.

[64] *Gilbert v. Brett* (1604) Davis 18, at 27.

[65] *Adelaide Electric Supply Company Ltd. v. Prudential Assurance Co. Ltd.* [1934] AC 122, 152–3, discussed in Chapter 32 in this volume.

held that two points had to be distinguished: the national money of account in which the value of the debtor's obligation was denominated; and the currency which the debtor tendered to secure a discharge from that obligation. *Adelaide Electric* confirmed that the identification of the national money of account was a matter of contractual construction. But a local court which was called upon to enforce a payment of the debt in its own jurisdiction would always order payment in the local currency according to the rate of exchange which was then in force. We see early forms of the same reasoning in the *Case*.

It will be recalled that Brett's bond was made in England but that it identified Ireland as the place of payment.[66] This was the foundation of Gilbert's argument that English sterling currency was the subject matter of the obligation, and that he should be paid in sterling coins. Even if he had to accept the debased coins, he should be paid however many debased coins would give him the same intrinsic value as £100 in English sterling money. But according to the report, the Privy Council held that even if English money had been the subject matter of the obligation, the debt could be paid in the debased Irish currency at the nominal rate specified in the bond. As authorities, it referred, first, to *Budelius* for the civil law rules which applied to a contract concluded in one place (*locus contractus*), but where the place of payment was designated elsewhere (*locus solutionis*);[67] and secondly, to a precedent writ of *fieri facias* in the *Registrum Judiciale Brevium* for the execution of an English debt against property in Ireland.[68]

Budelius began his chapter with the example of merchants in Cologne who contracted a generic debt for payment of 1,000 florins payable at the Frankfurt fairs (*nundini*). In Cologne, one florin was rated equal to fifteen *batz*.[69] Was the debt to be paid according to *aestimatio* of the florin in Cologne or that in Frankfurt (where Budelius' example assumes it must have had a different value)? Following Baldus, Budelius argued that the relevant *aestimatio* was that at the place of payment. The rules governing the *locus contractus* were not to be treated by analogy with those governing the *tempus contractus*. He said: 'As regards execution … we do not consider the legal ground of what has gone before, but the place where and time when the performance will happen, since the execution is a future act'.[70] This common practice displaced a rule of construction that said that the parties would have meant the obligation to be performed according to the rules of the place where they concluded the contract.

Budelius' formulation of the rule was consistent with the common law practice of the late sixteenth century. If a debt were denominated in foreign currency, then an English court which was called upon to enforce it would order payment in local sterling currency according to the prevailing rate of exchange. The determination of that rate was a question of fact for the jury.[71] The precedent writ of *fieri facias* mentioned in the report concerned an English debt for £10 due as arrears on an annuity payable in *c.*1305 to the plaintiff by the Archbishop of Dublin. The Archbishop had insufficient lands and chattels in England to

[66] See Section II above. [67] Budelius, above n 26, 2.21.

[68] See *Registrum Brevium Tam Originalium Quam Judicialium* (4th edn, 1687), fo. 43b, 'Registrum Judiciale', 'Breve de fieri facias directum justitario Hyberniae', discussed in (1604) Davis 18, at 28.

[69] The *batz* or *batzio* was a coin issued by the city of Berne. Fifteen *batziones* were generally reckoned throughout Germany as equivalent to one florin: Marquardus Freherus, above n 37, ch 3, fo. 43.

[70] 'In executione … non consideramus causam de praeterito, sed locum & tempus, quando & ubi fiet, quia executio est actus de futuro': Budelius, above n 26, 2.21.9–10 referring to Baldus, D. de solutione l. quaero [D. 46.3.100].

[71] *Bagshaw v. Playn* (1595) Cro. Eliz. 537; *Rastell v. Draper* (1605) Yelv. 80, at 80; *Ward v. Ridgwin* (1625) Latch 84 (sub nom *Ward v. Kedgwin* (1625) Palmer 407). The earlier practice might have been more relaxed in allowing the plaintiff to sue in a foreign debt either for the proper coin of the contract or its sterling equivalent: *Wilshalge and Davidge's Case* (1585) 1 Leo. 41.

satisfy the execution, so the writ was directed to the Justices in Ireland where the Archbishop allegedly held various assets in his own right, and in right of his office. Significantly, the Irish justices were ordered to levy execution in the amount of £10, which was the same nominal sum as was due on the English debt. Davies interpreted the effect of the writ as follows: '[T]he sum in such case shall be levied according to the rate of the Irish money, and not of English money, and in such coin as shall be current in [Ireland], at the time of execution'.[72] Correctly interpreted, this statement was consistent with the ordinary common law rule for the valuation and performance of debts which were contracted and discharged in different places. The 'rate of the Irish money' was to be understood correctly as the exchange rate between the English and Irish currencies in force at the time of execution. Davies would have been incorrectly overstating the point if he meant that debts denominated in English sterling could always be discharged by the same nominal amount of Irish coins, whatever the prevailing exchange rate between them. As it happened, either interpretation would have been correct in 1305 when the Irish and English currencies were on an intrinsic par of 20 *s*. Irish: 20 *s*. English. But since 1470, Irish silver coins had generally been minted to a lower intrinsic standard than their English equivalents, and the par of exchange was generally about 20 *s*. Irish: 15 *s*. English.[73] The court had to know the correct rate of exchange to determine the value of the goods on which the execution would be levied.

A proper understanding of the significance of these two authorities for the *Case* requires a brief digression into the foreign exchange structures that the English government put in place in Ireland to support the debasement of the currency. The exchange rate between England and Ireland had been deliberately fixed by proclamation so as to preclude any possibility of a valuation in the open market. The debasement project depended for its success on isolating Ireland and its monetary system from its trading partners. The imposition of a token currency on Ireland would have failed if the exchange rate between Irish and foreign currencies could be determined by the intrinsic value of the coins in each system.[74] The English government hoped to spend the same nominal sum in supporting its troops in Ireland as it would otherwise have done, but at a fraction of the intrinsic cost in terms of silver. The government therefore sought to ensure that all currency flows were directed through officially controlled exchanges, which enforced the nominal, rather than the intrinsic, value of the Irish currency.[75] A merchant in Ireland who wanted to remit money abroad would deliver his new Irish currency to one of the exchanges in Dublin, Cork, Galway, or Carrigfergus, and there receive a bill directed to one of the exchanges in England for payment in English sterling money. The rate was fixed at 20 *s*. Irish: 19 *s*. English.[76] The measures thus recognised a mere 5 per cent difference in the nominal values

[72] *Gilbert v. Brett* (1604) Davis 18, 28.

[73] See Simon, above n 4, at 25–6, disagreeing with Davies' dating at (1604) Davis 18, 22. (Note that these typical rates do not allow for the earlier debasements in England and Ireland of the 1540s and 1550s). For the extracts from the relevant mint indentures, see Challis, above n 2, Appendix III. After the Irish debasement of 1601, the silver currency was restored to a standard of nine *oz* fine, so that the par of exchange was set at 20 *s*. English: 15 *s*. Irish: Irish Proclamation (James I) (11 October 1603).

[74] The maintenance of the exchanges was described as the 'very soul of the base monies giving [them] life, credit, and fast passage': British Library MS TOW 20461P, fo. 152a–157b, at fo. 155a. For the usual influences determining international exchange rates in late sixteenth century England, see R. A. de Roover, *Gresham on Foreign Exchange: An Essay on Early English Mercantilism* (1949).

[75] The legal basis for this system was long established. An English statute of 1487 had prohibited the making of currency exchanges without the King's authority: Statute (1487) 3 Henry VII c. 6. The Statute (1503–4) 19 Henry VII, c. 5 fixed the maximum value of bullion, plate, or coin that could be transported from England to Ireland at 6 *s*. 8 *d*. No more than 3 *s*. 4 *d*. in Irish coin was allowed to be transported from Ireland to England.

[76] Irish Proclamation (Elizabeth I) (20 May 1601).

even though the Irish currency contained just 26 per cent of the silver of the English currency for which it was exchanged. The rate overvalued the Irish currency by a factor of nearly four in terms of its silver content.[77]

Returning to the *Case*, the effect of this official exchange rate on the rule derived from Budelius and the 1305 writ in *fieri facias* was as follows. Even if Brett's debt had in fact been denominated in English sterling (this being the currency of the *locus contractus*), he was nonetheless free to pay in debased coins, since they were current at the agreed place for payment. The court would have observed the official rate of exchange. The most that Brett would have had to pay would have been £105 Irish. The court was not free to inquire into any open market exchange rate between the two currencies based upon their relative intrinsic values. The proclamations precluded that. However, even allowing for the official exchange rate, the civil law and common law rules would not have justified Brett in tendering just £100 Irish if the obligation in the bond had in fact been denominated in English sterling. The enforcement of nominalism does not justify treating money of account sums simply as empty units of measurement, separate from the monetary system of any particular country.

To summarize, the effect of the authorities based on the time and place of payment was to leave the obligation open until the agreed time for payment. The obligor would get his discharge by paying whatever money was current at the agreed time and place for payment. Unlike the *communis sententia* of the civil law writers, the value of the obligation was not fixed by the *bonitas intrinseca* at the *tempus contractus*. It was therefore unnecessary to make any kind of conversion between the value of the money at the *tempus contractus* and *tempus solutionis*.

3. Molinaeus, *Bonitas Extrinseca*, and Sovereign Authority

The report in the *Case* referred to Molinaeus' central argument for monetary nominalism. He was paraphrased as saying:

> And this *bonitas extrinsica* which is called *aestimatio sive valor impositius, est formalis & essentialis bonitas monetae*, and this form giveth name and being to money; for without such form, the most precious and pure metal that can be is not money; and therefore Molinaeus, *liber de Mutatione Monetae,* saith, *Non materia naturalis corporis [monetae], sed valor impositius est forma & substantia monetae, quae non est corpu[s] physicum, sed artificiale*, as Aristotle saith, *Ethicorum liber* 5. And also *Politicorum* liber 1, he saith to this effect, that money is first signed and imprinted with a certain character, to the intent, that the people might accept it on the credit of the prince or state who publishes it, without examination or trial of the weight or purity. And to this purpose Molinaeus hath this rule, Q 99. *de jure, non refert sive plus sive minus argenti insit, modo publica, proba & legitima moneta sit*. Et Baldus, l singulari dit, In pecunia potius attenditur usus & cursus quam materia.[78]

In *quaestio 92* of the *Tractatus* Molinaeus argued against the *communis sententia* for an entirely new legal conception of money and the discharge of monetary obligations.[79] The minting of coins was an act of sovereign power, which transformed the substance of mere

[77] *Calendar of State Papers for Ireland* (1601–3), at 224–5, Edwards to Cecil (21 December 1601), 'New standard in Ireland with an exchange'. Soon afterwards travellers between England and Ireland were liable to be questioned and searched for any undeclared sterling money in their possession: Irish Proclamation (Elizabeth I) (9 June 1602).

[78] *Gilbert v. Brett* (1604) Davis 18, at 24–5, referring to Molinaeus, above n 40, at 694.

[79] For the derivation of Molinaeus' theory, see Taeuber, above n 27, at ch 1.

metal into that of *pecunia signata*. The substance of money was its *bonitas extrinseca*, the *aestimatio* conferred upon it by the sovereign.

The issue was presented in the context of the classic legal problem of the repayment of a *mutuum* when there had been a change in the *bonitas* of the money between the *tempus contractus* and the *tempus solutionis*.[80] He gave the example of a *mutuum* of 1,000 gold *solati* made in 1526 when the *solatus* was worth 40 *solidi*. At the *tempus solutionis*, 1532, the *solatus* was revalued at 45 *solidi*. Was the debtor bound to repay 889 *solati* and 5 *solidi* (which was the new equivalent of 40,0000 *solidi*), or 1,000 *solati* at the new rate? Molinaeus accepted the legal premise that a *mutuum* required repayment of an equal number of things, each having the same substantial quality (*bonitas substantiae*) as those which the lender had advanced. That depended on an assessment of the intrinsic quality (*bonitas intrinseca*) of the original things.

Here Molinaeus drew upon Aristotle's definition of money in the *Ethics* and the *Politics*, and the Roman jurist Paulus' sociological description for development of money in the evolution of contracts of sale from contracts of barter.[81] All were cited in the *Case*.[82] The theme common to the three texts was that money evolved to facilitate exchange transactions by serving as a conventionally agreed unit of measurement. It established the equivalence in exchange between disparate commodities. Paulus explained that the stamping of metal as money gave it a public *aestimatio*, which transformed it from a mere weight of commodity metal. Its form as money derived not so much from its material composition as from its quantity expressed in the *aestimatio*. The *aestimatio* needed to have a public character if it was to fulfil its measuring function, and overcome the difficulties encountered by parties in barter transactions. The parties to a barter would otherwise have to agree on the fair exchange values of the commodities they wanted to swap. Aristotle emphasized the same point in the *Ethics*: the unit of measurement had to be fixed by agreement (*ἐξ ὑποθέσεως*).[83] In the *Politics*, he acknowledged the argument that money seemed to be something of a 'sham, and nothing by its nature but entirely a convention'.[84]

By the time Molinaeus wrote, the legal understanding of the *aestimatio* and its relation to the conventional value of money had become more specialized. *Aestimatio,* as we have seen, was a legal term of art which was identified with the *valor impositius* decreed by the sovereign.[85] The practice of transforming crude metal into money was a feature of the *ius gentium*.[86] The ascription of an *aestimatio* to coined metal was the exclusive prerogative of the sovereign, who exercised this power ministerially on behalf of the *ius gentium*. It was settled by the specialist writers on monetary law that the sovereign enjoyed an exclusive prerogative to strike coins, and to assign them an *aestimatio*.[87] It no longer lay with the population at large to agree a generally acceptable value to the money they used. Indeed, a private person who refused to accept a coin at its *aestimatio* decreed by the sovereign, committed wrong and was liable to a penalty.[88] Jean Bodin, writing more generally from

[80] Molinaeus, above n 40, at 693.
[81] D. 18.1.1. pr.-1 (Paulus). See further Chapter 6 in this volume.
[82] *Gilbert v. Brett* (1604) Davis 18, at 19, 25. [83] Aristotle, *Nichomachean Ethics*, V.5.1133a.15.
[84] '*ὁτὲ δὲ πάλιν λῆρος εἶναι δοκεῖ τὸ νόμισμα καὶ νόμος παντάπασι φύσει δ'οὐθέν*': Aristotle, *Politics*, I.3.1257b.10.
[85] See Section IV.1 above.
[86] Molinaeus, above n 40, at 695.
[87] Brunus, above n 51, 1.1–7; Budelius, above n 26, 1.4. Other writing gathered in Budelius' compilation which accepted the same view were: Franciscus Curtius (d. 1495), *Tractatus Monetarum Practicabilis ac Utilis* (1482), para. 1; and Johannes Aquila (d. *c*.1518), *De Potestate et Utilitate Monetarum Tractatus Perutilis* (*c*.1516), ch 5.
[88] Budelius, above n 26, 2.3.2–6; Brunus, above n 51, 1.5, citing Bartolus in D. *de falsis* l. 'qui falsam monetam' [D. 48.10.19].

the perspective of political theory, took the same view. In the first book of the *De Republica* he described the power over coinage as one of the characteristic incidents of princely sovereignty. It was a feature of any well-ordered state.[89]

Molinaeus also drew on Aristotle in noting that it lay within human power to change money and make it useless.[90] It was thus consistent with the very nature of money that the sovereign could assign it a different *aestimatio*, or completely demonetize it. The convention (*νόμος*) which Aristotle described as the basis of money was by Molinaeus' time identified with the formal act of law established by the sovereign. Molinaeus translated Aristotle's *νόμος* narrowly as 'law' (*lex*). Bodin did the same. To justify his view, he played, rather spuriously, on the etymological link between the Greek *νόμος* and the Latin *nummus* in support of his identification of monetary status with the sovereign's role as law-giver.[91] Combining Aristotle and the jurists' view of the sovereign's prerogative over coinage, Molinaeus could argue that the very form and substance of money lay not in the material from which coins were struck but in the sovereign's legal act of monetizing metal and assigning an *aestimatio* to it.[92]

Molinaeus' view of the very substance of money determined his analysis of monetary obligations. He accepted the *communis sententia* that the value of a monetary debt must generally be fixed at the *tempus contractus*. But his innovation was to argue that the *aestimatio* of money had to be the proper subject matter of the obligation. Monetary obligations were contracted for money rather than coins. A debt should therefore be repaid according to the *aestimatio* of the money that was in circulation when the obligation was first contracted even if the sovereign subsequently changed the monetary standard by altering the *bonitas intrinseca* of the coinage.[93] His argument was thus the very opposite of the *communis sententia*, and provided the foundation for what would nowadays be called a nominal theory of money.

4. Molinaeus in the *Case*

The report in the *Case* made only selective use of Molinaeus' argument. It provided a principled justification, related to the very nature of money, for the sovereign's prerogative to assign a value to coins regardless of their intrinsic content:

> And it was said that the King hath the same prerogative to give value to base metal by his impression or character, as he hath to give estimation to a mean person by imparting the character of honour to him . . . And so it was concluded, that after the Esterlings, by command of

[89] Bodin, above n 36, I.10, 219. This was the main theme of Gabriel Biel, *Tractatus de Monetis* (1495) reproduced in Marquardus Freherus, above n 37.

[90] Aristotle, *Nicomachean Ethics*, V.5.1133a.11.

[91] The etymological connection, although real, did not support this association of ideas. The only thematic connection in the association between the Greek *ὁ νόμος* (law) and *τὸ νόμισμα* (money), and the Latin *nummus* (coin) was that they all involved conventionally established standards of assessment, whether in regulating human conduct or in measuring the value of commodities. In the French edition, Bodin also played on the superficial similarity between law (*loy*) and alloy (*aloy*) to make a pun about the relationship between law and the ascription of value to coins struck from an alloy of precious and base metals: J. Bodin, *Les Six Livres de la République* (1629), I.10, 242. *Aloy*, however, derived from the Latin root *LIG-* (as in *liga* 'compound' or *alligare* 'to combine'), and not the Latin root *LEG-* (as in *lex*, *legis*, 'law').

[92] Molinaeus, above n 40, at 694 (*Prima ratio*). This reading of Molinaeus' explanation exemplifies what would later be articulated as the 'chartalist' or 'state' theory of money: see G. F. Knapp, *The State Theory of Money*, trans. H. M. Lucas and J. Bonar (1924), ch 1, and discussed further in Fox, above n 1, at 161. E. Stampe, *War Carolus Molinaeus Nominalist?* (1926) argues that Molinaeus did not in fact hold with the most extreme version of the state theory whereby the sovereign could ascribe an *aestimatio* to a coin wholly irrespective of its intrinsic content.

[93] Molinaeus, above n 40, at 697.

> the King of England, had made this pure English money, which from the name of the makers was called sterling or sterling money . . . all money coined by the authority of the King of England, and having his character and impression, not only of England, but also in Scotland and Ireland, hath been sterling money, and so called, reputed and taken by all people, whether the matter of it were mixed or pure.[94]

Molinaeus thus justified delinking the valuation and discharge of the obligation from any question of the *bonitas intrinseca* of money. The report did not explicitly adopt the second, technical, part of Molinaeus' argument that value of an obligation was fixed by the *bonitas extrinseca* at the *tempus contractus*. The reason may be, as we have seen, that the Privy Council was reported as interpreting the term 'current money' in the bond as postponing the valuation of the obligation to the *tempus solutionis*.[95] However, the outcome was the same on either analysis. Any coin lawfully issued by the sovereign which carried an *aestimatio* equivalent to the sum in the debt could be tendered, regardless of its intrinsic content.

The discussion of the word 'sterling' related to the condition in the bond, which, it will be recalled, required Brett to pay Gilbert '£100 sterling, current and lawful money of England'. According to the report, the judges concluded that Gilbert's stipulation for 'sterling' money encompassed Irish currency. It was not specific stipulation for English currency, which would have had an intrinsic value nearly four times greater than the debased Irish currency. 'Sterling' described any money issued by the English sovereign, or possibly even any money that was lawfully permitted by the sovereign to circulate in England.[96] Both reasons were questionable. A reading of the English conveyancers' precedent books of the time indicates that stipulations for generic sums expressed in sterling (*sterlingorum*) served to identify the *lex monetae* of the obligation as English law, and the real coins which had to be tendered to discharge them as coins issued for circulation in England.[97] When these precedents were in use, an obligor would have been barred by statute from tendering anything other than English coins. 'Sterling' thus came to be identified with the distinctive currency of England. In payment clauses, the term 'sterling' was eventually supplanted by the expression 'lawful money of England' (*legalis moneta Angliae*).

The authorities cited in the report did not provide any strong support for the view that 'sterling' money could be identified with Irish currency. There was a reference to the *De Re Monetaria* of Marquardus Freherus.[98] Amidst a long list of the European coins, Freherus referred without explanation to *sterlingi* as coins current in 'England, Scotland, and Ireland'. This had some element of truth to it. Silver pennies imitative of the English sterlings had been minted by many states in Northern Europe during the early medieval period,[99] and until about 1467 the pennies of Ireland were struck to the same weight and fineness as those of England. The same was true of Scotland.[100] After then, the intrinsic standard of the Irish and Scottish currencies differed from that of England. The reference in the *Case* to Jean Bodin's *De Republica Sex Libri* was no stronger as authority for the view in the report. In the context of a long discussion of the different weights and fineness of the *libra* unit of various currencies, Bodin mentioned England and Scotland: 'In England the *libra* of Sterlings is worth 8 of ours [in France]. And in Scotland, there are two different

94 *Gilbert v. Brett* (1604) Davis 18, at 25. 95 See Section IV.2 of this chapter.
96 (1604) Davis 18, at 25. 97 See Chapter 11 in this volume.
98 Marquardus Freherus, above n 37, at 47 (named in the report as *De Re Nummaria*).
99 See T. Snelling, *Miscellaneous Views of the Coins Struck by the English Princes in France, Counterfeit Sterlings etc.* (1769).
100 Spufford, above n 50, at 162, 402–3. See further Section IV.2 of this chapter.

sorts of [*libra*] in use: one comprising the Sterling standard and the other established by custom'.[101] All this meant was that there were two monetary standards observed in Scottish practice: one which was their own lawful standard, and the other which was the English standard, probably because many English coins would have circulated north of the border. It was not a reason for identifying Scottish coins (and still less Irish) as sterling money. The report observed that the *Statutum de Moneta Magnum* of Edward I banned the circulation in England of all coins other than those of England, Scotland, and Ireland.[102] But it would be wrong to read this as putting the coinage of those three countries on the same legal footing. The effect was not to adopt Scots and Irish coins as English legal tender money with an official *aestimatio*.[103] Scots and Irish coins were merely being tolerated despite the ban on other currencies in England. Indeed by 1477 the statutory ban was extended and even the circulation of Scots and Irish coins was prohibited.[104]

The contemporary extra-legal record also stands against Davies' report of the reasoning in the *Case*. In the official correspondence about monetary transactions throughout the debasement period, the debased monies were routinely distinguished from the 'sterling' monies which were identified exclusively as English coins of full intrinsic standard.[105] The word 'sterling' seems not even to have been used to refer to the old Irish currency, 9 *oz fine*, which had been replaced by the debased coins.[106]

V. Conclusion

Davies' report of the *Case* was an extended justification for a result which was a foregone conclusion. The settled common law practice for the performance of debts after a debasement of the coinage was clear, and the terms of the Queen's proclamation of 1601 were unequivocal. Obligations were to be discharged by any coins lawfully current at the time of payment, provided that their proclaimed *aestimatio* was equal to the monetary value of the debt. The common law treated debts as generic obligations, valued in terms of abstract monetary sums. Those obligations tended to be interpreted *de futuro*. It followed that the value of the debt in terms of silver or gold was liable to fluctuate. The amount of silver or gold required to discharge the debt would not be known until the agreed date for payment. The obligee thus bore the risk that the currency would be debased. The value of the obligation was not fixed by the *bonitas intrinseca* of coins in circulation when the obligation

[101] '[E]n Angleterre la livre d'Esterlings en vaut huict des nostres. Et en Escosse il y a deux livres fort differentes: livre d'Esterlings, l'autre usagere': Bodin, above n 91, VI.3, at 924.

[102] Statute (1291–2) 20 Edward I, stats. 3–4

[103] The contrast is with the many instances during the reign of Henry VIII when foreign coins were formally adopted as the *legalis moneta Angliae* with a legal value assigned in terms of pounds, shillings and pence: Co. Litt. 207b and *Wade's Case* (1601) 5 Co. Rep. 114a. See, e.g., English Proclamation 88 (25 May 1522), Henry VIII; renewed at the same rates with the addition of carolus placks and florins in English Proclamations 95 (24 November 1522), 102 (6 July 1525), 103 (8 July 1525), Henry VIII. The adoption of most foreign coins was revoked by English Proclamation 487 (15 November 1561), Elizabeth I, except for French, Flemish, and Burgundian crowns.

[104] Statute (1400–1) 2 Henry IV, c. 6 (ban on Scots money), confirmed by Statute (1409–10) 11 Henry IV, c. 5; Statute (1411) 13 Henry IV, c. 6; Statute (1415) 3 Henry V, stat. 1, c. 1; Statute (1477–8) 17 Edward IV, c. 1 (ban on Irish money).

[105] Among the many references in the *Calendar of State Papers for Ireland* (1601–3), see Proclamation (9 June 1602), at 409; Watson to Cecil (1 August 1602), 'Estimate of Savings Effected by New Coinage', at 462; and (1602) 'Memorandum on the Debasement of the Coinage in Ireland', at 636 et seq.

[106] E.g., *Calendar of State Papers for Ireland* (1601–3), Queen to the Lord Deputy and Council (16 April 1602), at 367 appears to contain a reference to the 9 *oz* currency as 'sterling'. The reply, however, shows that this was interpreted as referring to the English money which was withdrawn from circulation in Ireland during the debasement: Lord Deputy and Council to English Privy Council (21 May 1602).

was first contracted, as it was in the civil law. The report thus affirmed that the common law worked on a nominal theory of monetary valuation, although it did not use that very term.

The reported reasoning in support of this foregone conclusion is what makes the *Case* notable. Davies drew on his knowledge of civil law and general historical writing to produce a justification for monetary nominalism that was different from what the common law, or civil law would have reached on their own terms. He borrowed all the terminology and forms of analysis developed by the civil law writers of his time, but deployed them to justify a conclusion that was the very opposite of their *communis sententia*. He was not much concerned to delve deeper into the long tradition of civil law writing on the performance of monetary obligations. So it was that common law debts were valued in terms of the *bonitas extrinseca* of money in circulation at *tempus solutionis* rather than the *bonitas intrinseca* at the *tempus contractus*.

The one author whom Davies did follow was Molinaeus, whose theory of money fitted closely with the existing practices of the English common law. The sovereign's act fixing a legal value to coins constituted their very substance as money and distinguished them from uncoined bullion. This provided a principled justification for the existing common law practice in enforcing monetary obligations at the legal value decreed by the sovereign. But even so, Davies chose not to follow Molinaeus' technical formulation of the rule that monetary obligations were enforced according to their *bonitas extrinseca* at the *tempus contractus*.

The report in the *Case* served Davies' immediate purpose of justifying the imposition of English monetary rules on Ireland. Beyond that, however, it provided the foundation for the common law's use of nominal values to enforce monetary obligations. That is why the *Case* remains important in the common law, far beyond Tudor and Stuart Ireland, and long after the demise of commodity money systems.

III

CIVIL LAW

13

The Effect of Debasements on Pre-existing Debts in Early Modern Jurisprudence

Harry Dondorp

I. Introduction

In 1620, Melchior Goldast ab Haiminsfeld (1578–1635), a German jurist and an industrious compiler, published his *Catholicon rei monetariae*, a compilation of monetary regulations in the *Corpus iuris*, canon law, and local statutes.[1] He added a list of monetary treatises 'from the birth of Christ up to 1620'. He included four Roman writers, and two medieval: Bede (672–735) and Nicole Oresme (*c.*1323–83). All remaining treatises date to early modern times, the oldest being Garrati's *Tractatus de monetae.* Some are of numismatic interest only, such as those authored by Hubert Goltzius (1523–86). Others deal only with monetary policy; Gabriel Biel's treatise is one such example, as is the chapter on money in Jean Bodin's *De Republica.*[2] However, there are many that discuss the effects of debasements on the payment of pre-existing debts. This was an issue that interested the

[1] M. Goldast, *Catholicon rei monetaria sive leges monarchicae generales de rebus nummariis et pecuniariis quotquot inde ab orbe condito ad presentem Christi annum* MDCXX *in quatuor mundi monarchiis et praesertim in ultima Romano Germanica cum gentium consensu latae et promulgatae fuerunt. Accessit chronologia omnium autorum qui de re monetaria tratactus instituerunt inde a navitate Christi usque ad dictum annum* MDCXX (1620).

[2] Cf. J. Bodin, *De republica libri sex* (1586), Bk VI.3: *De re nummaria quibusque legibus nummorum depravationi facile occurratur.* In his *Réponse aux paradoxes du seigneur de Malestroit*, Jean Bodin also restricts himself to the state's monetary policy. A discussion of its effects on pre-existing debts is absent.

public and provoked an unending stream of publications.[3] Goldast's list is extensive, but not exhaustive;[4] one obvious omission is the *Tractatus de variis nummariorum debitorum solutionis* which Antoine Favre (1557–1624), President of the Savoy Court of Genevois, published in 1598 '*adversus Carolum Molinaeum*'.

In 1546, the Parisian lawyer Charles Dumoulin (Molinaeus; 1500–66) had published a treatise on usury, of which *quaestio* 90–100 were immediately included in the sixteenth-century compilations of monetary treatises.[5] Dumoulin criticized the prevailing monetary theory of the *ius commune* and proposed a new interpretation of the Roman and canon law texts upon which it was built. He based his own opinion about the age-old issue of repayment after debasements on a rational understanding of money, derived from its actual use in exchange. Dumoulin wrote: 'The form and substance of money, as money, is not its matter or physical appearance, but its assigned value. Hence, as money, it is not made the subject of a contract or disposition other than in terms of its value at that moment.'[6]

This was undoubtedly true, Dumoulin said, when money was owed without reference to a specific coin, for instance 10 *libra* (2,400 *denier*), but it applied as well when a quantity of specific coins was owed, for instance five gold *écus*. Hence, unlike other goods, the quality of a coin was its value in exchange, and coins of the same 'quality' were coins with the same nominal value, irrespective of their content. In proposing nominalism in matters of debt repayment Dumoulin was revolutionary.[7]

II. Dumoulin's Rebuttal of Butigella's Nominalism

As regards monetary policy, Dumoulin brought nothing new to the analysis.[8] He left the setting of the actual ratio between a coin's nominal value and its content to the King.[9] Having described the views of both legists and canonists, and after a detailed discussion of the various arguments in favour of their respective views, Dumoulin[10] finally concluded that it was not up to him to decide what the ratio should be.

At the same time, he expressed his astonishment about the 'latest' view he found in the works of Girolamo Butigella (1470–1515) from Padua, namely that the substance that the

[3] So J. A. Schumpeter, *History of Economic Analysis* (1954), at 96, fn 206, citing Accolti, Garrati, Corti, Adler, Hornmann, Mynsinger, Cefali, Budel, and Covarruvias.

[4] Not included in Goldast's list are further: M. d'Afflitto, *Super III libris Feudorum* (1597), 770–4, *Moneta*; H. Butigella, *Repetitio super l. Cum quid ff. si certum petatur* (D. 12.1.3) repr. in *Repetitiones seu commentaria in varia iurisconsultorum responsa* (1553), vol. 2, at 47r–50r; N. Copernicus, *Tractatus de monetis* (1526), in *Minor Works*, trans. and comm. E. Rosen (1992) 177; H. Göde, *Consilia* (1544), 211r–212r, *In qua moneta fiat solutio census*; G. Cephali, *Consiliorum pars prima* (1563), 61v–62v, cons. 31.

[5] Cf. C. Dumoulin, *Tractatus commerciorum et usurarum* (1576; repr. 1972); *quaestiones* 90–100 are published separately under the title 'Tractatus de mutatione monetarum', in *Tractatus ex variis juris interpretibus collecti* (1549); M. Boyss, *Tractatus varii atque utiles de monetis atque earum mutatione et falsitate* (1574), at 181v–240; R. Budel, *De monetis et re numaria libri duo* (1591), at 475–578. Henceforth the 1972 edition of Dumoulin's treatise on usury is quoted.

[6] Cf. Dumoulin, above n 5, at 389, no. 694.

[7] See T. J. Sargent and F. R. Velde, *The Big Problem of Small Change* (2002), at 101–2: 'Dumoulin the Revolutionary'. The paragraph provides an excellent English summary of Dumoulin's doctrine, discussed extensively by Walter Taeuber and Ernst Stampe in the 1920s. Cf. E. Stampe, *War Carolus Molinaeus Nominalist?: Eine Untersuchung über seinen Valor extrinsecus monetae* (1926), at 37–66; W. Taeuber *Molinaeus' Geldschuldlehre* (1928), at 19–43; see also J. L. Thireau, *Charles Dumoulin (1500–1566): Étude sur les sources, la méthode, les idées politiques et économique d'un juriste de la Renaissance* (1980), at 401–31.

[8] See Schumpeter, above n 3, at 96, fn 26: 'no contribution to economic analysis'; Sargent and Velde, above n 7, at 106 'Dumoulin the Conservative'.

[9] Cf. Dumoulin, above n 5, at 446, no. 806: 'ipsius proportionis certa et iusta determinatio ... spectat ad rem publicam eiusve moderatorem, cui relinquo'.

[10] Cf. Dumoulin above n 5, at 472, no. 767: '... quaenam sit et esse debeat extrinsecae bonitatis ad intrinsecam habitudo et proportio'. Before reporting the answers of the legists and the canonists in no. 798, Dumoulin discussed several questions concerning the substance, probity, imprint, and value of coins.

money was made of was of no importance. With the state's approval, Butigella argued, coins could be made of lead or leather, and payment in these coins would discharge the borrower's debt, even if he had previously received a loan of gold coins.[11] That was a ridiculous notion of money, Dumoulin said, as contrary to reason as the idea that money could be made of paper (*pecunia de papyro arte impressoria*).[12] He seems to misquote[13] Butigella for the sake of argument. Writing shortly after the bullion famine in the Middle Ages, Butigella queried the rule that a loan must be repaid in coins of the exact same species, and argued that Roman law allowed repayment in coins of various substance.[14]

In the passage Dumoulin cited there was no more than a hint of leather coins. Dumoulin quoted the third of nine arguments from Butigella's thesis. Based on D. 46.3.99, Butigella explained that payment in a different coin was allowed, if that was not to the creditor's detriment. With coins of the same substance, gold for instance, it was generally accepted that the *ius commune* allowed payment in gold coins of another mint if this was not to the creditor's detriment. It followed from the same reasoning that coins of the same mint, but made of a different material, similarly could be used for payment if this was not to the creditor's detriment. Silver, and even copper,[15] coins could be used instead of gold coins,[16] Butigella argued,[17] provided there was no other disadvantage to the creditor than his receiving bulkier material. In money, unlike in other things, the substance was of no importance.[18]

[11] Cf. ibid., at 443, no. 798:

> Tertio nouissimis quibusdam uidetur prorsus non referre, ita ut in pecunia nullo modo attenditur materia, nec eius bonitas intrinseca, siue qualitatis, siue ponderis: sed sola aestimatio publice imposita, ita ut possit fieri moneta plumbea uel de coreo, modo sit publice approbata, et tunc possit solui pro quacunque pecunia aurea uel argentea etiam ex mutuo debita. Et ita tenet Hiero(nymus) Butigel(la) repet. l. Cum quid col. 9 nu. vigesimooctavo, si certum petat. (D. 12.1.3).

[12] Cf. ibid., quoted in Sargent and Velde, above n 7, at 107–8.

[13] Cf. Taeuber, above n 7, at 36 fn 108: 'Hieronymus Butigella geschieht durch M. Unrecht. Bei diesem Juristen ist an der oben herangezogenen Stelle [viz. Butigella, *Repetitio super D. 12.1.3* no. 26 ff] von so etwas Bizarrem wie Gutheissung von Blei- und Ledermünze nicht die Rede.'

[14] Cf. Butigella, above n 4, at 49r, Repetitio super D. 12.1.3 no. 26: Circa haec quia cotidinana sunt arverte ad unum, quod mihi noviter occurrit, nam quicquid omnes dicant, videtur mihi quod etiam diversa materia possit pecunia reddi.' With regard to the question what should be paid, if the coins current at the time of the contract are demonetized, Francheschino Corti (1470–1530) adopted Butigella's argument. Cf. Francheschino Corti, *Francischinus Curtius Iunior super Digesto Veteri* (n.d.), at 97v, super D. 12.1.3 no. 19:

> Secundo pro hac opinione retorqueo fundamentum bar. hic contra eum dum dicit quod in pecunia attendimus potius materiam quam formam. Istud enim uidetur contra l.i. de contrah. emp. (D. 18.1.1) ubi estimatio pecunie est illa que principaliter consideratur . . . ergo conueniens est quod quando una forma fuit reprobata debitor debeat potius soluere estimationem monete reprobata quam ipsam materiam, ut dicit Bar(olus) in d.l. Paulus (D. 46.3.99).

His repetition, is not, however, 'palesemente una derivazione di quello del Botticella' as Grossi asserts: see P. Grossi, *Ricerche sulle obligazioni pecuniarie nel diritto commune* (1960), at 429.

[15] Introduced in 1472 by the Naples mint. On copper money, see P. Spufford, *Money and its Use in Medieval Europe* (1988), at 360–1, 371–2; M. North (ed.), *Von Aktie bis Zoll: Ein historisches Lexikon des Geldes* (1995), at 258.

[16] This can already be found in Baldus, *In secundam Digesti Veteris partem Commentaria* (1577), at 6r, ad D. 12.1.2.4. Cf. Taeuber, above n 7, at 18 fn 57.

[17] Cf. Butigella, above n 4, at 49r, no. 28: 'infero unum generalius: quod pro pecunia aurea solui poterit argentea: et pro argentea erea'; The subsequent lines are quoted in the next footnote. On Buttigella's concept of money, see Grossi, above n 14, at 428–36.

[18] Ibid., at 49r, no. 28:

> [D]dummodo idem sit ualor, nec creditor sit passurus damnum aliter quam [quod] materia sit diversa, quod sic in duobus uerbis demonstro: si potest solui pecunia aurea pro argentea non ex alio est, nisi quia equiualet argentee, et hec ratio equiualentie in pecunia est tanti momenti quod materia non est in consideratione, nam in aliis rebus si pro unu sacco frumenti uelles mihi dare centum milia pondo auri non posses me inuito. l. ii. §.i. supra eo. (D. 12.1.2.1).

Dumoulin's reference to leather coinage would have been more accurate if he had referred instead to Butigella's ninth and concluding argument: 'It seems to be decided by D. 18.1.1[19] that if money is made of lead, even of wood or leather, provided these coins are legal tender, they also may be used to solve debts in any coin.'[20]

Since Dumoulin considered the notion of money made from leather as contrary to the very nature of money, he also dismissed as apocryphycal a story told by Guy le Pape (1402–87) about King John the Good (1350–64). The King was said to have struck leather coins after France had been depleted of its silver and gold, to raise the ransom of four million crowns after his capture in the Battle of Poitiers.[21] Dumoulin was equally dismissive of the story of King Louis IX (1226–70), who was said to have issued leather coins while on crusade.[22]

III. The Ratio between the Nominal and Intrinsic Values

'Dumoulin cannot imagine money without inherent value', Ernst Stampe commented in 1926.[23] In his own writings, Dumoulin seems to say that the substance of money had to consist of precious metal: gold, silver, or copper;[24] the actual fineness and weight of coins were to be determined by the sovereign, and it was he who, with the assent of his people,[25] set their nominal value within his realm.[26] Dumoulin accepted that the ideal position would be if the nominal value of coins equalled their intrinsic value (as the writers on the civil law required),[27] but since that was not possible, he left the setting of the actual ratio between the two values to the sovereign. However, Dumoulin set out to answer another question, namely. how this ratio was to be enforced.[28]

First of all, he said, creditors must accept payment of a sum of money in the current legal tender, provided no counterfeited coins were tendered. The creditors would sin and be severely punished, as Codex 11.11.1 states, if they refused payment in the current

[19] It derives the power of money 'not so much by its substance, as by its quantity'.

[20] Cf. ibid., at 49v, super D. 12.1.3 no. 32: 'Per illum textum (D. 18.1.1) videtur decidi quod etiam si ex plumbo, immo etiam si ex ligno vel corio fieret pecunia, dummodo publice esset approbata quod posset solui pro quacumque pecunia.' I am grateful to François Velde for pointing me to this passage, which he discusses in Sargent and Velde, above n 7, at 108.

[21] Cf. G. Papa, *Decisiones Gratipolitana* (1627), at 461, no. 493: 'Ponamus quod a tempore uenditionis circa facta est moneta de corio, sicut fuit tempore captiuitatis Regis Ioan(nis)'. Nowadays many scholars, like Fernand Braudel, Paul Einzig, or Larry Allen, consider the story true. On other examples of fiat money, see Sargent and Velde, above n 7, at 111.

[22] Cf. Dumoulin, above n 5, at 444, no. 799. On the issue of leather coins, see Sargent and Velde, above n 7, at 219.

[23] Stampe, above n 7, at 38: 'Molinaeus kann sich ein Geld ohne Eigenwert überhaupt nicht vorstellen' citing Dumoulin, above n 5, at 443 and 446, nos. 798 and 807.

[24] Cf. Dumoulin, above n 5, at 427, no. 767: '[Materia] tantum tres species complectitur, aurum, argentum, aes, quoniam haec tria tantum metalla subinterant.'

[25] Cf. ibid., at 442, no. 797: 'Publica autem aestimatio et ualor currens non a solo Principis in monarchia . . . sed etiam a consensu et usu populi, et consuetudine commerciorum.' The subsequent paragraph is quoted in the next footnote.

[26] Outside the realm, in international trade, the value set by merchants' custom may differ from the nominal value. Cf. ibid., at 442, no. 797:

> Quod si leges et statuta nisi communi utentium usu comprobata non ligant . . . maxime verum est in commerciis numorum, eorumque cursu et indicatura, que non est iuris sed facti, et necessario in usu et commercio uniuersorum etiam exterorum, et omnium quibus cum communia sunt commercia et iuragentium consistit.

[27] Cf. ibid., at 443, no. 798: 'Primi praecise tenent aequale omnino esse oportere, ita ut tantundem ualeat in massa quantum in pecunia signata.'; ibid., at 444, no. 800: 'Prima uero sententia esset optima, si seruaretur.'

[28] Cf. ibid., at 446, no. 806: 'Secundum [considerandum, scil. proportionis usus et observantia *jhd*] ad nos et ad nostrum quaestionem spectat.'

currency.[29] Hence, erred all those who taught that the intrinsic value at the time of the contract should also be taken into account, as if the creditor was entitled to a correspondingly higher sum if the coins current at the time of the contract were later debased.

Dumoulin opposed the unanimous view of his time, which was held by the medieval legists and canonists, that after a debasement, new obligations were to be paid in the new (debased) coin, but pre-existing obligations in the old. The argument in support of this view was that, at the time the obligation was contracted, these new coins were not legal tender.[30]

IV. The Common View: The Law Requires Recompense for Debasements

At the turn of the sixteenth century, the doctrine rooted in the works of the glossators Pillius and Azo[31] still prevailed. In 1482, for instance, Francesco Corti Senior (Curtius; d. 1495) in his lecture on D. 12.1.3,[32] published posthumously under the title *Tractatus monetarum*,[33] adopted Bartolus' interpretation of D. 46.3.99, namely, that after a debasement, pre-existing debts should be paid in the old coin, provided the coins due were still available; the same reasoning applied in the opposite case of a return to strong money.[34] Pier Fillippo della Còrgna (Corneus; 1420–92) taught the same,[35] as had Martino Garrati (Laudensis) in his *Tractatus de monetae*,[36] while Jean Regnaud (Raynaldus) from Avignon, answering a question on the return of a dowry after a debasement in the Dauphiné,[37] had based his answer on Azo's *Brocardica*.[38] In Erfurt, Henning Göde (1451–1520), in a *consilium* concerning the repurchase of a life annuity after a return to strong money, based his advice upon canon law.[39] In Flanders, Nicolaas Everaerts (1463–1532), in a case

[29] Cf. ibid.

[30] On the reason why the prince's decision to debase the coin is not considered to have retroactive effect, see Grossi, above n 14, at 105–13.

[31] For a discussion of Pillius' question and Azo's brocard, see W. Taeuber, *Geld und Kredit im Mittelalter* (1933), at 119–48, 216–24; W. Ernst, 'The Glossators' Monetary Law', in J. W. Cairns and P. de Plessis (eds), *The Creation of the Ius Commune* (2010), at 229, and Chapter 7 in this volume.

[32] Cf. *Tractatus ex variis juris interpretibus collecti* (1549), at 184r: 'Editus ab eximio Iureconsulto D. Francisco Curtio dum legeret l. Cum quid ff. si cert. pet. (D. 12.1.3) Anno Domini M ccccIxxxii in florido Ticinen. studio' (hereafter *Tractatus*). Cf. also Budel, above n 5, at 455.

[33] Corti, *Tractatus monetarum* (1st edn, 1497), reprinted in the following sixteenth-century compilations: *Tractatus*, above n 32, at 184r–85r; Boyss, above n 5, at 60v–70v; Budel, above n 5, at 455–61 (hereafter all Corti citations are to the Budel edition).

[34] Cf. Corti, no. 3, in Budel, above n 5, at 456:

> Et nemo dubitat quod semper pecunia est reddenda in bonitate intrinseca, quando de illa reperitur. Si uero non reperitur, poterit solui de noua, habita semper relatione ad estimationem pecunie mutuate. Et sic semper habetur respectus ad materiam et pondus . . . l. Paulus ubi Bar(tolus) no. omnes de sol. (D. 46.3.99).

[35] In a consilium on the return of a dowry, discussed in E. Stampe, *Das Zahlkraftrecht der Postglossatorenzeit* (1928), at 95–9.

[36] For the editions, see I. Baumgärtner, *Martinus Garatus Laudensis: Ein italienischer Rechtsgelehrter des 15. Jh.* (1986), at 114; M. Garrati, *Tractatus de monetis* (1518), no. 15, in Budel, above n 5. at 449: '. . . debet solui de moneta prima non de noua mutata. ut notat Bar(tolus) in dicta lege Paulus (D. 46.3.99) uel si antiqua non habeatur soluat de noua et supplebit bonitatem in noua ad rationem monete antique, si antiqua erat melior.'

[37] J. Regnaud, *Tractatus de monetis*, in J. Regnaud, *Comprehensorium feudale* (1515), at 109v; also in *Tractatus*, above n 32, at 185va–186ra; Boyss, above n 5, at 71r–76r; Budel, above n 5, 462, at 465, no. 9:

> . . . Concludo igitur quod solui debet dos in florenis qui currebant in Dalphinatu tempore contractus et promissionis dotis, si reperiantur uel, si non currant uel non reperiantur, debet solui de pecunia minuta argentea tunc currenti ad ualorem dictorum florenorum; alias si non reperiatur moneta alba que illo tempore currebat, soluetur de hodie ad ualorem tamen intrinsece bonitatis monete tunc currentis.

[38] Cf. Azo, *Brocardica Aurea* (1567), at 136.

[39] Cf. Göde, above n 4; also published in Budel, above n 5, at 793–4.

regarding a bequest made in 1488, followed the *communis opinio doctorum*.[40] In Naples, Matteo d'Afflitto (1448–1528), a member of the royal court from 1495 to 1501, in his *Decisiones Neapolitanae* reported a case in which a creditor had refused to accept payment in *quintinae* at their current rate of one-fourth of a *carlino*. Because the contract had been concluded in *carlini* before the introduction of the *quintino* in 1466, and these coins contained only one-fifth of the silver of a *carlino*, the creditor expected to be recompensed for the loss of silver.[41] Adopting Bartolus' theory, d'Afflitto had written that pre-existing debts must be paid in old coins, when these were still legal tender. If, however, the change in weight or alloy went hand in hand with a demonetization (*reprobatio*) of the coins due, the debtor had to tender their *aestimatio*.[42] Alberto Bruno (Brunus; d. 1551) completed in July 1506 his magisterial compilation of the legists' and canonists' doctrine on the amelioration and diminution of money,[43] which can be summarized the *ius commune* as follows.

If a coin was changed, with regard to pre-existing debts it was the common view of all legists and canonists that the value and quality of the coin at the time the obligation was contracted were to be taken into account, not those at the time of payment.[44] After a debasement, pre-existing debts must be paid in old coins, if these are still in circulation at the time of payment, and if not, in the new coin '*ad aestimationem antique*, see the decretals *Olim and Cum canonicis* (X 3.39.20 and 3.39.26)'.[45] And in the inverse situation, after the strengthening of a coin, debtors could tender a proportionately smaller number of new coins. In other words, in the case of both a debasement and a return to strong money, any difference in fineness or weight had to be supplemented or deducted.

If, however, the introduction of a new coin accompanied the demonetization of the old (*reprobatio*), it was the majority view[46] that pre-existing debts had to be paid in the new coin with a supplement or deduction due to the difference in weight or alloy.[47] Creditors

[40] Cf. N. Everaerts, *Repsonsa sive consilia* (1554), at 204–5 also published in C. M. G. ten Raa, *Consilium nr. 105 van Nicolaes Everaerts* (1979), at 28–32. The case concerned a bequest in 1488 of a sum of 60 *librae* (14,400) of Flamish *denarii* (*groot*). Such a large sum would be paid out in gold or silver coins. Because of a subsequent strengthening of the coin, the value (*valor*) of the sum of 60 *libra* had increased. Rather than a greater purchasing power, this indicates, as ten Raa (ibid., at 6–9) asserts, a better rate of exchange of the *liber* to the gold coin (*gulden*). The number of gold coins to be tendered should be calculated according to the rate of exchange at the time of the bequest. Everaerts rejected the view Ludovico Pontano expressed in his *Consilia* (1504), at 35v, cons. 123, that the coins should be counted out according to their current rate.

[41] Cf. M. d'Afflitto, *Decisiones Neapolitanae* (1537), at 75v–76r, dec. 90.

[42] Cf. ibid., at 76r, dec. 90 no. 3: 'Et tunc aut usus prime monete non est reprobatus et debet de antiqua moneta solui. Si reprobatus est usus prime monete, et debet solui estimatio illius monete antique. l. Eleganter §. Qui reprobos ff. de pigno. ac. (D. 13.7.24.1).' In that situation, according to Bartolus (ad D. 12.1.5) a debtor could pay existing debts in old reprobated coins—even though they were no longer legal tender.

[43] A. Bruno, *De augmento et diminutio monetarum*, in *Tractatus*, above n 32, at 186rb–97rb, Boyss, above n 5, at 76v–180v; and Budel, above n 5, at 353–413 (herafter all citations will be to Budel).

[44] Bruno, part. 1 no. 1, in Budel, above n 5, at 353.

[45] Cf. ibid., at 369, part. 1 no. 3:

> Predicta conclusio declaratur ut indubitanter procedat quando uariatur bonitas intrinseca pecunie… nam solutio fieri debet aut pos(se)t secundum antiquam pecuniam, hoc est de antiqua pecunia, si reperiatur, uel de noua equiualentia, seu (de noua) ad estimationem antique. c. Olim et c. Cum canonicis de censi. (X 3.39.20 & 26).

[46] Ibid., at 372–373, part. 2 nos 3–4, referred to a dissident view of Pierre de Belleperche, Cynus, and Bartolus, who taught that debtors discharged their obligation by tendering reprobated coins, because the creditor bears the risk of a demonetization (unless the debtor defaults).

[47] Ibid., at 372, part. 2 no. 1: 'supplendum erit in eadem bonitate et secundum antique ualorem antequam reprobatur'.

were rightfully entitled to refuse payment in reprobated coins,[48] for demonetized coins were no longer money.[49]

The effects of debasements had been discussed since the end of the twelfth century, first in the single-coin environment of the *denarius*, a small silver coin struck by a multitude of local mints and varying in design, fineness, and weight. In about 1180, a debasement by half of the Luccan *denaro* led to Pillius' famous *quaestio sabbatina* as to the coin in which the creditor could demand payment. Pillius opted for payment in old *denarii*.[50] So did Pope Gregory IX in 1234 in the inverse situation where there was a return to strong money.[51] Apparently, in Northern Italy, both glossators and canonists assumed that old coins would be gradually replaced by new ones, rather than being officially taken out of circulation.

Although demonetization of a coin (*reprobatio*) was obliquely referred to by Pope Innocent III in April 1199 in the letter *Quanto personam* to the Spanish King (X 2.24.18),[52] its consequences were not discussed until the 1260s.[53] Some legists taught that pre-existing debts could still be paid in reprobated coins, but this was not the majority view at the turn of the sixteenth century.[54] A pre-existing debt for money that was no longer legal tender had to be paid in new coins *ad aestimationem antique*,[55] since the coin current at the time the obligation was contracted had become obsolete.

V. Dumoulin's Diverging View

Charles Dumoulin opposed the view that, after debasements, pre-existing debts had to be paid in coins that were current at the time the obligation was contracted.

He condemned the surreptitious debasements that many princes had engaged in for profit motives.[56] 'All divine and human laws condemning those who forge or change measures also condemn those who tamper with coins, princes and private persons alike',

[48] 'Pecunia reprobata' has a different meaning in the common-law maxim *Reprobata pecunia liberat solventem*, the refusal of money tendered releases him who pays it. Cf. H. C. Black, *A Dictionary of Law* (1891; repr. 1990), citing *Peytoe's Case* (1777) 9 Co. Rep. 79; S.S. Peloubet, *A Collection of Legal Maxims in Law and Equity* (1880).

[49] Cf. Bruno, part. 2 no. 2, in Budel, above n 5, at 372:

> Et hoc facit quia postquam pecunia est reprobata non liberat et non est expendibilis, nec nomen pecunie habet. l. Eleganter § Qui reprobos ff. de pign. actio (D. 13.7.24.1). [...] Facit quod bonitas pecunie ex usu consideratur. l.i. ff. de contrah. emp. (D. 18.1.1).

[50] Cf. Pilius Medicinensis, *Quaestiones sabbatine* (1560, repr. 1967), at 62. The question concerns the repayment of a loan in Lucca, where a debasement occurred between the contract and the time payment was due, five years later.

[51] Cf. X 3.39.26 'tibi damus nostris litteris in mandatis ut canonicos illos solutione prioris pecuniae, uel si non sit in usu, aestimatione pensionis antiquae facias contere contentos'. For a more detailed discussion, see J. H. Dondorp, 'Molinaeus und die kanonistische Geldschuldlehre', (2013) 99 Zeitschrift der Savigny-Stiftung für Rechtsgeschichte, Kanonistische Abteilung 418.

[52] Pope Innocent III ruled that the money which King Alphons II had covertly debased be demonetized and new coins minted. Cf. X 2.24.18: '... mandamus ut reprobata moneta qua legitimo pondere fuerat defraudata ... alia cudatur'. On the decretal, see T. H. Bisson, 'Quanto personam tuam (X 2.24.18): Its original significance', in S. Kuttner (ed.), *Proceedings of the 4th International Congress of Medieval Canon Law* (1976), 229–50; F. Wittreck, 'Conservare monetam: Geldwertstabilität im hochmittelalterlichen Aragon im Lichte der Dekretale Quanto personam tuam' [1199], in A. Weber (ed.), *Währung und Wirtschaft: Das Geld im Recht* (1997) 103; Dondorp, above n 51.

[53] Cf. Hostiensis, *In decretalium librum commentaria* (1581, 1965), 130v, ad X 2.14.8 no. 4.

[54] See d'Afflitto, above n 41, at 76r, dec. 90 no. 3, quoted in n 42.

[55] Martino Garrati had limited this to the situation where too light a coin is officially taken out of circulation and a stronger coin is introduced. In his view debtors of pre-existing debts can discharge their obligation by tendering old, reprobated coins, if the *reprobatio* is unjust, being decreed out of avarice. Cf. Garrati, above n 36, no. 13.

[56] Cf. Dumoulin, above n 5, at 440, no. 793.

he said, quoting Saint Thomas' *De regimine principum*, chapter 13.[57] Had Dumoulin known that he was actually citing Bartholomew of Lucca (d. 1326), who around 1300 completed the work that Aquinas had not been able to finish before his death, perhaps he would have instead referred to the decretal *Quanto personam* (X 2.24.18), which he had discussed earlier. In this decretal, Pope Innocent III characterized the debased coins struck by King Alphons II of Aragon (1162–96) at the end of his reign as 'fraudulently deviating from the legitimate alloy and weight' (*de legitimo pondere defraudata*).[58] According to Dumoulin, creditors could have rightfully refused payment in these excessively light coins, which he characterized as counterfeit.

In this respect, Dumoulin's theory did not differ from those of his contemporaries. What he questioned was their doctrine on the effects of an overt, decreed debasement. He opposed the *ius commune* doctrine, which stated that a debtor had to supply or give recompense for the deficient metal, if he tendered debased coins that were current.[59] This doctrine was based upon a false assumption, Dumoulin said, namely that the quality of a coin's substance was its essence. He conceded that a sovereign could not use an entirely inappropriate material, such as leather, to strike coins, but he did not consider that the coins' inherent quality was their defining essence. In his view, it was of no consequence that debased coins contained less silver or gold, because coins were not meant to be estimated according to their substance and melted down. Rather, they were meant to be spent for their nominal, assigned value.[60] Dumoulin further argued that the debasement of a coin necessarily corresponded to an equal increase in the value of its substance. Consequently, if more coins were tendered to supply the deficient silver, the sum of money received by the creditor would exceed the sum due, and he would in turn have to return those extra coins.[61]

If, for example, an annuity of ten *libra* (2,400 *denier*) of Tours had been created two centuries beforehand, and the coinage was subsequently debased by half, then the coins that originally added up to ten *libra* would now be valued at twenty. Hence, if the creditor could demand payment in old coins or their *aestimatio*, he would in effect receive twice the sum due. That outcome would be most unfair. He likened this to the similar situation where a debtor offered to pay his debt (of ten *libra*) by tendering golden *écus* which not only had not been debased but their nominal value had doubled. It would be equally unfair if the creditor could demand that the coins be counted out according to their old value.[62]

Dumoulin's example concerned an annuity. He gave the example of a yearly payment of the fruits of invested capital or landed property, such as ten *libra* (2,400 *denier*) of Tours, where the sum was payable in any gold, silver, or base silver coin which was legal tender in France, such as a hundred current *gros d'argent*. If a specific coin had been mentioned in

[57] Cf. Aquinas, *De regimine principum ad regem Cypri*, in *Thomas Aquinas opuscula omnia necnon opera minora*. Vol. 1: *Opuscula philosophica*, ed. J. Perrier (1949) 221.

[58] Cf. Dumoulin, above n 5, at 422, no. 757. His *quaestio* 100 on debasements is only touched upon in Taeuber, above n 7, at 44–5.

[59] Cf. Dumoulin, above n 5, at 446, no. 807:

> Tota autem epitasis uersatur in hoc quod fatetur creditor debitum nouum de noua pecunia solui posse, non antiquum, sed causat antiquum debitum de moneta que tempore contractus erat legitima, soluendum dumtaxat, non autem de noua moneta intrinsecus uiliori, que tunc non fuisset legitima, nisi supplendo defectum uel estimationem deficientis materiae.

[60] 'Quantitas aestimationis publice imposita'. Cf. ibid., at 447, no. 807 in fine.

[61] Cf. ibid., at 447, no. 808.

[62] Cf. ibid., at 448, no. 808, implicitly refuting Bruno's theories. Cf. Bruno, part. 6 no. 5, in Budel, above n 5, at 383: 'consului et obtinui quod non, sed quod debeabt solui librae in tali antiqua moneta ad estimationem temporis contractus'. Cf. also Taeuber, above n 31, at 295. Dumoulin's reasoning derives from Bartolus' commentary to D. 43.6.99.

the contract, for instance a hundred silver *gros,* the outcome would be the same, according to Dumoulin. From the date of a debasement, the annual hundred *gros d'argent* could be paid *ad numerum* in the lighter *gros* current at the time of payment.[63] This rule not only applied to annual payments,[64] he said, but to one-time payments as well, such as the repayment of a loan or the deferred payment of a selling price.[65]

VI. The Law Requires No Recompense for Debasements if the Debt Is Internal

Dumoulin provided two exceptions to his rule that, after a debasement, pre-existing debts could be paid *ad numerum* in the debased coin current at the time of payment. First, he restricted the rule to payments within the sovereign's realm, where his new, lighter coin circulated at the same nominal value as the old. Outside his territory, however, where this debasement would not be authorized, the new coin would not be accepted as legal tender. In that case, the debtor was not simply obliged to supply the deficient silver or gold, but to pay the sum due in the locally accepted currency.[66] Secondly, the rule did not apply if a demonetization of the debased coin was imminent, and it was feared that the prince would not compensate those who held these debased coins.[67] Dumoulin had in mind the monetary policies of the Hundred Years' War, when from 1417 all three claimants to the French crown were engaged in vigorous debasements.[68] In this situation, too, these debased coins, which no longer enjoyed the trust of the public, lost their function as money.[69] Hence, in that dreadful situation, creditors who were owed pre-existing debts might repudiate payment *ad numerum* in the current, debased coin, since the coins they accepted would soon be worthless pieces of metal.

[63] Cf. Dumoulin, above n 5, at 449, no. 811: 'Amplio sexto, non solum quando debetur quantitas in genere, sed etiam si certa species monete debeatur, puta centum grossi uel centum aurei.'

[64] In which case already Ludovico Pontano (Romanus; d. 1439) and Dominicus de Sancto Geminianus (d. 1436) had maintained that the annual payment should be in the current coin despite its debasement. This was, however, not the prevalent view of their time. Their consilia, cited by Dumoulin, above n 5, at 448, no. 809, are discussed in Stampe, above n 35, at 67–74. As described by Dumoulin, the case concerned an annual payment of 1,300 *libra* (to compensate for the fact that the recipient did not yet enjoy the fruits of a plot of land to be transferred to him). Subsequently the coinage was debased by a quarter (the nominal value left unchanged).

[65] Cf. Dumoulin, above n 5, at 449, no. 810. In the case of a loan, Dumoulin limited this to the situation, where at the time the debasement occurred the debtor had already spent the money he received.

[66] Cf. ibid., at 450, no. 812:

> Secus si solutio debetur extra regnum, ubi diminutio intrinseca postea hic secuta non approbatur nec toleratur, tunc enim pecunia non esset proba et legitima in loco, quo deberetur, prout esse debet. Non tamen debetur tunc praecise supplementum materiae, sed debetur moneta proba et legitima currens in loco solutionis. . . .

[67] Cf. ibid.:

> Secundo limitatur ut non procedat, si tempore solutionis immineret de praesenti probabiliter periculum reprobationis cursus monetae intrinsecus diminutae, et dubium esset et incertum de satisdatione facienda a principe, quod non potest esse sine misera labe uel suspicione tyrannidis.

[68] In no. 719 he described the debasements by the English and Burgundians; cf. also E. Stampe, *Das Zahlkraftrecht in den Königsgesetzen Frankreichs* (1930), at 83–4. For landlords in France the effect was that they were being paid the same nominal rents with less than one-fifth of the amount of silver. Cf. Spufford, above n 16, at 309.

[69] Cf. Dumoulin, above n 5, at 450, no. 812: 'Sed hoc casu iam ea pecunia, utpote fide publica et communi destituta, non retinet amplius plenam authoritatem, nec uim nec nomen pecunie publicae et probae.'

VII. The Law Requires No Recompense for a Strengthening of the Coin

As discussed in the previous section, in contrast to the prevalent view, Dumoulin maintained that there was no reason to give any recompense for debasements occurring after the obligation was created.

In the inverse situation, after a strengthening of the coin, Dumoulin followed the same line of thought. He argued that the old, light coins that are still in circulation, but with a significantly different fineness or weight, would decrease in value. Hence, if the debtor paid using old, light coins, he had to tender more of them than he would have done if there had been no return to good money. To Dumoulin, this was a loss the sovereign should recompense, as King Philip the Fair must have done in 1308 when he reinstated the good money. Otherwise, he could not have decreed that pre-existing debts had to be paid in good money.[70] If, at the time of payment, the debtor tendered new, good money, the increase in its weight or precious metal content was not a reason for reducing the number of coins he had to tender. Alberto Bruno might have thought so, but Dumoulin dismissed his views as 'ravings'. He said that by maintaining that the higher quality of the coins had to be taken into account, Bruno countered the strengthening of the coin and evaded public statutes.[71]

VIII. Bruno's Distinction between *Ius Commune* and *Ius Proprium*

Dumoulin read Bruno correctly, but at the same time he did him injustice, for Bruno differentiated between the law 'found' in the *Corpus iuris* and medieval legal practice.

The cornerstone of the *ius commune* on payments was the principle that debts were owed according to the precise intrinsic value of specific coins. At the time of payment, these would be 'old coins', in the sense that they were identical in substance, alloy, weight, and appearance with those referred to in a contract, last will or statute. Regional custom, however, could diverge from this principle, by allowing payment in other large coins with the result that gold, silver, and base silver coins became interchangeable. Hence, in practice, the debtor discharged his obligation by tendering coins of other species equivalent to the sum of the specific coins actually due according to the terms of the debt (the exception, of course, was where a generic sum expressed in *libra* was promised). Accursius (ad C. 8.54.35) had already pointed out the existence of this custom. The jurists had not considered this practice unjust, for usually a creditor would have no interest in being paid in a specific gold or silver coin.[72]

Consequently, it was necessary to estimate the value of a coin in three cases. First, if the coin was obsolete or demonetized at the time payment was due. Secondly, if parties to a loan had agreed that repayment could be in any large coin. Thirdly, where custom

[70] Cf. ibid. Stampe discussed the royal decrees of 5 September and 28 February 1308. Cf. Stampe, above n 68, at 12–13. With the exception of a loan, pre-existing debts of a sum of money, for instance 1000 *libra*, were to be paid in good coins, and according to their current value.

[71] Dumoulin, above n 5, at 450, no. 812:

> Et sic multum delyrat Brun. ut supra dicendo quod debet haberi ratio quantiplurimi noui superualent antiquis: hoc enim esset eludere meliorationem monetae, et publicam ordinationem et retinere monetam in ueteri utilitate.

[72] Cf. Bruno, presuppositio 2, nos 4–5, in Budel, above n 5, at 373; cf. also Garrati, above n 36, no. 24; Corti, no. 22–24 , in Budel, above n 5, at 460.

prevailed over the *ius commune*, as happened in those regions where debtors were allowed to pay their debts in any legal tender.

How this estimate was made seems to have been obvious at the time, for it is hardly discussed in the legal treatises on money published at the turn of the sixteenth century. Nicolaus Copernicus (1473–1543), whose 1517 draft of his *Tractatus de monetis* is said to have been titled *De aestimatione monetae*,[73] is silent on the question. Copernicus advised the Prussian estates to demonetize the old, light coin when introducing a strong one, on the principle that bad money would drive out the good. But he did not address the impact on pre-existing debts; and nor did Gabriel Biel (d. 1495).[74] The Tübingen professor Johann Adler (Aquila; d. *c.*1518) discussed them briefly in his *Opusculum de potestate et utilitate monetarum*,[75] published in 1516. The risk that an underweight coin might be demonetized lay with the debtor.[76] He could not pay his debt in a reprobated coin, for his obligation was to pay according to the value of the coin at the moment the obligation was contracted.[77] It is unclear whether Adler meant by this to refer to the nominal, decreed value of the coin: perhaps, but not necessarily.

IX. The Repayment of Debts in Coins Other Than Those Received or Specified

Bruno's way of calculating differed depending on whether he was discussing *ius commune* or the legal practice in Milan. This becomes apparent in his discussion of a long-standing obligation to tender some Milanese *soldi*, silver coins of twelve *denaro*, issued for the first time under Emperor Henry VI (1165–97).

He presented the following problem.[78] A debtor contracted to pay a number of ancient *soldi* at a time when eighty *soldi* were equal to a golden ducat. By the time of payment, the current *soldo* was lighter, with ninety-four equalling a ducat. Since the former, strong *soldo* that had been current at the time the obligation was contracted was obsolete, the debtor had to resort to paying its *aestimatio*. If he chose to pay in current, debased *soldi*, how many of these coins must he tender?

Bruno's answer was ninety-four for every eighty old *soldi*. This was the case, he said, 'even if the prince has decreed that the new, debased *soldo* has the same value as the old. If, however, the custom that debts could be paid in any large coin was taken into account, the outcome was different according to Albericus de Rosate (1290–1354)[79] whose view he

[73] Erroneously: for the 1517 edition, the title was actually *Mediata*. Cf. Copernicus, above n 4, at 214.

[74] G. Biel, *Tractatus de potestate et utilitate monetarum* (*c.*1515); also published in Boyss, above n 5, at 1–9. The text taken from *Gabrielis Biel Collectorium circa quatuor libros sententiarum*, IV.2 (1977), at 175–89, is revised by its editor, most probably Johan Adler (Aquila). Cf. S. Kötz, 'Geldtheorie an der Universität Tübingen um 1500: Die Traktate *De potestate et utilitate monetarum* des Gabriel Biel (nach 1488/89) und des Johannes Adler gen. Aquila (1516)', in S. Lorenz (ed.), *Die Universität Tübingen zwischen Scholastik und Humanismus* (2012) 117, at 127–9.

[75] Its title resembles that of Gabriel Biel, one of the founding fathers of his university. On both tracts, see Kötz, above n 74, at 143–60.

[76] This was the common view among legists and canonists. Cf. Stampe, above n 35, at 62.

[77] Cf. Johannes Aquila, *Opusculum de potestate et utilitate monetarum* (1516), also in Boyss, above n 5, at 10r–38r; Budel, above n 5, at 433:

> Pars altera, Theorema 1: *Corrolarium primum* quod si quando numisma est reprobatum eo quod in valore erat nimis diminutum, tunc debitoris est periculum quia tenetur soluere in ualore quo erat tempore mutui seu alterius obligationis contracte.

[78] Cf. Bruno, part. 1 no. 7, Budel, above n 5, at 370.

[79] Cf. A. de Rosate, *Commentarii in secundam digesti veteris partem* (1585; repr. 1977), at 6v, ad D. 12.3 no. 14:

> Secundo quaerebatur an statutum regis predictum locum habeat inter dictos abbates supposito quod res pro quibus praestatur dicta pensio sit in regno Francie et alique sunt temporales et alique spirituales, determinatum fuit quod non, quia non sunt subditi Regi Franciae.

adopted in the second limitation to this rule,[80] for, if today eighty light *soldi* equaled one golden ducat like the old once did, the creditor had no interest (in them).'[81]

X. Bruno's Calculation According to the *Ius Commune*

In his first answer, 'ninety-four for every eighty', Bruno applied Roman and canon law. He was discussing the exceptional case where it was necessary to estimate a coin. As a rule, there was no need to do so, because a borrower had to pay using coins of the same substance, alloy, and weight as those he had received. A promissor had to tender the coins the parties had in mind when concluding the contract. It followed that, after a debasement, 'old coins' were to be tendered. But the tender of old coins was clearly impossible in this situation, since they were obsolete.

How was the value of an obsolete coin calculated according to the *ius commune* principles? One would, perhaps, expect that Bruno would have taken the intrinsic quality as his point of reference, because of the principle that coins had to be repaid according to their substance, alloy, and weight. Regnaud, Garrati, and Corti subscribed to this view,[82] but Bruno took a different approach. He said, instead, that the value of the old coin was determined by its exchange rate with the ducat, which was more stable. Bruno apparently assumed that the debasement of the *soldo* would have a corresponding effect on its value. But that would not could be true in Milan in the case posed, if the effect of a Ducal decree was that the debased silver *soldo* remained a coin of twelve *denaro*. Because of the custom that payment could be made in any large gold coin, and the fact that the old and new *soldo* both circulated at one-eightieth of a ducat, creditors in Milan had no interest in receiving *soldi* of exactly the same inherent value.

Ultimately, Bruno's *ius commune* estimate derived from the coin's intrinsic value, reflected in the exchange rate in interregional trade. In regions where payment in any large coin was customary, his estimate was based upon the nominal, decreed, value or *valor impositiitius*.

Here Albericus reported a case decided by the Curia Romana concerning the payment of an annuity. Once, at a time when the French silver *gros* had been very light, Boneface VIII in a dispute between monasteries had decided that one must pay the other annually 100 *libra* (24,000 *denier*) of Tours. Subsequently, the French King had strengthened the *gros tournois* (the coin commonly used for payment of such debts) and decreed that all annuities must be paid '*de bona moneta*'. It was decided that even if these 100 *libra* were the income of landed property in France, the abbots were not bound by the royal decree, and payment could be in a coin current at the time of the Pope's verdict.

[80] Cf. Bruno, limit. 2 no. 1, in Budel, above n 5, at 372, where 'he made the following exception: If after a revaluation of the coins due, the debtor in concord with local custom chooses to pay in other coins, the value of the latter at the time of payment is taken into account.'

[81] Bruno, part. 1 no. 7, Budel, above n 5, at 370:

> Et hoc verum est, si ex mandato principis moneta noua, licet uilior aut minoris ponderis, successerit loco antique taliter quod pro tanto expendatur quantum ualebat et ualet antiqua melior, per textum in dicta lege Paulus (D. 46.3.99). Sed attenta consuetudine soluendi in alia materia, secus esset secundum Alb(ericum) de Ros(ate) in dicta lege Cum quid (D. 12.1.3) in fine commentarie et infra dicitur in ii. limitatione . . . . nam si pro lxxx. ex nouis uilioribus potest haberi florenus auri sic pro lxxx. ex antiquis melioribus haberi poterat, nullum adest interesse creditoris.

[82] Cf. Regnaud, no. 3, Garrati, no. 18, Corti, no. 3, in Budel, above n 5, at 461, 450, 461. Like Bruno, Mattheo d'Afflitto took the coin's value as a starting point. Cf. Afflitto, above n 4, at 771, no. 11: 'Et sic debet reddi in eadem bonitate quae consideratur respectu valoris antiquae monetae, que est reprobata et non inuenitur. arg. l. Cum quid ff. si certum pet. (D. 12.1.3).'

XI. Bruno's Calculation According to Milanese Customs

Bruno's second answer to the question raised in the 'eighty for every eighty' problem, where custom allowed payment in any gold or silver coin, was even more striking. It is notable because, in other contexts, Bruno's discussion of the *ius commune* consistently related the quantity of monetary debts to the intrinsic quality of the coins current at the time of the contract.

Where the local custom allowed payment in any large coin, debtors discharged their debt for eighty *soldi* by tendering random coins equivalent to the sum of the 960 *denaro* represented by these eighty *soldi*. The only limitation was that the coins had to be legal tender. A similar situation occurred if, instead of a quantity of coins (such as eighty *soldi*) being promised, the debtor had promised the sum that these coins added up to (such as four *librae*). Since the *libra* was a mere counting unit of twelve *denaro* mulitipied by twenty, the jurists had discussed whether the intrinsic quality could be taken into account.

Bruno addressed the case where 100 florins were promised. Like the *libra*, the Milanese and Savoyan florin was a mere counting unit.[83] Bruno reported that no such coins circulated in his hometown Asti. It was clear that the *libra* and florin would not change in alloy or weight, but the question was what had to be paid after a debasement of the *soldo* of Milan. Would 3,200 debased *soldi* (coins of twelve *denaro*) still suffice? It would in Milan, he said, if the Duke had decreed that their value remained the same. But it would not according to the *ius commune*. Quoting a *consilium* of Oldradus (de Ponte Laude; d. *c.*1343), Bruno argued that the debtor had to compensate for the debasement of the coin usually tendered when such debts were paid.[84]

The case discussed by Oldradus concerned a bequest to a church of 200 *libra* (48,000 *denier*) of Tours, made ten years before the testator's death. Since the *libra* was a mere unit of account, was this sum to be paid in current coins, or in those of ten years ago? The question implies that a debasement occurred in the meanwhile.[85] Oldradus had answered that payment must be 'in the usual coin at the time the bequest was made'.[86] It was assumed that the debtor was obliged to pay in one of the various coins that were normally used for payment of such debts. The parties would know what number of those coins they would have to tender, whether it was one golden *écu*, or twelve silver *gros*, or thirty-six base silver *blancs*, any of which would add up to 432 *d*. A bequest of 200 *libra* would hence be about 111 golden *écu* or 1,333 silver *gros*.

XII. Nominalism in the Works of Bruno, Butigella, and Dumoulin

It was only in exceptional cases that Bruno acknowledged nominalism in matters of debt repayment. As a rule, the intrinsic quality of money had to be taken into account, he claimed, but this could be modified by local custom[87] and statutory provisions to the

[83] The Savoy *floren* of 48 *quarti*, the Milanese *floren* of 32 Milanese *soldi*. On the Milanese *floren*, cf. also Garrati, above n 36, 29 and Corti, no. 25, in Budel, above n 5, at 460: 'Collegium et ciuitas Mediolani obseruat de consuetudine quod intelliga(n)tur (verba 'floreni boni auri et iusti ponderis') de florenis ad computum solidorum trigintaduorum pro floreno.' If this sum was to be paid in gold coins, the stipulator should add 'et in auri'.

[84] Cf. Bruno, part. 1 no. 6 and part. 6 no. 2–3, Budel, above n 5, at 370 and 382.

[85] Stampe, above n 35, at 14, however, assumed a debasement of the small coins (*denier tournois*).

[86] Cf. Oldradus, *Consilia et quaestiones* (1481), no fo., consilium 31: 'Et sciendum est quod solutio debeat fieri de moneta usuali que currebat tempore conditi testamenti.' This consilium is also published and discussed in Stampe, above n 35, at 13–14.

[87] Cf. Bruno, limit 3, in Budel, above n 5, at 195v: 'Fallit tertio predicta conclusio ubi consuetudo esset ut fieret solutio pecunie debite secundum valorem et cursum temporis solutionis.'

contrary. If after the debasement or the strengthening of a coin, the sovereign ordered that pre-existing debts were to be paid not merely with current coins (*de nova moneta*), but also according to their current value (*secundum novam monetam*), creditors had to accept that for every old coin, one new debased coin could be tendered, if their assigned values were the same.[88] Perhaps Bruno did not even require such an express provision in regions where custom allowed debtors to pay debts in any gold or silver coin. That was clearly his view if the old coin had become obsolete.[89]

At first sight, it seems that Butigella's advocacy of nominalism extended to the issue of repayments after a debasement, since the printed edition reads: 'The third conclusion is as follows: If only the intrinsic quality has changed, money owed is to be counted out according to its current value, unless the debtor is in default.'[90]

However, while preparing the text for printing, the editor must have made a mistake. Butigella's subsequent substantiation[91] shows his thesis was as follows. Only if the *ex*trinsic quality had changed, was the amount of money owed to be calculated according to its current value, unless the debtor was in default. Butigella was not discussing the effects of a debasement, but those of a revaluation of the coin, such as the ducat, after the debasement of small money.

The question which value should be taken into account only arose of course if a debtor could choose which coin he used for payment. Medieval jurists taught that local custom could grant him such choice, but Butigella maintained the law did so as well. He presented a case where ten *ducats* were owed which then increased in value from four to eight *librae* (240 *d*). Butigella disputed that the value at the time of the contract should be taken into account. If that were true, he said, a debtor who received ten gold ducats would discharge his obligation by paying the amount of money these coins represented at the time of the contract (40 *libra*) in silver or gold coins. Hence, it would suffice to tender five gold ducats, which by that stage were each valued at eight *librae*.[92] Butigella considered this wrong. He taught that ten gold ducats or silver coins tantamount to their current value (eighty *librae*) had to be tendered.

Dumoulin was thus the first to conclude that the effect of a nominalist conception of money was that it was not the actual coin promised by the debtor that was owed but its value in terms of the sum it represented at the time the obligation was contracted. If the value of the coins had increased over time, the number to be tendered decreased accordingly.

[88] Cf. Bruno, limit 6, in Budel, above n 5, at 196r: 'Sexto fallit quando princeps mandaret facta debiliore uel meliore moneta solui debita contracta antiquitus uel census aut antiquas praestationes secundum nouam monetam.' Quoting, among others, Albericus de Rosate, ad D. 12.1.3 and Oldradus, consilium 250. Both, however, discussed a French statute to pay 'de noua moneta'. See also Bruno, limit 9, Budel, above n 5, at 197r: 'Nono fallit, quando adest statutum declarans attendi debere monetam et cursum tempus solutionis.'

[89] See discussion in n 80 above.

[90] Cf. Butigella, above n. 4, at 49v, ad D. 12.1.3 no. 34: 'Tertia conclusio est quod si uariatur solum bonitas intrinseca, debetur secundum ualorem currentem, nisi intercessit mora.'

[91] Cf. ibid.:

> Sed quicquid [Curtius] dicat, puto conclusionem Bartoli esse uerissimam. Primo omnes tenent, quod in aliis rebus mutuabilibus sufficit solutionem fieri in bonitate extrinseca secundum tempus solutionis, ergo idem in bonitate extrinseca pecunie, cum non possit reddi diuersitatis ratio.

[92] Cf. ibid., at 50r ad D. 12.1.3 no. 34:

> Si esset verum quod dicit Curtius et tempore quo mutuaui x aureos singuli valebant libras iiij. nunc autem valent singuli viij. sequeretur quod aut tu posses mihi reddere libras xl. in moneta argentea, aut quod sufficeret redddere ducatos v. qui ad computum librarum viii pro singulo facunt libras xl. secundum antiquam estimationem. Primum uero est falsum et contra communem de qua supra. Secunda etiam non est uerum, quia in minori numero et minore materia redderetur mutuum.

XIII. Dumoulin's Supporters

An idea similar to Dumoulin's claim[93] can be found in the works of two leading French jurists: Hugues Doneau (1527–91) and François Hotman (1524–90), both of whom taught for half of their lives outside France. Doneau, a professor at Bourges for twenty years, fled his country after the St Bartholomew's Day massacre of 1572. For the rest of his life he taught at Heidelberg, Leiden, and Altdorf. Hotman, who at eighteen began a promising career in Dumoulin's Parisian law firm, and lectured in Roman law in 1546, gave it all up in 1547 and moved to Geneva, where he became John Calvin's secretary. In 1555, Hotman returned to lecturing in law in Strasbourg. In the 1560s, he went to Valence and Bourge in France, but he left the country for good in 1572. He subsequently taught in Geneva and Basel.

According to Hotman, after a debasement, if the debtor repaid using legal tender coins of less precious metal than those received, then there was no violation of the Roman rule in D. 12.1.3 against '*aliud pro alio*'. There was no repayment of one thing for another since only the nominal value of the coins was taken into account.[94] In his commentary to D. 12.1.3, Doneau restricted himself to discussing coin revaluation. Citing Hotman, he agreed that the official rate of a coin was its true intrinsic quality and that the rules of Roman law should be interpreted on that basis. Instead of the actual coin, its value was owed, that is the sum of money it represented.[95]

French law eventually assimilated Dumoulin's theory so thoroughly that in the eighteenth century the great jurist Joseph Pothier (1699–1772) could write that 'our jurisprudence does not consider the substance and the actual coins, but only the value assigned to it by the Prince'.[96]

The Spanish Bartolus, as Diego de Covarubias y Leyva (1512–77) was styled because of his legal genius, adopted Dumoulin's ideas in his monetary treatise, first published in 1556.[97] The Italian jurist Giacomo Menochio (1532–1607) is said[98] to have adopted Dumoulin's ideas as well—but this could be connected with his pleading the case of Martino Cerrutti.

[93] It is likely they 'adopted Dumoulin's ideas' (Sargent and Velde, above n 7, at 103) but not certain, for neither cited Dumoulin. Cf. also Taeuber above n 7, 83, fn 206: 'Was sie bieten, und auch Grimaudet, entspricht nicht M.s wirklicher Lehre, sondern etwa die Beweisführung pro parte affirmativa und auch dieser in starker Verdünnung.' François Grimaudet published a mediocre treatise, *Des monnoyes augment et diminution*, in 1575.

[94] Cf. F. Hotman, *Quaestionum illustrium liber* (1573), at 122–3, quaestio 15, discussed in Sargent and Velde, above n 7, at 104. Hotman apparently presupposed that the nominal value of the coins remained the same despite the debasement.

[95] Cf. H. Doneau, *Commentarii ad titulos Digestorum* (1582), at 46, ad D. 12.1.3 no. 9.

[96] G. Hubrecht, 'Quelques observations sur l'évolution des doctrines concernant les paiements monétaires du XIIe au XVIIIe siècle', in *Aequitas und Bona Fides: Festgabe zum 70. Geburtstag von August Simonius* (1955) 133, at 143; Sargent and Velde, above n 7, at 104. On French case law, see B. Schnapper, *Les rentes au XVIe siècle: histoire d'un instrument de crédit* (1957), 184–92; G. Gruber *Geldwertschwankungen und handelsrechtliche Verträge in Deutschland und Frankreich, Bestandsaufnahme und Aussichten für das europäische Währungs- und Privatrecht* (2002), at 53:

> Die Recheneinheit *livre* wurde mit diesem Dekret (the 1602 Edict of Monceaux jhd) quasi zur staatlichen Währung erhoben und ihre Verwendung dem Rechtsverkehr zwingend vorgeschrieben. Die noch dem Metallismus verhaftete Rechsprechung musste sich diesem Diktat beugen.

[97] Cf. D. Covarruvias, *Veterum numismatum collatio cum his que modo expenduntur publica et Regia authoritate percussa* (1556), at 50v:

> [E]rudite (Molinaeus) probat solutionem debitae recte fieri si fiat ex pecunia proba tam in materia quam in forma quae ex publico decreto valet summam et quantitatem debitam, etiam si certa species pecuniae aut monetae debeatur.

[98] Cf. Taeuber, above n 7, at 83 fn 206; Endemann had erroneously described him as a precursor of Dumoulin. Cf. W. Endemann, *Studien in der romanisch-kanonistischen Wirtschafts- und Rechtslehre* (1883), vol. 2, at 204.

The consilium in the Cerrutti case concerned a dispute in Piedmont (Savoy territory) between the Bishop of Mondovi and Cerrutti, whose predecessors had granted the Bishop an annuity (*census*) in 1528. They had promised 915 Savoy florins every St Martin's day (11 November) in gold *écus*. At that time, five-and-a-half florins were equal to one *écu*, which implied a tender of about 168 *écus*. The dispute arose because, in the course of time, the value of the *écu* had increased to nine florins. The bishop demanded payment of 168 *écu*. Cerrutti offered 100.[99]

It would seem that the bishop was entitled to 168 *écu*, Menochio pointed out, for the increased value of the gold *écu* presupposed a debasement (of other coins), which had to be taken into account in annual payments. This was the common interpretation of the decretals *Olim causam* and *Cum canonicis* (X 3.39.20, 29) in accordance with the principle that a creditor should suffer no loss because of a debasement. But Menochio argued that a hundred *écus* sufficed, because in the case at hand the payment had to be made in current money, irrespective of any previous change in quality (weight or alloy) or value.[100] First, this conclusion followed from the wording of the contract that 915 Savoy florins were due; hence, the florin being a mere unit of account,[101] it cannot have changed intrinsically.[102] And, even if *écus* had been owed, Piedmont custom allowed debtors to pay the sum the *écus* represented, that is 915 Savoy florins, in any other large coin. The creditor would suffer no loss if 100 *écus* were tendered; however, he would be enriched through a payment of 168 *écus*. Subsequently, to disprove the Bishop's arguments, Menochio adopted Dumoulin's interpretation of the decretals *Olim causam* and *Cum canonicis* and borrowed his arguments to explain that the Bishop suffered no loss, when he was paid in lighter coin. Despite its depreciation, the coin had the same purchasing power as before,[103] and the Savoyan Dukes did not mint a coin so vile that its demonetization would be imminent.[104]

XIV. German Jurisprudence Keeps Faithful to the Medieval Doctrine

German jurisprudence acknowledged the *ius commune* principle that the intrinsic quality of money must be taken into account. After a debasement, pre-existing debts had to be paid in old coins. If these were obsolete or reprobated, payment should be in current coins, but compensation had to be given for the different intrinsic quality.[105] This was in conformity with the doctrine of the medieval legists and canonists, confirmed by the *Reichskammergericht*, and embedded in statutory law in, for instance, Saxony.[106] This was also the conclusion, of Helmstadt professor Johann Borgholten (1539–93), among others, who

[99] Cf. G. Menochio, *Consilia sive responsa* (1609), vol 1, at 140v, cons. 49.

[100] Cf. ibid., at 141r, cons. 49 no. 9: 'Re tamen ipsa diligentius perpensa et examinata contraria sententia mihi magis placet, nempe, solutionem census hoc nostro casu esse faciendam ex moneta nunc currenti, sive modo mututa fuerit mutatione intrinseca uel extrinseca.'

[101] The Savoy *florin* was a counting unit of 48 *quarti*: 915*48*4 = 1728 *denier*.

[102] Cf. Menochio, above n 99, at 141v, cons. 49 no. 14: 'ex quo non potest dici moneta haec mutata uel in ualore intrinseco, nempe in ipso metallo, cum non sit florenus certus nummus'.

[103] Cf. ibid., at 143r, cons. 49 nos 39–42, also quoting Butigella, Covarruvias, and Giovanni Francesco Ripa (1480–1535) ad D. 12.1.5 no. 24.

[104] Cf. Menochio, above n 99, at 143r, cons. 49 no. 38 borrowed from Dumoulin, above n 5, at 450, no. 812 (see text quoted at n 66).

[105] See, e.g., the 1565 *Disputatio monetarum* of the Erfurt syndicus Heinrich Knaust (Hornmann; 1520–80). Knaust did not cite Dumoulin.

[106] See, for other statutes, G. Hartmann, *Über den rechtlichen Begriff des Geldes und den Inhalt von Geldschulden* (1868), at 124 fn 1; Gruber, above n 96, at 59 fn 95.

evoked the view of medieval professors, the 1572 Saxonian statute, and the practice of the *Reichskammergericht*.[107]

In 1549, the *Reichskammergericht* had decided that, even after over a hundred years, a seller could invoke a contractual clause that allowed him to repurchase the feudal rights over two hamlets near Bad-Creutzach. The original selling price being in *Florentzer Gulden*, a gold coin long since obsolete, the court took its intrinsic quality into account.[108] Joachim Mynsinger (1514–88) reported and ruled that twenty-five *batzen* (a small silver coin minted in Bern) must be tendered for every ancient gold *Gulden*.[109]

The first jurist to cite Dumoulin was Renier Budel (1500–97), mint master of Westphalia by appointment of Ernest of Bavaria. He quoted Dumoulin at length, not because he adopted his ideas, but because Dumoulin's compilation of the views of other scholars was well written. Budel rejected Dumoulin's 'singular' opinion that contrasted with the view held by all jurists, and with the court practice of the *Reichskammergericht*.[110] Instead, Budel adhered to the doctrine, developed by medieval jurists, that a debasement must be compensated for, not only in the event that an amount of *specified coins* is due, but also if a *specified sum* of money is due, for instance 200 florin of Cologne, a counting unit of twenty-four *albuses*, small Rhenish coins that had initially (in 1362) been struck in silver, but by Budel's time, in bullion.[111]

In his *Exercitationes legales* published in 1601, Andreas Kohl (1568–1655), after an elaborate criticism of all of Dumoulin's arguments, concluded that the majority view was more in concordance with the law.[112] At the same time, Kohl no longer related a sum of

[107] Cf. J. Borcholten, *Commentaria in consuetudines feudorum singularis item explicatio c. un. Que sunt regalia* (1581), at 270v, no. 62:

> Posteriori casu, quando intrinseca bonitas monetae mutata est, hoc est quando materia et forma monetae est mutata, *wann schrot und korn an der münz verendert*, doctores unanimi fere consensu tradunt inspici debere tempus contractus non solutionis. Et ideo debitor vel antiquam monetam, si extat, praestare debet, vel si non reperiatur amplius tempore solutionis,debet solutionem facere in alia usu recepta moneta ad valorem tamen et aestimationem intrinsecam prioris monetae.... (271r) Et secundum hanc sententiam Vitenbergenses et Lipsienses pronunciant constitutio Electoris Augusti const. 28 in 2. parte, ibi dicitur *Wann schrot und korn und also bonitas intrinseca an der münz verendert so sol der bezahlung derer münz die tempore contractus ganghafftig gewesen, oder da man die nicht haben kan, nach derselben werdt und aestimation geschehen*. Eandem sententiam secuti sunt assessores supremae curiae. Mynsinger. in 4 cent. observat. 1.

Jacob Alemann, *Palaestra consultationum* (1613), at 393, also cited the 1603 Hamburg *Stadtrecht*, which adopted similar provisions.

[108] A 1553 consilium of the Frankfurt syndicus Johann Fichard concerns the same issue. He argued, citing Panormitanus, that the debts should not be paid by tendering the equivalent of the intrinsic quality of the obsolete *Gulden*, but according to its value at the time of the contract. From Oldradus' consilium 168 (discussed in Stampe, above n 35, at 17) he derived that recourse is made to estimating the coin's content, if that value is unknown. Hence, for every *kleine Gulden*, one current *Rheinische Gulden* should be tendered, unless such would be detrimental to the creditor. The latter would not be able to prove any loss, Fichard said, because deeds of about 1350 entailed that the old gold coin equalled 30 *Weisspfennige*, as did the *Rheinische Gulden* in his time. Its value known, there was no reason to establish whether the ancient *Gulden* was intrinsically equal to its successor. Cf. J. Fichard, *Consiliorum ... tomus alter* (1590), at 123va, cons. 47:'... wol nit, sol sie beschehen mit einer andern gutten gengen Münz irem eusserlichen un nit dem innerlichen Werth nach'.

[109] Cf. J. Münsinger, *Singulares observationes iudicii imperialis camerae (uti vocant) centuriae quattuor* (1563), at 119, cent. 4.1:

> Atque ita factum fuisse memini in causa Dominorum in Creutznach contra Wirichium Comitem de Falckenstein (cuius etiam supra in prima cent. Obser. 16 feci mentionem) cum leuitio quorundam pagorum deberet fieri florentinis aureis (*mit Florentzer guldin*) nec hi amplius reperirentur pro quo libet Florentino aureo taxati fueri uiginti quinque batzii, respectu scilicet habito ad intrinsecam bonitatem horum aureorum tempore contractus inniti extantem.

[110] Cf. Budel, above n 5, at 169, Bk II 1. no 17.

[111] Cf. ibid., at 170, Bk II.1 no. 19, unless the clause 'monetae currentis tempore solutionis' is added. Cf. ibid., at 193, Bk II.13 no. 9.

[112] A. Kohl, *Exercitationes legales* (1601), at 346r, exerc. 18 no. 6: 'Quae cum ita sint iuri magis consentaneam arbitror sententiam commu(nem).'

money to the inherent quality of the coin habitually used for payment of such sums. If a sum of money was due, for instance because ten *librae* (2,400 *d*) were promised, the debtor was entitled to pay with any current coin that was legal tender, irrespective of its inherent quality.[113] With regard to the impact of a debasement on pre-existing debts, he distinguished between a sum of money and a quantity of specific coins, limiting the *ius commune* rule to cases where a quantity of specific coins was owed.

This principle of law could be set aside by local custom or statute, expressly ruling that, in respect of pre-existing debts, for every old coin, one current coin should be tendered, irrespective of its intrinsic quality.[114] Kohl argued that such custom or statute was valid, because it deviated from a legal rule that (since Dumoulin) had no longer been universally accepted. Further, it had never been doubted that diverging statutes and customs prevailed over the legal rule. Even though such a provision would infringe upon the rights of those creditors to whom specific coins were owed, it was never considered to be contrary to natural law. Kohl further maintained that if the sovereign was entitled to set the nominal value of a coin (which no one disputed), he could certainly prohibit the payment of compensation when pre-existing debts were repaid after a debasement.[115] Rutger Ruland (1568–1630) referred to such a statute in Jülich, a town near Aachen.[116]

XV. Antoine Favre's Frontal Attack on Dumoulin's Nominalism

Andreas Kohl's rebuttal of Dumoulin's ideas was influenced by the repudiation of Dumoulin's nominalism published by Antoine Favre only three years earlier, in 1598. Favre characterized as wrong ('unjust') the assignment of a nominal value to a coin that diverged from its value in international trade based on the coin's intrinsic quality.[117] Foreign merchants did not estimate French gold coins according to their assigned value (*valor impostititius*), as Dumoulin acknowledged,[118] but according to their intrinsic value. Jurists failed to recognize, Favre argued, that there was more than one *aestimatio* of a coin: on the one hand, the nominal value assigned by the sovereign, on the other, a more universal value based on international trade. The former, dependent on state policy, was

[113] Cf. ibid., at 350r, exerc. 18 no. 20: 'Quando pecuniae summa non in certa monetae specie sed in genere debetur . . . tunc enim citra respectum bonitatis intrinsecae qualibet in moneta quae tempore solutionis est in usu, solui potest.'

[114] Cf. ibid., at 351r, exerc. 18 no. 24:

> Si statuto, consuetudine uel constitutione principis peculiariter inductum foret, ut moneta noua siue melior sit sive deterior, pro vetere circa ullum bonitatis intrinsecae respectu solvatur etiam his quibus ante incidentem monetae mutationem obligatio fuit acquisita.

[115] Cf. ibid., referring to Bruno's limitation of the *ius commune* principle (see above n 88). With regard to a deviating custom Kohl also cited Antonio Gabrieli (d. 1555) with regard to annual payments. Cf. A. Gabrieli, *Communes coclusiones . . . in septem libros distributae* (1574), at 352, de solut. 1 no. 38, where Gabrieli referred to (amongst others) Ludovico Pontano (Romanus), *Consilia* (1504), at 35v, cons. 123 and Francheschino Corti, *Consilia* (1575) at 49, cons. 24 no. 7.

[116] Cf. R. Ruland, *Tractatus de commissariis et commissionibus Camerae Imperialis* (1617), vol. 2, at 218, 7 no. 12:

> Et expresse tale statutum extat in Reformatione ordinationis Iuliacensis. *tit. von Zinsen und Renten*. 106 §.1 ubi disponitur contra ius commune. Et observatum in Camera in dicta causa *Johan Pastors contra Gülich* et *Wilre contra Aach.*

[117] Cf. A. Favre, *Tractatus de variis nummariorum debitorum solutionibus* (1622), at 5, caput 1 no. 1:

> Injustam (appellamus) alteram, quae ex contrario vel ponderi vel valori intrinseco materiae non respondeat, quam estimationem extrinsecam appellamus, sive pluris aestimetur aureus quam quanti re uera est sive minus, et sive principis aut reipublicae edicto statuta sit ea aestimatio, ut plerumque fit, sive, ut hodie, uel auri penuria uel commerciorum abusus excessum aut defectum justae aestimationis induxerit.

See also ibid., at 14 and 22, caput 1, nos 32–4, 48–9. However, in case of a bullion shortage in France, a just estimate could exceed its intrinsic value. Cf. ibid., at 6, caput 1, no. 6.

[118] See Dumoulin, above n 5, at 450, no. 812 (quoted at n 66 above).

variable, but the latter, based on the coin's content, was constant. Whenever the nominal value exceeded the intrinsic value, everyone noticed that imported goods became more expensive, which would not happen if the nominal and instrinsic value had coincided.[119] The intrinsic value referred not to the value of the bullion, but that of the gold coin.[120] Favre took the gold coin as a point of reference. He characterized the effect of the debasement of smaller coins not as a revaluation of the gold coin, but as a devaluation of the small denomination (base silver, billon, and copper) coins. The value of the latter decreased with respect to the stable, gold coin.[121]

Favre said that after a debasement of the gold coin, something which rarely occurred in his day, the old coin and its lighter successor became two different coins if their value also differed; hence, if a quantity of gold coins were owed, the new coins had to be tendered in greater number.[122] Dumoulin, he said, asserted that this was not the case if the nominal value had remained unchanged, for it was not the content, but the value assigned to the coin, that made it money.[123] To disprove this thesis, Favre argued that the true assigned value (*valor impositititius*) was not the one decreed by the sovereign, but the value assigned to a coin in international trade. That value would decrease because of the debasement. Hence, Dumoulin's subsequent argument, that compensating for the debasement would in effect enrich the creditor,[124] could perhaps apply if both parties were under French law, because in France both old and new gold coins had the same purchasing power (*utilitas*).[125] Favre acknowledged, of course, that French people were bound by a royal decree, but he limited its effect to subsequent transactions. The King's statutes were presupposed not to infringe on acquired rights, unless there was an express provision to the contrary. Hence, creditors of pre-existing money debts were owed coins with the intrinsic quality current at the time the obligation was contracted.[126] Those creditors could rightfully reject payment in debased coins (though their nominal value was the same), if there was no recompense given for the diminished content.

Favre adhered to the traditional (metallistic) idea of money: if a quantity of gold coins was owed, the debt had to be paid with money of the same inherent quality. One could not simply argue that only the nominal value was of importance, for creditors were not forced to accept other goods of the same value as payment, for instance a plot of land instead of gold coins.[127] He argued that Dumoulin failed to distinguish between the nominal value

[119] Cf. Favre, above n 117, at 23–24, caput 1 nos 52–4. The prices rise, Favre argued, because French merchants have paid for those goods with French coins according to their intrinsic value.

[120] Cf. ibid., at 28–31, caput 1, nos 62–8.

[121] Cf. ibid., at 36, caput 1, no. 79: 'Itaque quisquis dicit ex monetarum deterioratione augeri aestimationem aurei, male loquitur, sed dicendum est, augeri solidorum numerum, aut quod idem est, minui solidorum aestimationem.'

[122] Cf. ibid., at 79, caput 4, no. 2:

> [S]i aureorum bonitatas tam intrinseca quam extrinseca decreverit, constat inter omnes uideri alios esse aureos nec proinde cogi posse creditorem ut uel in novis illis aureis, uel in nova eorum aestimatione solutionem accipiat, nisi quod ueterum aestimationi deest suppleatur.

[123] To disprove Dumoulin's argument, Favre (ibid., caput 4, no. 44) pointed out that gold, silver, and bronze coins are not interchangeable; hence, the content is of importance.

[124] The coin's lesser content implies that the bullion price of gold has risen, Tendering additional gold coins to compensate for the deficient gold results in a greater sum of money.

[125] Cf. ibid., at 107, caput 4, no. 49:

> Dices pro Molineo duobus Gallis de hac re in Gallia contendentibus non esse curandum quanti sit aureus apud exteras nationes. Ambos enim lege Regia teneri satisque esse debere creditori quod tantam ex novis aureis in Gallia utilitatem consecuturus sit, quantam ex veteribus consequeretur.

[126] Cf. ibid., at 108, caput 4, no. 50. Favre (ibid., no. 52) disproved this argument, pointing to the higher price the mint 'paid' for old coins, and the lower rates foreign merchants use, if paid in strong money.

[127] Cf. ibid., at 84, caput 4, no. 13.

assigned by the French King to a coin, and the value of a coin in trade. The former determined the price of other goods, but the latter was decisive in the barter between money and goods.[128]

Favre's point of reference was the stable gold coin. Hence, if the value of gold coins rose because of a debasement of (base) silver and bronze money, debtors of pre-existing debts contracted in gold *écus* were bound either to tender the exact quantity of *écus*, or (where custom allowed) their *aestimatio* in silver coins assessed according to the sum represented by the *écus* at the time of payment. Even if a sum of money was owed without any reference to a specific coin, Favre maintained that the intrinsic quality of the *libra*—even though it was a counting unit—should be taken into account.[129] By this he meant the fineness and weight of (base) silver money, the *sous* being the smallest coin used for payment of such sums.

[128] Cf. ibid., at 86, caput 4, no. 16:

> [V]idetur mihi Doctor Analyticus in omnibus istis quaestinibus graviter errasse, duplicem esse pecuniae usum, proprium unum, ad aestimandas res ceteras, improprium alterum, ut permutari possit, sive cum pecunia sive cum alia re. ut diximus c.2. Porro aestimatio extrinseca ab hoc aut illo Rege imposita non potest afficere improprium usum nummi, sed proprium dumtaxat.

[129] Cf. ibid., at 215, caput 9, no. 10: 'Postremo hoc unum requiro, ut librae trecentae quas offert debitor solutionis tempore sive in speciebus sive in aestimatione nec intrinsecus auctae sint nec diminutae.'

14

Spanish Scholastics on Money and Credit

Wim Decock

I. Introduction

The aim of this chapter is to give a general impression of the rich treatment of questions related to money and credit in the writings of the early modern Spanish scholastics (sixteenth–seventeenth centuries). It cannot make any claim to comprehensiveness. As the late Marjorie Grice-Hutchinson (1908–2003) noted in her seminal work on the monetary theories of the School of Salamanca, the primary source material 'is so extensive and interesting that it would take a whole series of monographs to do it justice'.[1] Accordingly, this article will first give an overview of the general framework of Spanish economic thought.

First, the concepts of 'Spanish scholasticism' and the 'School of Salamanca' will be introduced, and the contribution of the Spanish scholastics to the development of economic analysis will be briefly considered without neglecting the moral and legal context within which their writings emerged. The second part of this chapter will discuss selected topics in scholastic economic thought, namely the issues of monetary debasement and the market for debt at the beginning of the seventeenth century. The latter topics have been selected since they have received relatively little attention in modern scholarship, which has hitherto concentrated on the 'great names' of the first half of the sixteenth century (e.g. Vitoria, Soto, Mercado) and on the topics of money lending, usury, and money exchange. An investigation into the subjects of 'monetary debasement' and 'the debt market' is not only relatively new, but also offers an occasion to highlight the close connection between economic, legal, and political arguments in Spanish scholasticism. The treatment of those topics in the works of Juan de Mariana and Leonardus Lessius, respectively, will also reveal the close relationship between what happened in the real economy and the reflections of the Spanish scholastics.

[1] M. Grice-Hutchinson, *The School of Salamanca: Readings in Spanish Monetary Theory 1544–1605* (1952), ix, available at http://mises.org/books/salamanca_grice-hutchinson.pdf.

II. The General Framework: Economic Analysis, Law, and Morality in Spanish Scholasticism

1. The 'Spanish Scholastics' and the 'School of Salamanca'

Research on the economic thought of the scholastic theologians and jurists of early modern Spain was reinvigorated in the second half of the twentieth century by Marjorie Grice-Hutchinson, amongst other scholars.[2,3] It was also through her work that it became common to denote the Spanish scholastics as the 'School of Salamanca', since most of the doctors had been either students or teachers at the University of Salamanca.[4] It is important to note that the revival of scholastic thought in Salamanca was part of a much wider phenomenon which is variously referred to as 'neo-scholasticism', 'late scholasticism', 'Baroque scholasticism', 'second scholasticism', 'early modern scholasticism', or even 'Renaissance Aristotelianism'.[5] As those names indicate, the renewed Spanish interest in Thomas Aquinas, particularly in his *Summa Theologiae* (written in 1265–74), was part of a broader revival at universities across Europe starting from the second half of the fifteenth century onwards.

A case in point is the neo-scholastic work of Conrad Summenhart von Calw (1455–1502) which heavily influenced Spanish economic thought. Summenhart taught at the University of Tübingen and is famous for his treatise *De contractibus* (*On contracts*). His work already displayed the 'hybrid' nature of neo-scholastic thought: it combined Thomism with nominalistic strands of thought such as Scotism. Nominalist philosophers such as Duns Scotus, Jacques Almain, and John Mair (1467–1550) were frequently cited by the Spanish doctors for their contributions on value theory and economic ethics.

Recent scholarship emphasizes that the origins of Spanish neo-Scholasticism cannot be reduced to the pioneering work of Francisco de Vitoria (1483/1492–1546) at the University of Salamanca. But it is well-established that he founded a particularly influential strand of Spanish neo-scholasticism which has become known as the 'School of Salamanca'. Besides Vitoria, representatives of this school include the Dominican theologians Domingo de Soto (1495–1560), Domingo de Báñez (1528–1604), and Tomás de Mercado (*c.* 1530–75), as well as the canon lawyers Martín de Azpilcueta (also known as Dr Navarrus) (1492–1586), and Diego de Covarruvias y Leyva (1512–77).

[2] This section draws on material from my contribution on 'Spanish Neo-Scholastics and the Bible', in B. Strawn and J. Witte Jr (eds), *Oxford Encyclopedia of the Bible and Law* (2015). For a brief introduction to scholasticism, see also A. Thier, 'Scholastic Jurisprudence', in J. Basedow et al. (eds), *The Max-Planck-Encyclopedia of European Private Law* (2012), vol. 2, 1529 first published in German as 'Scholastik', in J. Basedow, et al. (eds), *Handwörterbuch des Europäischen Privatrechts* (2009), vol. 2, 1370.

[3] Grice-Hutchinson, above n 1; M. Grice-Hutchinson, *Early Economic Thought in Spain 1177–1740* (1978). Other standard works include: O. Popescu, *Studies in the History of Latin American Economic Thought* (1997); F. Gómez Camacho, *Economía y filosofía moral: La formación del pensamiento económico europeo en la Escolástica española* (1998); O. I. Langholm, *The Legacy of Scholasticism in Economic Thought: Antecedents of Choice and Power* (1998); A. A. Chafuen, *Faith and Liberty: The Economic Thought of the Late Scholastics* (2003), which is a slightly revised version of A. A. Chafuen, *Christians for Freedom: Late-Scholastic Economics* (1986); A. Del Vigo Gutiérrez, *Economía y ética en el siglo XVI: Estudio comparativo entre los padres de la reforma y la teología española* (2006). For other secondary sources, see S. J. Grabill (ed.), *Sourcebook in Late-Scholastic Monetary Theory: The Contributions of Martín de Azpilcueta, Luis de Molina S.J., and Juan de Mariana S.J.* (2007), at xiii–xxxv, and W. Decock, 'Lessius and the Breakdown of the Scholastic Paradigm', (2009) 31 *Journal of the History of Economic Thought* 57.

[4] M. Grice-Hutchinson, 'The Concept of the School of Salamanca: Its Origins and Development', (1989) 7 *Revista de Historia Económica* 24, repr. in L. S. Moss and C. K. Ryan (eds), *Economic Thought in Spain: Selected Essays of Marjorie Grice-Hutchinson* (1993) 23.

[5] J. Schmutz, 'Bulletin de scolastique moderne (1)', (2000) 100 *Revue thomiste* 270.

The neo-scholastic movement was not confined to just one religious order. Jesuit theologians such as Luis de Molina (1535–1600), Juan de Mariana (1536–1623), and Francisco Suárez (1548–1617) also made full contributions to the revival of Thomas Aquinas. Many of them were exposed to the teachings of the Salamancans during their studies in Salamanca itself and in Alcalá de Henares, and they passed on those teachings in their own schools. The Jesuits thus made a large contribution to the reception of Spanish neo-scholasticism all around the world. The influence of Spanish neo-scholasticism can be seen in the writings of theologians and canonists working in regions within and outside the Spanish empire, such as the Low Countries. One example is Leonardus Lessius (1554–1623), who can be called a 'Spanish scholastic' since the Southern Netherlands belonged to the Spanish empire. Scholastic influence also stretched beyond disciplinary boundaries, as is clearly shown by the indelible imprint left by the Salamancan theologians on jurists such as Antonio Gomez (1501–61) and Hugo Grotius (1583–1645). It has also been claimed that through Protestant natural lawyers, such as Grotius, the School of Salamanca influenced Adam Smith (1723–90).[6]

2. The Spanish Scholastics and the History of Economic Thought

Since Marjorie Grice-Hutchinson's ground-breaking research in the 1950s, the Spanish scholastics have been credited with many contributions to the development of economic analysis. As Grice-Hutchinson noted in 1952,

> [T]hough they wrote as moralists, they were at pains to study the nature of money objectively, and they were not content merely to approve or condemn the monetary system as it functioned in their day, but tried to go deeper and explain it scientifically.[7]

This conclusion was supported two years later in Joseph Schumpeter's (1883–1950) posthumously published *History of Economic Analysis* (1954). Schumpeter credited Jesuit scholastics such as Luis de Molina (1535–1600), Leonardus Lessius (1554–1623), and Juan de Lugo (1583–1660) as the fathers of economic analysis. Whilst recognizing the moral and legal character of these scholastics' writings, Schumpeter correctly noted that their normative conclusions were built upon empirical insights. Their normative natural law presupposed an analytical moment in which market processes were carefully investigated.[8] Consequently, the Spanish scholastics deserve a place in any historical account of the evolution of economic science.

Not all scholars have been equally enthusiastic about the scholastics. Even prominent commentators such as Raymond de Roover (1904–72) considered late scholastic economics as too heavily indebted to the medieval paradigms of usury and just pricing to be really innovative.[9] In addition, as Stephen Grabill recently observed, the identification of scholasticism with Catholicism, religious authority, and Aristotelian metaphysics has made it the butt of positivist economic historians such as Mark Blaug.[10]

Generally, the Spanish scholastics have earned particular credit for anticipating the so-called 'quantity theory of money'[11] and the 'purchasing power theory of money'. The quantity theory of money tries to establish a connection between the quantity of money

[6] R. De Roover, 'Scholastic Economics: Survival and Lasting Influence from the Sixteenth Century to Adam Smith', in J. Kirshner (ed.), *Business, Banking and Economic Thought in Late Medieval and Early Modern Europe: Selected Studies* (1974) 333; Chafuen, *Faith and Liberty*, above n 3.

[7] Grice-Hutchinson, above n 1, at 42.

[8] J. A. Schumpeter, *History of Economic Analysis* (1954, repr. 1972), at 111.

[9] De Roover, above n 6. [10] Grabill (ed.), above n 3, at xiii. [11] Grice-Hutchinson, above n 1, at 52.

(M), the velocity of money (V), the price level (P), and the real value of the national product (Y), by stating that MV=PY.[12] In essence, the theory explains that the price level is directly proportional to the supply of money. Moreover, the Spanish scholastics, particularly the canon lawyer Martín de Azpilcueta (1492–1586) ('Dr Navarrus'), are said to have developed the purchasing power theory of money, twelve years earlier than Jean Bodin.[13] According to the theory, the more money there is, the fewer the commodities that can be bought with the same amount of money.[14] As an implication, money is worth more where it is scarce than where it is abundant. The following text by Azpilcueta (1556) contains elements of both theories:

> The rest being the same, in those countries where there is a great lack of money, less money is given for marketable goods, and even for the hands and work of men than where there is an abundance of it. This we can see from experience in France, where there is less money than in Spain. Bread, wine, wool, hands, and work cost less. Even in Spain, where there was less money, much less was given for saleable goods, and the hands and work of men, than later when the discoveries of the Indies covered it in silver and gold. The cause for this is that money is worth more where and when there is a lack of it than where and when there is an abundance.[15]

The Spanish scholastics' engagement with money was not a coincidence.[16] Historically speaking, from the beginning of the sixteenth century to the mid-seventeenth century many regions across Western Europe from Spain to England witnessed a period of persistent inflation, known as the 'price revolution' which puzzled the jurists and theologians of the time.[17] Even today, scholars are at pains to give an adequate explanation for

[12] A. Sandmo, *Economics Evolving: A History of Economic Thought* (2011), at 288–9, who discusses the development of the modern version of this theory in the work of Irving Fisher (1867–1947), after whom the quantity theory was called the 'Fisher equation'. There exists a modified version of the Fisher equation known as the 'Cambridge equation', cf. J. Black, H. Hashimzade, and G. Myles, *A Dictionary of Economics* (2012), at 48.

[13] See R. Muñoz de Juana's introductory notes in Grabill, above n 3, at 12. The literature on Azpilcueta is abundant. See V. Lavenia, 'Martín de Azpilcueta (1492–1586): un profilo', (2003) 16 *Archivio italiano per la storia della pietà* 15; R. Muñoz de Juana, *Moral y economía en la obra de Martín de Azpilcueta* (1998); B. Schefold (ed.), *Vademecum zu zwei Klassikern des spanishen Wirtschaftsdenkens, Martín de Azpilcuetas 'Comentario resolutorio de Cambios' und Luis Ortiz 'Memorial del Contador Luis Ortiz a Felipe II'* (1998); E. Tejero, 'El Doctor Navarro en la historia de la doctrina canónica y moral', in *Estudios sobre el Doctor Navarro en el IV centenario de la muerte de Martín de Azpilcueta* (1988) 125.

[14] Black, above n 12, at 332; Grice-Hutchinson above n 1, at 56.

[15] See the translation by J. Emery of Azpilcueta's *Comentario resolutorio de usuras*, paragraph no. 51, in Grabill (ed.), above n 3, at 70. This passage was also translated, but not always as accurately, in Grice-Hutchinson, above n 1 at 95.

For the original Spanish version, see Azpilcueta's *Comentario resolutorio de usuras sobre el cap. 1 de la question 3 de la 14 causa* (Salamanca, 1556), at 84–5, no. 51, available at http://www.mdz-nbn-resolving.de/urn/resolver.pl?urn=urn:nbn:de:bvb:12-bsb10164726-2:

> Lo tercero, que (siendo lo al ygual) en las tierras, do ay gran falta de dinero, todas las otras cosas vendibles, y aun los manos y trabajos de los hombres se dan por menos dinero que do ay abundancia del, como por la experiencia se vee, que en Francia, do ay menos dinero, que en España, valen mucho menos el pan, vino, pannos, manos y trabajos de hombres: y aun en España, el tiempo, que avia menos dinero, por mucho menos se davan las cosas vendibles, las manos y trabajos de los hombres, que despues que las Indias descubiertas la cubrieron de oro y plata. La causa de lo qual es, que el dinero vale mas donde, y quando ay falta del, que donde, y quando ay abundancia.

[16] See, e.g., A. García Sanz, 'El contexto económico del pensamiento escolástico: El florecimiento del capital mercantil en la España del siglo XVI', in F. Gómez Camacho and R. Robledo (eds.), *El pensamiento económico en la escuela de Salamanca: Una visión multidisciplinar* (1998) 17, and R. Specht, 'Die Spanische Spätscholastik im Kontext ihrer Zeit', in F. Grunert and K. Seelmann (eds), *Die Ordnung der Praxis: Neue Studien zur Spanischen Spätscholastik* (2001) 3.

[17] The literature on this subject is endless. The following considerations are based on E. Aerts, 'De economische geschiedenis van het geld tijdens het ancien régime: kennismaking met een discipline', (1994) 140 *Tijdschrift voor Numismatiek en Zegelkunde* 43, and J. H. Munro, 'Price Revolution', in S. N. Durlauf and L. E. Blume, *The New Palgrave Dictionary of Economics* (2nd edn, 2008), vol. 6, 631.

this phenomenon. While neo-Malthusians look for an explanation in population growth, specialists such as John H. Munro have argued for a return to a monetary explanation, following the example of the contemporaries of the price revolution such as Dr Navarrus and Bodin.

For a long time it was fashionable to follow Hamilton's thesis that the influx of silver from the new world contributed to the price revolution. Other researchers have correctly pointed out that inflation was already under way in 1515 and that no silver from the Americas was imported to Europe before the 1530s. An explanation of the price revolution in terms of monetary changes thus has to be modified. According to Munro, the central European copper mining boom (increasing M), combined with the financial revolution in the Habsburg Netherlands (increasing V), provides an alternative explanation for the price revolution.[18] Rather than new silver, increased economic change was triggered by technological and legal innovations. There were other economic changes in the background, too, which stimulated the Spanish scholastics' reflection on economic subjects, such as the debasement of money by princes and the emergence of commercial capitalism.

3. The Moral and Legal Context of Scholastic Economics

In her *Readings in Spanish Monetary Theory* (1952), Grice-Hutchinson recounted the story of Spanish merchants in Antwerp sending their confessor to the University of Paris in 1532 to get the doctors' opinion on the moral legitimacy of new money exchanging practices.[19,20] This episode reminds us of the moral context in which businessmen at the dawn of the early modern period lived. Even though we should not exaggerate the burden of moral conscience in business practice,[21] the theologians' duty to care for the salvation of souls was taken seriously.

It was precisely so that they could come to grips with cases of conscience that the theologians engaged with legal and economic analysis. This spiritual and jurisprudential dimension of scholastic economics has often been neglected by positivist economic historians, even though the relevance of medieval philosophy and Roman and canon law for the Spanish scholastics can hardly be overestimated.[22] The *ius commune* provided them with the necessary juridical categories and technical vocabulary to come to grips with new economic realities.[23] Particular business transactions, such as loan for consumption (*mutuum*), insurance (*assecuratio*), lease (*locatio*), sale (*emptio*), rent (*census*), or money exchange (cambium) were subsumed under contract law and analysed as specific contracts. Accordingly, under those legal headings all treatises on moral theology and contract law written by late scholastic authors discuss economic problems such as the value of money,

[18] Munro, above n 17, at 633–4. The financial innovations from sixteenth-century Antwerp, such as the negotiability of letters obligatory, are discussed below when we deal with Lessius.

[19] For a more detailed introduction to the moral and legal context of scholastic economic thought, see W. Decock, 'Leonardus Lessius on Buying and Selling (1605): Translation and Introduction', (2007) 10 *Journal of Markets & Morality* 444; and W. Decock, *Theologians and Contract Law: The Moral Transformation of the Ius Commune (c.1500–1650)* (2013), at 21.

[20] Grice-Hutchinson, above n 1, at 38.

[21] R. Schüßler, 'Business Morality at the Dawn of Modernity: The Cases of Angelo Corbinelli and Cosimo de' Medici', in S. Müller and C. Schweiger (eds), *Between Creativity and Norm-Making: Tensions in the Early Modern Era* (2012) 131, at 147: 'The assumption that medieval economic morality constrained the profit-oriented mind of businessmen more effectively than modern morality needs to be confirmed by other cases – if there are any.'

[22] Grabill, above n 3, at xvi–xvii. See also the critical observations by Sylvain Piron in the introduction to his critical edition and translation of *Pierre de Jean Olivi, Traité des contrats* (2012).

[23] R. Savelli, 'Modèles juridiques et culture marchande entre 16e et 17e siècles', in F. Argiolini and D. Roche (eds), *Cultures et formations négociantes dans l'Europe moderne* (1995); B. Clavero, *La grâce du don: Anthropologie catholique de l'économie moderne* (1996), at 93–108. This might give us a clue, too, as to why Lombardus' *Sententiae*, which was less juridical in nature, was replaced by Thomas' *Summa Theologiae*, which is pervaded by Romano-canon law, according to B. Löber, *Das spanische Gesellschaftsrecht im 16. Jahrhundert* (1965), at 8–9.

banking, interest, and usury.[24] The Spanish scholastics achieved a synthesis between the doctrines on contract in Roman and canon law, on the one hand, and Aristotelian-Thomistic principles of freedom and justice, on the other; this synthesis laid the foundations of modern contract law and built the framework for the economic analysis of contracts.[25] Moreover, the theologians' writings on property and contracts provided the moral and legal foundations of commercial capitalism.[26]

III. Selected Issues: Monetary Debasement and the Market for Debt

1. Juan de Mariana on Monetary Debasement

In 1609, the Jesuit theologian Juan de Mariana (1535–1624) published a treatise on monetary debasement (*De monetae mutatione*) which stirred immediate controversy. It even made him subject to prosecution for high treason (*laesio maiestatis*). Though Mariana managed to avoid punishment, he was held in custody in Madrid and Rome, and was urged to modify offensive passages in his treatise.[27] In the meantime, Pope Paul V put the first edition of *De monetae mutatione* (1609) on the Spanish Index of prohibited books. Moreover, state officials removed almost all extant copies from circulation.[28]

This treatment may help to explain why Mariana's ideas on money have received relatively scarce attention in the past, despite the abundant literature on his political ideas as expressed in the tract *De rege et regis institutione* (1599).[29] If anything, the episode following the publication of his treatise on monetary debasement seems to add further weight to the popular notion, circulated even by Bluntschli in his *Deutsches Staatswörterbuch* (1870), that Mariana was nothing but an infamous Jesuit proponent of tyrannicide.[30] This notion has rightfully been rejected as untrue by modern scholars such as Harald Braun.[31] But Mariana was a fearless thinker who did not spare his criticism of the Spanish

[24] For an overview of late scholastic treatises that deal with subjects related to money and commerce, see A. Folgado, 'Los tratados *De legibus* y *De iustitia et iure* en los autores españoles del siglo XVI y primera mitad del XVII', (1959) 172 *La Ciudad de Dios* 275; K. O. Scherner, 'Die Wissenschaft des Handelsrechts', in H. Coing (ed.), *Handbuch der Quellen und Literatur der neueren europäischen Privatrechtsgeschichte.* Vol. 2: *Neuere Zeit (1500–1800), Das Zeitalter des gemeinen Rechts.* Part I.1: *Wissenschaft* (1977) 797; C. Bergfeld, 'Katholische Moraltheologie und Naturrechtslehre' in ibid., Vol. 2, Part I.1, 999.

[25] J. Gordley, *The Philosophical Origins of Modern Contract Doctrine* (1991), at 10–111, a thesis repeated in J. Gordley, *Foundations of Private Law: Property, Tort, Contract, Unjust Enrichment* (2006).

[26] M. Koskenniemi, 'Empire and International Law: The Real Spanish Contribution', (2011) 61 *University of Toronto Law Journal* 32. See also W. Forster, 'Dominium–Pactum–Usura: Die Rechtswissenschaft der Frühen Neuzeit auf dem Weg in die moderne Kapitalwirtschaft', in H. Busche (ed.), *Departure for Modern Europe: A Handbook of Early Modern Philosophy (1400–1700)* (2011), at 504–18; W. Decock, 'In Defense of Commercial Capitalism: Lessius, Partnerships and the *Contractus Trinus*', Max-Planck-Institute for Legal History Research Paper Series 2012-04 (2012) 1; Decock, *Theologians and Contract Law*, above n 19, at 612–3.

[27] G. Lewy, *Constitutionalism and Statecraft during the Golden Age of Spain: A Study of the Political Philosophy of Juan de Mariana SJ* (1960), at 31.

[28] J. Falzberger (ed. and trans.), *Juan de Mariana: De monetae mutatione (1609), Über die Munzveränderung* (1996), at i–ii. Unless indicated otherwise, this is the modern Latin edition used in this investigation. It is also worthwhile mentioning that an English translation of *De monetae mutatione* with annotations has been provided by P. T. Brannan in Grabill, above n 3, at 248–327.

[29] The most recent standard work on Mariana's political thought is H. E. Braun, *Juan de Mariana and Early Modern Spanish Political Thought* (2007), including references to further literature. An autonomous study of Mariana's *De monetae mutatione* which remains valuable is J. Laures, *The Political Economy of Juan de Mariana* (1928), available at http://mises.org/books/mariana.pdf.

[30] The 'making of Mariana's notoriety' is critically discussed in Braun, above n 29, at 7–11. In his introductory note to the translation of Mariana's *De monetae mutatione* in Grabill, above n 6, at 242, A. Chafuen rightly points out that, despite rumours to the contrary, the French king Henry IV's assassin had never heard of Mariana.

[31] Braun, above n 29, at 80–91, also reviewed by P. Williams, 'Juan de Mariana and Early Modern Spanish Political Thought', *Reviews in History* (February 2008), available at http://www.history.ac.uk/reviews/review/647.

monarch Philip II and his successor. In assessing Mariana's liberal economic ideas, Murray Rothbard called him a 'learned extremist'.[32]

Mariana's tract on monetary debasement is an illustration of the political dimension inherent in scholastic monetary thought. This dimension was nothing new. At the time of his writing, the connection between coinage debasement and political ideas on representation was already at the heart of medieval canon lawyers' discussion of money.[33] In the late medieval period, an influential analogy was established between the king's power to tax—conditional on the consent of the people—and his power to alter money. Through the work of Nicolas Oresme (*c.*1320–82) and Gabriel Biel (*c.*1420–95) the idea gained ground that money is not the property of the prince alone, as Thomas Aquinas had argued, but of the entire community.[34] Hence, the consent of the representatives of the community was required before a ruler could debase the coinage.[35] It would seem that Mariana pushed these medieval constitutionalist ideas to their radical conclusion.[36]

At the outset of his treatise on money, Mariana dealt with three questions that are indicative of the close connection between coinage debasement, constitutionalist political ideas, and taxation. First, he asked, is the king the owner of the goods that his subjects possess? ('num rex sit dominus bonorum quae subditi possident'). Second, is it permissible for the king to impose taxes on his subjects without their consent ('an rex possit tributa subditis imperare non consentientibus')? Third, is it permissible for the king to debase money (i.e. coins) after their weight or quality has been altered without consulting the people ('num rex monetam vitiare possit pondere aut bonitate mutatis populo inconsulto')?[37]

A couple of words are needed to explain the historical context from which Mariana's tract on money emerged. Mariana reacted against King Philip III's repeated efforts to debase copper money (*vellón*) during the first decade of the seventeenth century, only shortly after the king had introduced the *vellón* in 1599.[38] Those debasements made the price inflation which had been rattling the Spanish economy for more than a century even worse.[39]

There are several reasons why King Philip III introduced and, subsequently, altered copper money instead of gold or silver. First, Spain had almost run out of silver by spending it on the war against the independence of the Low Countries.[40] More importantly, in the Middle Ages the kings of Aragon and Castile had renounced their right to mint profits, the *seignorage*, on silver and gold coinage.[41] In this regard, the Iberian peninsula was an

[32] M. N. Rothbard, *An Austrian Perspective on the History of Economic Thought.* Vol. 1: *Economic Thought Before Adam Smith* (1995; repr. 2006), at 117, available at https://mises.org/library/austrian-perspective-history-economic-thought.

[33] See Chapter 8 in this volume.

[34] H. Mäkeler, 'Nicolas Oresme und Gabriel Biel: Zur Geldtheorie im späten Mittelalter', (2003) 37 *Scripta Mercaturae: Zeitschrift für Wirtschafts-und Sozialgeschichte* 56, available at http://www.hendrik.maekeler.eu/oresme-biel.pdf. For further explanation of Oresme's and Biel's monetary theories, see Chapters 4 and 5 in this volume.

[35] On the medieval origins of this debate, see P. Spufford, *Assemblies of Estates, Taxation and Control of Coinage in Medieval Europe* (1965), also cited by Thier in Chapter 8 of this volume.

[36] Incidentally, this is a widespread evaluation of Mariana's political thought in general reached by scholars who studied his tract *De rege*, e.g., J. Fernández Santamaría, *Reason of State and Statecraft in Spanish Political Thought* (1983). Against this current, Braun, above n 29, at xii stresses that Mariana's political thought is too much indebted to an altogether pessimistic, Augustinian view of man to be called radically constitutionalist.

[37] Falzberger, above n 28, at 2.

[38] J. H. Munro (ed.), *Money in the Pre-Industrial World: Bullion, Debasements and Coin Substitutes* (2012), at 7–8, available at http://www.economics.utoronto.ca/munro5/IntroductionMoneyPre-IndustrialWorld.pdf. The historical facts in this section are entirely borrowed from John Munro's work.

[39] On the explanation of the 'price revolution' in sixteenth century Europe, see Section II.2 above.

[40] M. North, *Das Geld und seine Geschichte: Vom Mittelalter bis zur Gegenwart* (1994), at 98.

[41] Munro, above n 38, at 7 and J. H. Munro, 'Money, Prices, Wages, and "Profit Inflation" in Spain, the Southern Netherlands, and England during the Price Revolution Era: ca. 1520–ca. 1650', (2008) 4 *História e Economia: Revista Interdisciplinar* 43, available at http://www.economics.utoronto.ca/munro5/HistoriaEconomiaProfitInflation.pdf.

anomaly in the widespread phenomenon of silver coinage debasements in early modern Europe. From 1497 to 1686, no debasement of Castilian and Aragonese silver and gold money occurred. Yet, surrendering of mint fees did not apply to copper coinage. Accordingly, Philipp III introduced pure copper coins in 1599 and debased them by weight in 1602 to increase royal revenues from minting fees. The result of this fiscal policy for the circulation of money can be aptly summarized in Gresham's law, which states that 'bad money drives out good'. What little remained of silver and gold coinage was exported to foreign countries, while Spain was inundated by *vellones* and foreign debased silver. In 1607, fifty years after its first major collapse, Spain went bankrupt again.[42]

Confronted with the financial plight caused by Philip III's reckless fiscal measures, Mariana wished to address himself to the king and his counsellors. He said that they should not be surprised if, suddenly, an audacious individual like him stood up and wrote to the king about the misery that his subjects suffered and resented in silence.[43] Mariana cynically observed that those who were more cautious by virtue of their historical consciousness and knowledge of past evils ('ex memoria praeteriti temporis et malorum ex eo cautiores')[44] had warned—in vain—against the alteration of money. He noted that almost without fail debasements of coinage were detrimental to the state ('vix umquam pecuniam in peius mutari nisi reipublicae malo').[45]

Mariana's critique, then, was firmly rooted in historical experience, which may be a typical feature of his humanist spirit.[46] Mariana was famous for his critical historical scholarship, although it was certainly not free from partisan tendencies in questions regarding the relation of secular and ecclesiastical authorities or claims to succession of the crown.[47] His *History of Spain* (*Historiae de rebus Hispaniae*), published in 1592, remained a reference work up to the eighteenth century and earned him the nicknames the Spanish Thucydides and the Spanish Tacitus.[48] In the manner of those great classical authors, Mariana offered a critical account of the mechanisms of princely politics through the mirror of history. In his eyes, history was a mute teacher of the uses and abuses of power and a warning for the future.

The thrust of Mariana's answer to the three aforementioned questions was to polemicize against political absolutism. He showed himself a staunch defender of private property and limited government, much in the spirit of jurists such as Arias Piñel (1515–63).[49] Mariana argued that power is bound by certain limits ('potestatis certi quidam fines sunt').[50] Also, the unrestrained exercise of power is the sign of a tyrant ('tyranni id proprium est nullis finibus coercere imperium').[51] Further, the authority to govern the people does not grant a ruler the power to submit his subjects' goods to his judgment and steal them.[52] Mariana adduced the authority of the Roman and canon legal tradition to bolster his argument that

[42] North, above n 40, at 98.

[43] Falzberger, above n 28, at 10 ('Praefatio'). The human misery ensuing from this financial catastrophe is reflected in the Spanish literature of the time, see E. Vilches, *New World Gold: Cultural Anxiety and Monetary Disorder in Early Modern Spain* (2010), at 258–64, containing an interesting treatment of Mariana's *De monetae mutatione*.

[44] Falzberger, above n 28, at 6, argumentum. [45] Ibid., at 8, argumentum.

[46] Compare R. W. Truman, *Spanish Treatises on Government, Society and Religion in the Time of Philip II: The 'de regimine principum' and Associated Traditions* (1999), at 322.

[47] P. Linehan, *History and the Historians of Medieval Spain* (1993), at 7 and 407.

[48] Braun, above n 29, at 2–3.

[49] See Decock, *Theologians and Contract Law*, above n 19, at 568–9. The defence of private property against absolutist claims by the crown appears to have been generalized among Spanish jurists of the early modern period; see H. Kamen, *Una sociedad conflictiva: España, 1469–1714* (1995), at 244, and J. Fernández-Santamaría, *Natural Law, Constitutionalism, Reason of State, and War: Counter-Reformation Spanish Political Thought* (2005), vol. 1, at 349–2.

[50] Falzberger, above n 28, at 16, cap. 1. [51] Ibid., at 20, cap. 1. [52] Ibid., at 18, cap. 1.

kings were prohibited from enacting laws without consulting their subjects if those laws were burdensome for the people.[53] Accordingly, in answering the question whether a prince can tax his subjects without their consent, Mariana repeated the idea that

> the private goods of the citizens are not left to the arbitrary will of the king. Consequently, he must not take away all or part of them unless that is the will of those who are the legal owners of those goods. Moreover, if, as the jurists wisely say, the king cannot make laws that are pernicious to private citizens without their consent, then he cannot occupy a part of their goods by creating and imposing new taxes.[54]

From the assumption that monetary debasement is a form of taxation, Mariana clearly inferred that the king could not alter the money unless the people agreed: 'If the prince cannot impose taxes against the will of the people, then neither can he institute monopolies or make new profits out of debased money against their will.'[55] In Mariana's opinion, 'all those tricks, under whatever guise they come, are geared towards one and the same unlawful end, namely to weigh to oppress the people with new burdens and to amass money.'[56]

In making this argument, Mariana drew heavily on the canon law tradition. His plea against King Philip III's monetary policy abounds with references to the commentaries on title *De iureiurando*, canon *Quanto personam tuam* (X 2.24.8), which was the *sedes materiae* for the canonists' discussion of monetary debasement.[57] Innocent IV, Cardinal Hostiensis, and Abbas Panormitanus figure among Mariana's favourite authorities. The decretal *Quanto personam tuam* found its origin in a confrontation between Pope Innocent III and the king of Aragon in the late twelfth century.[58] As Mariana thought it worth remembering, Innocent III had invalidated the oath by which James, King of Aragon, promised to preserve the debased coinage minted by his father, Peter II, since, among other things, the consent of the people was lacking.[59] Mariana further admonished that, under Ferdinand II of Aragon and Philip II, laws concerning money had always been passed in popular assemblies by the *cortes*.[60]

[53] Ibid, at 18, cap. 1, ll. 18–22: 'Ita iureconsultorum communis sententia est (quam explicant in cod. Si contra ius vel utilitatem publicam, lege ultima, affertque eam Panormitanus cap. Quanto / De iureiurando), Reges sine consensu populi nihil posse in subditorum detrimentum sancire.'

The reference to 'cod. Si contra ius' in the Latin text has erroneously been interpreted as a reference to the *Nueva Recopilación* and commentaries on this Spanish compilation of laws in ibid, at 158 and also in Grabill, above n 6, at 306. In fact, the passage refers to C. 1.22.6 from Justinian's Code.

[54] Falzberger, above n 28, at 26, cap. 2, ll. 1–6:

> Id satis confirmat, quod paulo ante dicebamus, in Regis arbitrio non esse privata civium bona. Non ergo aut universa aut partem decerpet nisi ex eorum voluntate, quorum in iure sunt. Praeterea si ex iureconsultorum oraculo nihil Rex potest statuere in privatorum perniciem iis recusantibus, non poterit bonorum partem occupare novo tributo excogitato et imposito.

[55] Ibid., at 34, cap. 3, ll. 13–16: 'Quod si Princeps subditis tributa imperare non potest invitis neque rerum venalium monopolia instituere, non poterit ex moneta adulterata novum lucrum captare.'

[56] Ibid., at 36, cap. 3, ll. 8–10: 'Artes hae omnes quacumque simulatione eodem omnes pertinent, ad gravandum populum novis oneribus et pecuniam corradendam, quod non licet.'

[57] See Chapter 8 in this volume.

[58] For details, see D. Smith, *Innocent III and the Crown of Aragon: The Limits of Papal Authority* (2004), at 24–6, also quoted by Thier in Chapter 8 in this volume. It is worthwhile noticing that Pope Innocent III's decretal remained a point of reference in discussions on monetary debasement in the early modern period, not only in the works of theologians and canonists, but also for instance in the work of the Swiss jurist Melchior Goldast (1576–1635), cf. *Catholicon rei monetariae sive leges monarchicae generales de rebus nummariis et pecuniariis* (Frankfurt, 1620), at 104–5, title 33.

[59] Falzberger, above n 28, at 34, cap. 3.

[60] Ibid., at 36, cap. 3. It has been pointed out by other scholars that Mariana's political thought was conservative and resisting innovation. His conception of legitimate government action relied on history, custom, and 'the ways of our ancestors', see H. Höfpl, *Jesuit Political Thought: The Society of Jesus and the State, c.1540–1630* (2004), at 242.

Having laid down the fundamental legal and political principles by which Philip III's alteration of copper money should be judged, Mariana went on to discuss the more technical and economic aspects of the alteration of money. On the theoretical side, his ideas were often influenced by Aristotle and by Reiner Budel (d. 1530), a jurist in the service of the Duke of Bavaria, whose work *De monetis* appeared in 1591 in Cologne.[61]

Chapter four of Mariana's tract dealt with the distinction between the legal, or extrinsic, and the natural, or intrinsic, value of money by analogy with the legal and the natural price of a good. Our Jesuit thought that in a well-ordered society the king's administrators made sure that the two values coincided as much as possible. He regretted to find that the opposite policy was practised in Spain in his time: by having the legal value of copper money largely exceed its natural value, the king provisionally enriched the royal treasure, but created the conditions for financial disaster in the long run.[62]

In chapter five, dedicated to money, weights, and measures as the foundations of the economy (*commercii fundamenta*), Mariana highlighted the role of money as a unit of account, and, hence, the need for a stable currency: 'Just as the foundations of brick buildings must remain firm and stable, weights, measures and money cannot be altered without risk or damage to the economy.'[63] Mariana praised the example of the ounce, a unit of weight which had remained unchanged in Spain since Roman times. He dealt with this subject more extensively in his popular work *De ponderibus et mensuris*, published in 1599.

A general characteristic of Mariana's exposition is the frequent recourse to arguments from experience and historical examples from Spain and France. Chapter six, in which Mariana gave an overview of monetary debasements from the Hebrew people to the Romans and medieval Spain, is a good illustration. From chapters seven to twelve, he carefully weighed the advantages and disadvantages of altering money, silver and gold coinage included. Among the reasons in favour of debasing copper money, particularly by reducing the amount of silver mixed with it, he listed decreasing transport costs (because the money weighs less), and an expansion of commerce due to an increased supply of money.[64] In addition, the increased supply of *vellónes* and the concurrent economic upturn would lessen exposure to foreigners in two particular ways, which Mariana considered to be expedient. First, there would be less need to import goods from foreign countries, and, secondly, foreign merchants would have no incentives to sell their goods in Spain because they would be unwilling to receive the Spanish money in return for their goods, or, better still, they would not carry it to their country but rather spend it on Spanish merchandise.[65] Mariana concluded that the ultimate advantage of a coinage debasement was that money would flow into the king's treasure. Apparently, it was hard for Mariana to hide his cynicism. As he noted, 'The king will certainly profit greatly.'[66]

Historians of economic thought will appreciate Mariana's lucid analysis in chapter nine of the phenomenon whereby 'bad money drives out good', known as 'Gresham's law' after the English businessman Thomas Gresham (*c.*1519–79), though actually observed earlier by Oresme.[67] The truth and reality is, according to Mariana, that 'when

[61] Scant biographical notices on Budel are contained in Falzberger, above n 28, at 162.

[62] Ibid., at 38, cap. 4, and at 42.

[63] Ibid., at 46, cap. 5, ll. 7–10: 'Quae eo pertinent ut sit omnibus persuasum, uti in structuris fundamenta immota manent et intacta, non secus pondera, mensuras, pecuniam sine periculo non moveri et commercii detrimento.'

[64] Ibid., at 58, cap. 7. [65] Ibid., at 60, cap. 7.

[66] Ibid., at 60, cap. 7, l. 10: 'Magnum haud dubium regi lucrum accedet.'

[67] For critical observations regarding both the history and validity of 'Gresham's law', see R. Mundell, 'Uses and Abuses of Gresham's Law in the History of Money' (1998) 2 *Zagreb Journal of Economics*, available at http://www.columbia.edu/~ram15/grash.html.

copper is very abundant, silver radically disappears among the citizens, and this should be numbered among the major disadvantages'.[68] Our Jesuit goes on to explain why this happens:

> The silver flows into the royal treasure, since the king orders citizens to pay their taxes in that coinage. The silver money does not return to circulation, since the king himself pays his debts, if any, to his subjects in copper coinage. Indeed, it is easy to pay with copper and there will be plenty of it, while he will export the silver. Whatever remains of the silver among the citizens disappears, since all first spend the copper coinage while hiding the silver, unless necessity forces them to produce the silver.[69]

Apart from this economic disadvantage, however, what mattered even more to Mariana was the unlawful character of King Philip's alteration of the copper money.

Among many other disadvantages of monetary debasement discussed in chapter ten, Mariana rehearsed the principal objection already raised at the beginning of his tract: it opposed reason and natural law ('cum recta ratione et cum naturae ipsius legibus pugnat').

> It is not up to the king to rush upon his subjects' goods to snatch them away from their rightful owners according to his will. Look: would it be allowed for a prince to break into his subjects' granaries, take half of the grain stored there for himself, and by way of compensation allow the owners to sell the remainder at the same price as the original whole? I do not think that there would be anyone so preposterous as to condone such an act. But that is precisely what happened with the old copper coins.[70]

Beneath the sarcasm lay the central message of Mariana's *De monetae mutatione* (1609): debasing the *vellones* without the consent of the people was a form of disguised robbery which violated the natural rights of the citizens. It should be mentioned, though, that our Jesuit did not limit himself to a scathing deconstruction of King Philip III's monetary policy. In the last three chapters of his tract, he suggested alternative ways to fill the royal treasury and to revive the Spanish economy.

2. Leonardus Lessius and the Debt Market

There was a great divide between the wretched world of Spain's economy at the outset of the seventeenth century and the reinvigorated Spanish Netherlands during the same period. Under the reign of Archduke Albert of Austria and Archduchess Isabella of Spain (1598–1621) the Southern Netherlands regained some of their lost glory as a land of cultural magnitude and economic prosperity. Yet, by that time, the newer power was the

[68] Falzberger, above n 28, at 82–4, cap. 9: 'Verum ut fateamur, quod res est: aeris quando copia nimia est, argentum certe inter cives evanescit et perit, quod in praecipuis incommidis debet numerari.'

[69] Ibid., at 84, cap. 9:

> Nempe in regium aerarium confluit argentum, quoniam tributa in ea moneta solvi mandat, neque in orbem recurrit, quoniam ipse, si quid subditis debet, aerea moneta satisfacit, cuius facultas magna et copia erit, argentum per eum ad exteros deferetur. Sed et quod argentum inter cives manet, disparet cunctis prius aeream monetam expendentibus, recondentibus argenteam, nisi re necessaria cogantur illam proferre.

[70] Ibid., at 92, cap. 10, ll. 10–16:

> In regis arbitrio non esse in subditorum bona involare, ut ea pro voluntate dominis legitimis detrahat. Nunc age: an liceat Principi in horrea singula irrumpere, dimidium frumenti reconditi sibi sumere, nocumentum compensare facultate dominis lata vendendi, quod relinquitur, quanti integrum cumulum ante? Non arbitror fore tam praepostero iudicio hominem, qui factum excusaret. At in moneta aerea vetere hoc ipsum est factum.

Dutch Republic, which united seven provinces that had broken away from Spanish rule and had gradually reached *de facto* if not *de jure* independence after the revolt against King Philip II. Although Antwerp remained a metropolis for businessmen and bankers from all across Europe, the centre of activity gradually shifted to Amsterdam.[71]

It is against this background that the publication in 1605 of Leonardus Lessius' (1554–1623) *De iustitia et iure* should be read. Praised by historians of economic thought such as Bernard Dempsey, Marjorie Grice-Hutchinson, Joseph Schumpeter, Barry Gordon, Murray Rothbard, Louis Baeck, and Bertram Schefold, Lessius is known both for the accuracy of his insights into market mechanisms and for the sophistication of his legal and moral evaluation of those factual observations.[72] John T. Noonan Jr called him a 'master of economic analysis' and regarded his positions on money and usury as 'unprecedented'.[73] The basis for such praise will be illustrated in this section through Lessius' evaluation of the market for debt in Antwerp.[74]

Regarding the sale of 'letters obligatory', 'bonds', or 'securities', which, in Latin,[75] are referred to variously as *chirographa*, *nomina*, *credita*, *debita*, *iura*, *librantiae*, or *assignationes*, Lessius successively raised three different questions.[76] First, he asked, is it permissible to buy securities or bonds at less than their intrinsic value, for example to buy a right to 100 guilders that is due within a year at ninety-six or ninety-seven today? ('an chirographa seu credita possint emi minoris quam contineant, v.g. utrum ius ad 100. aureos solvendos intra annum possit modo emi minoris, ut 96 vel 97'). Second, is it permissible to buy securities, or *librantiae* as they were called, at half their price if payment is unsure or difficult to obtain? ('utrum chirographa seu librantiae, ut vocant, possint interdum emi dimidio pretio, si difficilis vel ambigua sit solutio'). Third, is it permissible to sell a bond at the current market price if I secretly know that the debtor will not be solvent while the buyers are ignorant about this insolvency? ('utrum si sciam occulte debitorem meum non esse solvendo, possim iis, qui id nesciunt, vendere illud debitum pretio ordinario').

In order to address these questions, Lessius had to meet the challenge of reconciling new financial practices with the traditional usury doctrine. Presumably, as a theologian, Lessius could not simply ignore that tradition. He also had to confront the existence of new economic realities. From his encounters with men of practice, Lessius was rather knowledgeable of the happenings in the marketplace. As Frans van der Zypen (Zypaeus)

[71] In 1609, the Bank of Amsterdam was founded as a centre for international clearing, cf. J. G. Van Dillen, *The Bank of Amsterdam* (1934).

[72] See B. W. Dempsey, *Interest and Usury* (1943), at 144–229; Grice-Hutchinson, above n 1, at 69–71; M. Grice-Hutchinson, 'Una nota sobre la difusión del pensamiento económico salmantino', in Gómez Camacho and Robledo (eds.), above n 16, 248; Schumpeter, above n 8, at 99; B. Gordon, *Economic Analysis before Adam Smith: Hesiod to Lessius* (1975), at 244; Rothbard, above n 32, 122–7; L. Baeck, 'Die rechtlichen und scholastischen Wurzeln des ökonomischen Denkens van Leonardus Lessius', in B. Schefold (ed.), *Leonardus Lessius'* De iustitia et iure*: Vademecum zu einem Klassiker der Spätscholastischen Wirtschaftsanalyse* (1999), at 59–60; B. Schefold, 'Leonardus Lessius: Von der praktischen Tugend der Gerechtigkeit zur Wirtschaftstheorie', in Schefold (ed.), *Leonardus Lessius'* De iustitia et iure, 5.

[73] J. T. Noonan Jr, *The Scholastic Analysis of Usury* (1957), at 222 and 264.

[74] What follows draws partially on material previously published in W. Decock,'Leonardus Lessius (1554–1623) y el valor normativo de usus y consuetudo mercatorum para la resolución de algunos casos de conciencia en torno de la compra de papeles de comercio', in M. Madero and E. Conte (eds.), *Entre hecho y derecho: tener, poseer, usar en perspectiva histórica* (2010) 75, and W. Decock, 'L'usure face au marché: Lessius (1554–1623) et l'escompte des lettres obligataires', in A. Girollet (ed.), *Le droit, les affaires et l'argent: Célébration du bicentenaire du code de commerce* (2008) 221.

[75] The contemporary Spanish terminology which corresponded to these Latin terms were *letras comerciales*, *cédulas obligatorias*, and *quirógrafos*; see R. De Roover, *L'évolution de la lettre de change, XIVe–XVIIIe siècles* (1965), 88.

[76] L. Lessius, *De iustitia et iure ceterisque virtutibus cardinalibus* (Antwerp, 1621), at 282–4, bk 2, ch 21, *dubitationes* 8–10.

(1580–1650) observed, Lessius went to the Antwerp Exchange on a daily basis to talk to the merchants.[77] It earned him the reputation as the best expert on money exchange contracts (*cambium*) of his time.

From a legal point of view, the letters obligatory are strictly distinguishable from money exchange (*cambium*) and rent (*census*) contracts. Although Lessius dealt extensively with those types of contracts, since they played a paramount role as credit instruments in the early modern period, they are not the financial devices directly envisaged in the questions set out above. By Lessius' time, *cambium* and *census* were considered by many Spanish scholastics to be relatively unproblematic contracts, since they were analysed juridically as pertaining to the sale of a right (*ius*) to future money and not of money itself.

The sale of bonds and securities, on the other hand, was still considered to be a sale not of a right (*ius*) to money, but of money itself. This immediately raised suspicions of usury, certainly if one considered the economic reality behind the *chirographa* exchanged at the Antwerp Exchange. New bonds were issued on this market as an alternative to concluding a money loan contract: 'a usurer will be able to say that he does not want to grant a loan, but that he is ready to buy a right, for instance at 100 or 200 guilders'.[78] In addition, moneylenders sold their contracts at the exchange, often resulting in the original debtor purchasing back his own debt at a price lower than the intrinsic value of the original loan. Interestingly, in the footsteps of Dr Navarrus, Lessius submitted that this was not a problem, although he warned that the debtor should not have urged the creditor to sell the credit certificate in the first place if, for example, the effect would be to make it more difficult for the creditor to obtain direct payment.[79]

A substantial part of the letters obligatory resulted from forced loans, in the sense that the government issued sovereign bonds and requested bankers or merchants to purchase those bonds.[80] In light of the pressure exerted on rich businessmen to buy sovereign bonds, the Antwerp Exchange served as a necessary, complementary mechanism to give bond holders the possibility of immediately selling their letters of debt so as to obtain cash. In contrast, it has been noted that certainly from the end of the sixteenth century onwards, there was increased demand by the Spanish nobility for government bond certificates, since they preferred those investment schemes to commercial credit.[81] Other forms of letters obligatory derived from sale transactions. For example, an English merchant sold wool to a Brabant merchant who paid him with a letter obligatory, payable to the bearer six months later at the St Bavo fair in Antwerp. The English merchant then transferred the letter obligatory to his creditor, who sold it at a discount on the Antwerp Exchange without waiting for payment at the St Bavo fair.[82] In the course of the sixteenth century

[77] F. Zypaeus, *Notitia iuris belgici* (Antwerp, 1675), at 61, bk 4.
[78] Lessius, above n 76, at 283, bk 2, ch 21, *dubitatione* 8, no. 71.
[79] Ibid., at 283, bk 2, ch 21, *dubitatione* 8, no. 70:

> Respondertur, si creditor illud offerat venale, non videri cur debitor non possit illud emere, eo modo quo quivis alius, ut docet Navarrus loco citato. Non enim ipse debet esse peioris conditionis in emptione illius iuris quam alii, nisi forte ipse sit causa cur creditor velit vendere, ut si se praeberet difficilem ad solvendum. Tunc enim non posset eo pretio emere, quo alii. Ratio est, qui tenetur illam difficultatem tollere, et praeseferre solutionem fore facilem et securam termino lapso.

[80] This could be further explained by the absence of municipal banks in the Low Countries at that time; see E. Aerts, 'The Absence of Public Exchange Banks in Medieval and Early Modern Flanders and Brabant (1400–1800): A Historical Anomaly to Be Explained', (2011) 18 *Financial History Review* 91. Accordingly, Lessius does not mention the existence of municipal credit institutions of the kind which were popular in late medieval Italy, such as Florence's *monte comune*, which are not to be confounded with the mounts of charity; see L. Armstrong, *Usury and Public Debt in Early Renaissance Florence: Lorenzo Ridolfi on the Monte Comune* (2003), reviewed by S. Lepsius, (2005) 91 *Zeitschrift der Savigny-Stiftung für Rechtsgeschichte, Kanonistische Abteilung* 826.
[81] W. Forster, *Konkurs als Verfahren: Francisco Salgado de Somoza in der Geschichte des Insolvenzrechts* (2009), at 265–6.
[82] Example based on North, above n 40, at 89.

'merchant-financiers' increasingly specialized in buying letters obligatory and other financial instruments before their due date for a sum below the intrinsic value of the security.[83] The English wool merchant, then, could have his letter obligatory paid in cash before its due date by going to a discount banker. It is precisely this practice which was at the heart of Lessius' debate.

Theologians and jurists at the time asked whether discount banking was safe from usury. For many, the practice of buying letters obligatory below their nominal value before the due date was problematic from a moral point view. Even eminent intellectuals such as Antoine Furetière (1619–88), member of the French Academy, surmised that discount banking was just a subtle trick to mask usurious money loans.[84] According to the common opinion,

> if you owe 100 guilders but you pay less, e.g. 96 by virtue of the advance payment, then you commit usury, since, implicitly, you grant a money-loan of 96 until you receive 100 on the due date and your debt of 100 is extinguished.[85]

The mere reason for the discount was the lapse of time, and according to the usury doctrine, time could not increase or decrease economic value.

However, Lessius objected to this common opinion. First, he claimed, letters obligatory are not money, but rather are rights to money. They are the object of a sale agreement and not of a money loan. Hence, their price is determined by common estimation, just as in the case of any other merchandise. Second, Lessius adduced an argument from practical experience:

> When those rights are sold as goods in a market, experience shows that they are commonly given a value less than present money. Cash offers plenty of opportunities which those rights do not offer. Therefore, it is allowed to buy them for a lower price.[86]

Thus, in considering the market for debt, Lessius tried to replace the doctrine of usury by the logic of the money market, which can be summarized as follows: 'absent money is worth less than present money' ('pecunia absens minus valet quam pecunia praesens'). As he explained in his chapter on bills of exchange:

> Money which is physically at a great distance from the place where the contract is concluded is worth less then present money. Consequently, it is permissible to make profits by exchanging present money for absent money. This assumption is valid for two reasons: 1. as a matter of nature absent money does not offer the same opportunities and advantages as present money; 2. as a matter of nature absent money can only be rendered liquid and present by making costs and incurring risks. By the same token, other merchandise is also worth less when it is absent.[87]

In his chapter on money lending and usury, Lessius pointed out that, every day, merchant-financiers gathered at the Antwerp Exchange to establish the market price of money.[88] This price was the interest rate in the case of a money loan and the discount rate in the case of

[83] H. Van der Wee, 'Antwerp and the New Financial Methods of the 16th and 17th Centuries', in H. Van der Wee, *The Low Countries in the Early Modern World* (1993) 163.

[84] A. Furetière, *Dictionnaire universel* (Paris, 1748), vol. 2, at 177, cited in De Roover, above n 75, at 121.

[85] Lessius, above n 76, at 283, bk 2, ch 21, *dubitatione* 8, no. 71.

[86] Ibid., at 282, bk. 2, ch 21, *dubitatione* 8, no. 66:

> Qui talia iura, dum proponuntur venalia instar merces, communi hominum iudicio minoris aestimantur quam pecunia praesens, ut experientia patet: eo quod haec multarum rerum facultatem praebeat, quam iura illa non tribuunt: ergo minoris emi possunt.

[87] Ibid., bk 2, ch 23, *dubitatione* 4, no. 30.

[88] Ibid., bk. 2, ch 20, *dubitatione* 14, no. 124. For further discussion of Lessius' ideas on money-lending and interest, see T. Van Houdt, *Leonardus Lessius over lening, intrest en woeker: 'De iustitia et iure', lib. 2, cap. 20: editie, vertaling en commentaar* (1998).

the purchase of a letter obligatory below its nominal value before the due date. He went on to adduce an argument from Roman law (D. 50.17.204) stating, in effect, that it is of less use to have a remedy (*actio*) to obtain what belongs to you than to have the thing itself.[89] In conclusion, it is reasonable to assume that Lessius wished to apply the logic of the market to the practice of discounting letters obligatory, even though he eventually admitted, albeit unconvincingly, that the opposite opinion was the safer one.[90]

Even aside from Lessius' analysis, the conventional usury doctrine recognized that there could be special circumstances by virtue of which interest could lawfully be charged in a money loan. Since those circumstances justified the charging of interest on grounds external to the contract itself, they were called 'extrinsic titles', for instance *damnum emergens* and *lucrum cessans*.[91] The second question raised by Lessius concerned the possibility that risk of insolvency or difficulty in obtaining payment could be invoked as an extrinsic title justifying a 50 per cent discount in purchasing letters obligatory. Pushing the logic of the market to its ultimate conclusion, Lessius argued that this was perfectly lawful. Indeed, he replaced the logic of the usury doctrine by the logic of the market, since he found that the common estimation in the market automatically took that kind of circumstance into account. Moreover, according to Lessius, who opposed the view of Luís de Molina (1535–1600) in this regard, if one market participant in particular was not exposed to the risk, then he was still allowed to buy the letter obligatory at the huge discount rate. The reason, according to Lessius, was that the price of merchandise is not determined by the subjective estimation of a single individual, but by the common judgment of those in the market.[92] Hence, for example, Lessius thought that if a merchant had a particularly good relationship with the Ottoman emperor and was therefore sure to obtain payment, he could lawfully purchase sovereign Turkish debt that was commonly valued at a discount of 90 per cent or more owing to the uncertainty attached to the bond.[93]

The free circulation of letters obligatory and other debt securities was an innovation in the history of money and finance that happened in about the first half of the sixteenth century, although it did not become common until the early 1600s. This might be an important clue to understanding the *raison d'être* of Lessius' third question regarding the market of subprime debt and the duty to inform purchasers of potentially insolvent debtors. Herman Van der Wee has demonstrated how the so-called 'transferability' and 'negotiability' of letters obligatory gradually emerged in the Antwerp market in the course of the sixteenth century.[94] According to Van der Wee, the first step towards the negotiability of letters obligatory was the increased legal protection of the bearer by granting him the possibility of taking legal action against the signatory of the letter without the need to

[89] Compare Lessius, above n 76, at bk. 2, ch 21, *dubitatione* 8, no. 69.

[90] For a more detailed analysis of his argumentation, see Decock, 'Leonardus Lessius (1554–1623) y el valor normativo', above n 74, at 84–6.

[91] For a useful explanation of the meaning and the gradual expansion of extrinsic titles for charging interest, see T. Van Houdt, 'Money, Time, and Labour: Leonardus Lessius and the Ethics of Money-lending and Interest-taking', (1995) 2 *Ethical Perspectives* 11.

[92] Lessius, above n 76, at bk 2, ch 21, *dubitatione* 9, no. 76.

[93] Ibid.

[94] H. Van der Wee, 'Anvers et les innovations de la technique financière aux XVIe-XVIIe siècles', (1967) 5 *Annales, économies, sociétés, civilisations* 1067. In this text we will refer to the already mentioned English version of this article: 'Antwerp and the New Financial Methods of the 16th and 17th Centuries' (1993), above n 83, 145–66. Dave De ruysscher has recently shown how these financial innovations were received, particularly in Germany, although not always in their entirety in other European regions: see D. De ruysscher, 'Innovating financial law in early modern Europe: Transfers of commercial paper and recourse liability in legislation and *ius commune* (sixteenth to eighteenth centuries)' (2011) 19 *European Review of Private Law* 505–18. For similar observations, see North, above n 40, at 90–1.

obtain a power of attorney from the original creditor.[95] Through an imperial ordinance of 1537, Charles V made this protection of the bearer officially available in the Netherlands, and there is evidence that this practice had already been recognized by the Antwerp magistrates in the first decade of the sixteenth century. The second contribution to the protection of the bearer was made through the introduction of the 'assignation principle', which eventually led to the *endossement*. By assigning the letter obligatory, the original creditor A asked the original debtor B to make payment to C, the creditor of creditor A, but A remained bound to C until C had been paid by B.[96]

Despite the innovations of transferability and negotiability in sixteenth century Antwerp, the assignment method was not always used. It was sometimes expressly avoided, undoubtedly because the ancient Roman-based legal technique of *cessio* was much more in the interests of A. The *novatio* ensuing from *cessio* allowed A to be definitively and absolutely freed from his debt towards C, since, from a juridical perspective, the ceding of the letter obligatory to his own creditor C was tantamount to a full payment.[97] Granted, if a case involving the transfer of a letter obligatory was brought to court, the transfer of letters obligatory by assignment was presumed, so that A was not considered to be freed from his obligation until he could prove otherwise. An important exception to this presumption was granted to the English merchants in Antwerp: on the basis of their customs, their payments with a letter obligatory were presumed to be definitive, unless a payment by assignment could be proved.[98] Also, there is historical evidence that many ceding creditors signed a transfer agreement before the notaries or eldermen to make sure that their transfer would be considered as a definitive payment, which excluded any form of assignment to the benefit of the holder.[99] Therefore, the purchaser of a letter obligatory took a risk of acquiring a legal claim that might turn out to be toxic: if the original debtor was insolvent, then the purchaser could not have recourse against the transferor of the letter obligatory unless he had assigned the letter. Assignment was a new invention in sixteenth century Antwerp, but it does not seem to have been obligatory to use the technique.

Lessius' treatment of the subprime market was subtle.[100] First of all, there appears to be nothing new under the sun when it comes to the question whether the holder of a junk bond can sell it at the normal market price, even if he personally knows that the debtor is insolvent. The opening sentence of Lessius' response was telling enough: 'this is a case which frequently occurs among merchants' ('iste casus est frequens inter mercatores').[101] The argumentation itself turned out to be more surprising. Lessius first claimed that it was permissible to sell subprime debt as if it were not toxic, as long as the current market price was asked.[102] The just price of any merchandise was its market price. Hence, nobody could

[95] Previously, in case of non-payment the bearer had to obtain a specific power of attorney from the original creditor; see Van der Wee, 'Antwerp and the New Financial Methods', above n 83, at 151–2. The problem with *cessio* was that it freed the granting debtor from his debts towards his creditor, because, in Roman legal terms, it led to a *novatio*. Consequently, if the original debtor became insolvent, the creditor could not have recourse to the granting debtor.

[96] Ibid., at 153. In the 1608 compilation of its customary law, the Antwerp magistrates confirmed that all the successive debtors who had assigned their debt on a credit remained linked to the last debtor, so that the new holder of the letter obligatory had greater recourse than the earlier bearer.

[97] Ibid., at 155. [98] Ibd., at 155, fn 53, and at 157. [99] Ibid., at 155–6.

[100] The following paragraph is based on W. Decock, 'A Historical Perspective on the Protection of Weaker Parties: Non-State Regulators, Colonial Trade, and the Market for Junk Bonds (16th–17th Centuries)', in A. Keirse and M. Loos (eds), *The Optional Instrument and the Consumer Rights Directive—Alternative ways to a new Ius Commune in Contract Law* (2012) 49.

[101] Lessius, above n 76, bk 2, ch 21, *dubitatione* 10, no. 79.

[102] Ibid., at 284, bk 2, ch 21, *dubitatione* 10, no. 79:

> Videri possit non esse contra iustitiam, modo mendaciis vel fraudibus non alliciam emptorem. Primo, quia vendit rem quanti communiter aestimatur, non facit emptori iniuriam (nam hoc censetur iustum rei pretium), atqui iste sic vendit, ergo, etc.

claim to be harmed by paying the market price. From the point of view of justice, strictly speaking, it was difficult to criticize the sale of subprime debt even if the seller did not disclose his knowledge about the insolvency of the debtor. Ultimately, however, Lessius recognized that it would be morally despicable to follow that market-based argument. First, selling subprime debt without telling anything would go against the principle of charity (*contra charitatem*), certainly if to do so inflicted serious harm on a weaker person.[103] Second, Lessius contended that junk bonds were intrinsically defective, just as rights to the production of fields and lands which were actually infertile ground.[104] Hence, the seller is obliged even as a matter of justice to inform the buyer about the insolvency of the debtor.

IV. Concluding Remarks

'Scholasticism' is a term seldom associated with modern, innovative, practice-oriented thinking. Yet, as Schumpeter previously noted, it is useful to remember that 'scholasticism' was simply derived from the 'scholastic method', the method employed by students and professors in the medieval and early modern universities to think systematically about all areas of life.[105] The analysis of money and credit by the Spanish scholastics was anything but arcane and dogmatic.

Both Mariana and Lessius reflected upon contemporary economic developments without eschewing audacious approaches to the problems of their time. In Mariana's treatment we witnessed the close interconnectedness of economic, legal, and political arguments. Mariana rebuked the debasement of money by King Philip III on the grounds that it violated the fundamental rights of the people. In his view, altering the currency required the approval of the citizens, just as levying taxes did. Apart from historical and economic experience, Mariana adduced arguments from canon law to oppose King Philip III's monetary debasement. Equally audacious was Lessius' defence of the logic of the flourishing debt market in Antwerp. He argued that letters obligatory and other instruments of debt could be bought at a discount since it followed from the market mechanism that present money was worth more than absent money. In other words, the usury doctrine had been rendered obsolete by practice and our Jesuit was willing to admit that. He nevertheless believed that selling junk bonds without informing the buyer about the toxic nature of the debt went against charity. The economic thought of the Spanish scholastics remained firmly embedded, then, in a moral theological context.

[103] Ibid., at 284, bk 2, ch 21, *dubitatione* 10, no. 81: 'Verum quidquid sit de ratione iustitiae, mihi videtur absolute illicitum, quia saltem est contra charitatem, maxime quando alicui tenuiori esset occasio gravis damni.'

[104] Ibid.:

> Deinde videtur esse contra iustitiam, sicut enim ius fructuum agri sterilis in se est parvi momenti, nec potest vendi eo pretio, quo ius in agro fertili, ita ius in illum, qui non est solvendo. Unde hoc vitium videtur intrinsecum rei, ac proinde manifestandum.

[105] Grabill, above n 6, at xix–xx.

15

German Law Faculties and Benches of Jurymen (*Schöffenstühle*) on Loans and Inflation

Legal Doctrine and Seventeenth-Century Legal Practice

Claudieter Schott

I. Issues and Practice

In the decades before the great '*kipper* and *wipper*' inflation of the early 1620s, there occurred a shift in the existing system of coinage of the Holy Roman Empire.[1] Although imperial coinage legislation tended to standardize the large species and maintain their stability, the minting of smaller coin species remained under the authority of the regional powers which led to a much greater variability in their form and value.[2] The scarcity of bullion coincided with an increase in demand for low denomination coins. To increase the supply, therefore, imperial estates with the right to mint and issue coins reduced the amount of precious metal in their current coins. The resulting decrease in the intrinsic value of the lower denomination coins, combined with the increase in the number of coins in circulation, led to a deterioration in the exchange rate between the higher and lower denomination coins.

Those who relied on fixed revenues, such as rents and fixed wages, were the first to feel the loss of purchasing power. Shortly thereafter, the business of credit finance, operating in large denomination coins, was also affected. Since monetary transactions were generally conducted in coins of low denomination which served as a benchmark for valuing other coins in the system, the downward shift in the value of lower denomination coins was equated with an increase in the value of coins of higher denomination. In northern Germany of the late sixteenth century, a *reichstaler* (an imperial *taler*) equalled 24 *gute groschen* (silver *groschen*); by 1610, the exchange rate was one *reichstaler* to 29 *gute groschen*. The value of the *taler* had thus risen by more than 17 per cent. After it had reached the value of 33 *groschen* in May 1619, the exchange value of the *taler* rose yet again,

[1] This chapter has been translated by Dr Carsten Fischer, Zürich.
[2] Cf. M. North, *Das Geld und seine Geschichte* (1994), at 101–2; M. North, *Kleine Geschichte des Geldes* (2009), at 100 et seq.; Chapter 16 in this volume; H. Rittmann, *Auf Heller und Pfennig* (1976), at 35 et seq.

reaching 40 *groschen* by October of the same year. The inflationary spiral was not going to end for a long time.[3]

The relation between the *taler* and the *gulden* was also prone to great fluctuation, and there could be considerable regional difference in the values of the coins, as may be illustrated by the following example. In 1349, the abbey of St Gallen had granted in fief the village of Ebringen in the Breisgau, south of Freiburg. In 1621, the abbey bought back the feudal title (the *dominium utile*) to Ebringen for 68,000 *gulden*[4] from the last fief holder, Hans-Dietrich von Hohenlandenberg. The abbey drew a considerable currency profit from this transaction. An internal report stated that:

> [A]t the time of the purchase, money in these more distant territories [i.e. in the Breisgau] traded at a very high value, and a *taler* had to be accepted by the seller for 3.5 *reichsgulden* (imperial *gulden*). Because abbot Bernhard had paid the *pretium emptionis* [purchase price] with *talers* only, these 68,000 *reichsgulden* equated to no more than about 27,400 *gulden* of St Gallen currency. Abbot Bernhard had paid this sum in gold and *talers*, which he himself had ordered to be minted and coined; on one side one could see St Gall, seated on a chair, on the other the princely coat of arms . . . Therefore, the lordship [of Ebringen] has cost no more than 20,000 *talers*.[5]

The depreciation of the currency reinvigorated the old legal discussion about 'valorism' and 'nominalism'. In the case of longer- and medium-term loans in *talers*, the pertinent question, apart from that of interest, was what *taler* value should be used when repaying the loan. It was in the creditors' best interest either that the same number of *talers* originally agreed on be repaid or that repayment be made according to their current, higher value. It was in the interest of the debtors, on the other hand, to repay the loan in the sum originally agreed on, without making any allowance for any increase in value of the *taler* coins.

In 1551 the Imperial Chamber Court, deciding a legal dispute between the Bishop of Basel and one N. von Schaunburg, opted for the valorist doctrine. Joachim Mynsinger von Frundeck (1514–88) reported on the decision in an *observatio* introduced by the following question: 'Which current market value of the coin is decisive?' ('Valor monetae a quo tempore sit inspicienda?')[6] His concise answer takes the form of the following *rationes decidendi*:

> [One] Regarding the coin's value, the time of the conclusion of the contract is decisive, not the time of payment. ('Valor monetae inspiciendus est a tempore contractus et non a tempore solutionis.')
>
> [Two] If the value of the coin has risen since the time of the conclusion of the contract, the increase can be deducted. ('Si valor monetae accreverit a tempore contractus, illud incrementum deduci potest.')
>
> [Three] But if it has fallen, then the debtor will make up the difference accordingly and pay the amount using regional coins current at the time of payment. ('Sin decrevit, tunc debitor supplebit et monetam usualem tempore solutionis reddat.')
>
> [Four] The Imperial Chamber Court has followed this wholly just and prevailing opinion. ('Haec sententia utpote aequa et communis in Camera est recepta.')

[3] W. Haupt, *Sächsische Münzkunde* (1974), at 132.

[4] See Schott, 'Lehnrecht der Abtei St Gallen', in C. Schott and E. Petrig (eds), *Festschrift für Claudio Soliva zum 65. Geburtstag* (1994) 273.

[5] Stiftsarchiv St Gallen, vol. 1911 B: Lucas Grass, description of the lordships of Ebringen and Norsingen, 1721/1724, at 52 and 157.

[6] J. Mynsinger a Frundeck, *Singularium Observationum Imperialis Camerae* (1697), Centuria IV, observatio I.

> [Five] The creditor does not have to accept money that has changed [i.e. fallen in value] against his will, unless he agreed to this at the conclusion of the contract. ('Creditor non tenetur pecuniam mutatam invitus accipere, nisi tempore contractus convenisset.') Yet, it is indisputable that the repayment can be made in a coin in use or currency at the time of payment, but according to the value which was observed at the time that the contract was concluded. ('Addendo tamen, non esse negandum, quin possit fieri solutio in moneta usuali sive currente tempore solutionis, ad valorem tamen alterius monetae, quae contractus tempore in usu erat.')
>
> [Six] And this also holds true should the original coin no longer be available. ('Quod verum est, si moneta data haberi non potest.')

The Imperial Chamber Court thus confirmed the prevailing doctrine which held that the correct analysis of a money debt was that it should be calculated in terms of the value of coins rather than in terms of an abstract sum. The Court accepted as given that individual agreements could define the obligation differently. This explains the reference in the fifth *ratio* of the opinion to agreements varying the default rule. The reference is best understood as recognizing that the agreement would be binding whether the value of the coins increased or decreased. By such an agreement, a nominalist analysis of the money debt remained possible. The detailed treatment given to the question in the literature emphasized this possibility.

II. Friedrich Martini

Debtors and creditors alike tried to promote their interests with the help of legal opinions. Law faculties and juries (*Schöffenstühle*, lit. 'benches of jurymen') were the preferred authorities to appeal to when seeking such help. Seen from the perspective of legal practice, the authority of these colleges did not rest only on their advisory practice.[7] Imperial and territorial legislation also granted them the competence to reach binding decisions on behalf of courts, a process called *Aktenversendung* (the sending of the file), and which resembled the *ius respondendi*.

The following sections discuss two requests for opinions addressed to the law faculty of Freiburg im Breisgau, in the Austrian forelands. The first was a twofold request from the city of Magdeburg (1612), and the other is a single request from a syndicate from Wismar (1619).[8] The request from Magdeburg takes the debtor's position; the request from Wismar, the creditor's.

Before considering these requests, however, the present section examines why petitioners hailing from Germany's protestant north looked for legal answers in Freiburg, which alongside Ingolstadt was a stronghold of the counter-reformation. Presumably, the petitioners could have sought advice closer to home. The reason was the canonist Friedrich Martini (d. 1630) whose expertise gave the college of Freiburg an excellent reputation even beyond the borders of the Breisgau.[9] The specific reason for the two northern German requests would certainly have been that Martini was the author of important works on the law of payment and coins. In 1604 he published the seminal, comprehensive treatise *De iure censuum*.[10] In the same year, the equally relevant dissertation *De monetis* appeared in print, which had at least been instigated, if not entirely written by him.

[7] See in detail U. Falk, *Consilia: Studien zur Praxis der Rechtsgutachten in der frühen Neuzeit* (2006).

[8] C. Schott, *Rat und Spruch der Juristenfakultät Freiburg im Breisgau* (1965), at 228, para. 150; 232, para. 171.

[9] R. Stintzing, *Geschichte der deutschen Rechtswissenschaft* (1880), 672; H. Ruth, *Das Personen- und Ämtergefüge der Universität Freiburg (1520–1620)* (2001), II Biogramme, at 63, available at https://www.freidok.uni-freiburg.de/fedora/objects/freidok:299/datastreams/FILE1/content.

[10] See F. Martini, *De iure censuum …* (1st edn, 1604). In 1660, another edition was published in Cologne by Jodocus Kalcovius under the title *Commentarius de iure censuum …*. All quotes are taken from the first edition.

In *De iure censuum* (1604), Martini treats the question of fluctuating coin values from the traditional angle of the just price. Although the fifth chapter bears the title *De iusto anni reditus precio* ('The fair price of return'), and thus reflects the main topic of his treatise, it also deals with the payment and repayment of debts. As examples, he mentions obligations 'ex mutuo, venditione, legato, donatione, dote' ('arising from a loan for consumption, or from sale, legacy, donation or dowry').[11] At the beginning of the chapter, he criticizes previous academic writings which had only discussed whether a fluctuation in value benefits or damages the debtor or the creditor. Instead, he asks the question in objective terms. After a fluctuation in the value in money, is it the time of the conclusion of the contract or the time of payment that is determinative in cases of payment of interest, repayment of money lent, or the repurchase of a rent?[12]

Martini's answer ('conclusio') relates to the discharge of credit agreements. He determined that if the obligation is based on a specific type of coin, and the weight and measure of this type of coin remain unchanged, and if the extrinsic value of this type of coin ('valor istius speciei extrinsecus') subsequently rises or falls, then payment has to be made based on the value of the coin ('secundum valorem') at the time of the conclusion of the contract ('tempore contractus'). The debtor therefore receives the benefit or bears the loss resulting from this change.[13] Martini's conclusion is based on several grounds. First, he raises the argument from authority,[14] and cites Antonius de Butrio, Franciscus Curtius, Marianus Socinus, Philippus Decius, Charles Dumoulin, Diego Covarrubias, and Ludovicus Molinaeus, as well as Joachim Mynsinger von Frundeck and his reports of decisions of the Imperial Chamber Court. In *De monetis* (1604), this conclusion is characterized as the prevailing scholarly opinion ('haec opinio a doctoribus communiter recepta est').[15] Second, in contracts involving money, Martini argues, the price has to be certain. But it is only the present value ('valor') which is certain; the future value is uncertain. Therefore the parties aim only at the present certain value, not at a future uncertain one. Third, the properties and essence of coins consist in their estimation and value ('substantia et essentia monetae in aestimatione et valore consistit'). Hence, it should be assumed that the parties based their agreement on the value and substance that the money had at the time of the conclusion of the contract. Fourth, the parties do not give any thought to any future change in value. Moreover, they need not, or could not, do so, since such changes depend on chance. Parties therefore agree on the certain value of the money at the time of the conclusion of the contract, rather than on the value at the time of payment. This reasoning also conforms to the Imperial coinage laws (*Reichsmünzordungen*) of 1551 and 1559, as well as to the reform of Emperor Frederick III of 1442. Finally, Martini's conclusion corresponds to legal practice ('probatur ex praxi et observantia consuetudineque'), which in the case of an increase in value usually grants the debtor a reduction in payment, and in the case of a decrease in value, obliges him to pay an additional sum. Again Martini refers to the case law of the Imperial Chamber Court reported by Mynsinger.

Martini did allow some exceptions to his conclusion. If the parties had from the beginning, out of concern about a possible change in the coin's value ('ob metum forsitan mutationis monetarum'), agreed on a specific intrinsic or extrinsic value of the coin, then according to the prevailing opinion cited by Martini, the sum to be repaid would be

[11] *De iure censuum*, above n 10, at 198, margin no. 65.
[12] Ibid., at 194.
[13] Ibid., at 199, margin no. 66.
[14] The following statements are found in ibid., at 199 et seq., margin nos. 66 et seq.
[15] F. Martini and C. a Brandis, *De monetis et re numaria theses iuridicae* (1604), Thesis 55.

unaffected by the change. If, for example, the agreed type of coin rose in value, the debtor would not be granted any deduction in payment.[16]

There were, of course, arguments as to when this exception applied. The legal solution depended on the wording or interpretation of the contract in question. When there was an increase in the value of the *taler*, debtors would opt for the valorist approach, whereas creditors had an interest in the contract being interpreted in nominalist terms. Where considerable sums were involved, it could be worthwhile for either party to obtain a costly legal opinion from a law faculty or a legal instruction by a jury.

III. The Requests from Magdeburg and the *Schöffensprüche* from Halle and Jena

In two letters, both dated 28 October 1612, the mayor, the members of the city council, and the guildmasters of Magdeburg approached the law faculty of Freiburg im Breisgau. They requested separate legal opinions regarding two different borrower bonds, which had caused 'all kinds of inconveniences' between the city and its creditors.[17] In 1589, Magdeburg had received a loan of 1,000 *talers*, which had been renewed ('de novo') in 1599. At the time of the extension of the loan, a *taler* had still been worth 24 *groschen*, whereas in 1612 it was valued at 29. As the bond 'did not make mention of the words "coin for coin", much less ha[d] some *species* been stipulated', the city took the position that payment had to be made according to the value at the time of the conclusion of the contract, 'as no one shall covet another's damage nor shall he enrich himself by it'.

The second case differed in the amount of the bond, as well as in the time of borrowing. In 1603, the city had borrowed 4,000 *talers*, 3,000 of which were imperial *talers*, and the remaining 1,000 Spanish *talers*. Between the time of the loan and the time of the repayment, the value of imperial *talers* rose from 24 to 29 silver *groschen*; and the Spanish *talers* to 32 silver *groschen*. Again, the question arose whether the repayment due should be calculated using the value at the time of the conclusion of the contract or the value current at the time of repayment.

> Therefore we [the city] consider it quite inequitable that, as we only had and still have the benefit of 24 silver *groschen* to the *taler* according to the *valor tempore numerationis* ('the value at the time of the counting out') of the *taler*, we shall now be obliged to repay 29 and 32 silver *groschen* respectively, which is the value that the *taler* has risen to.

Whether the answer went in favour of the debtor or the creditor depended on the wording of the bond. A copy of the bond, which was attached to the request and anonymized by the petitioners, is reproduced below. Incidentally, the document highlights other legal aspects as well. First, the parties refrained from using the precarious *mutuum* form of loan; instead, they employed the traditional *Rentenkauf*, a contract by which the buyer purchased the right to an annual rent from the seller.[18] Furthermore, the interest rate of 5 per cent was within the limits drawn by imperial usury laws.[19] The bond stated as follows:

[16] *De iure censuum*, above n 10, at 204, margin no. 76; *De monetis*, above n 15, Thesis 64.

[17] University archive of Freiburg, Bestand B 36/597 (nos 165–66 according to Maldoner's old reference codes).

[18] Cf. W. Trusen, 'Rentenkauf', in *Handwörterbuch zur Deutschen Rechtsgeschichte* (1990), vol. 4, 898 (hereafter *HRG*).

[19] See H.-W. Strätz, 'Wucher', in *HRG*, above n 18, vol. 5, at 1538–9; H.-J. Becker, 'Zinsverbot', in *HRG*, above n 18, vol. 5, 1719–22.

> We, the mayor and the council of the city of NN, with this public letter, acknowledge and announce to us, our successors and all others seeing, hearing or reading it, that all of us, harmoniously and after we had held counsel, have sold and assigned all our city's income, interest, rents, public dues and taxes which we now hold and which we may gain in the future, excluding nothing, in a lawful, enduring sale by virtue of this letter in the best manner and form as shall be most effective in law:
>
> To NN. and to his heirs or to the bearer of this letter shall be paid yearly on Judica Sunday 200 lawful *talers* (150 imperial *talers* and 50 Spanish *talers*) as a re-purchasable rent, beginning in 1604, until the re-purchase shall be concluded, and in particular it shall be paid here in the town hall, unimpeded by courts or by anybody else.
>
> This for the principal sum of 4,000 *talers*, of which 3,000 are whole, lawful *talers* of full weight, in unprohibited and flawless *talers* conforming to the imperial coinage law and of the electorial Saxonian coinage, weight and fineness, together with 1,000 whole, unclipped Spanish *talers*, as we have received them in one sum from NN. in cash, to the benefit of our city, and of which we hereby acknowledge receipt.
>
> Both parties have agreed and reserve the right that each may terminate the principal sum at their discretion and pleasure, by giving notice half a year before Michaelmas.
>
> If one party does this in good time, then on the following Judica Sunday we or our successors shall repay the 4,000 *talers* principal sum at our town hall in whole, lawful *talers* according to the Holy Roman Empire's coinage, weight and fineness, as well as in complete, unclipped, full-weight *talers*, as we have received them, including interest—hopefully not overdue—in one sum, unimpeded and without impediment by courts or by anyone else.
>
> As an authentication we have sealed this bond with the great seal of our city, which has been conducted in the 1603rd year, Tuesday following *Esto mihi*, on the 8th day of the month of May.[20]

It seems that Magdeburg had approached several other law faculties as well, expecting that their legal opinions would confer authority on the city's position. The files sent to Freiburg were accompanied by two legal instructions (*Schöffensprüche)* obtained beforehand from the juries of Halle an der Saale[21] and Jena.[22] Both were distinguished adjudicatory bodies whose services were in demand. Judging from the form of address, the city seems to have procured this information using intermediaries.

Both the legal memoranda relate to the loan to the city of 1589–99. The *Schöffenspruch* from Halle stated:

> Our cordial greetings afore. Honourable, well-respected, well-disposed, good friend, As you have sent us copies of a bond along with a question and as you have further asked to be advised about the law in this matter, we the *Schöppen* of the princely city of Magdeburg at Halle declare as law: Although the bond is aimed at a principal sum of one thousand good, whole, lawful *talers*, yet because the *talers* have risen markedly since then, your representatives are obliged to pay whole imperial *talers*. The creditor, however, is also bound to accept the same at their current value. By right. By written instrument, sealed with our seal. The *Schöppen* of the princely city of Magdeburg at Halle.[23]

[20] University archive of Freiburg, Bestand B 36/597 (no. 165, according to Maldoner's old reference codes).

[21] Cf. H. Lück, Berg und Tal—Gericht und Recht in Halle während des Mittelalters und in der Frühen Neuzeit', in W. Freitag and A. Ranft (eds), *Geschichte der Stadt Halle* (2006), vol. 1, 239.

[22] Cf. A. Kriebisch, *Die Spruchkörper Juristenfakultät und Schöppenstuhl zu Jena: Strukturen, Tätigkeit, Bedeutung und eine Analyse ausgewählter Spruchakten* (2008).

[23] University archive of Freiburg, Bestand B 36/597 (no. 166 according to Maldoner's old reference codes). The *Spruchbrief* is addressed to Franciscus Floren, town clerk at Nienburg.

The jury (*Schöffenstuhl*) of Jena was identical to the adjudicating body of Jena's law faculty. This is important since the legal opinion had been given without any reasoning but on the basis of scholarly authority, as was customary. The jurymen of Jena commented on the case as follows:

> Our cordial greetings afore. Dear learned, particularly good friend, With regard to the questions you have sent us, about which you have asked to be advised regarding the law, we declare as law: Even though your masters and representatives have Anno 86 received 1,000 whole *talers* against interest and have renewed the loan *de novo* anno 99, but because afterwards the *Valor Extrinsecus* has risen, and according to the copy of the bond it had made no mention at all of the words 'coin for coin' or other *aequipollentis clausulae*, much less has it promised to repay *talers in specie*, your Messrs creditors, as they required imperial *talers*, are obliged to accept either the same as they are now valid and have increased in value, or for each imperial *taler* 24 silver *groschen*, as they have been valid at the time of paying out the whole *talers*. By right. By written instrument, sealed with our seal. Ordained Dean and other *Doctores* of the *Schöppenstuhl* at Jena.[24]

Both adjudicating bodies strongly argued for valorism, which was in full accord with the prevailing scholarly opinion at the time as well as corresponded to Martini's view.

The legal opinions from Freiburg for Magdeburg have not been preserved. The official copies, along with the city's archive, probably perished in the great fire of Magdeburg when the city was sacked by Tilly in 1631. There are no drafts preserved in Freiburg's university archive. The reason may be that they were not filed (which would be in line with the general practice), or because they were lost during the course of the university's history. But a probable outcome can still be deduced. The point of view of Friedrich Martini, the most influential faculty member, is well known. Moreover, in a parallel contemporary case submitted by unnamed petitioners, the faculty based its opinion on a wealth of references and stated unequivocally that '[i]t is the common opinion of legal scholars that, when the *valor intrinsecus monetae* has mutated and changed, the payment shall be made according to the *valore intrinseco* which the coin had *tempore contractus*.'[25] The following section, too, regarding the request of a consortium from Wismar, aptly illustrates the clear position taken by the college. Finally, it is worth observing that the *consilia* for Magdeburg were legal opinions given for one party in the case, and that it must have been easy for the college to confirm that the prevailing view also applied to the creditor.

IV. The Request from Wismar

In a letter dated 27 February 1619, Heinrich Mareschall and 'consortes' from Wismar asked the law faculty of Freiburg for an opinion and 'legal decision'. With their letter, they sent six copies of bonds, as well as an anonymized legal opinion that they had obtained beforehand.[26] The petitioners seem to have been a community of heirs, possibly to a wealthy family business. According to the statement of facts, the deceased brother-in-law of Heinrich Mareschall, 'a wealthy man', had successively granted several loans, paid in imperial *talers*, to an unnamed 'noble city', represented by its mayor and the city council.

[24] University archive of Freiburg, Bestand B 36/597 (no. 166 according to Maldoner's old reference codes).
[25] University archive of Freiburg Bestand B 36/597; Schott, above n 8, at 224, para. 130. This is an incomplete draft of an expert opinion supplementing another expert opinion dealing with 16 questions regarding money law. The latter text is not extant.
[26] University archive of Freiburg, Bestand B 36/597 (no. 188 according to Maldoner's old reference codes); Schott, above n 8, at 232, para. 171.

As the *talers* had risen in value in the meantime, the borrower wanted to clear its debt according to the value at the time of the conclusion of the contract, whereas the creditors took the view that repayment had to be made either using the same amount of *talers* or at the *taler*'s current value. The petition itself already contained a 23-page legal opinion composed by the senders. In it, they described the city's arguments as a 'pretext', which they set out to refute. Although convinced of their case, they wanted to obtain the legal opinions of famous law faculties, 'among which your honoured selves are *primo ordine* highly respected and held in high esteem'. The question therefore was whether they could demand repayment coin for coin or merely 'valore contractus', and how the chances of a potential 'condictio indebiti' regarding the overpaid interest were to be assessed.

The petitioners' certainty of their position was not shared by the Freiburg counsel. At the outset, the decision states that the jurymen 'had not found the consideration of the main point easy, but rather quite complex'. The counsel notably omitted 'rationes dubitandi' which were part of the customary structure of legal opinions. Instead, it first contrasted the two positions and their arguments, then immediately proceeded to deliberation.

The initial position was given from the debtor's perspective:

> Mayor and city council of the city of N hold that, according to the written law as well as *secundum modernorum interpretum opinionem* ('according to the opinion of the modern commentators'), they are indeed obliged to pay imperial *talers* in specie, but that they are entitled to deduct and retain *a numero* and a quantity thereof equalling the increase of the *Valor Talerorum* since the time of the contract.

A detailed justification of this position was then given in ten arguments. First, concerning the money lent, generally the '*valor* and value (i.e. the *bonitas extrinseca* and not the *Corpus* or the *bonitas intrinseca*, weight and fineness)' had to be taken into account. This meant that the creditor had to be repaid the same value that he had advanced on loan to the debtor. Second, this legal assessment was based on a fragment of *Ulpian*, taken from the *Digest* title *De auro argento* (D. 34.2.19 pr.). Third, in the case at hand, the bonds only mentioned *talers*. Nowhere was it stated expressly that *imperial talers* had been lent and had to be repaid 'coin for coin or *in specie*'. Fourth, contractual obligations were governed by the implicit understanding *conditio rebus sic stantibus* ('subject to the circumstances as they stood at the time'), because, at the time the parties concluded the contract, they could not have foreseen a disproportionate increase in value. Instead, they had in mind the value at the time of the conclusion of the contract and thought 'that the *Exsolutio* had to be and should be oriented towards the value of one *taler tempore contractus*'. This could also 'be illustrated with many *Brocardicis* and *Generalibus Regulis*' ('brocards and general statements of principle'). Fifth, it would be a 'great inequity' if, at the moment of repayment coin for coin, the creditors could claim not only the increase in value on the principal sum but also an annual interest. Sixth, 'per dationem mutui' ('by delivery on a loan for use') the *talers* become the borrower's property. Consequently, the debtor, not the creditor, was entitled to their fruits. Seventh, the view taken here conforms to the 'communis interpretum opinio', as held by the Imperial Chamber Court, reported in Mynsinger's *Observationes* IV, 1, and is supported by the *Schöffenstühle* of Leipzig, Jena, and Halle, as well as the law faculty of Helmstedt: 'Constat autem receptas huiusmodi sententias pro veritate haberi' ('But as is well known, such well-established opinions are to be taken as the truth'). Eighth, the rule of 'Salus et bonum publicum veluti lex suprema' ('the public weal be, so to speak, the supreme rule') also required such an outcome. A similar view had also been adopted by the constitutions of the electors of Saxony, Brandenburg, Mainz, Cologne, and Trier, all of which followed the prevailing opinion. Ninth, the conclusion was further supported by the last act of the Circle Diet of 1610, which controlled the issue of *talers* in the imperial circle of Lower Saxony. Finally, it must be remembered that, even if the predecessors of the mayor and the city council understood the contract differently, they could not bind the city, as the city would thereby be 'damaged *enormiter*' ('enormously') and would thus have been entitled to the 'beneficium restitutionis in integrum' ('to be restored to their original position').

Against this reasoning, the counsel recorded the creditors' argument that the subject of the loan was a 'corpus certum et certa species' ('a particular form and species of coin'), namely *taler* coins 'without any assessment and estimation' being ascribed to them. In the case at hand, the bonds had 'verbis praegnantibus et significantibus' ('in words full of significance') stipulated 'whole unprohibited [i.e. lawful], undamaged, hard *talers vel* imperial *talers*'. The subject of the loan was therefore to be repaid coin for coin or *in specie*. Therefore, the '*valor intrinsecus*' was decisive. Also, it was undisputed that the borrower had received the *talers* coin for coin. The argument continued that this interpretation requiring the loan to be repaid coin for coin was further supported by the fact that the debtor had wanted to treat the imperial *talers* as *gulden*, but that the creditors had 'found that precarious to concede'. It followed that the parties' intention had been 'that *talers* be tendered and paid *in specie* and coin for coin'. Moreover, prior to 1616, the debtor had been paying interest in hard imperial *talers*, without any objection or deduction.

The creditors considered that the renunciation clause included in the contracts was the strongest argument in their favour. The original creditor, being 'a prudent man', foresaw the debasement of small denomination coins and the accompanying increase in value of the *talers*. Therefore, he had insisted on the inclusion of a clause which provided that 'possible future events or changes, however they may eventuate, will not cause the creditor to have anything deducted, reduced, or withheld from him, and no constitutions, privileges or other remedies may be used to this end'. Generally, the creditors' point of view rested on presumed 'aequitas' and it is remarkable that in the area of the contract's conclusion 'undoubtedly it is held that the *Debitores* stipulating hard imperial *talers*' are adjudged to pay coin for coin. Finally, the creditors pointed to the fact that 'omnes saniores interpretes unanimiter' ('all the more sound commentators unanimously') are of the opinion that the creditors were entitled to the 'augmentum in valore extrinsico' ('increase in extrinsic value').

The Wismar case is of special importance because of the complexity of problems and their legal resolution, and because it cited relevant sources. For the petitioners, the legal opinion from Freiburg on the case turned out to be quite sobering, as it found against the petitioners on all points. It is unknown who among the faculty members wrote the first draft, but it is certain that the second was revised and corrected in Friedrich Martini's hand.

The counsel's detailed legal discussion began with the appeasing remark that having heard the arguments brought forward 'quite a few [of the jurymen] contend[ed] and argue[d] *pro debitoribus*, [and] quite a few *pro creditoribus*'. Ultimately, however, there was no doubt that the creditors' case was unsustainable. The legal opinion supported the debtor's valorist case almost in its entirety, and it dismissed the creditors' submissions with the remark:

> The arguments and remedies brought forward *pro contraria opinione* are of no import or concern. [Even if the bond speaks of whole, unprohibited, undamaged, hard, lawful *talers* or imperial *talers*, respectively,] then this does not necessarily indicate that it was the parties' will and opinion that the same number of *talers* should be tendered as had originally been lent, and that they should be repaid coin for coin and *in specie*. If fewer *talers* were given, it would be enough that they were still the same whole, unprohibited, undamaged, hard, lawful *talers* [as

> mentioned in the contract]. For if the parties were concerned that the *Valor* of the coin could change, the standard practice would have been to use a *Cautela* ('guarantee') requiring that repayment be made using the same number of pieces and that each coin should not be rated higher than its value *tempore contractus*.

The effect of the Freiburg legal opinion was that an obligation could be construed in the creditor's favour as a specific debt only if the express wording 'coin for coin' or '*in specie*' were used. In any other case, the standard for payment in a pecuniary obligation would be calculated by reference to the value of the coin, which would have the effect of favouring the debtor. The frame of interpretation was thus kept very narrow. For the case at hand this meant that all of the lenders' further arguments were unsustainable. For instance, it was considered irrelevant that the debtor had previously paid interest without any deduction. The true position was that it had not been obliged to do so and could have changed its practice anytime. The opinion also said that the renunciation clause was to be read narrowly. The debtor would have been correct in arguing that the terms of the clause should be understood to mean 'changes that may eventuate and take place in the city, other than a *variatio valoris monetae*'. A change in the value of the money would therefore have been outside its scope. Moreover, the creditors' reference to equity was of little value, since the debtor could make a similar argument based on 'equity and equitability'. Finally, although the opinion noted the dissenting views in the scholarly writings and judicial decisions, it said that it was the prevailing general opinion, and the case law of the Imperial Chamber Court, that were decisive in the case at hand.

Aside from these monetary issues, the law faculty's legal opinion pointed to another weakness in the creditors' argument. There was a risk that the defendant's advocates would characterize the contract 'as a pure and straight *mutuum*' and that it would therefore show features of a 'usurarium', in contravention of the ban on usury. The contract's wording gave every reason to suspect this, which would leave the creditors facing grave disadvantages, especially in their claim to interest. The flaw would be remedied by re-characterizing the loan agreement as the purchase of a rent, which would not fall under the ban on interest. But that admittedly meant that the parties would have had to agree on an out-of-court settlement, a step which they were urgently advised to take in the case. The counsel closed with the following recommendation:

> Thus it will be advisable, even necessary, to reflect on ways and means whereby this dispute may be concluded and settled amicably *extra Judicium*, and in our view there are two ways to that result. The first is that the imperial *talers* should be treated as *floren* [*gulden*] and that one imperial *taler* be valued and rated at 21 or 22 *batzen*. The second is that another bond should be drawn up and that the *titulus mutui* be re-characterized as an *emptionem census*. For in either of these two ways the Messrs *Creditores* will suffer a smaller loss and less damage than if the case were decided in court, where the *exceptio mutui* would be opposed, and the *compensatio pensionis in sortem* would be demanded.

V. Summary

The complex of problems outlined above can be summarized as follows. The legal literature, the case law of the highest courts, and the decisions and legal opinions of juries and law faculties, all regarded a debt under a loan as a pecuniary obligation calculated by reference to the value of a given coin. It followed that changes due to inflation favoured the debtor, since on repayment he received the benefit of any reduction in the real value of the debt arising from inflation. An obligation would only be interpreted as creating a specific debt or a debt for nominal value if the contract explicitly provided for a repayment 'coin for coin' or '*in specie*', respectively. Obligations of this sort tended to favour creditors. The argument made by creditors that their contracts implicitly provided for such repayment coin for coin or *in specie* were not generally interpreted in that way by legal scholars. The law faculties' legal opinions and the *Schöffensprüche* discussed here were typical of the prevailing view in legal theory and practice of the early modern period.

It seems that village courts, however, did not always decide cases along the same lines. This is illustrated by a decision from the aforementioned lordship of Ebringen in the Breisgau. On 6 February 1624, the village court, which was staffed by laymen from the surrounding rural areas, decided a local case in point as follows:

> Between plaintiff S.S. and defendant M.B. regarding 60 *gulden* principal sum, which the defendant refused to accept at high currency, and after statement of claim and plea as well as further submissions, it is held that: the plaintiff will tender and pay the defendant the 60 *gulden* sued for and now determined according to the current value, as laid down in properly drawn up and sealed deed.[27]

[27] Generallandesarchiv Karlsruhe, record of court proceeding concerning Ebringen, Sign. 61 no. 5600, 3r.

16

Monetary and Currency Problems in the Light of Early Modern Litigation

Anja Amend-Traut

I. Introduction

The vital importance of money, and therefore also of coins, for the commonweal in the sixteenth and especially seventeenth centuries was for Christian Warner Friedtlieb, as for many other authors, the central theme in his comparisons with living organisms. Friedtlieb compared trade, merchants, and crafts ('Commerzia, Kauffmannschafften und Handtierunge [n]') to the veins of a community and coins to its blood.[1] This analogy reflects the transition from the medieval subsistence economy to the early modern monetary economy, which by then had definitely been completed.[2] It is not surprising that typical manifestations of this early modern monetary economy, and monetary policy issues, became the subject of court disputes and were eventually brought before one of the two highest courts of the Holy Roman Empire. Several legal cases tried before the Imperial Chamber Court shall highlight the characteristics of these subject matters and for the first time illustrate how they were brought before the highest court and evaluated there.

The research presented in this chapter relies mainly on source material from records of the judicial district of the city of Frankfurt. In order to study the relationships between

[1] C. W. Friedtlieb, *Prudentia politica Christiana, Das ist: Beschreibung einer Christlichen/Nützlichen und guten Policey/wie dieselbe beschaffen sein solle/auch mit Gottes hülffe in gutem Zustandt erhalten werden könne. Durch Vergleichung deren mit dem Menschlichen Cörper und dessen vornehmsten Gliedmassen und Eigenschafften* (1614), at 4.

[2] On the meaning of money in the Middle Ages, considered as a pre-capitalist period, see J. Le Goff, *Geld im Mittelalter* (2011). Subsequent theoretical observations on monetary economy were made by the theologian Friedrich D. E. Schleiermacher, who envisioned a system of ethics in which money, as an absolute value, would be accepted by everybody and therefore required no special basis of trust. Therefore, somebody accepting money as payment could generally trust that he would obtain adequate consideration. This applied only to coins, because paper money was seen only as a monetary surrogate for which 'acceptance was not at all compulsory'. See F. D. E. Schleiermacher, *Ethik (1812–13): Mit späteren Fassungen der Einleitung, Güterlehre und Pflichtenlehre* (1981; 2nd edn, 1990), at 284 et seq. ('Doctrine of Goods'). In the early twentieth century, Georg Simmel observed that modern culture was a 'monetary culture'. See Georg Simmel, Complete Edition, vol 6: Philosophie des Geldes (1989). See also W. Geßner and R. Kramme (eds), *Aspekte der Geldkultur: Neue Beiträge zu Georg Simmels 'Philosophie des Geldes'* (2002) and O. Rammstedt, *Georg Simmels 'Philosophie des Geldes'* (2003). On connections between Schleiermarcher and Simmel, see S. Meder, 'Übertragung durch Geld im Zeitalter elektronischer Medien. Zu Aktualität und Rezeption von Friedrich D. E. Schleiermachers "Philosophie des Geldes"', in S. Sanio and C. Scheib (eds), *Übertragung—Transfer—Metapher: Kulturtechniken, ihre Visionen und Obsessionen* (2004) 129, esp. at 129 et seq., 143 et seq.

economic activities and legal practice, the primary focus of research was thus on a busy trading hub like Frankfurt, which was strongly affected by economic difficulties – just as other imperial cities, but unlike several territories, such as the Duchy of Bavaria. It therefore comes as no surprise that most of the proceedings before the Imperial Chamber Court that dealt with the consequences of the great inflation in the years 1620–23 originated from the four imperial cities of Frankfurt, Hamburg, Cologne, and Lübeck.[3] Of these, the Frankfurt archive has by far the largest collection of relevant case files, and is likely to offer the most meaningful results. In total, the records indicate twelve[4] court actions challenging the consequences of the debasement of the coinage.[5] Among other aspects, these show the difficulties arising for merchants and private persons from currency differences between different locations and the partially significant temporal currency fluctuations.[6] Until well into the nineteenth century the conversion of coins into the common local or national currency was part of the standard know-how of the merchants in particular, but also of the general population, due to the heterogeneous circulation of money. Only precise knowledge of the current conversion rate, the support of legislation against bad money, and coin scales for daily use, offered some protection against being outbid. The complexity of currency conversions is proven by the large number of contemporary instruction manuals that were useful tools, especially for merchants, over hundreds of years.[7]

[3] This statement is based on a survey of 96% of the archival records of the Imperial Chamber Court's proceedings kept in German archives, classified into 39 repositories in accordance with the guidelines of the German Research Foundation and compiled in the so-called 'Datenbank Höchstgerichte', the supreme courts' database, as part of a research project launched by Bernd Schildt, Bochum, and led by Anja Amend-Traut, Würzburg. See 'Forschungsprojekt Datenbank Höchstgerichte', available at http://www.hoechstgerichtsbarkeit.eu.

[4] Institute for the History of the City ('Institut für Stadtgeschichte'), Frankfurt am Main, Reichskammergericht (ISG Ffm RKG), 65 (see BundA Berlin ['Bundesarchiv Berlin'] AR-1-I 1763 UBuchNr 73, fo. 247, 273; AR-1-I 1764 UBuchNr 74, fo. 138, 245); 66 (see BundA AR-1-I 1763 UBuchNr 73, fo. 273; AR-1-I 1764 UBuchNr 74, fo. 138, 245^{v}); 387, 513, 823, 839 (see BundA AR-1-I 1695 UBuchNr 10, fo. 50^{r}); 884 (in *Kauf v. Greff* the parties were in dispute over compensation for the loss suffered by the claimant due to a loan of 1,200 florins granted to him in bad coins) 920, 1235, 1460, 1547 (dispute concerning coin exchange between a Frankfurt citizen, Wackerwald, and a Frankfurt Protected Jew ['Schutzjude'], Mosche zum Kessel), 1556 (*Waldner v. von Bodeck*, where upon the sale of a house located in Strasbourg, the 'value of [certain types of] coins' was at issue, leading to a dispute over the exchange rates current in Frankfurt and Strasbourg in 1598 and 1621). In contrast, there are only two proceedings recorded in the inventory of the Cologne archive (see City Archive of Cologne, 915 and 1525).

[5] Six of the proceedings, however, do not belong to the period of the 'great inflation' discussed in this chapter: ISG, Frankfurt am Main, RKG, 65 and 66 contain appellate proceedings brought against the Frankfurt trader Isaac de Bassompierre in 1763 because he had allegedly made payments in 'disreputable coins'. In summary proceedings bearing the date 1758, ISG Ffm RKG 823, the release was contested of a Jew who was suspected of sustaining a trade with inferior coins issued by the county of Neuwied, which previously had been banned and were to be melted down by imperial order. In 1694, Meyer zur weißen Rose took action against his prosecution for alleged counterfeiting of coins, ISG Ffm RKG 839. Similarly, the banker Johann Martin de Rhon, the largest taxpayer in Frankfurt in 1690, 1704, and 1710 (see A. Dietz, *Frankfurter Handelsgeschichte* (1910), 4 parts, IV/1, at 188), was involved in criminal proceedings for circulating inferior florins, ISG Ffm RKG 1235. In the *Wackernagel* case, differences in coin exchange were under dispute as early as 1544, see ISG Ffm RKG 1547.

[6] For information on Frankfurt exchange rates, see, e.g., K. Schneider, 'Geldgeschichtliche Aspekte in den Diurnalen des Frankfurter Rechneiamtes 1544–1630', (1996) 30(1) *Scripta Mercaturae* 1, at 21–7.

[7] See, e.g., T. Flügel, *Der Haupt-Schlüssel zum Wechselrechnen. Oder: Derer vornehmsten Handels-Plätze in Europa Erklärete Cours-Zettel, Samt darzugehörigem Bericht, von der Eintheilung derer dabey vorkommenden Geld-Sorte* (1752); J. C. Hirsch, *Des Teutschen Reichs Münz-Archiv, Bestehend in einer Sammlung Kayserl. und Reichs-Münz-Gesetze/Ordnungen, Privilegien über das Münz-Recht, Kayserl. Rescripten, Reichs-Gutachten, Commissions-Decreten, Münz- Probations- Reichs- und Crayß-Tags-Abschiede, auch einzeler Chur- und Fürsten unter sich, und mit denen vornehmsten Reichs-Städten errichteter Münz-Vereinigungen, Edicten, Valvationstabellen sc.,* . . . , 8 parts (1756–68), esp. Part VI (1760); J. C. Nelckenbrecher, *Taschenbuch der Münz- Maaß- und Gewichtskunde für Kaufleute* (10th edn, 1809).

II. Tippers and See-Sawers ('Kipper and Wipper')

At the beginning of the Thirty Years' War, large parts of the Holy Roman Empire were affected by a severe inflation originating from the Imperial Coin Edict of 1559 and leading to a debasement of money that had started at the beginning of the seventeenth century and reached its peak between 1620 and 1623. The social and economic effects of the inflation were enormous. While the extreme price hikes threatened the existence of large parts of the population, a few profiteers used the situation to their benefit. These profiteers were involved in the speculative trading of coins, and were known by the rhyming binomial *kipper* and *wipper* ('tippers and see-sawers'). The name derived from the 'tipping' of scales and the 'see-sawing' effect of heavier coins. Once their weight was established, these better coins were taken out of circulation.[8]

The so-called tipper and see-sawer inflation has been researched at length, especially with regard to its economic, socio-historic,[9] and numismatic[10] aspects, but also as a public communication phenomenon—debased coinage was frequently the topic of early modern pamphlets.[11] Contemporaries, albeit just a few, also dealt with the subject in legal essays,[12]

[8] From Low German 'kippen', probably referring to 'Kippe', scales for gold, later aligned with the dialectal term 'kippen', cutting off the tip, and 'wippen' (derived from the scale beam moving up and down), actually someone who cuts something off from the coins and then throws it into the scales. For more details on the history of the terms 'kippen', 'Kipper', see Deutsches Rechtswörterbuch VII, cols 827f and 'Kipper', in J. Grimm and W. Grimm, *Deutsches Wörterbuch*, Pt 5 (1873), cols 786–8.

[9] Each with further literature references, R. Wuttke, 'Zur Kipper- und Wipperzeit in Kursachsen', (1894) 15 *Neues Archiv für Sächsische Geschichte und Altertumskunde* 119; A. Ernstberger, *Hans de Witte: Finanzmann Wallensteins* (1954), esp. at 86–108; F. Redlich, *Die deutsche Inflation des frühen 17. Jahrhunderts in der zeitgenössischen Literatur: Die Kipper und Wipper* (1972); H. C. Altmann, *Die Kipper- und Wipperinflation in Bayern (1620–23): Ein Beitrag zur Strukturanalyse des frühabsolutistischen Staates* (1976); K. Schneider, *Frankfurt und die Kipper- und Wipperinflation der Jahre 1619–1623* (1990); C. P. Kindleberger, 'The Economic Crisis of 1619 to 1623', (1991) 51 *Journal of Economic History* 149; P. W. Roth, 'Die Kipper- und Wipper-Zeit in den Habsburgischen Ländern, 1620 bis 1623', in E. Schremmer (ed.), *Geld und Währung vom 16. Jahrhundert bis zur Gegenwart* (1993) 85; M. North, *Das Geld und seine Geschichte: Vom Mittelalter bis zur Gegenwart* (1994), at 101–7; P. Trawnicek, *Münzjuden unter Ferdinand II. nach den Akten des Hofkammerarchivs in Wien* (2010); R. Walter, 'Kipper, Wipper und Inflation: Der Dreißigjährige Krieg in wirtschafts- und sozialhistorischer Perspektive', in U. Cantner et al (eds), *Dimensionen öffentlichen Wirtschaftens: Festschrift für Rupert Windisch* (2010) 91; M. W. Paas, *The Kipper and Wipper Inflation, 1619–23: An Economic History with Contemporary German Broadsheets* (2012).

[10] N. Klüssendorf, 'Die Zeit der Kipper und Wipper (1618–1623): Realwert und Nominalwert im Widerstreit', in Deutsche Bundesbank (ed.), *Vorträge zur Geldgeschichte im Geldmuseum 2007* (2009) 5.

[11] U. Rosseaux, *Die Kipper und Wipper als publizistisches Ereignis (1620–1626): Eine Studie zu den Strukturen öffentlicher Kommunikation im Zeitalter des Dreißigjährigen Krieges* (2001), at 40 with further references; U. Rosseaux, 'Inflation und Öffentlichkeit: Die Publizistik zur Kipper- und Wipperzeit 1620–1626', in C. Dekesel and T. Stäcker (ed.), *Europäische numismatische Literatur im 17. Jahrhundert* (2005) 301; G. Freytag, *Der Dreißigjährige Krieg 1618–1648: Gesamtausgabe in drei Bänden*. Vol. 2: *Die Städte. Die Kipper und Wipper und die öffentliche Meinung* (4th edn, 2010), based on *Bilder aus der Vergangenheit, 3. Bd., Aus dem Jahrhundert des großen Krieges (1600–1700)* (1888).

[12] These mainly adopted the views expressed in the pamphlets, Rosseaux, above n 11, at 436–47: Anonymous, *Examen quaêstionis. Ob alle/so alt oder schwer geld von dem newen diese negsten jahr hero gemüntzen leichteren gelde aussgewogen/oder aussgeschossen/den reichs abscheiden/vnd käysers Ferdinandi Ao. der minder zahl 59. Publicirten müntz ordnung zu wider gelebet/also/dass sie darumb mit gutem fug vnd recht an ehr/leib vnd leben billig zu straffen. Item der hierauss ferner entspriessender frage/ob auch die/welche jhr schwer geld für vffgeld müntzeren folgen lassen/als collusores der müntz corruption zu beschüldigen?* (1622); Anonymous, *Judicium in cavssa depositae pecuniae circa avgmentum putativi valoris extrinseci: in qva ex aeqvo & bono disseritur qvaestio ecqvid depositio pecuniae levioris notae ex mutuo qvondam contracto debitae vim solutionis obtineat? Oder/im rechten vnd der billigkeit gegründeter bericht/vber der streittigen frage/ob die beschehene berichtliche deponirung einer schuldsummen/an leichter müntze/das an schwerem gelde/fur vielen jahren contrahirte debitum könne auffheben: vnd den debitorem von solcher schuld wieder des creditors willen entledigen* (1623); J. G. Besold, *Tria responsa iuris, das ist, Drey rechtliche Bedenckenen von Rechtswegen schuldig seye?* (1623); Juristenfakultät der Universität zu Wittenberg, *Resolvtion vnd bedencken der verordneten vice hofrichters/vnd beysitzern dess hofgerichts/auch dechants/senioris vnd anderer doctorum der juristen facultet hoher schul Wittenberg. Dessgleichen ordinarii, senioris, vnd anderer doctorum der juristen facultet inn der Vniversitet Leiptzig. An ihre churfürstliche*

linking it to the discussion of medieval legal experts and canonists who addressed the influence of changes in coins on the obligations of the borrower.[13] Primarily, however, the issue is dealt with in political–theological pamphlets[14] that examine aspects of public policy ('gute Policey') on the basis of ordinances published by the government.[15, 16] This is not surprising for the mid-seventeenth century and earlier, as independent economic considerations did not come to the fore until the end of the Thirty Years' War, and until then the national economy entered the discussion only as a part of the overall 'good public order'. Of course, legal arguments also regularly had some influence, as they accompanied the governmental solutions to financial problems and issues of public policy relating thereto, largely disregarding disciplinary boundaries.[17]

Modern literature has so far only occasionally indicated that currency devaluation could also affect the performance of contracts and that disputes thereon were tried in court.[18] Apart from this, there has been little research on how legal practice dealt with inflation and its consequences, despite the large number of issues arising therefrom, and even though the analysis of the relevant court proceedings would reveal many new facets of this part of the general[19]

gnaden zu Sachsen. Uber etliche müntzfragen den 15. und 20. julij/1622. abgangen (1623); H. Kniephof, *Consultatio Juridica De controversiis ex moneta … Oder Vnvorgreiffliches Bedencken, Wie nunmehr nach restituirtem rechtmässigen Müntzwesen, die hierauß angesponnene Streitigkeiten mehrentheils, vermüge der Rechte vnd natürlicher Billigkeit, möchten erortert vnd verglichen werden/Zu mehrer erforschung der Warheit wolmeinend auffgesetzet vnd zu Pappier gebracht* (1623); M. Lustricius, *Responsum iuris alterum, das ist, Kurtzes aber doch gründlichs Bedencken uber dise Quæstion: ob einer, welcher vor etlich Jahren gut Geldt aussgelihen oder darmit jährliche Pensiones erkaufft hat, schuldig seye sich mit groben Müntzen der jetzigen gestaigerten hohen valuta nach bezahlen zu lassen oder nicht?* (1623); J. W. Hiller, *Responsum iuris Ioan. Wolfgangi Hilleri … vber die frag: ob ein schuldtner seinen glaubiger/der jhme vor disem mit guter gangbarer/vnuerruffter reichs müntz lehensweiss aussgeholffen/mit jetziger im schwanggehender/geringhältig oder gesteigerten müntz/rechtmessig bezahlen könne* (2nd edn, 1624).

[13] In summary, with further references, H. Coing, *Europäisches Privatrecht.* Vol 1: *Älteres Gemeines Recht (1500–1800)* (1985), at 471–8.

[14] See, e.g., C. Billich, *Unvorgreiffliches Bedencken Wie man dem Müntz-Wesen abhelffen unnd eine Wohlfeihle Zeit wiederumb zu wegen bringen könne, …* (1621); T. Friese, *Discurß Etzlicher Personen, Von denjtzigen Zustande der Kipper und Wipper, wie nehmlich ein Meß Pfaffe, so viel Goldt und Geldt beysammen hat, daß er nicht gewußt, wo er damit hin soll …* (1621); T. Henckel, *Gewissens Spiegel: Aller Eigennützigen Käuffer und Verkäuffer* (1621); J. Oepffelbach, *Wipper Gewinst/Das ist: Christliche und wolmeinende Erinnerung/an die Unchristlichen Geld-Händler/so den zuvor unerhörten Namen/Wipper und Kipper führen/Durch welche allerley Landsbeschwerung eingeführet und verursachet werden/da sie zwar Geld und Gut gewinnen/doch hingegen Gottes ernste und unausbleibende straffe verdienen …* (1621); C. Pistopatriota, *Historische Relatio Deß jüngst am 1. vnd 2. Novemb. oder Tag Aller-Heyligen, dieses 1621 Jahrs, in Parnasso, vnter den Göttern vber jetzigen in Teutschland wesendem Kriegß- vnd Müntzwesen, gehaltenem Rathschlag* (1621); C. G. de Spaignart, *Theologische Müntzfrage/Ob Christliche Evangelische Obrigkeiten/vmb ihres eigen Nutzes willen/die Müntz von Zeit zu Zeiten/mit gutem Gewissen/schlechter vnd geringer können machen lassen?* (1621); J. Weinreich, *Wolmeinende Warnung Vor Tumult und Auffruhr: Darinnen … dargethan und erwiesen wird/Daß der gemeine Pöbel/als privat Personen/nicht recht und fug haben/ derer öffentlichen Wipper/Kipper/Jüden/Jüdengenossen/falschen Müntzer/Vor- und Auffkäuffer/Auffwechsler/und dergleichen Betriegere Häuser zu stürmen/zu plündern/ihre Güter zu rauben/ … und also hierdurch die gegenwertige grosse Thewrung abzuschaffen/Dem allgemeinen lieben Vaterlande zum besten gestellet* (1622); J. H. Schellenbaur, 'Land(es)dieb', in *Schrifftmässige Anweisung zu dem wahren lebendigen Christenthum* (1694), vol. 2, 541.

[15] Collected for example in Hirsch, above n 7; O. Meinardus, *Protokolle und Relationen des Brandenburgischen Geheimen Rathes aus der Zeit des Kurfürsten Friedrich Wilhelm.* Vol 2: *Bis Ende Dezember 1644, Neudruck der Ausgabe 1893* (1965), 122nd protocol, 331.

[16] This also includes various pamphlets with legal content, all collected in Rosseaux, above n 11, at 455 et seq.: Nos. 50, 58, 64, 68–72, 74, 78–80, 82, 83, 88, 89, 92, 100.

[17] For more details, see M. Stolleis, *Pecunia nervus rerum: Zur Staatsfinanzierung der frühen Neuzeit* (1983), at 101–105.

[18] E. Blaich, *Finanzgeschichte der freien Reichsstadt Esslingen im Dreissigjährigen Krieg* (1934), at 34 and 36 et seq.; Schneider, above n 9, at 70; Rosseaux, above n 11, at 69 et seq; M. North, 'Geld- und Ordnungspolitik im Alten Reich', in A. Amend-Traut, A. Cordes, and W. Sellert (eds), *Geld, Handel, Wirtschaft: Höchste Gerichte im Alten Reich als Spruchkörper und Institution* (2013) 93, at 98.

[19] For proceedings concerning the money rate of an annuity, of a loan purchase (e.g. the decision ISG Ffm RKG 1402 and 1526 to be discussed in more detail later) or of a bill of exchange, see A. Amend-Traut, *Wechselverbindlichkeiten vor dem Reichskammergericht: Praktiziertes Zivilrecht in der Frühen Neuzeit* (2009), at 179–184. These

and legal historiography.[20] Thus it might, for example, be questioned, within the scope of private law disputes, how to deal with debtors taking advantage of the currency devaluation to settle their liabilities, or how to repay a loan that had been taken out with bad money. In the context of criminal law, it is of interest to examine, inter alia, to what extent it had been tried in the Empire's territories, especially in the years after 1622 and 1623, to return to orderly conditions by prosecuting the perpetrators. Two of these questions will be taken up and more closely examined in this chapter.

The Imperial Coin Edict of 1559, later repeatedly supplemented and affirmed, was one of the results of the Diet of Augsburg that convened the same year and that was meant to provide a sound basis for the coinage of the Holy Roman Empire.[21] The ten Imperial Circles ('Reichskreise') were responsible for implementing the edict. The latter provided for the setting up, under the supervision of the authorities, of mints in every Circle ('Kreismünzstätte'), where all of the Circles' Estates ('Landstände') were to have their money minted. The export of imperial money or bullion was prohibited, and, conversely, only small amounts of foreign coins were admitted into the Empire.

This prohibition was violated by several '*kippers* and *wippers*' who, in a court action brought in 1623, were accused of having exported 'good golden and silver coins outside the Empire, on the other hand imported other, false silver and non-golden coins to other places . . . but especially to Frankfurt'.[22] The proceedings clearly show the practical relevance of the Imperial Coin Edict of 1559. They reveal the edict's structural weakness that caused the great inflation and, as described below, provide an explanation for the fraudulent activities of the 'kippers and wippers'.

New values were determined for gold florins and silver imperial florins. The value of gold had increased, and the silver fineness was reduced, so that the unity of the originally equally valued coins could no longer be maintained. Both, however, were to remain large negotiable coins.[23] As for divisional coins, the Imperial Coin Edict determined the half florin at 30 *kreutzer*, and provided accordingly for coins with nominal values of 10.5, 2.5, and 1 *kreutzer*. They were all intended to be silver coins whose correspondingly low silver content was also determined by the Imperial Coin Edict. This content, however, was still so high that it by far exceeded the nominal value of each of the coins. However, it was small change that was needed in day-to-day business operations much more than large coins were. Due to the high cost of the materials, however, the minting of the small coins by the authorized mints was not a profitable business so that small change with lower silver content was minted in unauthorized mints, the so-called 'augmenting mints' ('Heckmünzen'), first only in small territories and later also in politically more significant ones.[24]

court records are a valuable source for contemporary conversions and thus of general economical–historical interest, because value indices, exchange rate tables and calculations can thereby be established and supplemented. On the history of the Frankfurt coins, see also ibid, at 300 et seq. In ISG Ffm RKG 1556, the exchange rates of 1598 and 1621 were at issue, and were therefore specified in detail.

[20] This assessment is shared by Rosseaux, above n 11, 69. See C. Schott, 'Darlehen und Inflation: Lehre und Praxis bei Juristenfakultäten und Schöffenstühlen', (2013) 35 *ZNR* 55 and Chapter 15 in this volume.

[21] On the history of the Imperial Coin Edict of 1559, its two precursors of 1524 and 1551, and the amendments thereto, see T. Christmann, *Das Bemühen von Kaiser und Reich um die Vereinheitlichung des Münzwesens: Zugleich ein Beitrag zum Rechtsetzungsverfahren im Heiligen Römischen Reich nach dem Westfälischen Frieden* (1988), at 37–88. On subsequent regulations, see Rosseaux, above n 11, at 57 with further references.

[22] ISG Ffm RKG 513, [Quadrangle = Q] 4, fo. 1^v and 2^r.

[23] See further R. Gaettens, *Geschichte der Inflationen: Vom Altertum bis zur Gegenwart,* (1957, repr. 1982), at 95 et seq.

[24] See further, with references, Rosseaux, above n 11, at 5 et seq. For the origins and history of inflation more generally, see B. Sprenger, *Das Geld der Deutschen: Geldgeschichte Deutschlands von den Anfängen bis zur Gegenwart* (3rd edn, 2002), at 96–117; Freytag, above n 11, at 91–111.

Due to the great need for small coins, all mints—authorized and unauthorized—were forced to acquire the necessary precious metal on the free market. The few mines owned by the minting imperial estates came nowhere near covering that need. Gustav Freytag describes the trading of minted metal as follows:

> The well-minted money was exchanged for inferior quality by untiring buyers; small money changers . . . went from village to village . . . and collected . . . their goods. . . . The secret goods were then packed into barrels together with ginger, pepper, tartar, customs cleared as white lead, wrapped into bales of cloth and furs. There were coaches with double bottoms fitted especially for such kind of transportation.[25]

As can also be seen here, the soon-to-be widespread practice of producing many coins of inferior quality from a few good ones, i.e. the 'tipping', was strictly prohibited by the Imperial Coin Edict of 1559.[26] The right to mint coins was exclusive to the estates, so that the sale or leasing of the exclusive coinage rights was just as prohibited as the export of domestic coins.[27] Counterfeiting of coins carried the sentence of death by burning.[28] It is not surprising therefore that the minting process was frequently moved outside the borders of the Empire and that coins of a fineness of precious metal lower than prescribed by the edict were brought back and put into circulation.

An illustrative example of such incidents provides the case of Guiden versus the imperial city of Frankfurt for 'committed coin partition'.[29] In 1622, the Cologne merchants Peter Fran(t)z and Hermann Hoithens sent their managing director Guiden to Frankfurt[30] to collect their claim in the amount of 1,200 imperial talers against their Frankfurt debtor Hermann von Ossen. For this purpose, Guiden went to Ossen's agent Servatius Löwart.[31]

Initially, the Frankfurt court accused Guiden himself of tipping and having taken the outstanding 1,200 imperial talers for himself, then 'having transported them outside the country and flooded [the country] with false [coins]'.[32] After all, the good coins were untraceable. Guiden first speculated that the regular courier might have embezzled the money on his way to Cologne. However, upon interrogation, the courier denied any wrongdoing. Someone who risked sending money by mail in the prevailing wartime conditions had to be very careful and had the sole responsibility for any loss.[33] Faced with the threat of conviction, Guiden then presented an entirely different version of the incident, which exculpated him, but inevitably involved denouncing his masters. Guiden now explained that Löwart had first denied being Ossen's agent.[34] However, when Guiden confronted him with a letter of authorization and threatened to 'have his master's business closed down by the magistrate',[35] Löwart begged him 'not to expose him and his master to such disgrace'. Then Löwart asserted 'not to have as much as a farthing or a penny', but offered to be Guiden's 'surety for twelve hundred talers'. '[A]fter lengthy consideration', Guiden travelled back to Cologne once Löwart had assured him that he would 'not leave Frankfurt before having received a reply from Peter Franz from Cologne'.[36] Löwart did not keep his promise; instead, he went to Cologne to agree on the 'prohibited coin transaction'

[25] Freytag, above, n 11, at 93 et seq.
[26] *Keysers Ferdinandi newe Münzordnung Meyntz 1559*, fo. 25^{v} and 26^{r}, available at http://www.mdz-nbn-resolving.de/urn/resolver.pl?urn=urn:nbn:de:bvb:12-bsb10941750-9 (hereafter Coin Edict of 1559).
[27] Ibid., fo. 11^{v} and 12^{r}. [28] Ibid., fo. 28.
[29] On the accusation, see ISG Ffm RKG 513, [Q] 4, fo. 1^{v} and 2^{r}.
[30] Ibid., [Q] 13, fo. 2^{v}.
[31] The name is not spelled consistently; the records of the proceedings sometimes also contain the spelling 'Lewart'.
[32] ISG Ffm RKG 513, [Q] 9, fo. 5^{r}. [33] Ibid., [Q] 7, fo. 3^{r}. [34] Ibid., [Q] 9, fo. 1^{v}, 2^{r}.
[35] Ibid., [Q] 9, fo. 2^{r}. [36] Ibid., [Q] 9, fo. 2^{v}.

with the creditors.[37] He subsequently did not make any use of Guiden's service. Still according to Guiden, the same held for Franz and Hoithens, who allegedly excluded him from further transactions because they 'did not trust him'.[38] However, when Guiden met with his principals and they 'had a drink and the wine made them tipsy, their tongue was made more loose than usual' and the two 'sufficiently' bragged about their 'fraudulent actions and unseemly, prohibited' practices regarding the false coins.[39] Then 'in closed chamber and secretly'[40] the parties made common cause with each other.[41] Guiden's services were then no longer needed by his masters.

The court considered it proven that Löwart had sent imperial talers in 'good old silver coins outside the Empire and exchanged them for prohibited invalid coins'.[42] In this way, the outstanding debts were more than settled. Both contracting parties had apparently found a way of making profit from tipping and see-sawing the 1,200 imperial talers.

The case was brought to court at a time when the pre-existing lack of small change and the steadily increasing price of silver were exacerbated by another factor that led first to inflation and then to the collapse: the Thirty Years' War was in full swing, engulfing large parts of Europe. In addition to the expansion and bureaucratization of governmental tasks, war finance had already been responsible for increasing the funding requirements of early modern governments since the early sixteenth century.[43] After the Hundred Years' War between England and France, the election of the Emperor in 1519, the wars of Ferdinand I against the Turks, the Schmalkaldic War, and other conflicts, the need for money and expenditure became immeasurably greater during the Thirty Years' War. Correspondingly, a passage from John Barclay's novel *Argenis* reads: 'There is no deeper sea swallowing money in such heaps'.[44]

Of course, raising money for financing these armed conflicts by imposing and justifying taxes was part of the 'raison d'État' and of early modern warfare.[45] However, the very ordinances that frowned upon the debased coinage inherent in the over-issuance of inferior coins, such as regulations issued by the Empire's various principalities, the municipal mint orders, and in particular the already mentioned Imperial Coin Edict, are indications of efforts by the authorities to win the battle for the power of money. The ancient maxim *pecunia nervus rerum* ('money makes the world go round') has, since the beginning of modern times, been applied specifically in times of war.[46] Yet, the return to orderly coin conditions was primarily owed to the fact that after having implemented a policy of debased coinage, which proved beneficial in times of war, the sovereigns then themselves obtained low-value money through tax payments and other charges.[47] Financial policy at that time thus developed on the basis of governmental requirements, albeit by necessity and of course without a theoretical basis, which arose only later.

The enforcement of the applicable imperial legal regulations turned out to be extremely difficult. Complaints about violations of the ban on the export of good coins were raised again and again before the Imperial Chamber ('Kaiserliche Hofkammer'). The innumerable

[37] Ibid., [Q] 9, fo. 3. [38] Ibid., [Q] 9, fo. 5^r. [39] Ibid., [Q] 9, fo. 3.
[40] Ibid., [Q] 4, fo. 3, 4, [Q] 9, fo. 4^v, 5^r. [41] Ibid., [Q] 4, fo. 1^v, 2^r. [42] Ibid., [Q] 9, fo. 7^v.

[43] On the poor state of public finances and the Emperor as debtor, see Trawnicek, above n 9, at 49–57. On the war's impact on coin development in detail, see Sprenger, above n 24, at 105–8.

[44] 'Es ist keine tieffere See / welche das Gelt so Hauffenweise verschlinge': M. Opitz, *Gesammelte Werke: Kritische Ausgabe.* Vol. 3.2 (1970), Bk 4, cap. 20, at 472. See futher S. Siegl-Mocavini, *John Barclay's 'Argenis' und ihr staatstheoretischer Kontext: Untersuchungen zum politischen Denken der Frühen Neuzeit* (1999).

[45] On the expansion of the formula 'raison d'État', see M. Stolleis, *Staat und Staatsräson in der frühen Neuzeit: Studien zur Geschichte des öffentlichen Rechts* (1990).

[46] On the origin of the term, see Stolleis, above n 17, at 63 et seq.

[47] Sprenger, above n 24, at 109.

repetitions of prohibitions and directions originating from the Imperial Chamber provide eloquent testimony to the weaknesses of the imperial supervisory system; there was no effective central authority.[48] This deficiency was noticed and publicly critiqued by citizens, as for example shown in a 1623 newspaper article: 'There is much discussion of healing the coinage and other things, but actually nothing happens.'[49]

Before the Thirty Years' War broke out, no serious attempt had been made at the imperial or territorial level to avert the practice of unauthorized mints and the increasingly frequent reduction in silver content, prohibited by the Coin Edict of 1559.[50] The *Guiden* case is an example of the movement at the territorial level towards the prosecution and sanctioning of offences against minting laws in light of the collection of bad money and the impending monetary collapse, and to publicize this in newspapers.[51] Investigations were at first only targeted at the owners of minting privileges ('Münzregal') who abused their right to issue coins, but soon action was also taken against counterfeiters of coins, and finally against private individuals who in some way interfered with the coinage system. At the imperial level, mint offences were more systematically prosecuted only in the so-called 'second kipper period' at the end of the seventeenth century. Imperial commissions were established, and the imperial estates were ordered to provide them with unrestricted official assistance.[52]

The Frankfurt Council ultimately found that Guiden himself was no longer 'under suspicion', but it did sentence Löwart to a 1000 taler fine and to imprisonment in 1623.[53] This outcome is interesting in itself because, until 1620, neither the Frankfurt Coin Edicts[54] nor the Imperial Coin Edict[55] provided for imprisonment. Rather, the latter edict imposed the penalty of death by burning for counterfeiting coins, and the penalties for making changes to coins were corporal punishment or a fine. However, the death penalty was imposed in only a very few cases in Frankfurt: between 1542 and 1597 only four cases resulting in a death sentence were recorded.[56] Rather than death, the Frankfurt jurisdiction more frequently imposed the milder punishment of incarceration.

48 Kindleberger, above n 9, at 156; see in detail Trawnicek, above n 9, at 31–44.

49 *Wöchentliche Zeitung auß mehrerley örther*, Hamburg 1623, 12, 2: Vienna 1623 III 3, quoted in Rosseaux, above n 11, at 395.

50 Rosseaux, above n 11, at 59.

51 This finding corresponds to those for Esslingen: see Blaich, above n 18, at 32, and for the so-called 'second *kipper* period' at the end of the seventeenth century, cf. Christmann, above n 21, at 139. In the 'second *kipper* period' in particular, imperial commissions were set up. See, for a further example, the judgment of the chair of the lay judges' court ('Schöffenstuhl') in Halle, published in printed form: *Wegen der Müntz Kipperer und Wipperer/ [et]c. Informat Urtheil/so durch den Fürstlichen Magdeburgischen Wolverordneten SchöpffenStul zu Halle in Sachsen gesprochen* (1621). For more details on printed reports on offences against minting laws, see Rosseaux, above n 11, at 397 et seq., 413 et seq.

52 See further K. Schneider, *Das Münzwesen in den Territorien des Westerwaldes, des Taunus und des Lahngebietes und die Münzpolitik des Oberrheinischen Reichskreises im 17. Jahrhundert* (1977), at 150, 155, 159, and 165; Christmann, above n 21, at 139; Rosseaux, above n 11, at 69, 413 et seq.

53 ISG Ffm RKG 513, [Q] 9, fo. 5^{v}. See also Guiden, personal letter, ISG Ffm RKG 513, without [Q]; ISG Ffm Bürgermeisterbuch 1623, entry from 6 June 1623, fo. 22^{r}.

54 Frankfurt Coin Edicts of 20 March 1560 and 9 March 1573, ISG Ffm Ratsverordnungen 1573.

55 Coin Edict of 1559, above n 26.

56 On this, ISG Ffm Ratschlagbücher. According to the records of A. A. von Lersner, *Der weit-berühmten Freyen Reichs- Wahl- und Handels-Stadt Franckfurt am Mayn Chronica, Oder Ordentliche Beschreibung der Stadt Franckfurt Herkunfft und Auffnehmen, wie auch allerley denckwürdiger Sachen und Geschichten, so bey der Römischen Königen und Käyser Wahl und Crönungen, welche mehentheils allhier vorgenommen worden, vorgegangen, nebst denen Veränderungen, die sich in Weltlich- und Geistlichen Sachen, nach und nach zugetragen haben* (1706), Bk 1, ch. 39 'Vom Müntzen', at 446 et seq., a Jew was burnt in 1542 after having 'coined false talers'; in 1547 a lansquenet and two further delinquents were impaled; in 1573 two Dutchmen were burnt; in 1574 one 'Häcker' was broken on the wheel; and in 1597 one forger was burnt at the stake: ibid., at 442–4.

The punishment for the violations of the mint law regulations became possible only after these regulations had become binding throughout the Empire through their formal pronouncement, and only when they were notified to the imperial court and the courts of the imperial estates who were then allowed to observe and apply them.[57] The reluctant imposition of painful punishments can, on the one hand, be explained by the assumption that, in view of their own implication in various coin offences, the city authorities, the sovereigns, and even the Emperor himself, tended to be cautious. On the other hand, cruel punishments did not reflect well on the city of Frankfurt, which always endeavoured to be attractive as a national trade and fair centre.

The comparatively mild measure of imprisonment lacked any explicit legal foundation, but was at least plausible, as the *Constitutio Criminalis Carolina* of 1532 did not provide a full catalogue of offences; the death penalty was generally only to be imposed when it was explicitly provided for by the *Carolina.* Moreover, the severability clause formulated in the Preamble contained a reservation in favour of the applicable local law. However, the obstacle to the enforcement of this clause is the general observation that the supremacy of the *Carolina* meant that it had largely supplanted the local penal law and procedure of most territories and imperial cities. Nonetheless, and as elsewhere, the search was already underway for alternative means of punishment that could replace primarily the death penalty. Prisons had already existed in England since 1555 and in Holland since 1595, and both served as models for the first prisons in the German Hanseatic cities in the early seventeenth century.[58] Then, in 1620, Frankfurt codified the common practice, according to which the death penalty was imposed only as a last resort in very severe cases. A new edict provided penalties for coin offences, which depended on the person and the sort of crime, 'first with fine, imprisonment or public humiliation', lastly with 'corporal punishment or death penalty'.[59]

But how was the matter referred from a court of an imperial city to the Imperial Court? This is not self-evident, because the Imperial Chamber Court, as the appellate court, did not have any competence to review penal judgments[60] and matters of public order. Nonetheless, criminal and public order proceedings could become pending before the Supreme Court—in an indirect way—by way of a complaint about the proper course of proceedings, for

[57] In Frankfurt, the Coin Edict of 1559, above n 26, was enacted in February 1560:

> The master reckoners inquired how they should carry out collecting and handing out coins now that the new coin ordinance has been published; should they act in accordance with the newly enacted coin ordinance when collecting and handing out coins and should they debate as necessary, how the exchange of coins shall be handled.

The corresponding notes on the acceptance of this recommendation by various municipal bodies can be found in the records of the Frankfurt Counsel, ISG Ffm Bürgermeisterbücher 1559, fo. 141^{v}; ISG Ffm, Ratsprotokolle 1559, fo. 90^{v} and 91^{v}; ISG Ffm Ratschlagungsprotokolle 5, fo. 181^{r}f; and ISG Ffm Bürgermeisterbücher 1559, fo. 143^{v}. On the enactment ('Insinuation') required for application of legislation by the imperial courts, see B. Wulffen, *Richterliches Prüfungsrecht im Heiligen Römischen Reich Deutscher Nation des 18. Jahrhunderts* (1968), at 38–40; on this legal institution, see W. Sellert, 'Insinuation', in *Handwörterbuch zur deutschen Rechtsgeschichte* (2011) (hereafter *HRG*$_2$), vol. 2, cols 1256–9. On the announcement of the applicable mint law standards, see Christmann, above n 21, at 172 et seq.

[58] On criminal justice and criminal justice theory in general, see E. Schmidt, *Einführung in die Geschichte der deutschen Strafrechtspflege* (3rd edn, 1995), at 147–211. On the *Carolina* in general, see R. Lieberwirth, 'Constitutio Criminalis Carolina', in *HRG*^{2}, above n 57, vol. 1, cols 885–90 with further references. See also P. Landau and F. Ch. Schroeder (eds), *Strafrecht, Strafprozeß und Rezeption: Grundlagen, Entwicklung und Wirkung der Constitutio Criminalis Carolina* (1984).

[59] 'Prouisional MünzEDICT', 26 March 1620, ISG Ffm Diplomatarium Monetarium Francofurtense 1 (A 123), fo. 6f, confirmed through the Edict of 27 October 1623, ISG Ffm Edikte 17, fo. 61, ISG Ffm Ratsverordnungen 1623, reproduced in Lersner, above n 56. The meaning of 'Thurnstrafe', i.e. 'Turmstrafe', which is mentioned in both edicts, is 'imprisonment'.

[60] Appeals in criminal matters had already been expressly prohibited by s. 95 of the Imperial Recess of 1530.

example, due to a denial of justice at the lower court.[61] The frequency of this occurring is shown in Oestmann's research on witch trials before the Imperial Chamber Court[62] and the last symposium of the research group 'Imperial Jurisdiction' ('Netzwerk Reichsgerichtsbarkeit'), entitled *Alles nach 'Recht und Ordnung'* (All According to 'Law and Order').[63] Some of the proceedings more closely researched here dealt with criminal matters which fall within the scope of 'gute Policey' (public policy in the early modern age).[64]

In the summary proceedings subsequently brought before the Imperial Chamber Court, Guiden accused the Frankfurt jurisdiction of a denial of justice. Having previously been found not guilty in the prosecution before the Frankfurt Council of having 'committed fraudulent coin exchange', Guiden now apparently tried to capitalize on the matter. Guiden wanted to obtain for himself one-third of the one-thousand-taler fine imposed on Löwart by the prosecution,[65] as a compensation for the costs incurred and damage suffered.[66] Regarding the damages incurred, Guiden stated that during his journey back home from Frankfurt, where he had gone on the order of his masters, the Cologne merchants Peter Fran(t)z and Hermann Hoithens, he had been, near Bonn, 'detained for several weeks to [his] ruinous damage, but ultimately discharged'.[67] The detention had only happened because Fran(t)z, Hoithens, and Löwart had previously denigrated Guiden in their report.[68]

Guiden had presumed that he himself could insist on compliance with the Imperial Coin Edict, and even felt committed to report any violation of the Edict: The 'highly damaging course . . . of having good golden and silver coins, also silverware, moved out of the Empire in exchange for importing false silver and non-golden coins from abroad' violated the Coin Edict of 1559 which stated that anyone who has 'obtained knowledge' 'of [the existence] of false coins', must 'for the sake of the common good' 'immediately report and identify the mint offenders to the authorities'.[69] Guiden stated that, originally, as a *homo plebejus cui jus ignorare permittitur*—a common man whose ignorance should be excused—he had neither understood nor known that 'such counterfeiting and augmenting of coins as well as the concealment thereof' was prohibited under the Coin Edict of 1559. As a result, he did not file a report directly after the incidents. However, while spending a couple of days in Mainz on his journey from Frankfurt to Cologne, he 'got to roughly read the imperial recess and especially the Coin Edict of 1559 at his innkeeper, who was a bookkeeper'.[70]

Despite Guiden's hope that he could assert private claims based on the legal action brought against Löwart *ex officio*, in the end he was only offered fifty imperial talers rather than the full reward of one-third of the fine that had been imposed. The reduction was made because the obligation to report offences under the Coin Edict was binding on the public generally, and Guiden had been reluctant to share the information in Frankfurt.

[61] ISG Ffm RKG 387 and 513.

[62] P. Oestmann, *Hexenprozesse am Reichskammergericht* (1997).

[63] The symposium took place on 2–3 December 2011 at the research centre of the Society for Imperial Chamber Court Research in Wetzlar. The topics of the presented papers included: 'Über das erstmalige Aufstellen von Werbung überhaupt' (Nils Jörn M.A., Wismar), 'Waren Hopfen und Malz verloren? Konflikte des Brau- und Biergewerbes vor dem Reichshofrat' (Ellen Franke M.A., Vienna), and '"Jedermann soll sich sowohl bei Tag als Nacht auf den Gassen ehrbar und still halten": Die Wetzlarer Policey- und Tax-Ordnung von 1767' (Alexander Denzler M.A., Eichstätt).

[64] ISG Ffm RKG 513 and 823. In this context, see also Hamburg City Archive RKG S 079; Lübeck City Archive RKG S 099.

[65] ISG Ffm Bürgermeisterbuch, 14 August 1623, fo. 52^{r} and 52^{v}; ISG Ffm Ratsprotokolle, 14 August 1623, fo. 16^{v}, and from the petition, ISG Ffm RKG 513, [Q] 4, fo. 1^{r}.

[66] ISG Ffm RKG 513, [Q] 9, fo. 6^{r}.

[67] In this respect, see also personal letter Guiden ISG Ffm RKG 513, without [Q].

[68] ISG Ffm RKG 513, [Q] 5, fo. 2^{r}.

[69] From the petition, see ibid., [Q] 4, fo. 2^{r}.

[70] Ibid., [Q] 9, fo. 3^{v}.

Nonetheless, Guiden's report of an offence is by no means a solitary case.[71] Numerous accusations of violations of the Imperial Coin Edict were made, as in the present case, in the hope of making profit on the seized coins or out of envy or resentment.[72] Nonetheless, contemporary legal literature states that it was a crime of *lèse-majesté* 'when a subject and private person claimed for himself and dared to do what was reserved for . . . the high authority'.[73]

Guiden was not content with the adverse decision of the Frankfurt lower court, who dismissed the claim. The court records show that the claimant first 'very defiantly blurted out' that the court did not want to help him.[74] Even 'more infuriated', the claimant then publicly accused the mayor[75] of a 'denial of justice'.[76] The mayor sanctioned the 'insult' by having Guiden imprisoned in the *Warrnhauß*, the 'most humble prison in Frankfurt', in order to have him 'serve a sentence there for such excessive behaviour'.[77]

After his release, Guiden took action against the alleged inactivity of the Frankfurt jurisdiction by taking formal measures, and turned to the Imperial Chamber Court by means of summary proceedings for an order to further pursue the matter. According to the case file, nothing happened in this 'urgent' matter for seven years, until the Council of the city of Cologne 'helped' citizen Guiden by 'interce[ding]' on his behalf by a letter of 16 November 1630 and asking for a decision in the matter. The file closes with a personal letter from Guiden in which he complained about having reported Löwart several years ago 'for the good of the Fatherland', and that Löwart was later convicted on that basis.

The Imperial Chamber Court at no point commented on Guiden's views. The records merely show that, in March 1630, the request 'shall at present still be denied . . . '.[78] The Imperial Chamber Court quite frequently failed to take formal decisions on the merits. Often, it literally 'shelved' things,[79] or the parties no longer pursued the matter. Nonetheless, despite the lack of formal decisions, the extant court records provide valuable source material for the study of issues related to coinage and coin circulation. In the case at hand, however, one can only speculate as to the reasons for the court's proceeding as it did. The court was possibly prevented from pursuing its ordinary course of action simply as a result of the war, as was the case with many other lawsuits pending during those years, so that it could not fulfil its role of overcoming the Empire's political and jurisdictional fragmentation. Court proceedings were at times brought to an almost complete standstill due to the repeated occupation of Speyer, the lack of maintenance payments to the court, and a severe shortage of personnel.[80]

Apart from this exceptional situation, however, in the course of the Supreme Court's three hundred years' existence it was always possible to sue one's own magistrate or sovereign, and to defend oneself against despotic acts or lack of action. Even the administrative measures of the sovereigns in the area of 'good public order', which were principally outside the courts' control, could be brought before the Imperial Chamber Court if the

[71] Ibid., [Q] 4, fo. 4^{v}, ISG Ffm Bürgermeisterbuch 1623, 14 August 1623, fo. 52^{r} and 52^{v}.

[72] Trawnicek, above n 9, at 41. [73] Ibid., at 9. [74] ISG Ffm RKG 513, [Q] 7, fo. 1^{v}.

[75] The so-called mayor's audience was the court of the lowest instance in the Frankfurt jurisdiction. See further, with references, Amend-Traut, above n 19, at 35 and 132–4.

[76] ISG Ffm RKG 513, [Q] 7, fo. 2^{r}. [77] Ibid., [Q] 7, fo. 2^{v}.

[78] ISG Ffm RKG 513, book of minutes ('Protokollband').

[79] For more both on the validity of this reproach and on the derivation of the proverb 'auf die lange Bank schieben', see A. Amend-Traut, *Die Spruchpraxis der höchsten Reichsgerichte im römisch-deutschen Reich und ihre Bedeutung für die Privatrechtsgeschichte* (2008), at 11.

[80] See further R. Smend, *Das Reichskammergericht Erster Teil: Geschichte und Verfassung* (1911), 203 et seq.; I. Scheurmann, 'Die Installation des Gerichts in Frankfurt und die Speyerer Zeit', in I. Scheurmann (ed.), *Frieden durch Recht: Das Reichskammergericht von 1495 bis 1806* (1994) 89, at 108.

injured parties asserted that their *jura quaesita*—their 'duly acquired rights'—had been impaired.[81] Retrospectively, some contemporaries even saw the possibility of legally reviewing sovereign orders as a reason why the ideals of the French Revolution could not assert themselves east of the River Rhine. This view is developed by the constitutional law expert Johann Jacob Moser, who in 1769 formulated the theory of restricted sovereignty in the Empire's territories, and based this restricted sovereignty on the competences of the Imperial Chamber Court: 'Let such prince, prelate, or count try . . . impose as many taxes as he wants, let him keep [as many] soldiers as he pleases, etc., and let legal action be taken before the highest imperial court, it will soon be firmly shown to [that prince, etc.] how limited his sovereignty is.'[82]

However, why did the Frankfurt court refuse to open proceedings in the first place? Perhaps for the same reason that the Imperial Chamber Court provided no findings? After all, Guiden's view was that the Coin Edict obliged everybody to report relevant offences and that he could then derive private claims from the action brought against Löwart *ex officio*. In fact, the Imperial Coin Edict provided that everybody was not merely permitted, but, under the penalty of a fine of two gold coins, was obliged to report the prohibited abuse/ fraud and forgery of coins ('einem jeden/ die . . . verbottene Mißbreuch / Betrug unnd falsche der Müntz . . . alsbaldt unnd unverzuglich anzubringen und zu rügen/ nicht allein erlaubt/ sonder auch bey Peen zweyer Marck Lottigs Golds anzuzeigen/ hiemit aufferlegt sein solle').[83] This also explains Guiden's statement that he had neither understood nor known that such forgery, and coin impairment or concealment thereof, was prohibited under the Coin Edict of 1559.[84]

As to private benefit to be derived from a report to the authorities, there were in fact regulations promising a reward for the reporting of offences, especially during times when the authorities had no functioning enforcement instruments and could rely only on a very small personnel with executive powers. Even under early-Roman penal action, pecuniary reward was sometimes granted;[85] later it became general judicial practice in respect of individual laws.[86] The Imperial Coin Edict of 1559 stated with regard to the reporting obligation that it was ordered to properly punish offences ('damit derselbigen untugendt desto baß unnd fürderlicher an tag/ unnd zu gebürlicher straff komme').[87] The Imperial Coin Edict also

[81] K. Kroeschell, 'Justizsachen und Polizeisachen', in K. Kroeschell (ed.), *Gerichtslauben-Vorträge: Freiburger Festkolloquium zum fünfundsiebzigsten Geburtstag von Hans Thieme* (1983) 57, at 66 et seq. and 71.

[82] J. J. Moser, *Neues teutsches Staatsrecht.* Vol. 13.2: *Von der Teutschen Reichs-Stände Landen, deren Landständen, Unterthanen, Landes-Freyheiten, Beschwerden, Schulden und Zusammenkünfften, Nachdruck der Ausgabe Franckfurt/Leipzig 1769* (1968), at 1147. For so-called subject lawsuits in particular, see further R. Sailer, *Untertanenprozesse vor dem Reichskammergericht: Rechtsschutz gegen die Obrigkeit in der zweiten Hälfte des 18. Jahrhunderts* (1997).

[83] Coin Edict of 1559, above n 26, 26^{r}.

[84] ISG Ffm RKG 513 [Q] 9, fo. 3^{v}.

[85] Livy 8.18.4; see T. Mommsen, *Römisches Strafrecht, Nachdruck der Ausgabe Leipzig 1899* (2010), Bk 1, ch 10, at 505.

[86] Mommsen, above n 85, 505 et seq. The formula 'qui tam pro domino rege quam pro se ipso in hac parte sequitur', i.e. '[he] who pursues this matter for the King as well as for himself', vividly expresses the practice of support by private persons in the *prosecution* of offenders. This is similar to the 'writ of *qui tam*' under English common law, i.e. a court order according to which a private person who provides assistance to the criminal prosecution was entitled to the imposed fine in its entirety or in part. US patent law still permits 'every person' to bring action for unauthorized claim of patent rights and to keep 50% of all amounts awarded in such a case. As to the applicable practice of the *qui tam* procedure, see R. Kölbel, 'Zur wirtschaftsstrafrechtlichen Institutionalisierung des Whistleblowing: Lehren aus der Praxis des sog. "qui tam"-Verfahrens', (2008) *Juristen-Zeitung* 1134 with further references. For the current discussion of whether economic crimes could be successfully combated with private legal enforcement mechanisms, see A. Hellgardt, *Kapitalmarktdeliktsrecht: Haftung von Emittenten, Bietern, Organwaltern und Marktintermediären. Grundlagen, Systematik, Einzelfragen* (2008), at 178 with further references. Roman law also provided for rewards for legal actions brought by a private person for the common good, Mommsen, above n 85, at 506–11.

[87] Coin Edict of 1559, above n 26, fo. 26^{v}.

explicitly provided for a corresponding monetary reward for notifications of coin abuses. However, because the Edict distinguished between punishments 'to body and property or body alone / or property alone', depending on the 'opportunity and nature' of the offence, the person denouncing a crime was entitled to a reward only in the event of 'punishment against property'. The reward would then amount to one-third of the fine, while the authorities retained the remaining two-thirds.[88] However, because Löwart's delict of 'exchanging coins' was sanctioned only with imprisonment and a fine, not with any confiscation of property, there was no legal basis for Guiden's request. In addition, the Frankfurt Edict, which was the most obviously applicable provision, did not provide for a corresponding reward at all. Regarding the damage Guiden allegedly suffered because of his imprisonment, he failed to provide any evidence.

Guiden was certainly the author of the decisive hint for the successful prosecution of the 'coin exchanger' and thus ultimately also contributed to restoring good order—under financial policy aspects—in favour of the common good. Nowadays, the term 'whistle-blower' is used for somebody reporting an abuse or grievance to the authorities so as to prevent some danger to the society as a whole. The negative connotation of the term 'denunciation' would certainly be too harsh here. Nevertheless, Guiden concealed his personal motivation of financial gain, and possibly also of desire for revenge, by stating that he merely acted for the sake of the common good.

III. Currency Debasement: Disputed Repayment Procedures in Loan Transactions

1. Annuities and Interest Payments

In the fourteenth and fifteenth centuries, innovative credit instruments were developed in Germany and other countries[89]—supplementing the already common loans and emerging bills of exchange—in the form of purchases against annuity and interest.[90] The loan contract was in conflict with the prohibition of interest under canon law,[91] and although this prohibition was frequently bypassed, there was a reluctance to officially abolish it until well into the sixteenth century. The annuity, however, offered a practicable solution to the request that interest be permitted arising in the wake of the increasing expansion of the money economy. If someone sold an annuity or charge on property encumbering a house, he obtained a specific sum of money as a loan, for which he in turn had to pay annual interest. Thus, someone who wished to invest money profitably acquired an annuity from an owner of real property who was in need of liquid funds. The debtors, that is, the sellers of annuities, were sovereigns, church institutions, cities, but also individuals.[92] Mortgaging as a security most frequently real estate, these sellers received from the purchaser a fixed capital, and paid him in return an annually recurring interest payment. What is remarkable in this respect is that under dogmatic aspects most contemporaries did not classify this compensation as interest.

[88] Ibid., fo. 26^{v}.

[89] E.g. Switzerland, see F. Elsener, 'Der eidgenössische Pfaffenbrief von 1370: Ein Beitrag zur Geschichte der geistlichen Gerichtsbarkeit', in F. Ebel and D. Willoweit (eds), *Ferdinand Elsener. Studien zur Rezeption des gelehrten Rechts. Ausgewählte Aufsätze* (1989) 66, at 95 et seq. with further references.

[90] For a summary of 'Grundrente', see I. Czeguhn, *HRG*^{2}, above n 57, vol. 2, cols 599–602 with further references.

[91] Luke 6:35: 'Benefacite, et mutuum date, nihil inde sperantes: et erit merces vestra multa, et eritis filii Altissimi, quia ipse benignus est'.

[92] For an overview of different forms of loans, see North, above n 9, at 56–69.

The legal action brought by the widow of the Frankfurt paymaster Philipp Christoph Simonis in 1630 by means of summary proceedings *sine clausula* is based on such a purchase against annuity.

Seventy years earlier, in 1560, the 'mayors, administrators and the council of the city of Frankfurt . . . by virtue' of a deed on payments encumbering real property (*Gültbrief*) had sold an annuity to Wolfgang Pletzer and Georg Schöffell, 'both citizens of Speyer' . . . 'for the benefit of the before-said city'.[93] For the provision of one thousand florins capital in Frankfurt currency, the city had undertaken to pay an annuity in the amount of forty florins in 'Frankfurt gold currency',[94] payable 'on the birthday of our dear Lady'.[95] In this legal transaction, the annuity purchasers acted for the wards entrusted to them, Maria Catharina and Apolonie, the surviving children of the Speyer citizen Georg Konig and his wife Catherine, née Zorn. Under the deed of 1560, the city, as the seller of the annuity, was granted the right to free itself from the perpetual obligation by 'full repayment of the principal sum and payment of the outstanding interest according to the proportionate time'.[96]

Based on this information, the proceedings are proof that the legal institution of the annuity purchase in the middle of the sixteenth century had developed fully into an interest-bearing loan and that since the late Middle Ages, annuity rights had frequently been certified in the form of public deeds. This case also clearly shows that these deeds were then commonly treated as negotiable instruments,[97] because according to the wording of the deed, it benefited the creditors as well as all 'heirs or recorded legitimate holder[s] of this deed'.[98] The deed had been issued as a perpetual annuity, in contrast to a life annuity where the payment obligation was tied to the lifespan of a particular person. Therefore, the payments had to be made to the beneficiaries and their legal successors without limitation in time, subject to other provisions, such as, as in the present case, the possibility of the repurchase of the annuity, that is, the reimbursement of the capital.

Maria Catharina, as one of the two creditors, transferred the deed one year later to Barbara Mäckin, also a resident of Speyer, by means of a written contract. In the contract, drafted by Maria's husband, who was a lawyer, Maria guaranteed her contract partner and her heirs to 'deliver, grant and hand over' the annuity contract 'for unrestricted use at your discretion'.[99] Upon the grant of these rights to her, the new creditor resold the annuity in 1568 to the Speyer citizen Lorentz Jungkhenn,[100] who then sold it again in 1640 to Philipp Seiblin, 'lawyer, advocate and procurator of the Imperial Chamber Court'.[101] The annuity finally passed on to the applicant, who was née Seiblin and heiress to Philipp Seiblin.

Obviously, the transfer of such annuities was entirely common, and it was not the validity of the transfers that was called into question in the present dispute brought before the Supreme Court. This finding is of particular interest because none other than the famous jurist Friedrich Carl von Savigny, in his study of the law of obligations, denied that they could be validly endorsed under ordinary law because they restricted the natural freedom of the debtor in favour of an unspecified third party.[102] Savigny first based his view

[93] ISG Ffm RKG 1460, [Q] 3, fo. 1r. [94] Ibid., [Q] 1, fo. 1v.

[95] Since the Middle Ages, 'our dear Lady' has been one of the honorary titles of Mary, mother of Jesus. She is celebrated on 8 September. See H. Grotefend, *Taschenbuch der Zeitrechnung des deutschen Mittelalters und der Neuzeit* (10th edn, 1960), at 77.

[96] Copy of the annuity contract, ISG Ffm RKG 1460, [Q] 3, fo. 2r. [97] Ibid., [Q] 1, fo. 1r.

[98] Ibid., [Q] 3, fo. 1r. [99] Ibid., [Q] 3, fo. 3v. [100] Ibid., [Q] 3, fo. 4v.

[101] Copy of the 'Cession Brieff' of 22 March 1604, in ibid. [Q] 4.

[102] F. C. v on Savigny, *Das Obligationenrecht als Teil des heutigen römischen Rechts.* Vol. 2: *Neudruck der Ausgabe von 1853* (1973), at 89 et seq. See further T. Baums, 'Das preußische Schuldverschreibungsgesetz von 1833', Institute for Law and Finance, Working Paper Series No. 121 (2010), at 17–19.

on the finding that Roman law did not provide for such credit instruments and that general principles derived therefrom could not be applied to obligations. Savigny further disputed whether a corresponding right or at least a corresponding custom had developed since then.[103] In fact, however, contrary to Savigny's view, the right or custom allowing the transfer of such credit instruments is proved not only by the Konig litigation itself, but also by the fact that local laws, such as the Frankfurt city law reformations of 1509 and 1578 or the Frankfurt Notaries Order of 1589, generally acknowledged the validity of endorsements. Obviously, these were based only partially on the Roman law tradition. This circumstance again exemplifies the reception process which Coing appropriately referred to as a 'merger process', and which was typical not only of Frankfurt.[104] Modification of procedural and private law was accordingly based both on the systematization of Romanized private law and the consideration of domestic—oral and written—traditions, and on other town charters which had already oriented themselves on Roman-canonical law and inspired other legal codes.[105]

Finally, the practice of promissory notes makes it clear that there was no sovereign monopoly on issuing them in the sixteenth or seventeenth centuries, as was the case in nineteenth-century Prussia, where the Law on Promissory Notes of 1833 enforced a monopoly, which applied also to paper money.[106] Likewise, the different money theories dealing with the position of the sovereign in the creation of paper money and the supervision of the money supply emerged only much later. However, at least the Frankfurt Notaries Order of 1589 provided for a formal legitimation of promissory notes ('Brieffliche Verschreibungen'): the validity and enforceability of personal promissory notes was now dependent on their establishment before notaries, 'before our mayor's hearing' ('Burgermeister Verhör'), before the administrative council ('Schöffenrat') or the city court, unless they were 'drawn up between merchants and traders'. The detailed description of contents and conditions of certification were not designed to prevent competition between private issuers of paper money. The same applies to the regulation that either the city chancellery or a notary admitted in Frankfurt had to acknowledge receipt of the redemption of 'certificated notes'. Rather than establishing a monopoly, the primary goal was to prevent the repeated assertion of claims 'by carelessness or with intent'.[107] Thus the regulations, on the one hand, were meant to maintain public order, avowedly 'to forestall all kinds of excuses as well as wrongdoing and fraud by the contracting parties'.[108] On the other hand, the nature of the creation of an annuity, as a sale of a notional share of real property, usually required compliance with real property law regulations. Accordingly, these legal transactions required official certification also in Frankfurt.

[103] Savigny, above n 102, at 123 et seq.

[104] H. Coing, *Die Rezeption des römischen Rechts in Frankfurt am Main: Ein Beitrag zur Rezeptionsgeschichte* (2nd edn, 1962), at 143–51, esp. 147 and 187–191.

[105] Thus, with the reform of the city's procedural and private law in mind, the Frankfurt Council set up a commission in 1499 charged with preparing the reform by 'studying the Nuremberg and Worms Statutes and reformation', ISG Ffm Bürgermeisterbuch 1499, fo. 81, 1500, fo. 65. On the history of Frankfurt's legal reformation, see G. Köbler (ed), *Reformacion der stat Franckenfort am Meine des heilgen Romischen Richs Cammer. ao 1509* (1984), at xxiv–xxvii.

[106] Law concerning issue of papers containing a payment obligation to each holder, of 17 June 1833, *Gesetz-Sammlung für die Königlichen Preußischen Staaten (PrGS)* 1833, 75. See Baums, above n 102.

[107] Article IX of Regulation 'Von den Notarien unnd dero Ampt', of 23 December 1589. The original of the regulation is not on record at the Institute for the History of the City of Frankfurt (ISG Ffm Ratsverordnungen): reprinted in J. C. Beyerbach, *Sammlung der Verordnungen der Reichsstadt Frankfurt, 7. Theil* (1799) 1599, at 1608 et seq. See further A. Amend-Traut, 'Zur Geschichte des Notariats in Frankfurt a.M.—Das Notariat zwischen Reichskonformität und kaufmännischen Sonderinteressen', in M. Schmoeckel and W. Schubert (eds), *Handbuch zur Geschichte des deutschen Notariats seit der Reichsnotariatsordnung von 1512* (2012) 325, at 334–8.

[108] Beyerbach, above n 107, Art. VII, at 1606.

As with other types of loans, annuities show clearly that in the face of dwindling stocks of precious metals people found ways of reducing the use of coin money. Similar to bills of exchange and other credit instruments, annuities were closely connected to the available cash, which after all was replaced only temporarily.[109] It is precisely because of this close connection to cash in the form of coin and the structuring of the annuity as interest payable over a period of undetermined length that disputes arose from the debasement over time of the coinage.

It was agreed in the disputed annuity certificate that the debtor had to pay forty florins per year 'in the same Frankfurt gold currency' in which the capital had been paid. However, at least from 1628, the city of Frankfurt, as the debtor, no longer made payments of due instalments in gold florins as determined in the contract, but used 'good very common ... imperial talers, each calculated at 1.5 florins'[110]. A dispute arose when the widow Simonis contested this new way of receiving interest payments, while the debtor believed it had paid the debts correctly and on time.[111]

In fact, the gold coins were not common money; they primarily played a role in long-distance trade and were not affected either by the coin deterioration of 1622–23 or by the following devaluation.[112] It is also worth remembering that, at the time of the conclusion of the contract in 1579, and even more so at the time when the claim was asserted, the imperial taler was the inferior coin. In Frankfurt, the place where the contract was concluded in 1579, the gold florin was worth 84 *kreutzer*, while in the same year only 76 *kreutzer* were given for one imperial taler. After 1623, the gold florin was worth 104 *kreutzer* and the imperial taler only 90 *kreutzer*. In the same year, Kurmainz, Hessen-Darmstadt, Nassau-Saarbrücken, and Frankfurt formed a Coinage Union (*Münzverein der Vier*) and, like other imperial territories, fought against the bad 'kipper money'. Following a conference held in Frankfurt in July 1623, the four cities fixed wages and prices by means of coinage and tax orders.[113] The members of the union returned to the imperial law currency which fixed the imperial taler at 90 *kreutzer*—an exchange rate that was undisputed among the parties.

The respondent in the case under discussion, however, alleged that it was no longer obliged to pay the annuity in large gold coins. It was then a 'standard practice' to pay such annuities 'in current money ... according to the district or town ordinances', which in this case meant according to the decision of the Coinage Union.[114] The Frankfurt city syndic tried to prove the legitimacy of such procedure in a considerable number of more or less relevant treatises:[115] the Frankfurt Council had 'neither acted in violation of the Coin Edict nor against this Honourable Imperial Chamber Court by offering and paying imperial talers at 1.5 florins for redemption of the annual pension'. Still according to the syndic, many, 'even most legal scholars' shared this opinion.[116] Electors, other Imperial Estates,

[109] See further Amend-Traut, above n 19.

[110] Hence the accusation, which was not contested by the defendant; ISG Ffm RKG 1460, [Q] 7, fo. 9^r^.

[111] Ibid., [Q] 6, fo. 1^v^. [112] Trawnicek, above n 9, at 44.

[113] For Frankfurt: Der Statt Franckfurt am Mayn Taxordnung, ISG Ffm Ratsverordnungen 1623. See further K. Schneider, 'Die Hessische Münz- und Geldgeschichte 1500 bis 1873 im Überblick', in K. Schneider and K. Schaal (eds), *Geld-Wechsel/Wechsel-Geld: Geld in Hessen 1500–2000* (2000) 5, at 16 et seq. Schneider, above n 9, at 74 et seq., includes an exchange rate table for the years 1571–1623, while the rates for the gold florin and imperial taler date only from 1579 onwards. See further Schneider, above n 9, at 68; and for an overview, see North, above n 9, at 105.

[114] ISG Ffm RKG 1460, [Q] 6, fo. 2^v^.

[115] See, e.g., P. P. Corneus, *Consilia Sive Responsa* (1572); A. Bruni, *De Augmento et Diminutione monetarum* (1584), Secunda praesuppositio, no 11, at 209; F. de Caldas Pereira Castro, *Receptarum sententiarum seu Quaestionum forensium et controversiarum civilium* (1612), Lib. I, Quaest. 24, no 8, at 286; A. Faber, *Tractatus de Variis Nummariorum Debitorum Solutionibus* (1622), Caput XVII, no 21, at 295 This view is also shared by Lustricius, above n 12, at 12 et seq.

[116] ISG Ffm RKG 1460, [Q] 6, fo. 3^r^.

and even his Imperial Majesty himself, paid their annuities in *moneta currenti*. Therefore, one would be hard pressed to allege that they acted in violation of the highest court ruling and the Coin Edict.[117] Indeed, the devaluation mandate for Electoral Saxony of 1623 ordered—although it was unique in doing so—that debts be redeemed in the coin applicable after the devaluation. Previously, the applicable rule there was that according to an order of 1572 long-term debts had to be settled with the coin in which the liability had initially been created.[118] The preamble to the mandate of 1623, explains, albeit not very convincingly, the background to this change of mind by stating that it was intended to prevent the courts from being overloaded. Like the imperial city of Frankfurt, Electoral Saxony followed specific self-interests in allowing the redemption of debts with debased coins. The reasons officially given for the Saxon policy would have been credible, states a contemporary commentator, 'but for the knowledge that the currently reigning Elector was commonly known only for his ability to hold his drink and that influential members of the court profited from the inflation and now wanted to feather their own nest'.[119]

The Frankfurt syndic further stated in his argument that, in the 'provisional coin edict' of 1623, the city, together with the other Electors and Princes of the Empire, had settled the matter of debt repayment to the effect that 'in such contracts that originally had been purchased in large coins, the date of the conclusion of the contract should be relevant, but otherwise the imperial taler should be accepted at [the exchange rate of] 1.5 florins, unless agreed otherwise or unless specific coins were promised'.[120] Thus, if an older contract stipulated payment in divisional coins at a nominal value, or if no coins at all were explicitly mentioned, then the basis for repayment should be the imperial taler at its current value. However, even though large coins were obviously agreed in the contract at issue, the applicant had to be content with payment in 'the presently common currency', just as were the parties who signed the Coinage Union.[121]

The widow Simonis, however, did not agree with this view and insisted that 'the annuities be paid as provided, namely in gold [florins]'.[122] She supported her claim that 'the [annual] pension should be paid in the same good florins as provided when the annuity [originally] had been purchased'[123] with references to such renowned authors as Joachim Mynsinger von Frundeck[124] and Andreas Gaill.[125] She further reminded the court that the annual pension had been 'determined and specified' by the contract.[126] With regard to the rate to be applied upon redemption, the widow held that it was 'by no means the value [the 40 florins annual interest payment, expressed in money of account] as applicable in 1560, [i.e.] at the time when the annuity was sold' that had to be taken into consideration, but rather the species [the gold florin coins] as 'hitherto increased in value'.[127] This was 'the long-established and almost general custom, namely that in settlement of annuities the date of the original payment is considered'.[128] Therefore, 'different Estates of the Empire', including Frankfurt, were required to make payments in the same currency and coin 'as their treasurer originally had received' at the date when the annuity was sold.[129] Both the

117 Ibid., [Q] 6, fo. 5r. 118 See further Redlich, above n 9, at 58 and North, above n 9, at 105.
119 Redlich, above n 9, at 57.
120 ISG Ffm RKG 1460, [Q] 6, fo. 5v. Contemporary literature has referred only to the normative finding: see, e.g., North, above n 9, at 105.
121 ISG Ffm RKG 1460, [Q] 6, fo. 6r. 122 Ibid., [Q] 6, fo. 3v. 123 ISG Ffm RKG 1460, [Q] 7, fo. 10r.
124 Joachim Mynsinger von Frundeck, *Singulares observationes Imper. Camera* (5th edn, 1594), Cent. 4, Obs. 1, no 1.
125 Andreas Gaill, *Practicarum observationum, tam ad processum judiciarium, praesertim Imperialis Camerae, quam causarum decisiones pertinentium* (1608), Bk. II, Obs. 73, no 3, at 436.
126 Ibid., [Q] 7, fo. 10v. 127 Ibid., [Q] 6, fo. 3v. 128 Ibid., [Q] 6, fo. 5r.
129 Ibid., [Q] 6, fo. 4r.

payment in the same currency and the adjustment of the coins' value are backed by detailed references to the legal writings reflecting the view of the medieval *communis opinio*, and therein following the jurists of the *usus modernus*: when a particular type of coin is promised as a means of payment, the creditor may request repayment in this coin; fluctuations in the coins' rates, that is, abatements as well as enhancements, must be borne by the creditor.[130] After all, as the applicant held, 'no deviating custom' was proved, 'neither generally nor specifically',[131] and the contracting parties in their initial contract had presumed no corresponding customary practice or a 'national custom'.[132] So, at least, ran the argument of the widow Simonis' legal counsel; it was, however, generally recognized custom that, having agreed on a particular type of coin, a debtor could also repay in another coin, for example when the agreed coin was no longer in circulation. In that case, however, the value of the repayment had to correspond to the rate at the time of the original payment.[133]

The opposing statements cited above vividly demonstrate the different interpretations of the Rescript of 1623. The city of Frankfurt invoked the Rescript in support of adjusting the contract in its favour. The creditor, on the other hand, insisted on the validity of the contract as concluded. She considered that any change to the contract was out of the question since the Rescript was passed decades after the contract had been concluded. She insisted that the annuity be paid in the currency stipulated in the contract and at the current rate; the annuity had to be 'delivered and paid' in just the same way as it had been 'purchased at the time it was contracted'.[134] Regarding the question of the currency owed, the clear wording was authoritative.[135] The existing contract could 'by no means' be modified to allow payment in different coins *ex post and perfecto*, nor by the Rescript of 1623.[136] Although the Rescript was not being 'disputed' as such, the applicant expressly denied its applicability to the contract at issue, as this contract 'was validly concluded on other terms, and florins were bought in specie'. 'And where no other terms are agreed', as 'also the court should know', the originally agreed provisions applied.[137]

The opinions exchanged between the disputing parties reflect the difficulty in establishing the actual value of a coin, which was evident in theoretical treatises on the value of money until the seventeenth century. A distinction was made between the nominal value of a coin assigned to it by the minting authority—*valor impositus*—and its precious metal content—*bonitas intrinseca*. A considerable part of legal literature took the view that the monetary value was determined by authority, so that the minting authority had the power to decide on the ratio between the nominal value and the 'material value' ('Schrot und Korn').[138]

The view held by the Imperial Chamber Court on the merits of this concrete case remains obscure, even though, in discussing comparable cases, contemporary legal literature states that 'without doubt, the assessors in Speyer hold that the date of the contract has

[130] Ibid., [Q] 7, fo. 6, with details on Bartolus, Anton Faber, and Hieronymus Schurpff. See further Coing, above n 13, at 472 et seq., and Schott, above n 20, at 56 et seq., 66.

[131] ISG Ffm RKG 1460, [Q] 7, fo. 6^{r}. [132] Ibid., [Q] 7, fo. 6^{v}.

[133] For a summary, see Coing, above n 13, at 472 et seq. See *contra* C. Dumoulin, *Tractatus commerciorum et usurarum, redituumque pecunia constitutorum, & Monetarum . . .* (1546), however not representative of the contemporaries' general opinion. For further details, see W. Taeuber, *Molinaeus' Geldschuldlehre* (1928); Coing, above n 13, at 473 et seq.

[134] ISG Ffm RKG 1460, [Q] 7, fo. 1^{v}, 3^{v}.

[135] The widow's lawyer refers here to Mynsinger, above n 124, and F. Martini, *De Iure Censuum, Seu Annuorum Redituum, Eorum Potissimum, Qui Emptionis Titulo Comparantur Commentarius* (1604), Cap. V, fn 66.

[136] ISG Ffm RKG 1460, [Q] 7, fo. 5^{v}. [137] Ibid., [Q] 7, fo. 10^{v}.

[138] For further details, see Coing, above n 13, at 472 et seq.; Rosseaux, above n 11, at 59 et seq. See also the references fn 144.

to be considered'.[139] The applicant did not comply with the request of an interim judgment that the holder of the certificate identify herself 'before justice [can] be administered'.[140]

It cannot be excluded that the court found unsatisfactory the copy of the annuity contract (*Gültbrief*), including the chain of endorsements, that was established by the applicant's lawyer and filed with the court in view of legitimizing the applicant's claim. It is more likely that the city of Frankfurt, that is, the debtor, had meanwhile realized the hopelessness of its submissions. On the one hand, it was not uncommon, for fear of general currency devaluation—before and after the 'kipper and wipper' period—for loan agreements to adopt large coins as their basis, such as the gold florin claimed by the widow Simonis in redemption of her annuity. The value of the coin was guaranteed by the metal it was made of. The creditors often tended to attach great importance to including formulations such as 'piece for piece' in the deed securing the debt. Even the Treasury accepted only large coins as payment for various taxes and fees.[141]

Both the reasoning of the Coinage Union underlying the Rescript of 1623, and the prevailing contemporary legal doctrine,[142] in fact support the opinion of the widow Simonis. They reflect the rule that old debts had to be paid back in the same form as they had been contracted. Consequently, in the case of a 'change in coinage', 'the date of the contract had to be taken into consideration'.[143] It was a '*lex catholica* that the debtor [should] repay his creditor with good and heavy coin . . . in weight and content ('Schrot und Korn)'.[144] This rule was reflected in case law, especially that of the highest courts, as well as in legal scholarship,[145] and was invoked here by the widow.[146] Finally, the principle of equivalence between performance and counter-performance expressed in the rule is also found in most other devaluation mandates issued in 1622 and 1623.[147]

The practice followed by the city of Frankfurt as debtor until 1623 did, however, come into partial conflict with that rule: as shown in the records of the Frankfurt Council and Mayor's Audience, debt interest was mostly paid at the rate of 1.5 florin per 1 imperial taler,[148] as was done with the disputed annuity in the case at issue. According to the commentaries on the Frankfurt reformation, this would 'most certainly be fair'.[149] In fact, this practice was most likely due to the fact that Frankfurt found itself in a tight economic

[139] Anonymous, *Rechtlichs vnd zu dieser Zeit hoch nothwendiges Bedencken vber die Frag, Wann einer vor fünff oder sechs Jahren Gelt auff Zinss angelegt: den Reichsthaler hingeliehen vmb ein vnd zwantzig Batzen wie damaln im Röm. Reich bräuchig, also hundert Reichsthaler dargezehlt für hundert vnd zwantzig Gulden, ob er schuldig wann ihme jetzunder das Capital widerumb auffgekündet, den Reichsthaler zu fünff oder auch sechs Gulden anzunemmen, vnd also für seine hundert dargelegte Reichsthaler allein vier vnd zwantzig oder nur zwantzig zu empfahen/von einem so wohl in der Theorie als Practica erfahrnen vnd berühmbten Rechtsgelehrten; männiglichen zur Nachrichtung, trewlich vnd mit sonderm Fleiss zusammen getragen vnd in Truck verfertiget* (162–?), fo. 8.

[140] ISG Ffm RKG 1460, record, entry of 22 March 1632, fo. 1v.

[141] Schneider, above n 9, at 10.

[142] J. P. Orth, *Nöthig- und nützlich-erachtete Anmerckungen über die Im Zweyten Theil enthaltene Acht erstere Tituln Wie auch Viele andere aus den übrigen Theilen dahin gehörige Tituln und Stellen Der so genannten Erneuerten Reformation Der Stadt Franckfurt am Mayn . . .* (1731), Fortsetzungen 1742–57, Zusätze 1775, Anderer Theil, Tit VII, § XVII, at 652–68, esp. 656 et seq. with further references; *Rechtliches Bedencken*, above n 140, fo. 8; *Juristenfakultät der Universität zu Wittenberg*, above n 12, at 14 et seq.; see also Schott, above n 20, at 56 et seq.

[143] Orth, above n 142, at 659.

[144] This formulation is often found in applicable treatises. See, e.g., Hiller, above n 12, at 4, Lustricius, above n 12, at 9 et seq.

[145] See, e.g., Hiller, above n 12, at 48–59; P. M. Wehner, *Practicarum Iuris Observationum selectarum singularis liber* (1661), at 184.

[146] Orth, above n 142, at 657. For further references, see *Juristenfakultät der Universität zu Wittenberg*, above n 12, at 3. Hiller, above n 12, at 48–59, contains three further decisions of the Imperial Chamber Court on the issue of debt repayment; Schneider, above n 9, at 70.

[147] See further Redlich, above n 9, at 62.

[148] ISG Ffm Ratschlagungsprotokolle, vol. 10, fo. 218r–219; ISG Ffm Bürgermeisterbücher 1623, fo. 63r–64v.

[149] Orth, above n 142, at 657 and 660.

situation and was trying to save money on the redemption of debts by applying the increased coin rates.[150] It was not only creditors who objected to this practice. The allied partners of the Coinage Union also accused the Frankfurt Council members of not applying the coin and tax orders in due form. It is thus not surprising that the Frankfurt Council, following a recommendation by the Imperial Chamber Court in another matter, 'considered it advisable' to settle with the creditors.[151]

2. Loans

Imperial Court proceedings also allow us to trace the evolution of the credit system towards interest-bearing loans secured by mortgages, as well as the controversies surrounding the redemption of old debts.

After the elimination of the canonical prohibition of interest, it was no longer necessary to hold on to the institution of the annuity. Lawsuits concerning annuities had become increasingly rare since the seventeenth century, and any there were based on certificates that had been established a long time ago in the past.

The loan soon became a widespread credit instrument, negotiated not only between merchants but also between private persons—most often between members of the low and middle nobility. Consequently, disputes regarding the terms of repayment of loans brought before the Imperial Chamber Court came not only from markets and fair cities, such as Frankfurt, but from all parts of the Empire. This is what happened in the case of Counts Georg Friedrich and Wolfgang Georg zu Castell versus Margrave Christian von Brandenburg-Bayreuth concerning the repayment of a loan in equivalent coin. The creditors stated that the repayment of debt on 'capital loaned in good money' had been made partly 'in much inferior coins', so that 'instead of 4,060.5 imperial talers . . . the creditors received no more than 465.5 imperial talers'.[152] In this case, too, the creditors relied on the date of the conclusion of the contract to determine the coin and its agreed value: according to 'commonly described Christian and secular rights and the reasonable general custom', debts 'had to be [repaid] at the value of the type of coin provided at the time of the loan'. In the case of the loan at issue, this meant that it had to be repaid at a rate 'almost eight times as high' as that actually paid. Finally, the creditors stated that the repayment of a loan on any other basis than that of the coin's rate at the date of the loan's purchase contradicted 'the appropriate style and daily observance of the Imperial Chamber Court'.[153]

The file of the Imperial Chamber Court, where the dispute was brought in 1638, does not show the decision.[154] However, according to a receipt attached to one of the parties' files, the adversaries settled the case by agreeing that the shortfall claimed was acknowledged as a debt by means of a novation for 3,000 imperial talers 'of good and common coin' and was paid on 1 March 1720 after repeated payment deferrals, so the litigants could call it 'quits and even' eighty years after the dispute was filed.[155] The amicable settlement in this case was probably based on several factors: both Houses were well-disposed towards each other

[150] This motive is also indicated in legal literature: see Kniephof, above n 12, at 8.

[151] ISG Ffm Ratschlagungsprotokolle, vol. 10, fo. 219^{v}, entry of 10 September 1623.

[152] Fürstlich-Castellsches Archiv (FCA) KA B VII 1^4, fo. 1.

[153] FCA KA B VII 1^4, lawyer's pleading of 1636.

[154] HStA München, 15248; M. Hörner (ed.), *Bayerisches Hauptstaatsarchiv, Reichskammergericht* (1995), 1840–2129 (lit C), 1885.

[155] FCA KA B VII 1^4, fo. 146.

for several decades; local magistrates were exchanged; and their political affiliations coincided, as both families were Protestant.[156]

Another lawsuit brought before the Imperial Chamber Court in 1749, against the widow of Friedrich Wilhelm Graf zu Solms, concerned the repayment of a loan in the amount of 66,000 florins contracted by Friedrich Wilhelm in 1743 with the Prince of Thurn and Taxis.[157] As a collateral, Friedrich Wilhelm pledged a house in Marburg, the small town of Niederweisel, and the village of Hausen near Butzbach, along with the rights, contributions and taxes ('beed, Zehnden und Gefällen') relating thereto.[158] The loaned sum was paid out to Friedrich Wilhelm 'in cash, in common good money, each florin at thirty *albus* and each *albus* at eight farthing of Frankfurt currency'.[159] According to the bearer instruments,[160] 'the mortgage and the letter of hypothecation',[161] the creditors, including renowned members of the Frankfurt patriciate, such as the Guaita, Diesterweg, and Behagel families,[162] requested the redemption of the capital and interest according to the exchange rate updated at each Frankfurt fair. It was explicitly agreed that 'every year, payment had to be made with five per cent [interest], notably every six months from fair to fair, . . . in good money valid in the city of Frankfurt according to the exchange rate'.[163] The legal successors of the debtor, on the other hand, insisted on calculating the amount due based on the date when the money was first loaned, rather than using the current exchange rate.

As in the case of the widow Simonis, both parties invoked relevant legal scholars, such as Mynsinger von Frundeck, to substantiate their arguments. However, in this case, the debtor could only have been interested in gaining a short-term advantage, since the interim judgments that were available to him each granted a period of only several weeks for providing powers of attorney and pleadings.[164] In addition, no real action on the merits could be brought by the borrower, because he had subjected himself to immediate execution under the deed in case of default:[165] the creditors could have taken possession of the collateral secured on the aforementioned mortgages 'by one of the highest Imperial Courts', without any 'right and power' of the debtor to have the contract or its fulfilment first reviewed in court by the 'distinguished Imperial Court Counsellor or the Distinguished Imperial Commission'.[166]

IV. Conclusion

Research into the court records presents a fresh view on the 'kipper and wipper' inflation and shifts the attention to the legal problems arising from the devaluation of coins and the resulting decline in the exchange rates. The examination of case law of the Imperial Chamber Court offers a unique glimpse into the *legal* reality underlying the historical events. Not even the expert opinion on the impact of the devaluation presented to the

156 One example of an exchange of offices is Count Wolfgang Dietrich zu Castell-Remlingen (1641–1709), who first was the head of the government (*Landeshauptmann*) of the margrave's province of Neustadt an der Aisch, which belonged to Brandenburg-Kulmbach and later to Brandenburg-Bayreuth: O. Meyer, 'Das Haus Castell: Landes- und Standesherrschaft im Wandel der Jahrhunderte', in O. Meyer and H. Kunstmann (eds), *Castell: Landesherrschaft—Burgen—Standesherrschaft* (1979) 9, at 28. For the military connections between the Houses, see A. Jakob, '. . . seine Hauptleidenschaft war das Militair . . .'? Markgraf Friedrich von Brandenburg-Bayreuth als Regimentsinhaber und Landesherr', in G. Seiderer and C. Wachter (eds), *Markgraf Friedrich von Brandenburg-Bayreuth 1711–1763* (2012) 195, at 246.

157 ISG Ffm RKG 1402, [Q] 2, fo. 1^{v}, 2^{r}.

158 Ibid., [Q] 3, fo. 2^{v}.

159 Facsimile of the loan deed, ISG Ffm RKG 1402, [Q] 3, fo. 2^{v}.

160 Ibid., [Q] 3, fo. 5^{v}.

161 Ibid., [Q] 3, fo. 4^{v}.

162 For a list of creditors, see ibid., [Q] 2, fo. 2.

163 Ibid., [Q] 3, fo. 2^{v}.

164 BundA AR-1-I 1751 UBuchNr 61, fo. 105^{v}; 1752 UBuchNr 62, fo. 67, 192^{r}, 270^{r}; 1755 UBuchNr 65, fo. 319^{r}.

165 ISG Ffm RKG 1402, [Q] 3, fo. 6^{v} and 7^{r}.

166 Ibid., [Q] 3, fo. 3^{v}, 4^{r}.

Emperor in 1621 addresses individual debt relationships, even though it covers the plight of selected segments of the population.[167] This chapter has focused on the analysis of legal norms of mint law, going beyond issues of origin and theoretical debates, to address the specific ways in which they were implemented and interpreted by early modern jurists. It became apparent that violations of the prohibition of coin impairment were not prosecuted either at the imperial or at the territorial level until the outbreak of the Thirty Years' War. This might have been due to the fact that the sovereigns themselves were involved in coin debasement. Only from the 1620s onwards do the sources show a systematic prosecution of mint law offences. This shift in attitudes undoubtedly reflected the fiscal interests of the sovereigns: their tax income was hampered by the collection of inferior coins. At the imperial level, the prosecution of mint law offences is a good example of the weakness of a system lacking effective authority. The Imperial Coin Edict required private persons to report any offences and imposed penalties in the case of failure to do so. However, anyone providing useful information was entitled to a reward only if the offender was sentenced to a confiscation of property, not if he was punished with imprisonment or with a fine. The practice of the imperial city of Frankfurt shows, however, that the estates of the Empire did not judge the support of 'whistleblowers' as indispensable.

The reluctance to inflict corporal punishments for mint law offences reflects an older practice commonly followed in the imperial cities, as well as a trend developing in other parts of the Empire and beyond, which regarded imprisonment as an alternative to the death penalty or physical punishment.

Regarding the terms of repayment of old debts, the ruling of the highest judicial authority entirely followed the tradition of the medieval *communis opinio* and the ensuing views of the jurists of the *usus modernus*. In this respect, the Imperial Chamber Court rejected special local jurisdiction or interests, thereby strengthening the trust in legal and business transactions. In the debate on debt repayment procedures, involving economic as well as financial law issues, a position that equally drew on justice and freedom of contract proved to be remarkably long-lived and stood the test of time both in scientific literature and in court ruling.

The court files provide insights both into the efforts by the authorities to win the battle for the power of money and into private efforts to minimize the losses from the currency devaluation with the support of legal literature. The fact that the parties involved in a lawsuit and their representatives relied on important legal scholars points to the importance attached to them.

Lastly, the lawsuits analysed in this chapter mark a period when modern legal methods came into widespread use as well as an evolution in legal theory: transferability of claims appears already just as natural as the possibility of adjusting a contract, a practice partly granted by the coin edicts of the early seventeenth century.

[167] On this expert opinion, see further Trawnicek, above n 9, at 45 et seq.

PART III

THE EVOLUTION OF CASHLESS PAYMENT: BANK MONEY

I

MONETARY ENVIRONMENT

17

Early Public Banks I

Ledger-Money Banks

William Roberds and François R. Velde

I. Introduction

The structure of modern central banks follows a well-established model. The asset side of a central bank is dominated by debt of its sponsoring government, augmented in some cases by the debt of other sovereign states. The liability side consists of debt in more liquid form, either bearer notes or balances in low-yielding accounts used by commercial banks. Central bank debt, a.k.a. 'money', enjoys a privileged status as a transaction medium (e.g., in terms of legal tender and payment finality), which renders it the most liquid asset in most contemporary economies. This extreme liquidity allows central banks to operate profitably with high levels of leverage. If all goes according to plan, high leverage does not generate solvency concerns, because the central bank's assets are backed by the taxing power of the state. The state benefits from this arrangement as well, both from the central bank's profits, and from the policy activities of the central bank, which help ensure a steady market price for government debt. In short, money is trusted because it is basically repackaged government debt, and government debt is liquid because it can be reliably transformed into money.

The purpose of this chapter, and another that follows it,[1] is not to question this curiously circular arrangement, but to explore its origins. In the Anglophone world, central banking is sometimes represented as a spontaneous, late-seventeenth-century invention of the Bank of England. It should come as no surprise that the true origin of central banking is more complicated and less Anglo-centric. By one author's count, there were already twenty-five publicly owned or sponsored banks operating in Europe at the time of the Bank of England's founding.[2] Our survey will consider the history of many of these pre-Napoleonic-era public banks.[3] With few exceptions, we rely on the descriptions of these

[1] See Chapter 22 in this volume.

[2] Theodore Janssen in his 1697 *Discourse Concerning Banks*, cited in J. Clapham, *The Bank of England: A History* (1945), at 3.

[3] Some of the banks we do not cover are the Bank of San Ambrogio founded in 1593 in Milan (A. Cova, 'Banchi e Monti pubblici a Milano nei Secoli XVI e XVII', in *Banchi pubblici, banchi privati e monti di pietà nell'Europa preindustriale* (1991) 327); the Danish *Kurantbanken* founded in 1736 (M. Märcher, 'Danish Banking before and after the Napoleonic Wars: A Survey of Danish Banking, 1736–1857', in T. Talvio, C. von Heijne, and M. Märcher (eds), *Monetary Boundaries in Transition: A North European Economic History and the Finnish War 1808–1809* (2010) 127); the Spanish Banco de San Carlos founded in 1782, an ancestor of the Bank of Spain (P. Tedde de Lorca, *El Banco de San Carlos (1782–1829)* (1988)); and the First Bank of the United States founded in 1791

institutions in the secondary literature. This literature is extensive but is spread across a spectrum of languages, and as a result has been relatively inaccessible.[4]

II. Common Themes

1. Origins

Early public banks were the predecessors of modern central banks, but were often set up in a quite different fashion from their modern counterparts. Some were not owned by governments—the Bank of England, for example, originated as a private entity. Many of them did not function as 'central banks' in the sense of having a monopoly of control over a nation's monetary base. Many of them held little government debt. These banks did, however, share a common characteristic: the ability to create a privileged set of claims (ledger money or circulating notes) of a form that could not easily be replicated by purely private institutions. Against these liabilities the public banks held a range of assets, including coin, bullion, debts of individuals, dedicated tax revenues, and to varying extents, obligations of the sponsoring government. The banks' alchemical quest was to aggregate these inherently risky assets—even coin was often of uncertain quality—into a set of stable and liquid claims. As with other branches of alchemy, many recipes were tried, with varying degrees of success.

Our focus is on a key ingredient of the banks' recipes for transmuting shaky assets into money-like liabilities, that is, the legal features of the claims they issued. In all the cases studied, these offer a variety of inducements for the public to hold the banks' liabilities, in the form of both 'carrots' (freedom from attachment by creditors, for example) and 'sticks' (requirements for use of the bank's claims to settle certain obligations).

2. Viability

A noteworthy lesson that emerges from the history is that statutory mandates, by themselves, cannot guarantee the success of a public bank. Legal inducements aside, many early public banks failed or languished because they lacked the support of the local merchant community. Merchants (generally operating as proprietorships) were reluctant to risk their accumulated wealth in interactions with a newly founded public bank, unless the bank offered some obvious advantage over existing monetary arrangements. This was not without some justification, as early public banks were subject to runs, lengthy suspensions, and occasional outright liquidation. Examples of such events discussed below include disruptions in Genoa (1444), Barcelona (1468), Nuremberg (1635), Venice (1638), Stockholm (1664), Hamburg (1672), and of course the 1720 collapse of John Law's Bank in France.

The merchants' practically based scepticism is in keeping with the teachings of modern economic theory. A useful perspective on the public banks' experience is provided by the

(D. J. Cowen, *The Origins and Economic Impact of the First Bank of the United States, 1791–1797* (2000)). Nor do we survey the municipal exchange offices present in the Southern Low Countries in the late Middle Ages (E. Aerts, 'The Absence of Public Exchange Banks in Medieval and Early Modern Flanders and Brabant (1400–1800): A Historical Anomaly to be Explained', (2011) 18(1) *Financial History Review* 91). We have not tracked down other banks rumoured to have been founded in the sixteenth century in Palermo, Turin, Messina, and Rome.

[4] See J. G. Van Dillen (ed.), *History of the Principal Public Banks* (1934) for an early survey and S. Ugolini, 'What Do We Really Know about the Long-Term Evolution of Central Banking? Evidence from the Past, Insights for the Present', Norges Bank, Oslo Working Paper 2011–15 (2011) for a recent one.

well-known Modigliani and Miller theorem.[5] This celebrated result states that a firm's value does not depend on its capital structure, for example on its debt-to-equity ratio. Modern corporate finance, in essence, consists of a study of exceptions to this general rule.

The alchemical nature of the early public banks becomes apparent if we now apply the Modigliani–Miller theorem at the economy-wide level. The early public banks were all engaged in the business of reshuffling the set of claims on their host economies, attempting to take relatively risky assets out of the hands of the public and to replace them with putatively more reliable obligations. Consistent with historical experience, Modigliani and Miller predict that this kind of 'leveraging' operation should accomplish nothing in itself. Indeed, modern corporate finance suggests that in order to increase the wealth of an economy, a public bank would, for example, have to improve the quality of information on its backing assets, or improve the incentives of underlying obligors (the banks' sponsoring governments especially) to repay. Our review will show that public banks thrived precisely in circumstances where they could offer such improvements (e.g., by committing to hold a restricted range of assets), and fell into disuse when they could not.[6]

3. Tensions

In today's economies, much of the intermediation performed by the early public banks is carried out by commercial banks. Why should not the same have been true in the economies of medieval and early modern Europe? A complete answer to this question goes beyond the scope of this survey, but a superficial answer is that commercial banks were underdeveloped during the time period we consider. Deposit banking in the modern sense was well under way in England, but on the Continent, distrust of depository institutions ran deep. Merchants and other wealthy individuals often preferred to keep deposits in public banks.

The successful introduction of a public bank opened up new opportunities and created new trade-offs. As the banks' claims became more and more accepted as money, the management of the banks' balance sheets became a vehicle for the practice of what is now understood as beneficial policy: deliberate smoothing of money market fluctuations through open-market operations and through changes in the banks' lending terms. A downside was that the increased trust in the public banks made them more tempting targets for fiscal exploitation.

4. Taxonomy

Although the early public banks shared a common underlying theme—creation of a new, liquid type of asset—they differed in many details of their organization. To impose some order on the diverse array of banks, our survey is split into two chapters. The first chapter focuses on banks that issued claims in the form of ledger money. The 'money' in question might be a demandable bank deposit (as in Venice's *Banco di Rialto*), a bond or time deposit (as in Vienna's *Stadtbank*), or an equity-like claim (as in Genoa's *Casa di San Giorgio*). These various instruments were money-like in theory at least, as they could

[5] F. Modigliani and M. H. Miller, 'The Cost of Capital, Corporation Finance and the Theory of Investment', (1958) 48(3) *American Economic Review* 261.

[6] The founders of the early public banks did not contemplate the creation of fiat or 'outside' money as exists with modern central banks. Nonetheless, the liabilities of some of the early banks (the Bank of Amsterdam, Law's Banque Royale) eventually came to resemble fiat money in some respects.

generally be used for giro (book-entry) payment (the actual prevalence of giro payment differed from bank to bank). The second chapter considers banks that issued circulating notes in some form, the predecessors of today's banknotes. This classification is not always clear-cut. Vienna's *Stadtbank*, for example, began life as a ledger-money bank but later evolved into a prolific note issuer.

Issuance of bearer notes did not become widespread until the eighteenth century. The seventeenth century saw some sporadic issuance in Sweden[7] and more successful issue in Naples.[8] At this time the idea of public banks was virtually synonymous with the idea of a giro bank operating in a republic (Genoa, Venice, Amsterdam, and Hamburg). The model of note issue against (principally) government debt was popularized by the example of the Bank of England,[9] an institution that was initially greeted with derision by continental observers.[10] With the Bank of England's continued success, however, derision turned to envy, and eventually to conscious imitation by public banks in Austria, France, and Prussia.[11] Sweden also resumed note issue, perhaps inspired by England's example.

The introduction of bearer notes was an important innovation. The convenience and anonymity of banknotes expanded public banks' customer base beyond the wealthy merchants who might keep bank accounts, this despite the notes' lack of legal tender status in many countries. The value of the notes was guaranteed, in principle, at least by promises of convertibility to coin on demand. Unfortunately, this popularization of the banks' money increased the scope for their fiscal exploitation. For both ledger-money and especially note-issuing public banks, pressures to inflate became acute with the wartime fiscal demands of the Napoleonic Era, and promises of convertibility were abandoned. These same pressures led to the dissolution or extensive reorganization of many of the institutions considered in this survey.

III. Ledger-Money Banks

1. Genoa

(a) The Casa di San Giorgio *(1404–1815)*

The institution that figures as a public bank in the history of Genoa is the *Banco di San Giorgio*,[12] which was a subsidiary activity of the *Casa di San Giorgio*; the latter was constituted in 1404 to consolidate the administration of Genoa's public debt.[13]

Since the twelfth century, Genoa had been issuing debt backed by specific tax revenues. Over time, the lenders were allowed to form syndicates to manage the debt collection from the tax farmers who had contracted to collect the debt. In 1404, most public debt was consolidated, on a voluntary basis, into a single consolidated claim or title, and the *Casa di San Giorgio* was created to represent the creditors and administer the debt on their behalf. The *Casa* became a formidable institution, a state within a state, to protect the interests of the creditors.

7 See Chapter 22 in this volume. 8 See Section III below. 9 See Chapter 22 in this volume.

10 M. Niebuhr, *Geschichte der Königlichen Bank in Berlin* (1854), at 14–15.

11 See Chapter 22 in this volume.

12 H. Sieveking, 'Studi sulle finanze genovesi nel medioevo e in particolare sulla casa di San Giorgio', in *Atti della Società Ligure di Storia Patria* (1906), vol. 2.

13 M. Fratianni, 'Government Debt, Reputation and Creditors' Protections: The Tale of San Giorgio', (2006) 10(4) *Review of Finance* 487.

(b) *The First* Banco di San Giorgio *(1408)*

In 1408, the city authorized the *Casa* to open a banking business, motivated in large part by instability in exchange rates between coins; the government, after fruitless attempts at fixing the rates by law, decided that it was all due to greedy bankers, and a non-profit banker under government supervision would better enforce the mint ordinances.

The Genoese monetary system, like other medieval systems, consisted of a gold coin (the *genovino* or *ducato*, roughly interchangeable with the *florin* of Florence and the *zecchino* of Venice), a coin of fine silver (the *grosso* introduced in 1365) worth 2 *s.*, and the *denaro* of low fineness, worth 1 *d.*[14] The gold coin had remained at a stable value of 25 *s.* since the 1340s, but, as shown in Figure 17.1, in the early years of the fifteenth century it began to rise, reaching 28 *s.* in 1404.[15] Genoa responded that year by debasing the *denaro*, introducing a 6 *d.* coin called the *petacchina*. Reports of an influx of bad foreign coins appeared. The government also tried to fix the price of the *florin* at 25 *s.*, which only resulted in the emergence of a fictitious unit of account, the *fiorino d'oro* at 25 *s.*, while the real coin (*fiorino in oro*) continued to rise in price. Suspecting that this rise was due to unscrupulous bankers, the city instituted regulators to monitor the rates paid by bankers on *florins*. By 1413, the concern was now over an excess of small coins, and legal tender was limited for small coins in 1413 (payments up to 50 *L.*: up to one quarter in small coins; above: one fifth).

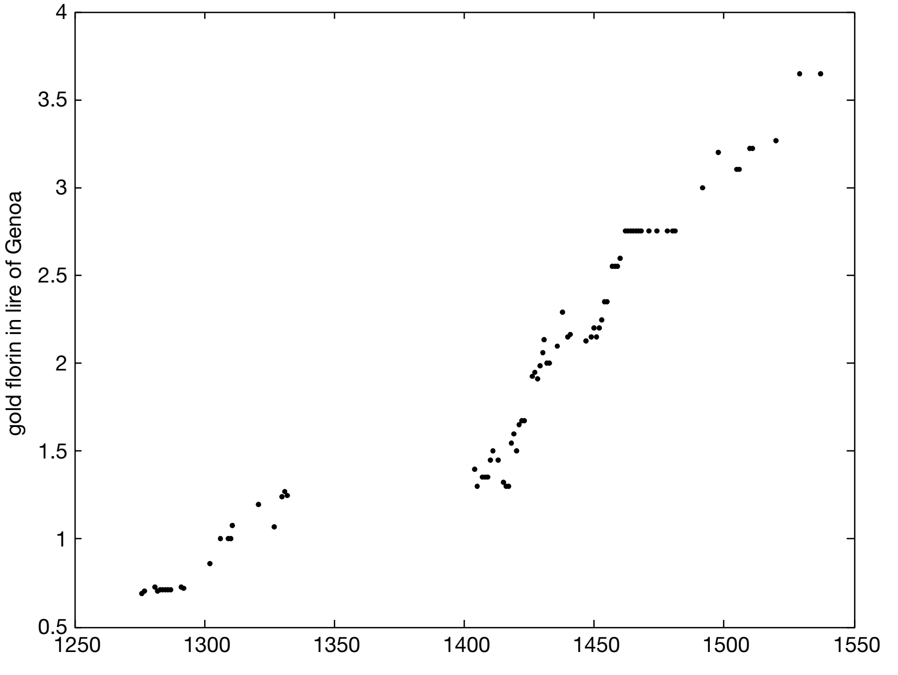


Figure 17.1 Price of the gold genovino or ducato in lire of Genoa, 1276–1535.

Source: G. Pesce and G. Felloni, *Le Monete Genovesi: Storia, Arte ed Economia delle Monete di Genova dal 1139 al 1814* (1975), at 331–4.

[14] Nominal values were expressed in *denari* (*d.*), *soldi* (*s.*) of 12 *d.*, and *lire* (*L.*) of 20 *s.* The same conventions prevailed in Venice.

[15] G. Pesce and G. Felloni, *Le Monete Genovesi: Storia, Arte ed Economia delle Monete di Genova dal 1139 al 1814* (1975), at 331.

The intent guiding the creation of the bank is clear in the initial statement on the very first ledger, declaring (after expressing confidence in the help of God and Saint George) that the bank opened on 2 March 1408 'in order to extinguish the public debt and to eradicate certain bad practices of bankers, who are so devoted to their own interest that they barely blush as they ruin the public good, and have become accustomed to spend out and hold money not at the required price, but at an unusual and irrational price'.[16]

The goal of extinguishing the public debt is a reminder that the banking operation was not owned by the city, but by the *Casa di San Giorgio*, and for the benefit of its shareholders (creditors of the state); indeed, the managers (*gubernatores banci*) were chosen among the highest officials of San Giorgio. With respect to the public it was only a bank of deposit and transfer, but it could make loans to the tax farmers (who provided San Giorgio's income) and the state, a fact that may have contributed to its early demise. The state already used private bankers for its transactions, in particular to pay interest on the debt. All these operations were now concentrated in the bank, although private bankers continued to operate and even held accounts at San Giorgio.[17] There was a rapid increase in business, as a second bank (or ledger) was opened in 1439 and a third one soon after. The bank dealt with bills of exchange to the extent that it needed to collect revenue from overseas Genoese establishments in Chio, Constantinople, and Crimea.

Of course, San Giorgio could not maintain the price of the *florin* and in 1427, when the *florin* had reached 39 *s.*, San Giorgio was authorized to take the *florin* at the market rate (the price at which they 'were paid and received by other bankers') for a specific transaction with the government. In 1437 a major reform of coinage took place, debasing the silver currencies by about 8 per cent; at the same time, supervision of the mint was taken from the city officials and given to San Giorgio. At the same time, the *Casa* was enjoined to keep the *florin* at the new legal rate of 40 *s.*, and its balances were made legal tender (*scripta banci San Georgii refutari sive renui non possint*). Nevertheless the *florin* rose to 47 *s.* by 1444.

(c) Interlude (1444–1530)

The bank was running into difficulties; it had to pay interest to its creditors punctually, but the tax farmers delayed payment and it was forced to buy cash at high prices. It was also weakened by the loans to the government, which the latter was not in a hurry to repay. The coin tariff it had to apply increased difficulties. When the government raised the *florin* to 42 *s.*, it gave San Giorgio the choice of maintaining the new rate or relinquishing its banking business: the *Casa* decided on the latter (4 September 1444). Heers (1961) makes an important point: the closure of the bank in 1444 has been overplayed, because one of its functions, that of a payments system, was taken up by another part of San Giorgio.[18] The shares in the public debt managed by San Giorgio (the *luoghi*) were transferable and actively traded (although annual turnover amounted to only 5 per cent of the stock). Interest on the debt was originally payable every three months in cash, but with accumulated delays in payments a different method had evolved. When the interest payment (*paga*) was due, the owner of *luoghi* was credited on a register with the interest corresponding to his holdings. The credit would eventually be settled in cash, but in the meantime the owner could transfer his credit to others. By the 1460s, the actual cash

[16] E. Marengo, C. Manfroni, and G. Pessagno, *Il Banco di San Giorgio* (1911), at 251.

[17] E. Aerts, 'The European monetary famine of the late Middle Ages and the Bank of San Giorgio in Genoa', in G. Felloni (ed.), *La Casa di San Giorgio: il potere del credito* (2006) 27, at 57.

[18] J. Heers, *Gênes au XVe siècle: Activité économique et problèmes sociaux* (1961), at 165–9.

settlement took place at face value but four to seven years late, and only involved very small amounts. The reason is that in the interval the credits, called *lire de paghe*, had been bought and sold extensively, and ultimately purchased by the debtors of San Giorgio (mostly the tax farmers) to settle their debts. The secondary market for *lire de paghe* distinguished between vintages, and prices behaved like discounted values, with an upward trend over time and implicit discount rates of 4 per cent to 7 per cent. These cash prices presumably represent the discounted expected value of the cash payments to be made by tax farmers purchasing *lire de paghe* to settle their obligations. As Heers showed, the market price of *luoghi* in turn reflected the variations in the *lire de paghe* markets.

The *lire de paghe*, being small in size, were used extensively for small transactions, to purchase small quantities of food, spices, wax, and fabrics. In the silk industry almost all payments, including wages, were made with them.

(d) The second Banco di San Giorgio *(1530)*

After an interval of nearly a century, San Giorgio again accepted deposits, but cautiously. A first register was apparently opened to deposits in 1530, although we do not know on what authority or under what conditions. Later, from 1586 to 1625 San Giorgio opened a sequence of coin-specific banks, before opening in 1675 a general bank. San Giorgio reopened a bank in 1530, the *cartulario di numerato*.[19]

Accounts were kept in *lire*, but we have no documentation on the rules governing the exchange of cash for bank balances. Privileges attached to the balances included protection from seizure except on court order and only in limited cases.[20] From the registers, it appears that small coins (*soldini* and below) were rarely accepted, but in the sixteenth century many other coins of billon, silver, and gold, preferably but not exclusively of Genoese coinage. In 1600, however, the bank was restricted to Genoese gold and silver coins and gold *scudi* 'of the five stamps' (Genoa, Spain, Venice, Florence, and Naples) at prices set by the Protectors. The discretion was exercised on foreign coins, accepting them at times at prices below their legal value; but until 1630 Genoese coins were taken at their legal value.

This bank was progressively replaced by other offices created successively, and publicly. The first three were designed to accept and pay out specific coins, and operate alongside each other:

- In 1586 the *cartulario de oro* was opened, initially for one year only, renewed several times and then indefinitely in 1591, to accept deposits of gold *scudi delle cinque stampe*.[21] Depositors acquired a credit which they could use at any time, either by

[19] Sieveking, above n 12, dates the new bank to 1586. No founding document is known, but the evidence is in ledgers preserved in the archive of San Giorgio, which shows that the bank not only handled operations in cash or payable in cash that were related to the shares and their interest, but also from the start accepted sight deposits from individuals and made transfers between clients at their request. This suggests that the payment system based on the *lire de paghe* described by Heers, above n 18, may have been opened to deposits, if only informally and selectively. We do know that overdrafts were not allowed, except with the authorization of the Protectors of San Giorgio, and even then only under specific circumstances: only for the Republic, its magistrates or charitable institutions; for short duration loans with pledged collateral; and when the cash reserve was sufficiently large.

[20] Sieveking, above n 12, at 203.

[21] These gold *scudi* were minted in Spain, Naples, Florence, Genoa, and Venice at the same standard and were the sole legal tender of the Genoese fairs: see G. Felloni, 'Un Système monétaire atypique: la monnaie de marc dans les foires de change génoises, 16e-18e siècles', in J. Day (ed.), *Études d'histoire monétaire, XIIe–XIXe siècles* (1984) 249.

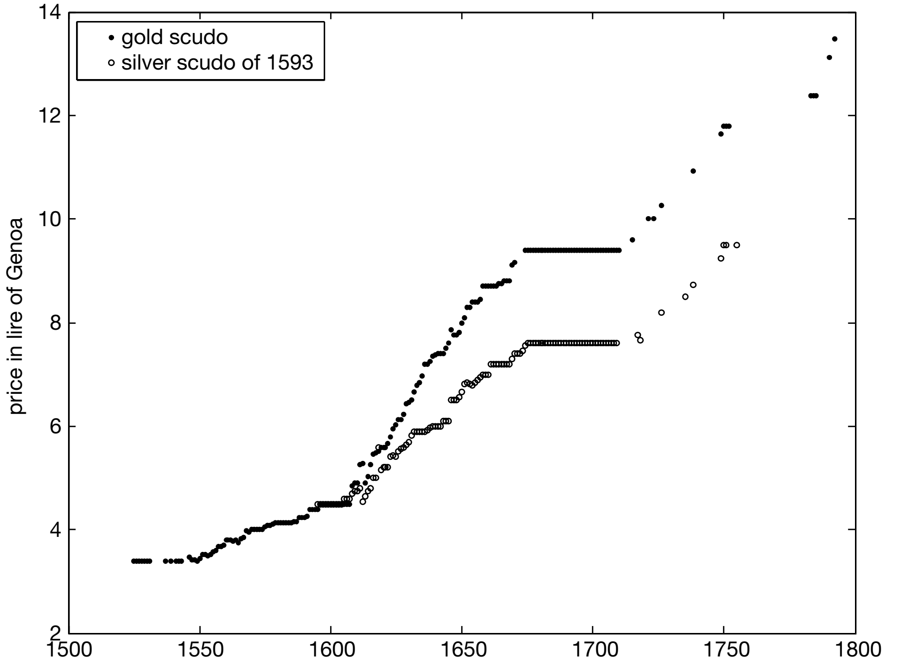


Figure 17.2 Price of gold and large silver coins in lire of Genoa, 1504–1755.

Source: G. Pesce and G. Felloni, *Le Monete Genovesi: Storia, Arte ed Economia delle Monete di Genova dal 1139 al 1814* (1975), at 331–4.

withdrawing it or transferring it to another party. Accounts were kept until 1643 in *lire*, with the gold *scudo* rated at 3 *L.* 8 *s.*, and afterwards in *scudi*.

- In 1606 the *cartulario di argento* or *di scudi di cambio* was opened for the Genoese silver *scudi* minted since 1593, initially for three years and later permanent. Its unit of account was the *scudo*.
- In 1625 the *cartulario di numerato* or *di moneta de reali* for Spanish *pieces of eight reals*, again initially for one year but eventually made permanent. Accounts were kept in *reali*.

The new offices proved popular, and in 1606 the Genoese state required its cashiers to make all payments above 100 *L.* through giros in San Giorgio's offices, in part because the resulting paper trail made auditing easier. Eventually, continuing exchange variability between coins (Figure 17.2) resulted in greater demands for a general bank accepting various sorts of coins. The state tried to regulate the value of coins to no avail. Several proposals for a bank were made: in one, depositors could withdraw the specific coins they had deposited or in some other coin, but the latter chosen by the bank; in another, depositors could choose the coin to withdraw but would then pay an agio.[22] By mid-century there was widespread belief that some public bank was needed, and the only question was whether the state or San Giorgio should run it. Finally, in 1675 the decision was made in favour of the latter.

The context was once again a monetary crisis associated with shortages of small change.[23] The silver and gold currencies had been appreciating sharply in the 1660s in

[22] Sieveking, above n 12, at 248–50.

[23] G. Gianelli, 'La riforma monetaria genovese del 1671–75 e l'apertura del banco di moneta corrente', in G. Felloni (ed.), *La Casa di San Giorgio: il potere del credito* (2006) 121.

terms of *moneta corrente*, that is, small denominations. The latter's poor quality, that is, overvaluation, was alleged as a cause, and the Genoese government had actually withdrawn large quantities of small coins between 1644 and 1656. By 1670, however, there was a shortage of small coins. In 1671, the government issued a series of copper coins valued at intrinsic value (gross of production costs) but soon reversed itself and proceeded instead to issue a new large silver coin or *scudo*, of slightly lower fineness than the existing *scudo*, along with slightly overvalued fractions from one half to one thirty-second to serve as small change. The legal value of the old *scudo* was set at its then current market rate of 7 *L.* 8 *s.*, while the new *scudo* was set at 4 *L.*, or 54 per cent of the old *scudo*, while its fine silver content was 53 per cent. Four years later, the old *scudo* had risen by another 4 *s.*, and its legal value was adjusted accordingly while the new *scudo* was debased in proportion to keep the same nominal value of 4 *L.*

The new bank was to keep its accounts in *moneta corrente*, and accept all legally rated coins at the official rate (except small coins). Underweight coins, which had until then been allowed to circulate by weight, were demonetized but the new bank accepted them (as well as counterfeits!). Bills of exchange but also all other payments above 100 *L.* had to be made through the bank, the first time such an obligation was imposed in Genoa. The management of the bank had the choice of the coin in which to repay, at the official rate; only those who had used their credit for payments in the exchange fairs and could prove that they had, had the right, like the creditors of the coin-specific *cartularii*, to request payment in a specific coin. The bank also had the option to pay the government in *piccola moneta* or small coin, a particularly interesting feature in the context of seventeenth-century copper inflations. As always, the initial concession was limited to renewable three-year terms, later extended to ten years.

One innovation, imitated from the Neapolitan *fede di credito*, was the *biglietto di cartulario*, a certificate issued by the bank to a depositor attesting his balance. The depositor could use the certificate to withdraw cash or he could transfer it by endorsement: the assignee could then withdraw the cash from the bank without further intervention of the original depositor.

Two other features, requested by San Giorgio, were denied by the state. One was the possibility of opening a Lombard facility, offering short-term loans against collateral in coin and bullion; the other was a monopoly on foreign exchange. The only loans it made were short-term, to the city, and only with the approval of San Giorgio's Grand Council.

The bank's foundation, combined with the monetary reform of 1671–5, was successful in checking the rise of gold and silver coins for one generation; in 1709 the rise resumed. Since the bank's unit of account remained tied to the 1675 valuation of the silver *scudo*, an agio (shown in Figure 17.3) developed on bank money over current money, which rose from 0.5 per cent in 1710 to 18.5 per cent in 1741, exactly in line with the *scudo*'s price increase.[24] In the mid-1740s the government attempted to fix the agio at 15 per cent, but soon the catastrophe of 1746 hit. Genoa, a reluctant participant in the War of Austrian Succession on the French side, was occupied by the Austrians in September 1746 and subjected to a large war indemnity. The state begged the *Casa di San Giorgio* to make a loan, resulting in a suspension of payments, at first for large sums and then on 15 September for all sums for fifteen days, then on 10 October indefinitely. The agio collapsed, turning negative in 1748

[24] G. Pesce and G. Felloni, *Le Monete Genovesi: Storia, Arte ed Economia delle Monete di Genova dal 1139 al 1814* (1975).

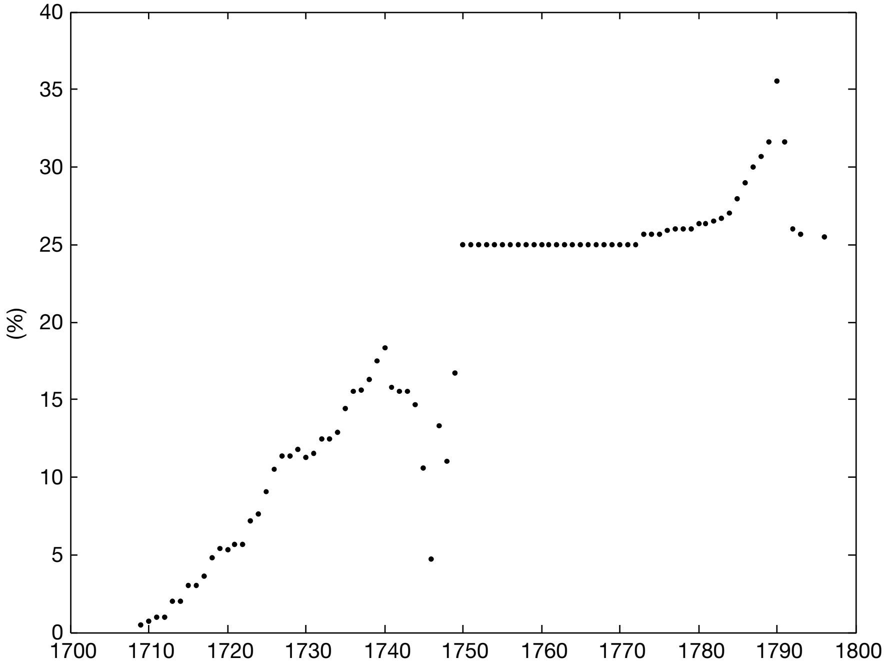


Figure 17.3 Agio on bank money in Genoa, 1705–97.

Source: G. Pesce and G. Felloni, *Le Monete Genovesi: Storia, Arte ed Economia delle Monete di Genova dal 1139 al 1814* (1975), at 331–4.

and reaching −16.7 per cent in 1750. The existing accounts (in the amount of 13.3 million *L.*) were converted into redeemable bonds in 1751, while in 1748 San Giorgio opened a new bank, the *banco corrente* (a gold-only bank was also briefly in existence in 1751). The state progressively repaid its debt to San Giorgio, and San Giorgio redeemed the bonds by 1777.

The revolutionary government imposed by France in 1797 took away the foundation of San Giorgio, namely, the assignment of taxes. The creditors of San Giorgio became creditors of the state. The bank continued to operate briefly, and for a short while repaid depositors partly in bearer notes, but its growing debt to the state soon sank their value, and liquidation of the bank began, financed in part by selling the assets of San Giorgio (such as the port it had built in the eighteenth century). After the fall of Napoleon the new but ephemeral Republic of Genoa recreated a bank, but Genoa's annexation to Sardinia put an end to it. The *Casa* was abolished in 1815 and the creditors were absorbed into the Sardinian debt.

2. Venice

(a) Private banking in Venice

The creation of *Banco della Piazza di Rialto* or *Banco di Rialto* in Venice in 1587 was essentially a government intervention to correct a market failure: the institution created was intended to supply a payment service hitherto provided by the private sector, but in a manner found to be wanting.

Medieval banking arose out of money changing: moneychangers over time came to accept deposits and let their depositors settle debts by transferring deposits between each other.[25] The transfer was made by oral order, in presence of both parties, and the written record of the transfer on the banker's books was sufficient evidence for the discharge of the debt. Over the course of the fourteenth century Venetian bankers ceased to be called *campsores* (changers) and became known as *banchieri* (bankers), and by 1374 their businesses were called *banca de scripta*, or *banchi di scritta*, clearly indicating their primary purpose.[26] Although Venetian banks were not numerous (eight to ten in the fourteenth century, three or four around 1500, all located in the Rialto), their economic role was widely considered as crucial.[27] Their total balances were around 1 million *ducats*, and they may have had as many as 4,000 depositors, or one in thirty of the population of Venice.[28] By 1400, bank money was used in payment for a variety of transactions, from purchases of bullion to payment of rents and settlement of foreign exchange, and in the fifteenth century some duties.[29]

The basic problem with the Venetian payment system based on private banks was the possibility of failure, since the banks were not 'narrow' and, by the fourteenth century at the latest, allowed their depositors to overdraw.[30] Deposit banking and commercial banking were not separate, and bankers extended loans or invested directly. Mueller[31] documents at length the bank failures of the fourteenth and fifteenth centuries, concurring with Lane[32] that they were due not so much to excessive lending to the state, but rather to business cycles. When advocating the creation of a public bank in 1584, Tommaso Contarini (see Section III.2.(c) below) emphasized the inherent fragility of the banking business:

> A suspicion born, a voice heard, that there is no cash or that the banker has suffered some loss, a person seen at that time withdrawing money, is enough to incite everyone to take his money and the bank, unable to meet the demand, is condemned to fail. The failure of a debtor, a disaster in some venture, the fear of war is enough to destroy this enterprise, because all creditors, fearing the loss of their money, will want to insure themselves by withdrawing it and will bring about its complete destruction. It is too difficult, indeed impossible that in the space of a few years one of these events fails to occur that bring about the ruin of the bank.[33]

That banks did not maintain 100 per cent reserves is apparent from a law of 1322; indeed, it appears that by then the main elements of the payments system were in place: payment in bank money (that is, by transfer on the books of a bank) was considered final payment, that bankers kept fractional reserves, and that they kept accounts with each other. The law also indicates that legislators felt the need to intervene, since it required bankers to redeem deposits on demand within three days, and in cash rather than with claims on other bankers.[34] This was but one of many legislative attempts to remedy the fragility of banks, which more often relied either on some primitive form of capital requirements or else restricted allowable activities. Early on, in 1270, bankers were required to post bonds; the requirement seems to have fallen into abeyance, and was legislated again, this time conclusively, in 1455.[35] Venice did not have limited liability as Siena and Florence did, so a banker's patrimony provided security in addition to the bond, but this was not always deemed sufficient: in 1404, bankers' investments were limited to 150 per cent of their

[25] R. De Roover, 'Le contrat de change depuis la fin du treizième siècle jusqu'au début du dix-septième', (1946) 25(1–2) *Revue belge de philologie et d'histoire* 111.

[26] E. Lattes, *La Libertà delle Banche a Venezia dal Secolo XIII al XVII* (1869), at 34.

[27] R. C. Mueller, *The Venetian Money Market: Banks, Panics, and the Public Debt, 1200–1500* (1997), at 5–7, 82.

[28] F. C. Lane, 'Venetian Bankers, 1496–1533: A Study in the Early Stages of Deposit Banking', (1937) 45(2) *Journal of Political Economy* 187, at 190.

[29] R. C. Mueller, 'The Role of Bank Money in Venice, 1300–1500', (1979) 3 *Studi Veneziani* (new ser.) 49.

[30] Ibid. [31] Mueller, above n 27. [32] Lane, above n 28.

[33] Lattes, above n 26, at 124. [34] Mueller, above n 27., at 16. [35] Ibid., at 52–62.

assessed patrimony, a law that seems to have had little effect. At other times bankers were forbidden from dealing in commodities, or lending for purchases of silver,[36] but these prohibitions were difficult to enforce: a complete prohibition on bankers' involvement in silver in 1378 was soon repealed as unenforceable under current circumstances, and prohibitions on bank lending for silver purchases were continually renewed and ignored from 1378 to 1429.[37]

Comprehensive banking regulation did not emerge until 1524, when bank supervisors were established in the wake of a dangerous expansion of banks and renewed depreciation of bank money relative to cash.[38] A law of 1526 increased the number of supervisors to one per bank, requiring them to inspect the banks every day, and to enforce parity between bank money and current money. Bankers were required to pay depositors on demand and in cash without delay; and bank money was made legal tender except when specific clauses for payment 'out of bank' would be made.[39] The preamble of the law stated that bank money then stood at a 20 per cent discount, and at least for a while it was brought to par.

(b) Early proposals

Besides this legislative activity, there were repeated proposals to have the payment function of the banking sector performed by a public entity.

The first proposal for a public bank was made in 1356, following the failure of a major bank and a resulting liquidity crunch marked by high interest rates.[40] The Senator, Giovanni Delfin, proposed that a bank be set up alongside existing private banks, headed by three noblemen appointed by the city. It would be prohibited from lending or investing money and paying interest: its sole function was to receive deposits for the purpose of making payments by transfer. Salaries of officials would be covered by the flat fee charged for each transfer.

The proposal reappeared, almost word for word, nearly twenty years later. The context was again a troubled one: fluctuating commodity prices and variations in gold and silver had resulted in two bank failures.[41] The Senate, stating that the situation of the banks of the Rialto 'could not be worse than they are at present',[42] appointed a commission to submit proposals. That of Michele Morosini was simply to outlaw banking but, perhaps as a practical concession, it allowed foreigners to deposit coin and bullion in a government office, and also reprised Delfin's proposal for a public bank, with fees depending on the size of the transfer. The proposal was turned down, as was another to avoid large banks by limiting transaction and loan sizes, while other proposals to prevent bankers from financing speculation in commodities were adopted.[43]

A final early proposal was actually enacted, in 1421. The context this time was a blockade against Venice that deprived it of its silver imports, with a resulting agio between current money and bank money. The period also saw the development of a practice, whereby bankers offered unredeemable balances, euphemistically called *bona scritta*, at a better rate to cash than redeemable ones.[44] The approach, curiously, was to restrict the use of bank money, requiring, for example, that bills of exchange be settled in cash only. At the same

[36] C. F. Dunbar, 'The Bank of Venice', (1892) 6(3) *Quarterly Journal of Economics* 308, at 315–16.
[37] Mueller, above n 29, at 63–5. [38] Lane, above n 28. [39] Lattes, above n 26, at 88–94.
[40] Mueller, above n 27, at 112, 142. [41] Mueller, above n 27, at 113, 151–3.
[42] R. Cessi, *Problemi monetari veneziani fino a tutto il secolo XIV* (1937), at 146.
[43] Ibid., at 146–55. [44] Mueller, above n 29, at 87–91.

time, the city's Silver Office was ordered to accept deposits and make transfers,[45] although it seems the law was never implemented.[46]

(c) *The Banco di Rialto (1587–1638)*

There were two aspects to the proposals: narrow banking and institutional continuity.

> The banker, not the bank, was thus the object of careful scrutiny; unless it was known that a succession was planned and organized, the impending death of the principal could awaken fears of a difficult execution of the testament. Not providing specifically for the continuity of management and responsibility was a serious weakness of Venetian practice and commercial law in this sector.[47]

The law of 1526 was clearly not effective in the long run, and in 1569 private banking was abolished.[48] The situation became dire after the failure of the last private bank of Pisani and Tiepolo in 1584. Coincidentally or not, the market value of the gold *scudo*, which had been set at 8.6 *L.* in 1573, began to rise that year and reached 9 *L.* At the same time the value of the silver *ducato*, issued at 6.2 *L.* in 1561, rose as well, by about 15 per cent.[49]

The Senator, Tommaso Contarini, made a long speech arguing for the establishment of a public bank.[50] He explained that trade needed a system of payments; he described the fairs of Lyon and the settlement mechanism of Antwerp, but argued that those systems, relying on private trust (*fede privata*), were unsuitable in Venice with its multitude of merchants of different nationalities and creeds. Yet Venice needed the revenues and stocks of metal that came with trade, and if it failed to maintain an attractive trading centre it could lose out to nearby competitors such as Ferrara. Bank transfers had proven indispensable, but experience showed that private banks could not be relied upon in the long run, and he cited the figure of ninety-six failed banks in the history of Venice. The incentives for over-issue of credit were too strong, and Contarini also blamed bankers for the variability in exchange rates between coins. Only a state-sponsored entity could provide the service, and Venice had the advantage of an infinitely lived and trustworthy government. To his colleagues, he said:

> [Y]ou, are a prince who by God's grace has always kept his word and above all his immaculate and inviolable faith; a prince not subject to the variations and failures that arise from death, but a constant and immortal senate; a prince who rules himself by laws and caution rather than violence and desires; all conditions desired in a government that lacks them, loved and revered in one that doesn't.

Opponents argued that this innovation was dangerous, that fraud was inevitable (so ingrained in Venetian mentality was the willingness to provide favours to family and friends), and that banking was not a proper activity for the 'prince', that is, the state, whose functions were to govern the people and wage war while business belonged to private individuals.[51]

[45] Mueller, above n 27, at 117.

[46] The text of the law (Lattes, above n 26, at 49) is rather obscure; see also G. Luzzatto, 'Les Banques publiques de Venise (siècles XVI–XVIII)', in Van Dillen (ed.), above n 4, at 44 fn 2.

[47] Mueller, above n 27, at 127.

[48] U. Tucci, 'Il Banco della Piazza di Rialto, prima banca pubblica veneziana', in U. Tucci, *Mercanti, Navi, Monete nel Cinquecento Veneziano* (1981) 231.

[49] V. Padovan, *La Nummografia Veneziana: Sommario documentato* (1882), at 277.

[50] Lattes, above n 26, at 118–40.

[51] The speech against the bank reported in Lattes, above n 26, at 140–60, is attributed by some to Contarini despite the difficulty in reconciling such opposite positions.

The Senate voted to abolish private banks and establish a public bank (28 December 1584), but the law was rescinded a few months later because of 'opposition, disadvantages, and misdeeds'. Meanwhile the monetary situation worsened, with the gold coin rising from 9 *L.* to 9.6 *L.* Debasements followed, to match the appreciation of the large coins:[52] first were issued coins of 5 *s.* in 1585, then pure copper coins of 1 *d.* (*bagatini*) in 1586, and coins of 2 *s.* (*gazzette*) in 1587: the first and the last overvalued by 15 per cent relative to the official price of the silver *scudo* (that is, seven *lire*'s worth of *gazzette* contained less silver than a *scudo*). Finally the silver *scudo* itself was debased in 1588, replaced by a lighter coin that came to be known as the *ducatone*. Eventually a modified plan for a public bank was adopted (11 April 1587 and subsequent amendments), and private banking was again allowed.

The preamble of the law of 1587, as that of 1584, bluntly stated that 'the city needs a bank' and restated the lesson of the past that private banks could not provide the service. The public bank was to be run by a governor, chosen by the Senate on the basis of submitted proposals (including the governor's requested salary), and required to post a bond like private bankers. The law specified the salaries, duties, and penalties for the employees of the bank. The governor was not to carry out any business (*trafico*) with the bank's funds. The bank's cash was to be kept at the mint, except for 30,000 ducats to meet payments. The bank was obligated to accept any deposit of fifty ducats or more offered in good and current money, and the cash was always to remain available at the request of depositors. Transfers could not be made without the creditor or his due proxy; credits and debits had to be made simultaneously. The governor was to present the bank's balance sheet to the Senate once a year. After three years, the bank was to be liquidated, and the governor held responsible for the full satisfaction of creditors, under pain of confiscation of his estate and banishment. After the liquidation a new bank would open and a different governor would be chosen; creditors could opt to carry forward their balances in the new bank (unclaimed balances were deposited at the mint after three years). The expenses of the bank were met from tax revenues, in particular a tax on bankers' fees.[53]

There are important and interesting differences between the statutes of 1584 and 1587. The first bank of 1584 was a fully public bank: all officers were appointed by the Senate for renewable two-year terms (except the cashier, who had to wait out as long as he had served before serving again), and operated under the daily supervision of three regulators. The senior officers (cashier, head clerks) were required to post bonds and subject to penalties for specific misdeeds, but no one had overall liability for any losses to the bank. Conversely, rules on the management were more detailed, and in some ways stricter: only coin could be accepted in deposit, bank entries were given full legal value as if they had been produced by a notary, and bank credit could not be seized even for debts to the city. The statute even specified that sums should be written in Roman numerals. Finally, the Senate pledged never to take any money from the bank.

The 1587 bank was called 'public', but the Senate had shifted the liability, since the governor was personally liable for all losses. As a stopgap, the bank was liquidated every three years, so that losses might be uncovered before they had become larger than the governor's bond or personal assets.[54] The prohibition on accepting uncoined metal was absent as was the legal privilege against seizure. In some ways, the *Banco di Rialto* was a privileged, and highly regulated, private bank: as the preamble stated, it took up an offer to

[52] T. J. Sargent and F. R. Velde, *The Big Problem of Small Change* (2002).
[53] Lattes, above n 26, at 109–16, 160–2.
[54] Private banks, authorized again in 1587, were required to liquidate every six years.

found a private bank, but shaped it so that it could 'fulfil the certain need but without the risk of ruin' because its management would not be driven by private gain.

The first governor was chosen in June 1587; the bank proved successful since he soon requested permission to open a second ledger, and his first report to the Senate a year later showed a balance of 546,082 ducats, the equivalent of 1.5 million Dutch *guilders*.[55] In 1593 the cash balance required to be kept at the bank was reduced by a third, suggesting that withdrawals were less than expected. The bank's balance reached 705,889 ducats by 1594 and 950,440 ducats by 1597. Supervision tightened in 1593 when the bank was required to balance its books every month, but the resulting closures proved too onerous and the term was soon changed to three months. The only serious evidence of mischief arose when the fourth governor was forced to resign six months after his appointment, in January 1597, and a special commission was appointed to audit his accounts, after which the term of the governor was shortened to one year.

No legal tender status was initially given to bank balances. This development occurred several years later, in 1593, ostensibly in response to the common problem that bills of exchange were not paid in cash but by assignment of another debt, so that creditors had to 'pass through fifteen or twenty hands' before being paid, and on the terms of the debtor. Assignment of debts was strongly forbidden, and a few weeks later settlement of bills of exchange through the bank became mandatory (14 December 1593). The requirement was successfully implemented, judging by one surviving figure: from 24 May to 9 August 1603 exchange settlement reached the sum of 2,978,098 ducats, representing according to an official four-fifths of the volume in Venice.[56]

As we have seen, the creation of the *Banco di Rialto* coincided with a serious monetary crisis, reluctantly solved by debasing the main silver coin. From the start, the bank's unit of account was the silver *ducato* of 1561, which bore on its obverse the value of 6.2 *L.* and had therefore a *lira* associated with it. The new *ducato* of 1588, or *ducatone*, was about 20 per cent lighter in content, and also bore a face value of 6.2 *L.*: this *lira* came to be known as the *lira corrente*, while the *lira* pegged to the old *ducato* was the *lira di zecca*: as a result, the bank's unit of account immediately acquired an agio of 20 per cent over current money.

Monetary problems persisted nevertheless, since in 1593 (on the same day that bill settlement through the *Banco* became mandatory) the legal value of the *zecchino* was raised to 10 *L.* Tucci sees a connection,[57] and believes that the bank was also intended to improve the quality of the circulating coinage and ensure a uniform medium of exchange, an endeavour in which it briefly succeeded, because in 1590 the Senate required it to operate only in *valuta buona e di giusto peso*.[58] The requirement was later dropped, and bad money was received as well as paid out, at intrinsic value, although it was reinstated in 1608. Tucci sees a desire to remove bad coinage from circulation as the main reason behind the repeated attempts in the first decade of the seventeenth century to require settlement of all operations above 100 ducats in bank money,[59] although Luzzatto prefers to explain them as moves to shore up the value of bank money by requiring its use.[60] The same author also sees evidence in 1607 of speculation in bank money, which the Senate tried to outlaw, but also of violation of the bank's rules, since the Senate was moved to prohibit the bank from accepting deposits (presumably at interest) and creating bank balances without any corresponding cash receipts.

55 The exchange rate with Amsterdam in 1609 was 2.65 *guilders* for one *ducato di banco*: see M. A. Denzel, *Handbook of World Exchange Rates, 1590–1914* (2010), at 83.

56 Tucci, above n 48, at 244. 57 Ibid. 58 Ibid., at 241.

59 Ibid., at 242. 60 Luzzatto, above n 46, at 50.

(d) The Banco del Giro *(1619–1800)*

The *Banco del Giro*,[61] founded in 1619 alongside the *Banco di Rialto*, was of a quite different nature: it was not intended as a deposit bank, but rather a way to make a government debt easily transferable and thus turn it into a means of payment. There were precedents for this mechanism: the Salt Office had provided transfer services for its creditors in the fifteenth century,[62] and from 1608 to 1614 the Grain Office, having bought a large quantity of grain from six merchants whom it couldn't pay, kept a register where the merchants could assign part of the 745,900 ducats they were owed to their own creditors. After a few years, most of the debt had been repaid. The giro service might have continued but concerns about weak accounting controls led the Senate to wind it down, and the remaining liability was transferred to the *Banco di Rialto*, except credits of ten ducats or less which were redeemed in cash: the existence of such small portions is suggestive of the degree to which successive transfers had fragmented the original credits.

The example of the Grain Office was explicitly cited by the *Banco del Giro*'s promoter, one Giovanni Vendramin, who had delivered a large quantity of silver bullion and foreign coins to the mint, and offered to be paid part in gold, part in transferable credit.[63] The Senate obliged, and the *Banco del Giro* was created, but as a temporary measure like its predecessor at the Grain Office. The bank was run out of the State Mint; offices in the bank were created and sold (Venice had instituted venality of offices in the sixteenth century). Vendramin's silver, once coined, served as a fund kept at the mint to back the operations of the Giro, but the backing was not 100 per cent: the Senate explicitly authorized the creation of 500,000 ducats' worth of balances to pay its creditors, and ordered monthly transfers of 10,000 ducats from the mint to the Giro to repay. Six months later the Senate authorized another 200,000 ducats and, over time, increased the monthly transfers from the mint to 80,000 ducats. Transfers from the Republic's magistrates to the bank were recorded as debits and used to service creditors' requests for cash: in effect, as long as the monthly flow was sufficient to accommodate depositors' requests, the bank's liabilities remained convertible. This would remain the modus operandi until 1666: the state, considering the bank's liabilities to be a form of public debt, increased the bank's liabilities to pay its debts to various creditors and adjusted the monthly flows of cash from the mint to service the redemption requests. The bank seemed to have some flexibility in the choice of coins to repay: Mandich infers from the variations in the agio on bank money, or *partita*, that it followed the silver *scudo* at first, then a coin of lower fineness, the *lirone* (and even briefly copper coinage), then from 1636 good silver and from 1645 gold coin.[64] As long as redemption requests did not exceed the monthly inflows of cash, the Giro balances could be deemed to be 'convertible', but a careful balance needed to be struck. Through trial and error, state officials came to the conclusion that the outstanding balance should not exceed 800,000 ducats. That level was first reached at the end of 1624, and balances kept rising to a peak of over 2.6 million ducats in June 1630, during a period of warfare (war of Valtellina in 1625–6, Mantova in 1629–30) and plague (1630–1).

Figure 17.4 shows that from 1625, the agio on bank balances began to fall, slowly at first and then precipitously in 1630.[65] A serious reform took place in 1630, with the

[61] This section relies principally on Luzzatto, above n 46 and U. Tucci, 'Convertibilità e copertura metallica della moneta del Banco Giro veneziano', (1973) 15 *Studi Veneziani* 349.

[62] Mueller, above n 27, at 111.

[63] A. Soresina, *Il Banco Giro di Venezia* (1889).

[64] G. Mandich, 'Formule monetarie veneziane del periodo 1619–1650', (1957) 5(4) *Il Risparmio* 634.

[65] Ibid., at 660–8. No series for the agio exists, but Figure 17.4 approximates it by taking the common component of all available foreign exchange quotations for Venice: see Denzel, above n 55.

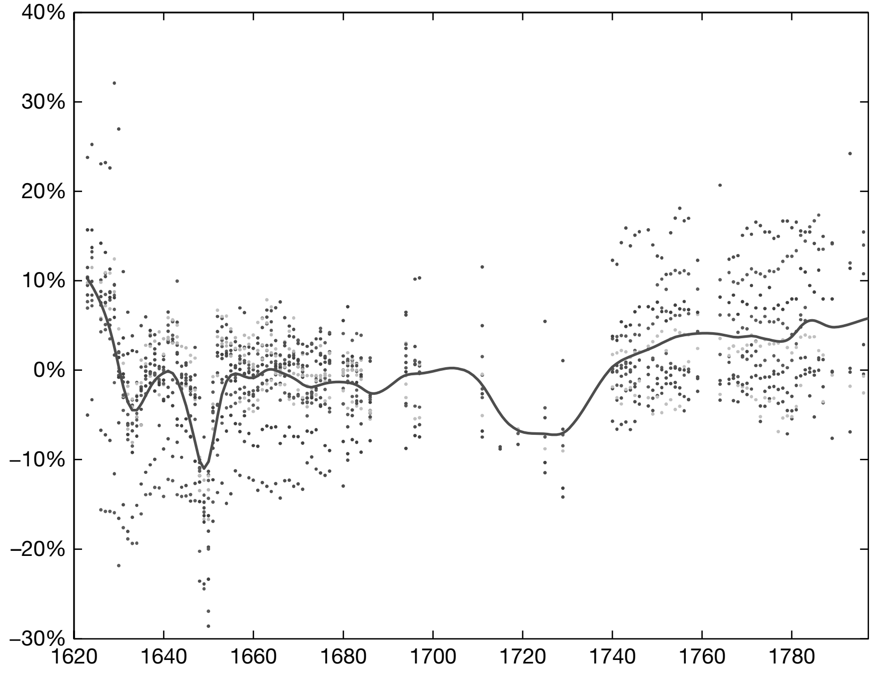


Figure 17.4 Foreign exchange rates of Venice on various European cities.
The thick line represents a common index.
Source: M. A. Denzel, *Handbook of World Exchange Rates, 1590–1914* (2010)

appointment of three inspectors.[66] Among other things they were to investigate those who devoted themselves to the trade of *valute e partite in banco*, or bank balances. To curb this trade it was decided that no one could withdraw from the bank if he didn't have credit for at least three days prior, ruling out 'day trading' in the *partita* market. The credits of officers and magistrates of the city were consolidated and netted against the public debt; for a limited time anyone was allowed to pay taxes and dues with bank credit; 100,000 ducats' worth of small change in copper was minted and distributed to members of the silk and wool trade who needed it, to repay the debt. Small retailers were prohibited from making payments in giro. In addition, various measures soaked up the Giro debt: deposits were opened at the mint to receive bank credits and pay 7 per cent interest, and proceeds from sales of life annuities at 14 per cent were applied to the Giro.

This quickly brought down Giro balances to 1.4 million ducats at the end of 1630, although they did not stabilize below 900,000 ducats until 1638. In the meantime, the agio climbed back to 14 per cent in January 1631 and reached 22 per cent in 1635. That same year saw the abandonment of the *moneta di zecca* as a separate unit of account: henceforth the government tried to maintain the bank money's agio at a stable 20 per cent relative to current money.[67] At the same time, the *Banco di Rialto* was withering: after reaching a likely peak of 1.7 million ducats in 1618, its balances declined to 0.2 million ducats in 1630. The two banks had remained completely distinct, but the payment function of the Rialto had been overtaken by the Giro, and the former was shut down in 1638.

[66] Soresina, above n 63. [67] Mandich, above n 64, at 673–5.

From the start balances at the Giro were legal tender for private debts, in payments of 100 ducats or more;[68] and in 1629 they were made legal tender for public dues, initially with the Senate's consent but as a normal practice later on for up to half of the tax amount. From 1638 there were pressures from the public to permit the use of coins for the purchase of bank balances and the Board of Trade (*cinque savi alla Mercanzia*) was favourably inclined, as was the manager of the Giro, who thought that the agio had risen too high.[69] But the Senate proved reluctant, and only made limited offers to purchase silver through the mint. Only in 1643, when the agio reached 25 per cent, was it resolved to allow anyone to bring gold and silver coin to the mint and receive credit in the bank.[70]

A second crisis soon erupted in 1648, and convertibility was de facto suspended, with the agio falling to –3 per cent. This was the period of the war of Candia (1645–69) against the Ottoman Empire, and Giro balances grew again to a peak of 1.7 million ducats in June 1650, but new tax revenues were assigned to the Giro and by the end of 1651 balances were down again to 925,000 ducats, where they would remain for more than a decade.

The expansion of the Giro led the state to enlarge its legal usage; in 1651 it was made the sole tender for all commercial payments (including bills of exchange) above fifty ducats on pain of nullity, and any debtor could repay debts of fifty ducats and above. This law was never enforced and was immediately considered tacitly repealed; in 1725 and 1749 it was again contemplated but rejected for fear of disturbing trade.[71] An idea of velocity at the time is given by the fact that, in 1650 when balances were around 1.7 million ducats, five or six million ducats were transferred every week.[72]

In 1666, the state was ready to resume convertibility, and did so by establishing a *Cassa* where cash could be exchanged for deposits and conversely at no cost, although the bank retained discretion on which coins it accepted and paid out, in order to maintain an appropriate mix of coins in its reserves.[73] The state also renewed the requirement to settle bills of exchange through the Giro, but exempted domestic bills of exchange; it also required tax payments to be made through the bank. The deposits could not be mortgaged and were exempt from seizure.

This resumption of convertibility, however, was accompanied by a debasement: a new silver *ducato* (soon called *ducatello*) was coined and assigned a legal value of 6.2 *L.*, as the *ducato* of 1561 and the *ducatone* of 1588.[74] The bank money continued to have an agio of 20 per cent, but relative to the new *ducatello* instead of the *ducatone*. Since the *ducatello* contained 30 per cent less silver than the *ducatone*, the bank balances were in effect devalued by the same amount.

The war of Morea (1684–99) occasioned brief difficulties as the Giro's cash balances were nearly depleted in 1702, although no suspension ensued. The next major crisis was occasioned by another war with the Ottoman Empire (1714–18): payments were suspended in 1714 and the agio fell to –7 per cent by 1718. After the war ended, temporary measures were used to reduce the agio, among which the *stagnazione*, contracts by which private individuals agreed to keep their balances inactive ('stagnant') for a number of years during which they earned interest. Several such operations succeeded in bringing down the agio, mostly through announcement effects; but the gains, which helped the state in its purchases

68 Soresina, above n 63. 69 Luzzatto, above n 46, at 61. 70 Mandich, above n 64, at 645.
71 Ibid., at 646. See also Tucci, above n 61, at 367.
72 Mandich, above n 64, at 646.
73 See Tucci, above n 61, at 427–36, for details on the giro's specie management in the later years.
74 L. Balestrieri, *Banche pubbliche e problemi monetari a Venezia nei secoli XVI e XVII* (1969), at 71.

of goods and services with bank money, proved short-lived, and only fiscal revenues brought in over time stabilized the agio.[75]

The *Casa* was reopened in 1739 with more or less the same constitution as before. The bank's unit of account was not devalued, however, relative to the *ducatello*, and so maintained its silver content through the crisis. The Giro continued to function uneventfully for the rest of the century, with a reserve ratio above 50 per cent most of the time, and as high as 95 per cent in 1796. Depositors' statements of balances, called *fede*, were not transferable, and proposals to make them circulate or issue paper liabilities were rejected in 1721 and again in 1784. Surviving documents from its last years provide some information on account holders: numbering around 500, they were mostly merchants, and total balances fluctuated between 1.5 and 3 million ducats.[76]

The French invasion of 1797 brought the end of the Republic. The bank did not reopen after its quarterly closure in January 1798, and resumed partial payments only in August 1799. The bank was found to be a large creditor of the city, but the new Austrian authorities refused to assume the city's debts. The bank stopped payment in October 1800. When Venice became part of the Kingdom of Italy in 1805 the new government assumed the debt and the bank's creditors were repaid in government bonds.[77]

3. Naples

The case of Naples is interesting because it provides a counterpoint to the experiences described above.[78] Naples never had a single, publicly sponsored banking institution. Confronted with the same failures of private banks as Venice, it used the same methods at first (bond monies, obligation to pay depositors within six days, prohibition on endorsements in 1580), but the solution that emerged was different. From 1584 to 1597, the Spanish Viceroy in Naples authorized seven charitable institutions to open public banks, that is, receive deposits from anyone. The institutions were hospitals, confraternities, or charitable Lombard facilities (*monte di pietà*). What they had in common, in contrast with private bankers, were permanent existence, strict and open governance (sometimes under the tutelage of the state), and a certain conservative bias in management. What distinguished them from each other was mostly their geographical location: together they covered the city of Naples. The purpose of undertaking banking operations was to find new sources of revenues to finance their charitable activities. An eighth bank, founded in 1661, was distinct in that it was created by the administrators of the wheat tax; it became the bank of the court and administration.

For two centuries the eight banks together provided the banking services that one found in Genoa or Venice, namely holding deposits and paying through transfers on their books. However, they also innovated by introducing the *fede di credito*. This was originally a receipt or certificate of deposit notarized by the bank and given to the depositor as evidence of his deposit (say, for judicial purposes); later it turned into a negotiable instrument which the depositor could endorse to another person: the latter could obtain payment from the bank without further involvement of the original depositor. These notes apparently enjoyed widespread circulation.

[75] Tucci, above n 61, at 383–7. [76] Ibid., at 409–26. [77] Soresina, above n 63.

[78] D. Demarco, *Il banco di Napoli: Dalle Casse di Deposito alla Fioritura Settecentesca* (2000); D. Demarco, *Il banco di Napoli: L'Archivio Storico: La Grammatica delle Scritture* (2000); F. Balletta, *La circolazione della moneta fiduciaria a Napoli nel Seicento e nel Settecento (1587–1805)* (2009).

They were not narrow banks, but were nevertheless very conservative, remaining well above 50 per cent reserves in the aggregate nearly at all times. They made some loans against collateral and also invested in government debt and government tax farms. Inevitably they encountered difficulties, notably in 1622 when a monetary reform reduced by a factor of three the value of their reserves, and another reform in 1689–91. Yet only one of the eight banks failed, in 1702, and the deposits were taken over by the other banks under heavy pressure from the government. During the Napoleonic era the banks were merged and ultimately became the Banco di Napoli.

4. Catalonia

(a) Beginnings

The public banks of Catalonia appeared in the fifteenth century, in a country that possessed a long tradition of private banking.[79] As elsewhere, banking arose from money changing but soon combined two key features of banking: deposit taking and merchant banking, in other words demandable liabilities and risky (and illiquid) assets. The role of bankers in providing means of payment is recognized by a law of 1284 which makes book entries sufficient proof of payment.

Regulation of private banking, on the model of other crafts, arose toward the end of the thirteenth century and involved ex-ante measures, such as the requirement to post a substantial bond in order to become a banker, as well as ex-post measures making the banker personally liable for all his book entries and providing various punishments in case of bankruptcy.

(b) The Taula de Canvi *(1401)*

The municipalities of the crown of Aragon had acquired substantial financial autonomy as well as responsibilities during the fourteenth century. By 1400, Barcelona was confronted with a heavy debt burden and widespread failures of private banks. The foundation of the *Taula de Canvi* (exchange bank) of Barcelona in January 1401 was intended to address these two problems, by giving the city a reliable provider of banking services and by drawing deposits away from the private sector in order to finance its short-term debt more cheaply than with annuities.[80]

The management was appointed by the city for fixed terms and paid fixed salaries. The main business of the bank was to serve as the fiscal agent of the city (and, from 1413, the *Generalitat* of Catalonia), and provide loans to the city. In principle it was not supposed to lend to anyone else, but overdrafts were apparently pervasive. It received deposits of money and jewellery, and may also have issued long-term debt (annuities). To attract depositors, the city provided a blanket guarantee, but this quickly proved insufficient and within a few months the bank received a monopoly on certain types of deposits required by law, such as those of executors and guardians, dowries and property of minors, sums in dispute, etc.: essentially, all conditioned deposits (that is, deposits which could be withdrawn only in

[79] This section is based on A. P. Usher, *The Early History of Deposit Banking in Mediterranean Europe* (1934); M. Sánchez Sarto, 'Les Banques publiques en Espagne jusqu'à 1815', in J. G. van Dillen (ed.), *History of the Principal Public Banks* (1934) 1; and M. Riu, 'Banking and Society in Late Medieval and Early Modern Aragon', in F. Chiappelli (ed.), *The Dawn of Modern Banking* (1979) 131, at 149–64.

[80] P. Ortí Gost, 'Les finances municipals de la Barcelona dels segles XIV i XV: Del censal a la Taula de Canvi', (2007) 13 *Arxiu Històric de la Ciutat de Barcelona, quaderns d'història* 257.

specified circumstances). Among its activities were manual exchange (exchange of coins) and payments by transfer.[81]

The city continued to confer advantages to the *Taula*, notably a monopoly on clearance of bills of exchange from 1446 to 1499, motivated by a desire to regulate the prices of foreign exchange and encourage minting. Also, from 1468, deposits were protected from attachment or seizure, even 'those of a traitor'; the city, however, retained the right to seize the funds of its debtors. Nevertheless, the competition for deposits with the private sector led to difficult relations with bankers, and the city used its regulatory powers to its own advantage, restricting the number of banking licences in 1437 or prohibiting bankers from having accounts at the *Taula*, after it had become a convenient place for interbank settlements. This prohibition was repeatedly repealed and renewed up to the seventeenth century. Private bankers were subject to increasingly stringent regulation in the mid-fifteenth century. In 1444 deposits were declared to be payable within twenty-four hours in cash, and bankers were forbidden from extending credit on bills of exchange.[82]

The deposits were irregular in that the bank was not obliged to return the same coins but *tantundem eiusdem generis* (as many of the same kind), so that deposits were legally closer to the loan contract than the strict deposit contract. As such the deposits could not pay interest (as opposed to deposits in private banks). At the same time, credits became new means of payments or bank money, reimbursable or transferable orally (*per dita*) or in writing (*per pòlissa*). The bank was thus a bank of deposit, transfer, and credit.[83]

The earliest preserved balance sheet from 1433 shows cash in hand of 105,781 *L.* for a total balance sheet of about 358,000 *L.* Only 15 per cent of the other assets were loans to the city, leading Usher to conclude: 'overdrafts [were] on such a scale that one must presume that the ordinances were deliberately and systematically ignored'.[84] On the liabilities, only a third of deposits were demandable, the rest being conditioned deposits. There were 1,460 depositors from all over Catalonia, but mostly from Barcelona (population of about 35,000 at the time). Of the 1,494 accounts, 134 were overdrawn. The size of deposits ranged mostly between 2 *L.* and 150 *L.*, although a single account, that of Pere Ribalta, represented 28 per cent of the total. Accounts rarely remained open for long and withdrawals were common. Funds could be transferred to non-depositors who then withdrew the cash.

The vicissitudes of the *Taula* are closely connected to city finances. Soon after its start, in 1404, the *Taula* helped refund the debt and provided a short-term loan of 50,000 *L.* (about 12 per cent of the total debt). When the city imposed on itself strict budgetary controls in 1412 by assigning specific revenues to specific expenditures, it delegated monitoring and enforcement to the *Taula*. It was also decided to limit the size of loans that it could make to the city: the executive could only borrow up to 8,000 *L.* at a time, larger loans requiring a formal vote of the city council and a new tax to service the loan. By 1435, the debt had been halved and the city's budget balanced.

The *Taula* was also given a role in enforcing monetary laws. It was obligated to abide official tariffs for coins and accept coins of the realm at the legal rates. It could also accept foreign coins if they were tariffed, and other coins by weight only. Difficulties arose in 1453, when the crown of Aragon devalued the common silver coin, the *croat*, from 15 *d.* to 18 *d.* After long debates the city decided to revalue the deposits by 13.3 per cent, somewhat less

[81] A.-É. Sayous, *Les Méthodes commerciales de Barcelone au XVe siècle, d'après des documents inédits de ses archives: la bourse, le prêt et l'assurance maritimes, les sociétés commerciales, la lettre de change, une banque d'État* (1936).
[82] Usher, above n 79, at 243.
[83] J. M. Passolla, *Els Orígens de la banca pública: les taules de canvi municipals* (1999).
[84] Usher, above n 79, at 333.

than the 20 per cent increase in face value of the *croat*; however, the rate on the gold *florin* was increased in line with the *croat*.

A severe crisis occurred during Barcelona's rebellion against the crown of Aragon from 1462 to 1473. To help the war effort the *Taula* issued annuities and lent extensively to the city. It also started to offer interest on deposits, up to 15 per cent, but this proved insufficient. In 1463 severe legal restrictions were enacted to support the *Taula*: private banking was prohibited and all payments larger than 15 *s.* were required to be made in the *Taula*. Nevertheless, by 1466, a premium on specie relative to bank balances had emerged (reaching at least 15 per cent in 1467) and payments were suspended. In 1468, the *Taula* was reorganized. Existing deposits were given an option to convert into annuities or remain as a means of payment by transfer but inconvertible until such time as profits allowed for redemption, a process that took decades. New accounts were opened but backed fully by cash deposits, and private banking was allowed again. The *Taula* was prohibited from lending to the city, a restriction that was observed until the seventeenth century.

The *Taula* continued to operate, even after the creation of a *Banco de Barcelona* in 1609 to handle clipped coinage (their respective roles were defined in 1620) and a suspension of payments in 1641 (during the war with Castile). It was only absorbed by the Bank of Spain in 1853.

(c) The Banc de la Ciutat *(1609)*

In the late years of the sixteenth century the medium of exchange in Catalonia deteriorated: there were complaints of lightweight, clipped, and counterfeit coins circulating. The problems were probably caused or exacerbated by the developing copper inflation in nearby Castile. Bankers were accused of charging a premium when withdrawals were demanded in good coin, thereby raising prices. To remedy the situation the city decided to found a new bank, the *Banc de la Ciutat* or Bank of the City, in 1609. In contrast with the Bank of Deposit, the new institution, clearly designed to be a temporary extension of the former, could accept any sort of coin at the discretion of the cashier. Its purpose was apparently to allow the limited use of inferior coinage by the general public (although private bankers were prohibited from having accounts in 1614). The new bank was well received, and after 1615 there were no private bankers left in Barcelona.

In a repeat of earlier events, Catalonia revolted against the King of Spain in 1640. There followed a period of rapid inflation as the coinage was debased (prices rose by a factor of six over ten years), and the city used its two banks to finance its expenditures, in addition to floating loans. Both banks suspended payments partially in 1641 and completely in 1650. After Barcelona fell to the King of Spain in 1652, the two banks were reorganized and separated, the city having no account at the *Banc*. New accounts were created into which existing balances could be converted at 3 per cent of face value. In 1656, further arrangements were made to convert old accounts into annuities at rates roughly indexed to the price level at the time the credits arose. Small depositors were treated more leniently, and for a while so were some privileged depositors such as ecclesiastical institutions and trusts. Finally, in 1663, the whole funded debt was reorganized, with further 'haircuts' imposed on annuity holders.

The War of Spanish Succession marked the final chapter: Catalonia sided with Archduke Charles of Austria against the King of Spain. Once again the *Taula* and the *Banc* were forced to suspend payments, in 1706. After the capitulation of Barcelona, the *Banc* was placed under the control of the military authorities and reorganized into a 'rigidly administered giro bank' with no ties whatsoever to the city.[85] In 1769, there was a partial repudiation of the debt created in 1640 and 1714 by the conversion of frozen deposits. From 1780 the government used the banks again to finance expenditures, bringing them to suspension by 1812. The banks were slowly wound down during the nineteenth century and finally closed in 1853.

(d) Other municipal banks in Catalonia and Aragon

Other similar institutions appeared in Catalonia. Valencia set up a deposit bank in 1408, which was closed down in 1416 because of mismanagement. A new one was opened in 1519, refounded in 1649 and liquidated in 1719.[86] It was a deposit bank and served as fiscal agent of the city, in particular servicing the public debt. Other fifteenth-century examples[87] include Perpiñán (1404), Vic (1413), Tarragona (1420), and Girona (1438); sixteenth-century examples include Majorca (1507), and Cervera (1599).

5. The Dutch Republic

(a) Amsterdam (1609–1820)

The Bank of Amsterdam (*Amsterdamsche Wisselbank*) was founded in 1609. The original conception of the bank was as a conservatively designed 'exchange bank'—a ledger-money bank backed principally by coin, following the example of Venice's *Banco di Rialto*. Through a series of innovations, however, the Bank of Amsterdam was ultimately able to achieve a greater degree of success than its Venetian predecessor. Almost until its demise in 1795, the bank was widely admired and served as an inspiration for public banks in other cities.[88] The Bank of Amsterdam never issued notes, but by limiting its depositors' withdrawal rights, was able to create a highly liquid, quasi-fiat asset in the form of its ledger money.

Differently from the Venetian case, the chief impetus for the founding of the bank was not dissatisfaction with private banks but the poor state of circulating coinage, and consequent uncertainty regarding settlement of bills of exchange.[89] Bills were denominated in *guilders* (*gulden*), also called *florins*. The guilder coin had been produced under Charles V's mint ordinance of 1543, but by the time of the bank's founding was a ghost currency, long vanished from circulation. Prior to the founding of the bank, settlement of bills commonly occurred through private intermediaries known as cashiers,[90] or less satisfactorily, by assignment (endorsement) of a bill drawn on a third party. Contemporary writings complain that bills were endorsed many times over for this purpose.

[85] Usher, above n 79, at 502.

[86] S. Carreres Zacarés, *La Taula de Cambis de Valencia 1408–1719* (1957); F. Mayordomo García-Chicote, *La Taula de Canvis: Aportación a la historia de la contabilidad valenciana (siglos XIII–XVII)* (2002).

[87] J. M. Passola, *Els Orígens de la banca pública: les taules de canvi municipals* (1999).

[88] Adam Smith, for example, gives the Bank of Amsterdam a highly favourable review in the 1776 *Wealth of Nations.*

[89] J. G. van Dillen, 'Oprichting en Functie der Amsterdamse Wisselbank in de zeventiende Eeuw 1609–1686', in J. G. van Dillen (ed.), *Mensen en Achtergronden: Studies uitgegeven ter gelegenheid van de tachtigste jaardag van de schrijver* (1964) 336.

[90] Cashiers (*kassiers*) accepted and paid out coins for local transactions. They could also effect settlement through giro transfers. Cashiers were a legally distinct profession from moneychangers (*wisselars*), although in practice the activities of the two groups often overlapped. Both moneychangers and cashiers were widely blamed for the poor quality of circulating coin.

Coin circulated in bewildering variety. The loose political structure of the Dutch Republic allowed for thirty-five quasi-independent domestic mints, and the Republic's mint ordinances assigned official values to almost 1,000 different types of coin, foreign and domestic.[91] Ongoing debasement meant that the silver content of a guilder was dropping by about 1 per cent annually, with most of the profit accruing to the least scrupulous mint owners.[92] This profit was to no small extent extracted from creditors (bill beneficiaries) in the Amsterdam bill market,[93] who sought a remedy through the creation of the bank.

The initial charter of the bank[94] did the following:[95]

1. required all bills of exchange over 600 guilders to be payable through the bank;[96]
2. outlawed private cashiers;
3. made deposits in the bank not attachable by creditors;
4. allowed recognized coins to be deposited in the bank at value prescribed by the Republic's mint ordinances; others to be credited at metallic value (sent to a mint);
5. made deposits redeemable on demand, but allowed the bank to recover costs by charging fees for withdrawals. Fees varied by coin and were capped at 2.5 per cent; in practice they averaged about 1.5 per cent.

Provisions one to three were clearly aimed at creating a privileged status and hence a market demand for bank deposits. Although most early records of the bank have been lost, indirect evidence suggests that these provisions were successful. Within two years of its founding, 1.4 million guilders' worth of metal flowed into the bank, despite the considerable fees charged by the bank for coin withdrawals.[97] The bank's monopoly on bill settlement was, however, never complete and private cashiers were soon (1621) allowed back in business.

Chartered as a '100% reserves' institution, the bank quickly began lending, to the East India Company (starting in 1615) and the City Treasury (1624), as well as to a number of other politically privileged parties. Lending by the bank continued despite its official prohibition. The bank's loans/total asset ratio shot up to 60 per cent during the 1620s but then quickly fell back to less than 20 per cent.[98] In contrast with exchange banks in some other cities, the Bank of Amsterdam did not extend credit through a Lombard window.[99]

91 P. Dehing and M. 't Hart, 'Linking the Fortunes, Currency and Banking, 1550–1800', in M. 't Hart, J. Jonker, and J. L. van Zanden (eds), *A Financial History of the Netherlands* (1997) 37.

92 M. Polak, *Historiografie en Economie van de 'Muntchaos'*, 2 vols (1998).

93 S. Quinn and W. Roberds, 'An Economic Explanation of the Early Bank of Amsterdam, Debasement, Bills of Exchange and the Emergence of the First Central Bank', in J. Atack and L. Neal (eds), *The Origins and Development of Financial Markets and Institutions from the Seventeenth Century to the Present* (2009) 32.

94 The bank was a perpetual, public institution, although legally separate from the city. Governance was in the hands of three commissioners, who were typically current or former members of the city council: see M. 't Hart, 'Corporate Governance', in M. van Nieuwkerk (ed.), *The Bank of Amsterdam: on the Origins of Central Banking* (2009) 144. Profits from the bank's operations were returned to the city.

95 Van Dillen, 'Oprichting en Functie der Amsterdamse Wisselbank', above n 89.

96 Literally, 'ter Bank gerescontreert ofte betaelt moeten worden'. This is usually interpreted as requiring settlement of bills through giro transfers. Because the early ledgers of the bank have been lost, there is no surviving direct evidence that this was the case. Van Dillen, 'Oprichting en Functie der Amsterdamse Wisselbank', above n 89, reports that his examination of the ledgers of a similar exchange bank in Middelburg indicate that giro settlement was in fact used from the beginning of that bank's existence; it seems reasonable to assume the same practice prevailed in Amsterdam. The Middelburg ledgers were unfortunately destroyed in the Second World War.

97 Quinn and Roberds, above n 93.

98 Ibid., at 26.

99 Lombard credit was traditionally available through a separate institution, the Lending Bank (*Bank van Leening*). Surviving evidence suggests that the Bank of Amsterdam provided some limited support to the Lending

The advent of the bank slowed, but did not halt the pace of debasement. The situation took a turn for the worse when the Republic's 1641 mint ordinance recognized an 'invading' coin from the southern Netherlands, the *patagon*, as having the same value (2.5 guilders) as a popular domestic coin, the *rijksdaalder*, despite the latter having about 4 per cent greater silver content than the former. This put the bank on the losing end of coin-to-coin arbitrages. The improvised solution was for the bank to apply a discount or 'haircut' to deposited *patagons*, so that these were credited at only 2.4 guilders on the books of the bank. This move had the unintended consequence of creating a de facto second unit of account, the *bank guilder*, as opposed to the *current guilder*, the unit of account for money outside the bank. The 'haircut' applied to *patagons* caused bank money to be valued at a premium or agio of about 4 per cent above current money.

The system of dual units of account was formalized by the mint ordinance of 1659, which assigned separate values to large coins, in current and bank money respectively.[100] Bills of exchange drawn from outside the Republic continued to be denominated and settled in bank guilders, while local bills were primarily denominated in current guilders and settled through private cashiers. The cashiers also operated a daily market where bank money could be exchanged for current money for a small commission (one-fourth per cent or less).

A reform in 1683 sharply reduced the costs of trading in bank money. Following the suggestion of an Amsterdam merchant, the bank began giving out a new type of receipt against each deposit of coin.[101] The receipt, which was negotiable, entitled its bearer to reclaim the specific deposited coin within six months, at a minimal charge—0.5 per cent for gold coin and 0.25 per cent for silver.[102] No receipts were given for existing deposits. Under this system, it was now cheaper to redeem a receipt than to exercise the right to withdraw a deposit in the traditional fashion. Depositors not holding a receipt could purchase one, so the right to withdrawal became unused and at some unknown point (probably 1685) was quietly abolished.[103] Bank money thus lost its inherent redeemability and took on a quasi-fiat character.

The lowering of redemption fees greatly increased the flow of money into and out of bank accounts, the turnover of bank money, and the profitability of the bank. During this period the bank also began a practice of regular, seasonal lending (*anticipatiepenningen*) to the East India Company. Virtually all of the bank's profit from these operations was quietly transferred to the city, leaving the bank with little or no capital reserve.[104] Despite this back-door fiscal exploitation, the metallic reserves were generally ample over this time period, and averaged 82 per cent of deposits over the entire period of the bank's existence.[105]

Bank, peaking at 200,000 guilders in 1616 and diminishing quickly thereafter (Van Dillen, 'Oprichting en Functie der Amsterdamse Wisselbank', above n 89). In the eighteenth century, Amsterdam created other institutions for credit provision, which are discussed later in this section.

100 Ibid.

101 J. G. van Dillen, 'Een Boek van Phoonsen over de Amsterdamsche Wisselbank', (1921) 7 *Economisch-historisch jaarboek* 1.

102 That is, a receipt was an American call option on the deposited coin. Receipts were almost always redeemed, so in practice they functioned more like repurchase agreements than options. By structuring the receipt as an option rather than evidence of a debt, however, the bank was able to secure its priority as a creditor, and hence offer loans against coin at very low rates with little or no haircut: see W. C. Mees, *Proeve eener Geschiedenis van het Bankwezen in Nederland geduerende den Tijd der Republiek* (1838). Through the use of receipts, the bank seems to have also avoided political disputes over priority as occurred in Basel (discussed in Section III.6(a)).

103 J. G. van Dillen, 'Bloeitijd der Amsterdamse Wisselbank 1687–1781', in Van Dillen (ed.), above n 89 385.

104 Quinn and Roberds, above n 93.

105 Dehing and 't Hart, above n 91, at 49.

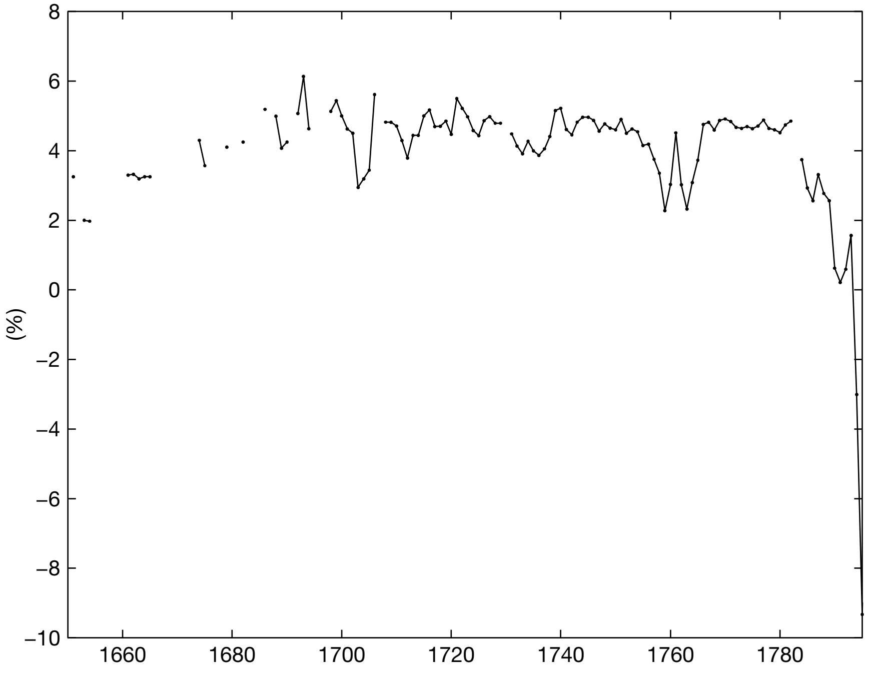


Figure 17.5 Agio on Amsterdam Wisselbank balances, 1650–1800.
Source: M. A. Denzel, *Handbook of World Exchange Rates, 1590–1914* (2010), at 58.

An extensive set of records is available from 1666 and these show that the bank engaged in frequent and profitable open-market operations. At first, these were probably trades in silver bullion, despite restrictions on such activity in the bank's charter. Later on, vault records indicate that the favoured instrument for such transactions was current money. These operations apparently served to stabilize fluctuations in the stock of bank money.

The Republic's 1694 coinage reform ushered in a period of remarkable stability. Outlying mints came to accept Amsterdam's monetary hegemony, and curtailed their production of debased coin. The guilder coin was successfully reintroduced, but curiously remained ineligible for deposit in the bank: the dominant unit of account remained the guilder as defined by entries in the bank's ledgers. Confidence in the bank guilder was such that during the first half of the eighteenth century, the market agio rarely ventured outside its statutory range of 4 per cent to 5 per cent (Figure 17.5). Towards the end of the eighteenth century, however, the bank was impacted by two serious financial crises. The first of these, in late 1763, resulted from a collapse in the market for acceptance loans following the failure of a major merchant bank, *Gebroeders de Neufville*.[106] The second panic, in late 1772 and early 1773, saw the failure of an even larger merchant bank, George Clifford and Sons, setting off another wave of payment suspensions and failures.[107]

The bank withstood these crises, but was forced to implement emergency measures in both cases. In August 1763, the bank widened the range of assets eligible for deposit to include unminted silver bullion—a commodity in excess supply due to large shipments of recently demonetized Prussian wartime coinage. Resulting deposits of bullion were

[106] I. Schnabel and H.-S. Shin, 'Liquidity and Contagion: The Crisis of 1763', (2004) 2(6) *Journal of the European Economic Association* 929.
[107] P. Koudijs and H.-J. Voth, *Optimal Delay: Distressed Trading in 18th c. Amsterdam* (2011).

relatively small in aggregate (1.5 million guilders or about 5 per cent of total deposits) but were critical to maintaining the liquidity of several large merchant banks.[108] The 1772–3 crisis led to the creation by the city of a new, open access loan facility, the 'Fund for the Maintenance of the Public Credit', legally distinct from but wholly funded by the bank. The impact on the bank's balance sheet was again quantitatively small (a half million guilders) and the Fund was wound up by October 1773. However a precedent had been set for the expansion of the bank's lending operations.

These operations greatly increased during the Fourth Anglo-Dutch War (1780–4). The bank abandoned its traditional conservatism and extended large credits to the East India Company, to provincial governments, and to a newly formed municipal loan facility (*Stadsbeleeningkamer*). Metal deposits were withdrawn from the bank, and soon the customary agio on bank money could no longer be maintained. In 1790 the bank tried to unilaterally impose a 9 per cent depreciation of bank money, causing the agio to fall below zero and forcing a recapitalization of the bank the following year. A near total collapse followed soon thereafter, with the French invasion of 1795. The Bank of Amsterdam was superseded by *De Nederlandsche Bank* in 1814, and was liquidated in 1820.[109]

(b) Other Dutch exchange banks (1616–1812)

The popularity of the Bank of Amsterdam inspired the founding of similar exchange banks in other cities of the Dutch Republic: Middelburg (1616), Delft (1621), and Rotterdam (1635). Initially these institutions operated as close copies of the Amsterdam Bank.[110] The motive for the founding seems to have been much the same, and the success of the Amsterdam institution moved the outlying cities to closely follow its example. Foreign merchants, the English Merchant Adventurers especially, also encouraged this development.[111] As in Amsterdam, the chartering legislation of the banks required bills payable in the respective cities to be settled through the local exchange bank. This rule appears to have been enforced less vigorously in the provinces than in Amsterdam; in 1720 the city council of Rotterdam found it necessary to pass an ordinance reiterating this restriction.[112]

With the arrival of the *patagon* and the subsequent emergence of dual units of account, the smaller Dutch exchange banks embarked on different paths from the Bank of Amsterdam. Specifically, in the outlying banks, depositors were allowed to maintain separate accounts in bank money and current money. As noted previously, the former was used principally for settlement of bills drawn abroad and the latter for domestic transactions, particularly bills drawn on Amsterdam. Bank money in the accounts of the outlying banks was usually valued at the going market agio in Amsterdam. There is no evidence that the outlying banks abolished the right to withdrawal of deposits, as occurred in Amsterdam following introduction of the receipt system in 1683. This right could not be honoured in all circumstances, however, as cash ratios of the outlying banks were distinctly lower than in Amsterdam.[113] Illiquid loans forced lengthy shutdowns at both Middelburg and Rotterdam following the French invasion of 1672.[114]

108 Quinn and Roberds, above n 93.

109 J. G. van Dillen, 'Ondergang van de Amsterdamse Wisselbank, 1782–1820', in Van Dillen (ed.), above n 89 416.

110 Mees, above n 102; Z. W. Sneller, 'De Rotterdamsche Wisselbank 1635–1812', (1938) 87(1) *De Economist* 685.

111 J. G. van Dillen, *Bronnen Tot de Geschiedenis der Wisselbanken* (1925).

112 Z. W. Sneller, 'De Rotterdamsche Wisselbank 1635–1812 (Vervolg)', (1938c) 87(1) *De Economist* 818.

113 E.g., the cash ratio of the Middelburg bank averaged over its lifetime was 54% as compared to 82% for the Bank of Amsterdam (Dehing and 't Hart, above n 91, at 49).

114 Mees, above n 102.

By operating in both current and bank money, the outlying exchange banks came to function essentially as state-sponsored cashiers for their respective merchant communities. Over the course of the eighteenth century, two developments worked to undermine this functionality. The first was the stabilization of Dutch domestic coinage in the wake of the 1694 mint ordinance. This reduced fluctuations in the value of current money, so that domestic bills increasingly were drawn in current rather than bank money. The second was the loss of trust in the Amsterdam bank guilder after 1780, so that foreign bills also came to be written in current money terms. Sneller examined samples of protested bills in the Rotterdam notarial records, and found that by 1763–70, the great majority of these were payable in current money.[115]

As bank money became increasingly less used as a unit of account, the rationale for the exchange banks evaporated. Merchants could just as well settle through a private cashier or with coin. The Rotterdam bank moved to a current money basis after 1795 and was dissolved in 1812.[116] The Middelburg bank collapsed in 1794 with the French invasion. In 1805 it was resurrected in diminished form, operating only on a current money basis and having no monopoly of settlement.[117]

6. German Banks

(a) Early German municipal banks (fifteenth–seventeenth centuries)

Municipal exchange banks (*Stadtwechsel*) arose in a number of German cities during the fifteenth and sixteenth centuries: examples cited by Günther (1932) include Erfurt, Wismar, Bremen, Lübeck, Frankfurt, Basel, Konstanz, Augsburg, Strasbourg, Cologne, and Merseburg. Throughout Germany, the right to exchange money was bound to coinage rights. By tradition such rights were reserved for religious and secular authorities, but in practice coinage and exchange activities were often carried out by *Hausgenossenschaften*, hereditary societies often associated with guilds. With the rise of commerce, cities sought to exercise increased control over the local money supply. The 1402 mint ordinance of King Ruprecht III encouraged cities to better regulate exchange, but this law may have only served to recognize the inroads the cities had already made onto the turf of the *Hausgenossen*.[118]

The initial forays of cities into banking were often quite modest. In 1402 Frankfurt created a municipal bank with fourteen employees and an initial capital of 900 *florins*. The bank existed only for the duration of the autumn fair. Its principal function and the main source of its revenue was the weighing of coin to be used during the fair. The success of this first enterprise led to the founding of a second municipal bank, a three-year joint venture between the city of Frankfurt and a married couple, the Palmstorffers.[119]

Such joint ventures were hardly unusual: Basel initiated its *Stadtwechsel* in 1491 by taking an equity position with a local *Hausgenosse*.[120] Rights to operate a municipal bank could also be contracted out to private parties (*verpachtet*) without equity participation by the city, or an exchange bank could be operated as a 'pure' municipal entity staffed with employees. In most cities the *Stadtwechsel* operated alongside private moneychangers, as monopolies of either the public or private variety were not desired by the merchant community.

[115] Sneller, above n 112.
[116] Z. W. Sneller, 'De Rotterdamsche Wisselbank 1635–1812 (Slot)', (1938) 87(1) *De Economist* 882.
[117] Mees, above n 102.
[118] K. Günther, *Die städtischen Wechselbanken Deutschlands im Mittelalter und im 16. Jahrhundert* (1932), at 15.
[119] Ibid., at 29. [120] R. Hallauer, *Der Basler Stadtwechsel 1504–1746* (1904), at 40–1.

The stated reason for the founding of a municipal bank was always to maintain the quality of coinage within the city. The city council of Konstanz voiced a fear that allowing poor quality coins into the city markets would lead to disruptions in the grain supply. The charter of the Basel City Council stated that 'our municipal bank is being founded to benefit the public good'. In granting coinage (and hence exchange) rights to the city of Breslau in 1470, a royal decree proclaimed 'that such profit and benefit [of the bank] will accrue to the entire city and not any single person'.[121]

Importation of some higher value 'foreign' coins, especially gold coins, was allowed but it was generally forbidden to circulate such coins within the city. Otherwise, anyone bringing foreign coins into the city was supposed to exchange these, at metallic value, at a municipal bank or licensed private moneychanger. Foreign coins then had to be sent to the city mint. Even minor deviations from these rules were subject to severe punishments. Both public and private banks were bound to follow these rules, but the presence of a public bank was thought to improve the honesty of the private enterprises.

Another important motive for the founding of municipal banks was the view of the Church on interest. Payment of interest was less frowned upon when it sprang from the exercise of civic authority. A factor behind this view was the Church's desire to earn income on accumulated wealth.

Money changing was the mainstay of the municipal banks' business, but over time their business model came to more closely resemble modern banks. Although relatively few ledgers have been preserved, the practice of giro payment seems to have gradually taken hold. Günther cites an early (1421) Lübeck court case where a wine shipment had been paid for by a transfer of seventy *marks* on the books of a local moneychanger who subsequently absconded.[122] The wine merchant sued the purchaser but lost his court case, as his written receipt of the transfer was taken as evidence that he considered it to be valid payment. The 1551–3 ledgers of an Augsburg municipal banker, Stadwechseler Mair, contain numerous examples of giro payments.[123] Municipal banks also dealt in bills of exchange, but these were lightly used as compared with places such as Flanders and Italy. Bills were usually drawn on other German cities and they functioned more as a means of transferring value rather than as credit instruments.

In addition to transaction deposits (*depositum regulare*) municipal banks also offered interest-bearing deposits (*depositum irregulare*). These were popular among all classes of society, although interest rates were generally low, 5 per cent or less. In some cases laws compelled the deposit of orphans' funds into a municipal bank. Foundations and religious orders were encouraged to do the same. A side benefit of depositing monies at a municipal bank was that they were often guaranteed to be free from attachment by creditors. Laws to this effect were passed as early as 1397 in Frankfurt and Strasbourg.[124] There were also deposits from the cities themselves, which served to provide working capital to the banks. Such deposits bore a higher interest rate than what was available to private depositors.

Over time the banks expanded their lending activities, as well. The most common type of loan was a Lombard loan against the metallic value of gold or silver collateral. The popularity of such loans is attested to by various attempts to regulate their interest rates, e.g. to a maximum of 5 per cent (a 1559 Imperial Edict) or a more realistic 10 per cent (1376 city ordinance in Ulm).[125] These loans bore almost no credit risk, as haircuts were liberally applied, and municipal banks often enjoyed a right to prompt liquidation of collateral and priority over other creditors. In 1691, resentful private lenders in Basel succeeded in

[121] Günther, above n 118, at 17. [122] Ibid., at 75. [123] Ibid., at 76–7.
[124] Ibid., at 64. [125] Ibid., at 70.

overturning laws guaranteeing the priority of the *Stadtwechsel* banks.[126] This change was quickly seen as endangering interest payments to depositors, and was rescinded a year later.

Banks also made other types of loans. In Basel, unsecured loans could be obtained, though only with the express permission of the borrower's wife.[127] The Augsburg ledgers of Stadtwechseler Mair indicate that overdrafts were commonly allowed for in the accounts of prominent local merchants, for example the Welsers and Fuggers.[128] The Basel municipal banks also extended loans against bills of exchange, where their guarantee of priority brought them into even sharper conflict with the local merchant community.[129]

Inevitably, loans were extended to the municipal banks' sponsoring cities. The Mair ledgers show numerous, uncollateralized loans to the Augsburg Tax Office and to the City Building Superintendent.[130] The financing activities of the Basel banks were even more wide-ranging, with loans to the City Salt Office, the Finance Office, and Municipal Stables, among others.[131] There were limits, however. Günther finds occasional examples of loans to foreign sovereigns, but that in general municipal banks shied away from international lending.[132]

(b) Hamburg (1619–1875)

Problems with circulating coinage in early seventeenth-century Hamburg were, if anything, worse than in Amsterdam, this being the era of rampant debasement throughout Germany. The destructive practice of competitive debasement culminated in the infamous *Kipper- und Wipperzeit* of 1619–23, during which prices increased as much as tenfold in some areas.[133] The foreign merchant community in Hamburg was impressed by the monetary stabilization achieved by the Bank of Amsterdam, and advocated the chartering of a similar institution. Distrust of banks was widespread among the native population, however, and the Bank of Hamburg (*Hamburger Bank*) was founded in 1619 only after long and contentious debate.[134]

For the first century and a half of its existence, the Hamburg institution operated much as a smaller and somewhat less stable version of its 'older sister' in Amsterdam. The fortunes of the Bank of Hamburg began to improve with a 1770 reform, and, unlike its Amsterdam sibling, it was able to successfully weather the stresses of the Napoleonic period. With minimal modifications to its original design, it continued to thrive up until the German Unification in 1871.

The chartering legislation of the Bank of Hamburg closely followed that of its Amsterdam model. Bills were required to be payable through the bank, and funds in the bank were made not attachable by creditors, with exceptions in cases of bankruptcy. The bank had an obligation to 'pay out passable money without excuse', that is to redeem bank deposits on demand, but in practice the bank retained flexibility in terms of which coins it chose to pay out. Bank funds could also be used to settle obligations other than those arising from the acceptance of a bill, subject to prior agreement by creditor and debtor.[135]

Unlike in Amsterdam, the founders of the Bank of Hamburg envisioned an explicit credit role for the bank. The bank was formally split into two entities, an exchange bank

[126] Hallauer, above n 120, at 63. [127] Ibid., at 55. [128] Günther, above n 118, at 70.
[129] Hallauer, above n 120, at 65. [130] Günther, above n 118, at 68.
[131] Hallauer, above n 120, at 54. [132] Günther, above n 118, at 73.
[133] I. Schnabel and H.-S. Shin, 'The "Kipper- und Wipperzeit" and the Foundation of Public Deposit Banks' (November 2006), available at https://www.aeaweb.org/annual_mtg_papers/2008/2008_258.pdf.
[134] H. Sieveking, 'Die Hamburger Bank', in J. G. van Dillen (ed.), *History of the Principal Public Banks* (1934).
[135] E. Levy von Halle, *Die Hamburger Giro-Bank und Ihr Ausgang* (1891).

(*Kaufmannskassa*) and a lending bank (*Lehnbank*). Private parties could borrow against a wide range of collateral: gold and silver coin, jewellery and gems, durable goods, municipal securities, and in one case an estate near Leipzig.[136] Loans were limited to 75 per cent of the estimated value of the collateral.[137] The bulk of the bank's lending went to the municipal treasury (*Kämmerei*), however, which used loans from the bank as a way of smoothing tax revenues. Finally, the bank was given the job of maintaining a store of grain for the city.

Despite this somewhat confusing initial structure, the bank proved popular with merchants.[138] By 1621, over 500,000 *marks* had flowed into the *Kaufmannskassa*,[139] and by 1655, deposits were almost 1.9 million *marks*. Prices for bills drawn in or on Hamburg came to be quoted in *marks banko*, that is, bank money.[140] The dominance of bank money for Hamburg transactions is confirmed by Amend-Traut's examination of a sample of actual seventeenth- and eighteenth-century bills from disputes at the Imperial Court in Frankfurt.[141]

The Hamburg bank experienced its first serious crisis in 1672, following the French invasion of the Netherlands. Expansive lending and heavy cash demands forced the bank to close its doors in May 1672, and it did not reopen until June of the following year. Revisions of the bank charter followed in 1710 and 1719; the most important change was to restrict eligible collateral for loans to gold, silver, and copper.[142]

As in Amsterdam, bank money in Hamburg circulated at a premium over current money (Figure 17.6). As current money continued to depreciate for much of the seventeenth and eighteenth centuries, this agio tended to be both large and unstable. By 1718 the disagio on current money had risen to 34 per cent.[143] Pressure from merchants led to the creation of a 'current money bank' in 1726, temporarily stabilizing the disagio at 16 per cent, but the current money bank had to be closed in 1737 following an influx of low quality coins from Denmark, which threatened its liquidity.[144]

The period of the Seven Years' War was a time of instability for the bank. Liquidity pressures forced the bank to close again in 1755. The bank was not fully reopened until 1761, and this was only possible after the bank curtailed loans against metal and called in existing loans.[145] Following the 1763 panic (originating in Amsterdam but affecting many merchants in Hamburg), lending practices were again liberalized, ultimately leading to a partial closure (suspension of withdrawals) of the bank from 1766 until 1768.[146]

Beginning in 1770 the bank attempted to address the instability of the agio by making silver bullion rather than coin the basis for deposits.[147] The city council reluctantly agreed to this, and then only after the bank offered a two million *mark* loan on favourable terms. Under its new policy, the bank stood ready to buy at 27.625 *marks:mark fine* silver and sell at 27.75 *marks:mark fine*, prices only slightly above the original 1619 value of bank money (25–27 *marks:mark fine*, depending on the coin). This form of 'virtual coin' proved extremely popular with merchants, so much so that in 1790 the bank ended its use of coin in favour of silver bullion. Money in bank ledgers became known as the 'pure silver currency' (*Reinsilberwährung*). Deposits and turnover at the bank increased sharply with the decline of the Bank of Amsterdam in the 1790s.

136 Sieveking, above n 134, at 129. 137 Levy von Halle, above n 135, at 4.
138 Sieveking, above n 134, at 130. 139 Ibid., at 128.
140 J. Schneider, O. Schwarzer, and P. Schnelzer, *Historische Statistik von Deutschland. Band XII: Statistik der Geld- und Wechselkurse in Deutschland und im Ostseeraum (18. Und 19. Jahrhundert)* (1991)
141 A. Amend-Traut, *Wechselverbindlichkeiten vor dem Reichskammergericht: Praktiziertes Zivilrecht in der Frühen Neuzeit* (2009), at 302.
142 Sieveking, above n 134. 143 Schneider et al., above n 140.
144 Sieveking, above n 134, at 145. 145 Ibid., at 140. 146 Levy von Halle, above n 135, at 6.
147 Sieveking, above n 134, at 150.

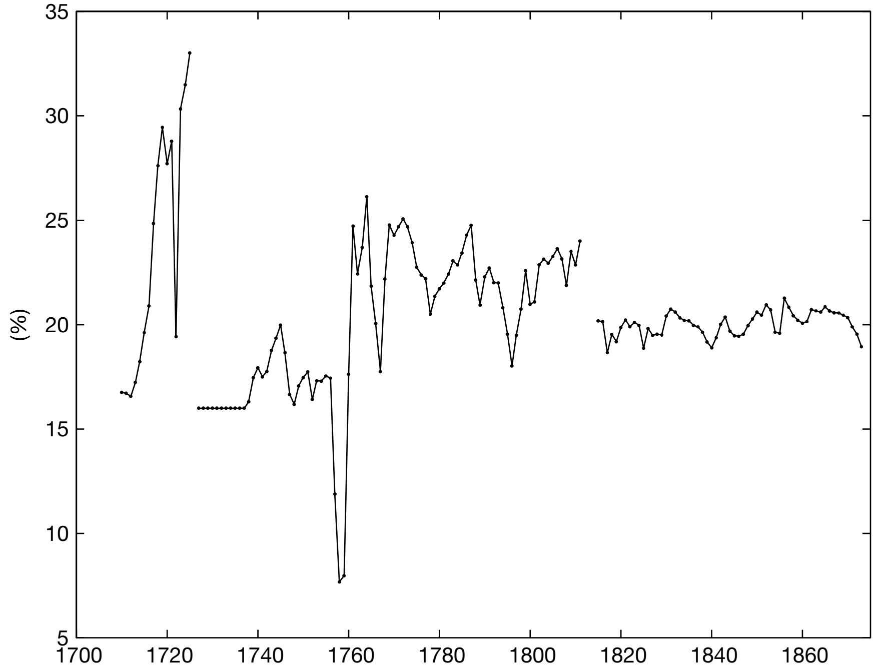


Figure 17.6 Agio on Hamburg bank money, 1710–1873 (annual averages).
Source: M. A. Denzel, *Handbook of World Exchange Rates, 1590–1914* (2010), at 192.

The bank was closed briefly during the Napoleonic Wars but resumed business soon afterwards. The success of the Bank of England prompted calls for the Hamburg bank to begin discounting bills and issuing notes. Proposals to this effect were floated in 1799 and 1845, but were rejected out of fear that banknotes would lead to inflation and financial instability.[148] The only substantial policy change during this period occurred during the 1847–8 downturn, when the bank initiated a facility to make emergency loans against coin rather than bullion. This was the exact reverse of the Bank of Amsterdam's 1763 intervention, which monetized bullion rather than coin.

Confidence in the bank was tested during the panic of 1857. As in the 1763 Amsterdam crisis, the proximate cause of the panic was a loss of confidence in bills issued under acceptance credit schemes. After trying a number of largely ineffective measures, in December 1857 the city set up an emergency municipal discount facility. The latter was funded by a loan of 10 million *marks* from the Austrian National Bank, arriving in the city in highly visible fashion on the famous silver train or *Silberzug*.[149] Market confidence was quickly restored, funds flowed into the Bank of Hamburg, and the Austrian loan was fully repaid with 6 per cent interest by the end of 1858.[150]

The 1857 experience left the bank intact, but weakened political support for the traditional 'exchange bank' central banking model. Nonetheless the bank remained in existence for another fifteen years. Only following the Unification of 1871 did the final

[148] A. Soetbeer, *Beiträge und Materialien zur Beurtheilung von Geld- und Bank-Fragen mit besonderer Rücksicht auf Hamburg* (1855).

[149] A. Soetbeer, 'Die Hamburger Bank 1619–1866: Eine geschichtliche Skizze (Zweite Hälfte)', (1867), 5(2) *Vierteljahrschrift für Volkswirthschaft und Kulturgeschichte* 1, at 36.

[150] M. Wirth, *Geschichte der Handelskrisen* (1890), at 403.

transformation take place: deposits were converted to Prussian currency (gold *thaler*) units in 1873,[151] and the bank was liquidated in December 1875.[152]

An enduring legacy of the Hamburger Bank was its giro payment system, which served as a model for the nationwide giro system introduced by the *Reichsbank* (central bank of the German Empire) in 1876, and in turn for similar payment systems in other countries.[153]

(c) Nuremberg (1621–1836)

The Public Bank of Nuremberg (*Nürnberger Banco Publico*) was founded by the city of Nuremberg in 1621.[154] The bank was founded in an attempt to exclude the debased coinage of the *Kipper- und Wipperzeit* (1619–23) from circulating within the city. At that time, Nuremberg merchants had extensive trading relationships with their counterparts in the 'banking cities' of Amsterdam, Hamburg, and Venice, so the founding of a municipal exchange bank was widely viewed as a reasonable solution to the problem of payment in debased coinage.

The initial design of the bank closely followed the Amsterdam model. Merchants were to deposit full-weight coins in the exchange bank, and commercial obligations were to be discharged through giro transfer. The Public Bank was not allowed to extend credit, but was to finance itself by charging a 0.1 per cent fee on each giro transfer. Legal compulsions to pay in bank money (known collectively as the *Bancozwang*) were more extreme than in other banking cities. The bank's charter required *all* debts in excess of 200 guilders/100 *Reichsthalers* (not just bills) to be payable exclusively through the Public Bank, and made any payments outside the bank subject to a fine equal to 10 per cent of the payment in question. Assignment of bills of exchange was limited to a single endorsement. Finally, an additional incentive for use of bank money was provided in 1622, when the city council imposed the death penalty for anyone caught trading in debased coinage.[155]

Due in part to the severity of these ordinances, and in part to the general distaste for debased coinage, the Public Bank enjoyed an initial run of success. Deposits by the public (the *Hauptkasse*) sometimes reached 600,000 guilders in 1622 and 1623.[156] However, the popularity of the bank was soon undermined by two factors. The first was a 1623 monetary reform agreed to by neighbouring states (Franconia, Swabia, and Bavaria) that effectively ended the inflation of the *Kipper* and *Wipper* period, making the use of bank money less attractive relative to coin (which did not carry transfer fees). The second was the ongoing exploitation of the bank by the Nuremberg City Council, which had succumbed to the temptation to borrow funds from the bank 'according to its best judgement'. Fiscal demands on the city increased sharply after it agreed to pay war contributions to Sweden in 1631, and by 1634 the debt of the city to the bank had risen to the level of deposits at the bank, now totaling only 85,000 guilders.[157] The reduction in deposits and loss of transaction fees caused the bank to be unable to pay its expenses, and it was forced to reorganize.

In 1635 the city came up with a plan to repay its debt to the bank in relatively short order—in fifty-five weekly instalments—and some deposits flowed back in. The bank was unable to regain the degree of trust it had enjoyed in its early days, however. Deposits

[151] Levy and von Halle, above n 135, at 62–70. [152] Ibid., at 80–1. [153] Ibid., at 78–9.

[154] This section presents a summary of the recent monograph by M. A. Denzel, *Der Nürnberger Banco Publico: seine Kaufleute und ihr Zahlungsverkehr (1621–1827)* (2012).

[155] M. P. White, *The Kipper and Wipper Inflation 1619–1623: An Economic History with Contemporary German Broadsheets* (2012), at 13.

[156] Denzel, above n 154, at 119. [157] Ibid., at 122.

generally remained under 200,000 guilders,[158] and fell further after a revised 1654 bank ordinance allowed some commercial payments to be made outside the bank. After 1660, renewed pressure from coinage debasements in neighbouring states led to a further contraction of deposits, as heavy coin was increasingly worth more outside the bank than inside. A 1675 ordinance sought to address this problem by limiting the convertibility of bank balances, prohibiting bank payments to foreigners, and specifying that withdrawals (when allowed) could only be made in the lightest available types of coin. The ordinance was ineffective, and subsequent years saw a continued outflow of bank balances and increasingly widespread evasion of the *Bancozwang*. In the meantime much of Nuremberg's bill business moved to the nearby city of Augsburg.

Ultimately the Public Bank (unlike its more successful contemporaries in Amsterdam and Hamburg) was unable to maintain a firm connection between its ledger money and full-weight silver coins. After convertibility restrictions were eased in 1682, depositors rushed to withdraw heavy coin, causing balances to contract further (to 26,000 guilders) and plunging the bank into an existential crisis. In a bid to recover its business, the bank after 1691 allowed for current money payments in its accounts, and from 1695 most accounts were kept in current money. Transaction fees were halved to 0.05 per cent for all but Jewish depositors, and restrictions on the type of coin that could be deposited were steadily liberalized. This led to a partial recovery in bank balances, to 150,000 guilders by 1700, but by 1725 the bank fell into increasing disuse.

In 1765 the city adopted a new, more stable coinage standard, based on the coins of the 1753 Austria–Bavaria monetary treaty. Paralleling the experience of the smaller Dutch cities, the ensuing stability of current money made payment through the bank largely superfluous. The bank continued to see some use from existing depositors, however, and it was not liquidated until 1831.

IV. Conclusion

The banks surveyed in this chapter were founded between the early fifteenth and the mid-seventeenth century. A number of characteristics distinguish them from those to be surveyed in Chapter 22. These 'first-generation' public banks were created in city-states (for the Italian, Dutch, and German banks) or municipalities with strong autonomy (the Catalonian banks, which withered after the loss of that autonomy in 1714). They were almost all owned by the sponsoring city, Genoa's bank being owned by an association of state creditors. Their liabilities were essentially book entries, and many (but not all) were required to maintain full backing in metal.

The motivations for their creation varied. One goal was to provide a stable means of payment to remedy coinage disorders (Genoa, Amsterdam, Hamburg) or private sector banking weaknesses (Venice). The emergence and general use of *banco* units of account in these cities attests to their broad success, but that required active management and a long learning process. The best example remains Amsterdam's success in maintaining the stable value of what had become a fiduciary currency.

Another motivation was to make government debt more liquid (Barcelona, Venice). Even when public finance was not clearly the motivation, the course of time and the inevitable occurrences of wartime emergencies often compelled the banks to lend to their

[158] Ibid., at 130–2.

owners. Success in surviving such pressures varied, and recovery was often a drawn-out process; Amsterdam avoided them altogether for a long period of time.

Most of these early banks survived long enough to coexist with the public banks created after 1650. This date is nevertheless an appropriate break point for this chapter because (as we will see[159]) the next generation of banks presented substantial differences.

[159] See Chapter 22 in this volume.

II

COMMON LAW

18

'Bank Money'

The Rise, Fall, and Metamorphosis of the 'Transferable Deposit'

Benjamin Geva

I. Introduction

As an institutional framework for paying out of and into bank deposits in discharge of debts, 'deposit and transfer banking' goes back to antiquity.[*, 1] Even cheques, in which such bank payments originated in England,[2] can be traced back to Ptolemaic Egypt.[3] It was, however, owing to a feature of 'deposit and transfer banking' in the Middle Ages that the term 'bank money' was coined to describe credit to a bank account[4] as something that can move from one deposit to another, possibly in the discharge of debts.[5] Gradually, in a process that goes back to post-medieval England, interbank payment systems evolved both nationally and internationally.[6] Considering that money had been viewed as

> that which *passes freely from hand to hand* throughout the community *in final discharge of debts*... [and] accepted equally without reference to the character or credit of the person who offers it and without the intention of the person who receives it to consume it...[7]

it became appropriate to consider credit to a deposit account as 'money'.[8]

It is tempting to think of the execution of a payment order as the transfer of a deposit in whole or in part from one person to another. Indeed, at least one regulatory statute speaks

* This essay primarily consists of and heavily builds on parts of chapters 9 and 12 of B. Geva, *The Payment Order of Antiquity and the Middle Ages—A Legal History* (2011). See that book for acknowledgments and funding provision for this work.

[1] See B. Geva, *The Payment Order of Antiquity and the Middle Ages—A Legal History* (2011), ch 3, at 116–57.

[2] See ibid., ch 10 section 2, at 469–84; and Chapter 19 of this volume.

[3] See Geva, above n 1, ch 3 section 5, at 140–55.

[4] 'Bank account' is the record in which credits for customers' deposits and debits for customers' withdrawals are entered. See, e.g., *United Dominions Trust v. Kirkwood* [1966] 2 QB 431, at 447.

[5] See Geva, above n 1, ch 8 section 2, at 357–69.

[6] See ibid., ch 10, at 467–527.

[7] *Moss v. Hancock* [1899] 2 QB 111, at 116. Emphasis added.

[8] See Geva, above n 1, ch 10 sections 3–4, at 497–505 and ch 5, at 518–27.

of institutions holding 'deposits transferable by order to a third party' as eligible participants in a national payment system.[9] However, other than in Scotland[10] and France,[11] the broad consensus, overwhelmingly applicable worldwide,[12] is that '[a] check or other draft[13] does not of itself operate as an assignment of funds in the hands of the drawee available for its payment.'[14] Hence, a drawee incurs liability on a bill of exchange only by signing as an acceptor.[15] It is against this background that, as long as it has not been acted on by the drawee, in principle, a cheque is revocable.[16]

Even in the absence of a specific statutory provision on the point, as available for bills and cheques, the assignment of debt is overwhelmingly rejected as the theory underlying the transfer of funds. At common law, a debt was looked upon as a strictly personal obligation, and its assignment was prohibited. For its part, equity did not play any role in the early development of payment mechanisms in English law. Thus, a credit transfer has been explained as a process under which the debt owed to the payer by his bank is ultimately replaced by a new debt owed to the payee by his bank. To that end, the characterization of the process as a 'transfer' is certainly a misnomer,[17] as in fact nothing tangible or intangible is transferred. Rather, one debt, owed by a bank to the payer, extinguishes (or decreases), and allows for another debt, that of a bank to the payee, to arise (or increase) and substitute it substantially[18] for the same amount.[19] Stated otherwise, the payment order does not initiate an assignment of funds held by the payer's bank. This is true for a debit transfer as well.[20]

In the final analysis, the impact of the process initiated by the payment order is to extinguish the payer/order-giver's claim to a deposit balance and create a new claim,

[9] Canadian Payments Act, RSC 1985, c. C-21, ss 2(1) (definitions of 'loan company' and 'trust company') and 4(2)(a) and (c) (entitled members).

[10] Bills of Exchange Act 1882 (45 & 46 Vict., c 61) (hereafter BEA), s. 53(2).

[11] For *la provision* in French law, see, e.g., C. Gavalda and J. Stoufflet, *Instruments de paiement et de crédit*, ed. Jean Stoufflet (7th edn, 2009), at 105–14; and for a summary, see Peter Ellinger, 'Negotiable Instruments', in U. Drobnig and K. Zweight (eds), *International Encyclopedia of Comparative Law.* Vol 9: *Commercial Transactions and Institutions*, ed. J. S. Ziegel (2000), ch 4, at 110–13. See also G. Ripert and R. Roblot, *Traité de droit commercial* (13th edn, 1992), at 181–6. For a more extensive analysis, see P. Lescot and R. Roblot, *Les effets de commerce* (1953), vol 1, at 389–465.

[12] Though not necessarily in French-based systems, for which see in general Ellinger, above n 11, at 70–2.

[13] 'Draft' and 'bill of exchange' are used interchangeably.

[14] Uniform Commercial Code (1990, as amended 2002) (hereafter UCC), § 3-408 'Drawer Not Liable on Unaccepted Draft'. See also BEA, above n 10, s. 53(1) (almost verbatim).

[15] Ibid. See also United Nations Convention on International Bills of Exchange and International Promissory Notes, UN Doc. A/RES/43/165, (1988) 42 *Yearbook of the United Nations* 834, Arts 37 and 40. Cf. Convention Providing a Uniform Law for Bills of Exchange and Promissory Notes, 7 June 1930, 143 LNTS 257, Annex I (on which legislation throughout the world is modelled in civil law countries including those in Continental Europe), Arts 21, 25, and 28.

[16] See, e.g., BEA, above n 10, s. 75 ('The duty and authority of a banker to pay a cheque drawn on him by his customer are determined by—(1) Countermand of payment; (2) Notice of the customer's death'); UCC, above n 14, § 4–403 'Customer's Right to Stop Payment'; 'Burden of Proof of Loss'; and cf. Art 32 of the Convention Providing a Uniform Law for Cheques, 19 March 1931, 143 LNTS 355, Annex I.

[17] Notwithstanding dicta in *Delbrueck v. Manufacturers Hanover Trust Co.*, 609 F. 2d 1047 (US Court of Appeals (2nd Cir.), 1979), at 1051, under which a 'funds transfer' was treated as the assignment of a debt.

[18] Possibly subject to charges levied by banks.

[19] *Libyan Arab Foreign Bank v. Bankers Trust Co.* [1989] QB 728, at 754 (disapproving the dicta in *Delbrueck*, above n 17, though without specifically identifying the case). See also *R v. Preddy* [1996] 3 All ER 481, at 496 and *Du Preez v. Kaupthing Singer and Friedlander*, 12 ITELR 943 (Isle of Man HC AD 2010), at 946, *affirming Habana v. Kaupthing Singer and Friedlander*, 12 ITELR 736 (Isle of Man HC CD 2009) and also specifically rejecting the existence of a trust held by the originator's bank and consisting of the amount of a payment order prior to its execution.

[20] Other than in Scotland, where, like a cheque, each 'instruction to pay' issued to the payer's bank (and yet not the mere authority given by the payer to comply with such instructions when duly presented by the payee) has (subject to the availability of funds in the payer's account 'at the critical date') an 'assignative effect'. See *Mercedes-Benz Finance Ltd v. Clydesdale Bank plc*, 1996 SCLR 1005, at 1110–11 (Court of Session, Outer House).

corresponding to the amount of the previous one, to a deposit balance in the third party/payee's hands. It is in this sense that the impact of the payment order is said to 'transfer' funds from one deposit balance to another.

This chapter presents the doctrinal underpinning of the 'transferable deposit' as the historical explanation to 'bank money'. It is written from a common law perspective albeit with some reference to other legal systems. Section II discusses the medieval bailment of money as the ancestor of the bank deposit. Section III sets out the emergence of the modern legal doctrine of the bank deposit from the medieval bailment of money. Section IV analyses the beneficiary's rights under the bailment of money and shows the rise of the 'transferable deposit' in the late Middle Ages. Section V compares the bailment of money and bills of exchange as payment mechanisms. Section VI outlines the disintegration and ultimate fall of the 'transferable deposit' as a theory underlying the beneficiary's right. The concluding Section VII assesses the metamorphosis of the 'transferable deposit' as the foundation for its use as 'bank money'.

II. Bailment of Money and Bailor–Bailee Relationship

The origins of the claim to money deposited are to be traced to the roots of the action to recover a monetary debt. The earliest writs for the recovery of a specific sum of money, as well as a specific chattel, were modelled, under the common law of England, on the *praecipe* writs, namely the Writs of Right for the recovery of land. Around the close of the twelfth century, in Glanvill's time, they formed a composite writ originally encompassing 'debt' and 'detinue'. The ultimate split occurred towards the end of the thirteenth century. Debt had come to provide for the recovery of a specific sum of money; detinue had come to provide for the recovery of specific goods.[21]

Money enclosed in a chest, bag, or other receptacle so as not to be used as current coin was recoverable in detinue. In such a case, the recoverable object was not a sum of money, but the container enclosing the money. Such a 'box under seal', rather than the sum of money, was conceived as the specific chattel to be recovered in detinue.[22]

The 'bailment of money'[23] gave rise to some difficulties. In its simplest sense, the term means delivery of money. Case law was concerned with the failure of the purpose for which the money was delivered to the bailee. Hence, as a legal concept, the bailment of money denotes the delivery of money for a particular, or in effect, any given purpose.[24] Where the purpose was not carried out, inasmuch as the bailee was not obligated to keep the specific coins separately,[25] he was not liable to the bailor for the money in detinue.[26] At the same time, debt was originally perceived to lie either on an obligation, namely a sealed deed, or

[21] See, in general, S. F. C. Milsom, *Historical Foundations of the Common Law* (2nd edn, 1981), at 262–5; C. H. S. Fifoot, *History and Sources of the Common Law: Tort and Contract* (1949), at 25–8 and 217–18. See also T. F. T. Plucknett, *A Concise History of the Common Law* (5th edn, 1956), at 363–5. Recovery of a specific amount of fungible (i.e. unascertained) goods fell under debt.

[22] *Luffenham v. Abbot of Westminster* (1313) YB Hil. 6 Edward II (43 SS) 65. See Fifoot, above n 21, at 27–8. Accidental loss of 'money delivered in keeping under seal . . . which could not be changed' is a defence in the bailee's hands. See *Anon.* (1339) YB 12 & 13 Edward III (RS) 244, at 245–6.

[23] See, e.g., R. M. Jackson, *The History of Quasi-Contract in English Law* (1936), at 24–6 and 30–1; J. B. Ames, 'account', in J. B. Ames, *Lectures on Legal History and Miscellaneous Legal Essays* (1913) 116, at 117–20; C. D. Hening, 'History of the Beneficiary's Action in Assumpsit', in Association of American Law Schools (ed.), *Select Essays in Anglo-American Legal History* (1909, repr. 1968), vol. 3, 339, at 344–60; and A. W. B. Simpson, *A History of the Common Law of Contract: The Rise of the Action of Assumpsit* (1975), at 182–5.

[24] The term is used in numerous authorities. For a partial definition, see Jackson, above n 23, at 24.

[25] See further discussion below nn 68–71, and accompanying text.

[26] See above text accompanying nn 21–2.

on a contract, on a 'real transaction' like sale or loan, where the defendant-debtor had received a material benefit, technically called *quid pro quo*.[27] Also, the action of account was originally unpromising. To be accountable for property committed to his charge, the defendant must have acted as the plaintiff's guardian in socage, bailiff, or receiver.[28]

The breakthrough occurred in 1368. In a case decided that year,[29] the bailor was allowed to bring against the bailee either debt or account. In that case, 'the plaintiff bailed to the defendant £10 on condition that, if the defendant made him an assurance of certain land, the defendant should keep the £10, but that, if he did not make the assurance by a certain day, he should bail them back to the plaintiff'.[30] Claiming that the defendant had acted as his receiver and that he had not made the assurance by that day, the plaintiff brought a writ of account. Arguing for the defendant, Cavendish denied a receiver status, and thought that the proper action should have been debt.[31] Belknap, for the plaintiff, responded that '[w]e cannot have a writ of debt, for there is no contract on which we can count'.[32] Thorpe CJ conceded that the plaintiff might have brought debt, but nevertheless allowed account: 'Inasmuch as he may have an action of debt or an action of account, he may choose which of them to bring. Wherefore, albeit he may have a writ of debt, this will not oust him from the action of account.'[33]

The bailee's account liability should be looked upon as part of the expansion of the receiver category,[34] by which account was ultimately transformed into a general quasi-contractual remedy.[35] Nevertheless, account was a cumbersome proceeding. In general, a judgment in account established the defendant's accountability and provided for the appointment of auditors to work out its detail. To enforce the auditors' award, the plaintiff was then required to bring a separate and subsequent debt action.[36] Where the amount in which a defendant was 'accountable' to the plaintiff was in a sum certain and did not require any calculation, as was the case in the bailment of money,[37] such lengthy proceedings served no useful purpose. Courts were hard-pressed to avoid the duplication and redundancy of the remedies, and permitted the bailor to sue the bailee directly in debt.[38]

[27] See, in general, Fifoot, above n 21, at 223 and 225–6. But see *Anon.* (1294) YB 21 & 22 Edward I (RS), at 598: on a seller's failure to convey land fully paid for by the buyer, Metingham CJ allowed the buyer to 'demand the money by writ of debt', as an alternative to his remedy to enforce the seller's covenant (ibid., at 600). For the discontinuation of such 'equity jurisdiction' by common law courts in the earlier part of the fourteenth century, see Jackson, above n 23, at 20, relied on by Fifoot, above n 21, at 222. For *quid pro quo* as reflecting reciprocity (or receipt in exchange) in medieval informal contracts, see D. J. Ibbetson, *A Historical Introduction to the Law of Obligations* (1999), at 80–3 and 141–2.

[28] See, in general, e.g., J. H. Baker, *An Introduction to English Legal History* (4th edn, 2002), at 363–4.

[29] *Anon.* (1368) YB Pasch. 41 Edward III, fo. 10, pl. 5, repr. in Fifoot, above n 21, at 285.

[30] Ibid.

[31] Ibid. Perhaps he had in mind the 1294 case, *Anon.* (1294) YB 21 & 22 Edward I (RS). It is more likely that he made this argument in order to oust the plaintiff's case from court. Insofar as medieval procedure did not allow for alternative counts, the dismissal of account would have forced the plaintiff to bring a fresh debt action where he was required to start all over again, and where the defendant was free to raise all objections, including as to the propriety of the writ.

[32] See *Anon.* (1368) YB Pasch. 41 Edward III. Compare n 27 above and accompanying text.

[33] See *Anon.* (1368) YB Pasch. 41 Edward III.

[34] The categories of accountants are enumerated in Baker, above n 28, and text accompanying n 28.

[35] For this process, see, in general, e.g., Baker, above n 28, at 363–4, and in greater detail, S. J. Stoljar, 'The Transformations of Account', (1964) 80 *Law Quarterly Review* 203.

[36] See, e.g., Fifoot, above n 21, at 273–4.

[37] According to Jackson, above n 23, at 26, '[t]here is good reason to think that . . . the [bailor's] remedy was limited to the recovery of the sum paid to [the bailee].' For Year Book authorities, see Baker, above n 28, at 365, fn 16.

[38] Baker, above n 28, at 365.

The fact that wager of law[39] could more easily be defeated in account than in debt[40] did not reverse this trend.

The disadvantages of account may explain the pressure to introduce debt as a cause of action available to the bailor against the bailee.[41] However, debt did not supersede account altogether. The ambiguity in relation to the application of these two forms of action to the bailment of money can be seen in connection with the nature of the liability of a custodian of money for safekeeping, which 'was never really settled in medieval law'.[42] A custodian who failed to return on demand a sum of money delivered to him 'not in a sealed container' in order that it would 'be safely guarded and returned on request' could be held liable either in account or debt.[43] Thus, in the course of the fifteenth century, account was brought in one case involving the bailment of money to be rebailed at the bailor's request.[44] Another case specifically approved of the availability of either debt or account in connection with the bailment of money not in a sealed bag.[45] In a third case, Littleton CJP stated that 'where one bails a certain sum of money . . . , if it be in a bag, or in a box, he will have an action of detinue, and otherwise . . . he will have an action of debt'.[46] In a fourth case, the delivery of money for safekeeping was said to trigger either detinue or debt, presumably depending on whether or not money had been delivered in a sealed bag.[47]

Thus, a firm line of demarcation was drawn between two categories of cases involving the liability of one to whom money was delivered. For cases covered in the first category either account or debt was available. For the second category recovery could be made in detinue. The first category is typified by *Core's Case* (1537),[48] where money was delivered to the bailee to purchase merchandise for the bailor. Upon the bailee's death prior to the purchase, the bailor sought to recover the money. In that and other cases of the first category, the bailee 'had liberty by the bailment to make an exchange' of the money delivered to him.[49] Consequently, liability was in terms of the sum of money, not the coins themselves, and hence in debt or account. This was true even where the money delivered to the bailee was 'sealed up in a bag', provided of course that the bailee was free to open the bag and use the money, and was liable to the bailor only in terms of its amount.[50]

Usually, however, delivery of money sealed up in a bag fell into the second category of cases. Money in a bag, which the bailee was not free to use, or the bag of money itself,[51] became the subject of a detinue action 'to recover the thing itself'.[52] The detinue category

[39] 'Wager of law' is interchangeable with 'compurgation' or 'trial by oath'. It is a method of proof in which a person defends against a claim by swearing that the claim is groundless, and by enlisting others—frequently eleven—individuals ('compurgators') to swear to his (the defendant's) credibility. See, e.g., B. A. Garner (ed. in chief), *Black's Law Dictionary* (9th edn, 2009), at 1716–17 ('wager of law') and 327 ('compurgation').

[40] For this point, see Fifoot, above n 21, at 273.

[41] The doctrinal explanations are set out in text accompanying nn 91–3 later in this section.

[42] Simpson, above n 23, at 183, citing at fn 1, Year Book authorities addressed immediately below.

[43] Ibid., at 183.

[44] *Cheney v. Alisand, executor of J. Flint* (1425) 4 Henry VI, Mf. 2, pl. 4, available at http://www.bu.edu/phpbin/lawyearbooks/display.php?id=17001.

[45] *Anon.* (1439) Mich. 18 Henry VI, fo. 20, pl. 5, available at http://www.bu.edu/phpbin/lawyearbooks/display.php?id=17818.

[46] (1467) YB Hil. 6 Edward IV, fo. 11, pl. 6, available at http://www.bu.edu/phpbin/lawyearbooks/display.php?id=19890.

[47] (1484) YB Mich. 2 Richard III, fo. 14, pl. 39, available at http://www.bu.edu/phpbin/lawyearbooks/display.php?id=21105.

[48] *Core's Case* (1537) Dyer 20a, 73 ER 42, Fifoot, above n 21, at 285.

[49] *Core's Case* (1537) Dyer, at 22a, 73 ER, at 46; Fifoot, above n 21, at 287.

[50] See, e.g., *Anon.* (1573) 3 Leon. 38, 74 ER 526 (money sealed in a bag given to the bailee to be used by him to purchase goods for the bailor).

[51] See text accompanying n 22 above.

[52] *Sir George Walgrace's Case* (1606) Noy 12, 74 ER 983.

also covered cases involving 'money that may be known',[53] namely coins 'valued for their rareness or their aesthetic or archaeological interest'[54] and not used as current money. The second category thus encompassed cases where a bag of money or coins were treated as specific goods.[55] Strictly speaking, only the first category, where liability lay in terms of the sum of money and not any specific chattel,[56] involved the bailment of money.[57] It was to be contrasted with the bailment of a bag of money or of specific coins, falling under the second category.[58]

Responsibility for the loss or theft of money varied and depended on whether liability was to return money lent (in debt), to account for money delivered (in account), or to return a specific chattel (in detinue).[59] Responsibility in debt was absolute, and was not excused by lack of negligence or even *force majeure*.[60] Whether any defence could be raised in account was not settled.[61] In detinue, originally, as in debt, no defence was available to a defendant.[62] Subsequently, however, following the treatment of liability under deposit in Roman law,[63] a custodian who was sued in detinue could raise a defence based on his due diligence or lack of any fault.[64] However, in the course of the fifteenth century, the defence disappeared and responsibility tightened. It became excused only when two cumulative conditions existed. First, therefore, loss must have occurred in circumstances beyond the custodian's control. Second, the loss must have occurred in circumstances in which no cause of action or remedy, even theoretical, existed against the wrongdoer.[65] Ultimately, as the seventeenth century came to an end, with detinue having been partly superseded by the action on the case, the custodian's responsibility was re-linked to due diligence or duty of care.[66]

The delivery of money by one person (bailor) to another (bailee) to deliver to a third person (beneficiary) is a specific type of 'bailment of money'.[67] In such a case, the delivery of money to the beneficiary is the particular purpose to be carried out by the bailee. It is unlikely that the bailment of money was associated in medieval England with 'banking', namely the deposit of money to be lent by the depositary in their own name. Nevertheless,

[53] See, e.g., *Bretton v. Barnet* (1599) Owen 87, 74 ER 918.

[54] For this definition of coins that are not treated as fungible chattels, see F. H. Lawson and B. Rudden, *The Law of Property* (3rd edn, 2002), at 27.

[55] See text accompanying nn 21–2 above.

[56] See text accompanying n 49 above.

[57] As defined in n 24 above and accompanying text.

[58] See text accompanying n 22 above.

[59] In detinue, this development is best outlined by Milsom, above n 21, at 266–9.

[60] Though in the late thirteenth century, 'Britton, knowing no Roman law and misunderstanding Bracton's point' on the liability of the custodian for safekeeping, thought that an accidental loss would excuse a money debtor: ibid., at 267.

[61] For a non-conclusive discussion on the point, see (1596) Hil. 38 Elizabeth, Owen 57, 74 ER 897, where it was debated whether, as in detinue (see n 62 below), a plea based on loss in circumstances beyond control, so as to provide the defendant with a cause of action, even theoretical, against a wrongdoer, cannot be raised before the auditors.

[62] This view, attributable to Glanvill at the beginning of the thirteenth century, may be explained on the basis of the common ancestry of debt and detinue. See Milsom, above n 21, at 267.

[63] For the limited liability under Roman law of a depositary of a chattel for safekeeping—effectively only for a wrongful intentional act or gross negligence—see Geva, above n 1, ch 5, section 2, at 194–201, text around fn 19.

[64] This was Bracton's position in the middle of the thirteenth century, which subsisted through the fourteenth century as well. See Milsom, above n 21, at 267–8, and Fifoot, above n 21, at 159–60.

[65] This is following *The Case of the Marshalsea* (1455) YB Hil. 33 Henry VI, fo. 1, pl. 3, Fifoot, above n 21, at 168, where the Court, which dealt with the liability of the Marshal of the King's Bench upon the escape of a prisoner, was prepared to accept a plea based on loss caused by 'the King's enemies or . . . sudden tempest', but not by an act of any of the King's subjects, including an unknown King's subject, against whom the Marshal had an action. See also *Southcote v. Bennet* (1601) Cro. Eliz. 815, 78 ER 1041; 4 Co. Rep. 83b, 76 ER 1061, Fifoot, above n 21, at 169.

[66] A leading case, in which Holt CJ explicitly followed Roman law, is *Coggs v. Bernard* (1703) 2 Ld. Raym. 909, 92 ER 107, Fifoot, above n 21, at 173.

[67] See, in general, Jackson, above n 23, at 24. 'Bailment of money' is defined in text and n 24 above.

it is unclear that the bailment of money precluded the bailee from borrowing the money or some of it until repayment.[68] Regardless, it seems obvious that the bailment of money did not require the bailee to deliver to the beneficiary the same coins originally delivered to him by the bailor.[69] Otherwise, the bailee's liability to the bailor would have been in detinue.[70] In the final analysis, the bailment of money is the delivery of money by one person to another for safekeeping, whether as an end in itself or pending the use of the money for some other purpose. Such a purpose may be the subsequent delivery of the money to a beneficiary, possibly in payment of a debt owed to him by the bailor. Either way, under the bailment of money, delivery of the money is in circumstances under which the bailee is free to mix the money with his own (or with that of other bailors), so as to be liable to return the specific sum, but not necessarily the specific coins.

In fact, the bailment of money to be delivered to a beneficiary is the bailment of money for safekeeping with the additional purpose of the delivery to the beneficiary, whether with or without a demand made by him.[71] Under these circumstances, liability in detinue was out of the question. At the same time, as in connection with the bailee's liability for the safekeeping of money delivered to him other than in a sealed bag, no clear determination was made between account and debt.

Two prominent dicta[72] came to support the proposition that a bailee who failed to deliver the money to the beneficiary was chargeable to the bailor, not only in account, but also in debt. First, in *Doige's Case* (1442),[73] Newton CJ[74] stated that '[i]f I bail a certain sum of money to *Paston* to bail over to *Fortescue*, now, if *Paston* does not do this, he will be liable to me in an action of account and also in an action of debt'.[75] As to the relationship between these two liabilities, the plaintiff-bailor may choose which action to bring, and having 'brought the one, the other is extinguished'.[76] Second, in a 1505 *Anonymous* case,[77] Frowicke CJ stated that 'if I bail money to one to bail over and he converts it to his own use, I can have action of account [or] debt'.[78] Also, in *Core's Case* (1537), the majority of the court thought that 'if money be delivered . . . to be bailed over, if the bailee break his trust, [debt or account] lies for the bailor'.[79] Indeed, the bailee's liability to the bailor in debt or account, arising upon the bailee's failure to hand over the money to the beneficiary, is in line with the 1368 *Anonymous* case.[80] As will be recalled, this case held in general for the

[68] Notwithstanding Simpson, above n 23, at 184, who suggests that as 'a mere intermediary' the bailee 'is not to have the use of the money' and goes on to say that the intermediary is to pass the specific bailed coins to the beneficiary. Simpson's view as to the beneficiary's property in the specific coins delivered by the bailor to the bailee is criticized in n 204 below.

[69] Notwithstanding D. Fox, *Property Rights in Money* (2008), at 83–4, fn 57, whom I understand to say that the bailee was not allowed to mix the bailor's money but was required to keep it separately.

[70] See above nn 24–6 and accompanying text.

[71] In fact, this possible element, that of demand by the beneficiary, has not been discussed, and whether in a given case it existed or not is not clear.

[72] Other Year Book authorities are cited by Ames, above n 23, at 120, fn 4.

[73] *Doige's Case* (1442) YB Trin. 20 Henry VI, fo. 34, pl. 4, Fifoot, above n 21, at 347.

[74] But note that a year earlier, Newton CJ thought that only account was available. *Anon.* (1441) YB 19 Henry VI, fo. 5, pl. 10. See Jackson, above n 23, at 25, fn 1; and Ames, above n 23, at 120, fn 3.

[75] See Fifoot, above n 21, at 348, fn 73. [76] Ibid.

[77] *Anon.* (1505) YB Mich. 20 Henry VII, fo. 8, pl. 18, Fifoot, above n 21, at 351 (also reported in Keilway 69 and 77, 72 ER 229 and 239 as (1506), and Mich. and Hil. 21 Henry VII. See Fifoot, above n 21, at 351, fn 54.

[78] Fifoot, above n 21, at 352. Frowicke CJ (who was in the minority as to the principal holding of that case) would also allow an action on the case. The case was introduced to facilitate the bailor's remedy for consequential loss, or in modern terminology, for wrongful dishonour. Ibid., at 352–3. In the Keilway 77 report, the same judge is reported to mention account and case only. Debt is surprisingly omitted.

[79] See *Core's Case* (1537) Dyer, at 22a, 73 ER, at 46, Fifoot, above n 21, at 287, per Spilman J, Portman J, and Fitzjames CJ. For opposing counsels' views, see Dyer, at 20a and 20b, 73 ER, at 43 and 44.

[80] See *Anon.* (1368) YB Pasch. 41 Edward III, fo. 10, pl. 5. The case is explicitly relied upon by the majority of the Court in *Core's Case* (1537).

bailee's liability to the bailor in debt or account upon the bailee's failure to carry out the particular purpose.[81] The failure to deliver the money to the beneficiary was just one instance of such a bailee's failure.[82]

The availability to the bailor of debt against a custodian of money for safekeeping who was not required to keep it segregated was settled in *Bretton v. Barnet* (1599).[83] The case dealt with the situation where '[a] man delivers money to JS. to be redelivered to him when he should be required: which JS. refused'.[84] The plaintiff-bailor brought a debt action against JS. Particular emphasis was given in the judgment to the distinction between debt and detinue, namely between an action for a sum of money and an action for the return of specific coins.[85] Explicitly citing a case with similar facts to those of *Core's Case* (1537),[86] the court held for the plaintiff. The judges were not concerned with the question of whether the bailee had been free to use the money.[87] Rather, they agreed that 'if money be delivered, it cannot be known, and therefore the property is altered'.[88] Stated otherwise, the bailee's freedom to 'make an exchange'[89] of the money deposited with him, and pay the depositor a sum equivalent thereto, had given adequate grounds for debt. The case settled once and for all the availability of debt to a bailor of money delivered other than in a sealed bag. True, it did not overrule the availability of account, 'but the point is unimportant since there would be no advantage' in bringing account; the latter is appropriate only 'where there is a need to take accounts to settle precisely what sum can properly be claimed by writ of debt'.[90]

The bailor's debt remedy is best explained by an analogy to the remedy of a money lender. Inasmuch as a bailee of money is free to use the specific coins and his liability is in terms of the sum of money delivered to him,[91] he is to be treated very much like a borrower. This is true with respect to every bailment of money, whether to be delivered to a third-party beneficiary for safekeeping or for any other purpose. The money loan has always been a transaction giving rise to debt.[92] True, unlike a loan, the bailment of money does not necessarily involve an explicit repayment undertaking on the bailee's part.[93] Also, unlike a loan, the objective of the bailment of money is not to provide the bailee with the use of the money, but rather to carry out a specific purpose. Nevertheless, in the final analysis, every bailment of money contains a strong element of a loan. Inasmuch as any bailee actually receives the *specific coins* for his own use and benefit, subject to his accountability for their

[81] See above nn 29–33 and accompanying text.

[82] See above text following n 67. According to Ames, above n 23, at 120, the bailor 'might have account, and afterwards debt' against the bailee, also where the bailee's failure to deliver the money was caused by the beneficiary's refusal to accept it.

[83] See *Bretton v. Barnet* (1599) Owen 87, 74 ER 918.

[84] Ibid. Notwithstanding the ambiguity in this statement of facts, the report unequivocally suggests (and so it was understood by Simpson, above n 23, at 183) that the case dealt with the deposit of money for safekeeping, and not with a demand loan. It is unlikely that a borrower's debt liability would have been disputed in 1599.

[85] See above nn 21–2 and 41–58 and accompanying text.

[86] Under the cited judgment, where 'a man delivers money to another to buy certain things for him, and he does not buy them, the party may bring an action of debt', *Bretton v. Barnet* (1599) Owen 87, 74 ER 918. See also *Core's Case* (1537) Dyer 20a, 73 ER 42 and text accompanying n 48 for a summary of the facts of the case.

[87] Freedom to use the money is a distinctive feature of the loan transaction.

[88] See *Bretton v. Barnet* (1599) Owen 87, 74 ER 918.

[89] See above n 49 and accompanying text.

[90] Simpson, above n 23, at 183. For 'account' as involving cumbersome proceedings, see above text accompanying nn 33–9.

[91] See above text accompanying nn 48–9.

[92] See above n 27 and accompanying text.

[93] For example, an explicit undertaking to repay, or to 'bail . . . back', existed in the 1368 case: *Anon.* (1368) YB Pasch. 41 Edward III, fo. 10, pl. 5. See also text accompanying n 30 above. No repayment undertaking was involved in *Core's Case* (1537) Dyer 20a, 73 ER 42, and text following n 48 above.

specific amount, his debt liability to the bailor is in line with a borrower's debt liability to his lender.

III. The Bank Deposit

Money placed in a demand deposit is available to the depositor; and yet, through bank lending, it is also available to the borrower from a bank, whether or not it is redeposited in it. This 'double disposition' of money deposited in a bank expands the 'money supply' in the economy and underlies 'commercial bank money';[94] and yet it perplexes legal theorists who, in discussing the legal nature of the bank deposit, have endeavoured to capture this aspect.[95] However, in the final analysis, towards the depositor, the bank deposit simply creates a right *in personam* against the depositary and effectively forfeits the right *in rem* in the actual coins and banknotes the depositor had in them prior to the deposit.[96]

The link is supplied by *Bretton v. Barnet* (1599).[97] The case dealt with the situation where '[a] man deliver[ed] money to JS. to be redelivered to him when he should be required: which JS. refused.'[98] In finding JS liable to the plaintiff bailor in debt, the judges were not concerned with the question of whether the bailee had been free to use the money. Rather, they agreed that 'if money be delivered, it cannot be known, and therefore the property is altered.'[99] Stated otherwise, the bailee's freedom to 'make an exchange'[100] of the money deposited with him, and pay the depositor a sum equivalent thereto, had given adequate grounds for debt.

In allowing the bailor/depositor to sue in debt, English common law bypassed difficulties encountered both in Roman[101] and Talmudic[102] laws. In contrast to both legal systems, and only on the basis of the bailee's right to mix the money, and not necessarily to use it, English common law imposed on the bailee of money debt liability, as if the bailee were a borrower. This conclusion was reached in English common law without the entanglement with the regime governing the liability of a custodian of a specific chattel, as was the case in both Talmudic and Roman law. Indeed, as against the bailee of money, English common law did not hesitate between detinue and debt, viz. between a remedy for the recovery of a specific chattel and that for the recovery of a specific sum of money. Rather, English common law hesitated between two monetary claims, viz. account and debt. In not focusing on whether money deposited was actually used by the depositary, it improved on the Talmudic solution; it went even beyond Roman law in bypassing altogether the category of the irregular deposit, and thus facilitated an easy route to the characterization of the bank deposit as a loan.

[94] For the 'money supply' as consisting of deposits in commercial banks and currency (banknotes and coins) in circulation, see Geva, above n 1, at 15–67 (ch 1, text around fn 61) and at 492–505 (ch 10, sections 3.3 and 3.4).

[95] See, in particular, R. Ben-Oliel, *The Juridical Nature of the Bank–Depositor Relationship* (Unpublished PhD thesis, Hebrew University of Jerusalem, 1977).

[96] See, e.g., K. Laurinavičius, 'The Legal Nature of Bank Deposits', (2006) 31(3) *Review of Central and East European Law* 291.

[97] See *Bretton v. Barnet* (1599) Owen 87, 74 ER 918. See text accompanying nn 83–90 above.

[98] *Bretton v. Barnet* (1599) Owen 87, 74 ER 918. Notwithstanding the ambiguity in this statement of facts, the report unequivocally suggests (and so it was understood by Simpson, above n 23, at 183) that the case dealt with the deposit of money for safekeeping, and not with a demand loan. It is unlikely that a borrower's debt liability would have been disputed in 1599.

[99] *Bretton v. Barnet* (1599), Owen 87, 74 ER 918.

[100] *Core's Case* (1537) Dyer, at 22a, 73 ER, at 46 (ER), Fifoot, above n 21, at 287.

[101] For a discussion of the Roman law on point, see Geva, above n 1, ch 5(2).

[102] For a discussion of the Talmudic law on point, see Geva, above n 1, ch 7, section 2.1.

In any event,[103] during the seventeenth century, by lending to others the money delivered to him, the goldsmith, as a depositary of money, had transformed the nature of his business. Having before then acted as a custodian of safekeeping,[104] he came to accept deposits with full authority to make use of deposited money by lending it to others; thus he became a banker.[105] Being free to use the money, he truly became a borrower from the customer-depositor so as to be liable to him in debt.[106]

It was, however, only in the course of the nineteenth century that the process of the characterization of the bank deposit as a loan, so as to be owed by the banker to the customer as a debt on a loan, reached its logical conclusion. The landmark case is *Foley v. Hill* (1848).[107] In that case, the House of Lords dealt with the 'common position of a banker . . . receiving money from his customer on condition of paying it back when asked'.[108] Holding that 'the banker is not an agent or factor, but [rather] he is a debtor',[109] Lord Cottenham spoke of the banker's right to mix and use money deposited with him, subject to a repayment obligation of an equivalent sum, either with or without interest:

> Money, when paid into a bank, ceases altogether to be the money of the [customer]; . . . it is then the money of the banker, who is bound to return an equivalent by paying a similar sum to that deposited with him when he is asked for it. The money paid into the banker's [sic], is money known by the [customer] to be placed there for the purpose of being under the control of the banker; it is then the banker's money; he is known to deal with it as his own; he makes what profit of it he can, which profit he retains to himself, paying back only the principal . . . or the principal and a small rate of interest.[110]

Stated otherwise:

> The money placed in the custody of the banker is, to all intents and purposes, the money of the banker, to do with it as he pleases; he is guilty of no breach of trust in employing it; he is not answerable to the [customer] if he puts it into jeopardy, if he engages in a hazardous speculation; he is not bound to keep it or deal with it as the property of his [customer], but he is of course answerable for the amount, because he has contracted, having received that money, to repay to the [customer], when demanded, a sum equivalent to that paid into his hands.[111]

In his concurring judgment, Lord Brougham pointed out that 'even a banker who does not pay interest could not possibly carry on his trade if he were to hold the money, and to pay it back, as a mere depositary'. In his view, it thus follows, a banker receives the deposit of money 'to the knowledge of his customer, for the *express purpose* of using it as his own'.[112]

[103] As discussed in Geva, above n 1, at 471–81 (ch 10, section 2.2, text around fns 23–35).

[104] It is likely that he was never a bailee of specific coins. A custodian of money for safekeeping was not allowed to use the money, but inasmuch as he was not required to return to each depositor the specific coins originally delivered to him for safekeeping, or to keep them separately, he was not liable in detinue. The nature of the custodian's liability to the depositor, whether in debt or account, 'was never really settled in medieval law'. Simpson, above n 23, at 183. See also Geva, above n 1, ch 9, text around fn 35. But see A. Feavearyear, *The Pound Sterling—A History of English Money*, ed. E. V. Morgan (2nd edn, 1963), at 102, speaking of the goldsmith as a custodian of money acting 'just as a modern safe-deposit company would do' today, which suggests physical segregation of money deposited by each depositor.

[105] See, e.g., R. D. Richards, *The Early History of Banking in England* (1929, repr. 1965), at 37.

[106] For debt on a loan, text accompanying n 27 above.

[107] *Foley v. Hill* (1848) 2 HLC 28, 9 ER 1002. A slightly earlier authority is *Pott v. Clegg* (1847) 16 M. & W. 321, 153 ER 1212.

[108] *Foley v. Hill* (1848) 2 HLC, at 43, 9 ER, at 1008.

[109] Ibid., 2 HLC, at 37, 9 ER, at 1006. [110] Ibid., 2 HLC, at 36, 9 ER, at 1005.

[111] Ibid., 2 HLC, at 36–7, 9 ER, at 1005–6.

[112] Ibid., 2 HLC, at 43–4, 9 ER, at 1008 (emphasis added).

The inevitable conclusion is, then, that in his trade, a banker becomes a 'debtor to the person who has *lent* or deposited with him the money to use as his own'.[113]

The analysis of the debtor and creditor relationship between the banker and customer was subsequently refined in *Joachimson v. Swiss Bank Corp* (1921).[114] The court acknowledged that an amount held by the banker for the customer on deposit forms a debt owing and accruing from the former to the latter. As such, it is garnishable by the customer's creditors. At the same time, in the absence of a demand properly made by the customer at the branch holding the account, the debt is not presently payable so that the banker does not incur liability for its payment.[115]

IV. The Rise of the Transferable Deposit: Beneficiary's Right to Bailed Funds

Unlike the bailor, the beneficiary is not placed in a position similar to that of a lender. Therefore, it is not surprising that the issue of whether the beneficiary could sue the bailee in debt had not been easily resolved by medieval common law. Originally, even the beneficiary's right to bring account against the bailee was not free from doubt. In 1317, an account action by a plaintiff-seller failed against a defendant who had been paid by buyers for goods sold to them by the plaintiff.[116] According to that decision, in order to 'bind' the defendant in account, it was not sufficient for the writ to state that the defendant was a 'receiver of money'. To succeed, the plaintiff must have counted that the defendant was his 'common receiver',[117] presumably on the basis of a pre-existing relationship between them.[118]

It is, however, arguable that in that case the sale itself was not conducted by the defendant. Had the goods been entrusted to the defendant by the plaintiff-owner by way of trade, the defendant's accountability as a receiver for the proceeds of their sale could not have been disputed.[119] In fact, it is likely that the goods had not been in the defendant's possession at all. Thus, it was convincingly argued in a 1308 case in connection with land lawfully held by the defendant that in general, and without necessarily being 'privy' to the plaintiff-owner, 'he who had the profit of the land ought by law to be charged with the account'.[120] It is hard to see why this does not equally apply to the plaintiff-owner's goods if held by the defendant.[121] It is thus reasonable to assume that the defendant in the 1317 judgment was a messenger[122] with money to be transmitted to the plaintiff-seller. Nevertheless, the report is silent even as to whether the buyer expressly authorized the defendant to hand over the money to the plaintiff. Also, the plaintiff apparently did not authorize the buyers to pay the defendant; this is so since according to the defendant, the plaintiff had not lost his cause of action against the buyers.[123]

[113] Ibid., 2 HLC, at 44, 9 ER, at 1008 (emphasis added).
[114] *Joachimson v Swiss Bank Corp.* [1921] 3 KB 110 (CA).
[115] For the demand made at the branch holding the account triggering the banker's liability at that place, see, e.g., *Libyan Arab Foreign Bank* [1989] QB 728.
[116] *Anon.* (1317–18) YB 11 Edward II, (1942; repr. 1996) 61 *Selden Society* 264.
[117] Ibid. [118] See, e.g., Stoljar, above n 35, at 209.
[119] *Anon.* (1309) YB 2 & 3 Edward II, (1904) 19 *Selden Society* 34; *Pirton v. Tumby* (1315) YB 8 Edward II, (1924) 41 *Selden Society* 59, Fifoot, above n 21, at 280. See, in general, Fifoot, above n 21, at 271.
[120] *Anon.* (1308) YB 1 & 2 Edward II, (1903) 17 *Selden Society* 107, at 108, Fifoot, above n 21, at 271–2. See also Stoljar, above n 35, at 208–9.
[121] The distinction between a bailiff of land and a receiver of merchandise, discussed by Fifoot, above n 21, at 271, does not appear to be relevant.
[122] For this term, see, e.g., M. S. Arnold (ed.), *Year Books of Richard II, 1378–1379* (1975), at xxvi ('Introduction').
[123] See *Anon.* (1317–18) YB 11 Edward II, (1942; repr. 1996) 61 *Selden Society* 264.

On its facts, the 1317 case could perhaps thus be narrowly understood to mean only that a bailee who was neither expressly instructed by the bailor to pay the beneficiary nor appointed by the beneficiary could not be liable to the beneficiary in account. Furthermore, under no circumstances could the bailee's consent to owe to the beneficiary be bypassed; conferring on the beneficiary a direct remedy against a bailee, without the latter's agreement, would be tantamount to the assignment to the beneficiary of the debt owed by the bailee to the bailor which, as indicated in Section I, was impossible in the common law.

Half a century later, in 1368, the 1317 judgment was not perceived as an obstacle to the bailee's accountability to the beneficiary, where the bailee had been instructed by the bailor to hand over the money to the beneficiary. An argument in the above-mentioned 1368 case[124] conceded the beneficiary's account remedy, but rejected altogether his right to bring an action in debt. Thus, arguing for the defendant, Cavendish asserted that '[i]f I bail certain money to you to bail to one John, he will have a writ of account . . . and he cannot have an action by a writ of debt.'[125] The same view was confirmed by Belknap CJ and 'conceded by everyone' in *Hastynges v. Beverley* (1379):[126] 'If I am debtor to Percy, J., in the amount of £100 and bail the money to John Holt to pay him the money, if John Holt does not pay it to him he will have an action of account and no other action.'[127] While neither case mentions the bailee's consent, such consent must be taken to exist.

A 1306 authority[128] cited by Holdsworth[129] to support the availability of debt as an alternative remedy in the beneficiary's hands is disputed by Jackson, who points out that in that case, 'the beneficiary was not suing'.[130] In fact, this was an action by an executor for 'silver' (possibly money) delivered to the use of a person who died possibly under the age of majority. However, the report is cryptic. It turned more on questions of the age of majority according to custom, the effect on the plaintiff's right of the death of his co-executor who had been served with the writ, and the executor's right to bring the action, assuming the deceased had such a right. It is not even clear from the report whether the plaintiffs were executors of the beneficiary (whom we know to be dead) or the bailor(s) (who may or may not be dead). The report does not contain any discussion which sheds light on the availability of the debt remedy to the beneficiary.

It is actually widely agreed that an argument in a 1458 decision[131] is stronger evidence for the beneficiary's alternative debt remedy.[132] At first blush, the argument is indeed quite convincing: 'when a man pays to another, certain money by my commandment to my [benefit,] if he who receives this money is unwilling to pay me, I shall have a good writ of

124 See *Anon.* (1368) YB Pasch. 41 Edward III, fo. 10, pl. 5.

125 Ibid.

126 *Hastynges v. Beverley* (1378–9) YB 2 Richard II, repr. in Arnold, above n 122, at 122–3. Another report of the case (Fitz. Abr. Accompt. pl. 45) is fully translated by Hening, above n 23, at 347–8.

127 *Hastynges v. Beverley* (1378–9) YB 2 Richard II, Arnold, above n 122, at 122–3. In that particular case, the defendant claimed that he was merely a 'messenger'. According to Arnold, the term 'messenger' denoted an association with a business concern offering professional courier services. Perhaps, as such, he was to be treated as a custodian of money for safekeeping throughout transit. While not liable to deliver to the beneficiary the same coins given to him by the bailor, he himself might not have been free to have the use of them. This may explain the doubts as to the beneficiary's rights to bring debt.

128 *Anon.* (1305–7) YB 33–5 Edward I (RS), 238, available at http://www.bu.edu/phpbin/lawyearbooks/display.php?id=1964.

129 W. Holdsworth, *A History of English Law* (5th edn, 1942, repr. 1966) vol. 3, at 426, fn 1.

130 Jackson, above n 23, at 31, fn 2.

131 *Anon.* (1458) YB 36 Henry VI, fo. 9, pl. 5.

132 Relying on this report, Holdsworth concluded that the principle governing the beneficiary's right to bring debt 'was certainly established in the reign of Henry VI'. See Holdsworth, above n 129, vol. 3, at 426. According to Jackson, compared to the 1306 authority, the argument in the 1458 case 'is much stronger evidence' of the beneficiary's debt remedy. See Jackson, above n 23, at 31, fn 2. According to Hening, the argument indicates that 'the old distinction between debt and account to enforce [the beneficiary's] right was becoming obliterated.' See Jackson, above n 23, at 349.

debt or account against him'.[133] Nevertheless, as Simpson pointed out,[134] the argument deals only with the case where payment by the bailor was made to the bailee, at the beneficiary's command and direction. Only under such narrow circumstances may the beneficiary elect between account and debt.

A statement made by Brian CJ in a 1479 *Anonymous* case[135] explicitly rejects the availability of debt as an alternative remedy in the beneficiary's hands.[136] It was argued in that case that 'if I deliver £20 to *Catesby* to deliver to *Pigot*, he can have either a writ of account against *Catesby* or a writ of debt'.[137] Brian CJ rejected this proposition quite decisively: 'he shall have an action of account and not of debt. For on what matter shall his action of debt be founded? He cannot declare on a contract, as on a sale or on a loan, and so such an action must fail.'[138] The same objection that had originally impeded the availability of debt in the bailor's hands[139] thus reappeared and presented an obstacle to the availability of debt to the beneficiary.

Further opposition to the beneficiary's alternative debt remedy came from Frowicke CJ in a 1506 *Anonymous* case:[140] 'The stranger', that is, the beneficiary, 'has no other remedy except an action of account.'[141] Likewise, according to one report of *Core v. May* (1536–7),[142] the beneficiary may not sue the bailee in debt but only in account, since the money 'was never' the beneficiary's and 'he was not privy to the contract'.[143]

Ames[144] cites a 1528 judgment[145] as the first case in which debt was allowed between the beneficiary and the bailee. The decision is nevertheless quite vague. Thereunder, one may bring 'debt on contract by another hand',[146] but the circumstances under which the plaintiff-beneficiary obtains this right are not set out. In fact, the actual case involved detinue by 'bailment of certain goods by another hand'[147] and was primarily concerned with the beneficiary's right to bring detinue.[148] It held that the defendant in such a detinue action, like the defendant in the beneficiary's debt action, but unlike the defendant in account who alleges receipt from a third party, may wage his law.[149] If the debt illustration is concerned with the bailment of money, the report undoubtedly reflects an acknowledgment of the beneficiary's debt remedy.

There is strong, though not infallible, evidence that in the second half of the sixteenth century, debt was considered a viable remedy. Thus, it is said in Brooke's 1576 *Abridgement*,[150] in connection with the bailment of money, that either account or debt is available

[133] The translation is from Hening, above n 23, at 349. The original language is reproduced in Holdsworth, above n 129, vol. 3, at 426, fn 2.

[134] Simpson, above n 23, at 184, fn 3.

[135] *Anon.* (1479) YB Hil. 18 Edward IV, fo. 23, pl. 5, Fifoot, above n 21, at 113.

[136] Jackson cites the case, erroneously in my opinion, as an authority for the proposition that the bailor could not sue the bailee in debt. Jackson, above n 23, at 25, fn 1.

[137] Fifoot, above n 21, at 113. [138] Ibid., at 113–14. See Hening, above n 23, at 349–50.

[139] See above n 27 and accompanying text.

[140] *Anon.* (1505) Keilway, at 77, 72 ER, at 239. See above n 77.

[141] *Anon.* (1505) Keilway, at 77, 72 ER, at 239.

[142] *Core v. May* (1537) Spel. Rep. vol. 1, (1976) 93 *Selden Society* 132. The other report is cited in note 48.

[143] Ibid. According to the Dyer's report, Luke J (dissenting) alone stated that the beneficiary may bring account only. His reasoning: 'no action of debt lies without a contract'. See *Core's Case* (1537) Dyer, at 21b, 73 ER, at 45. Compare with text accompanying nn 137–9 above. The Dyer report does not record the majority view on this point.

[144] Ames, above n 23, at 119 and fn 1. [145] *Anon.* (1528) YB 19 Henry VIII, fo. 3, pl. 15.

[146] In the original: '*Det sur contract per auter main*'.

[147] In the original: '*bail[ment] de certains biens per autre main*'.

[148] For bailment of goods to the benefit of a third party, and for the third-party beneficiary's action against the bailee in detinue, see *Anon.* (1339) YB 12 & 13 Edward III (RS), 245. For wager of law, see above n 39.

[149] For this proposition, see Fifoot, above n 21, at 273. Compare with nn 39–40 above and accompanying text.

[150] R. Brooke, *La Graunde Abridgement* (1576). Sir Robert Brooke, who was the Chief Justice of the Common Pleas between 1554–8, died in 1558. According to P. H. Winfield, *The Chief Sources of English Legal History* (1925), at 233, his *Abridgement* was published in 1568, and reappeared in 1570, 1573, 1576, and 1586.

to the beneficiary against the bailee.[151] Nevertheless, Brooke relied solely on the argument in the 1458 decision,[152] and overlooked any opinion to the contrary.[153] Furthermore, in another place, the same *Abridgement*[154] is quite hesitant in stating that debt is available to the beneficiary against the bailee as an alternative to account.[155]

The beneficiary's right to sue in debt was finally and authoritatively established, though not without reservation, at the turn of the seventeenth century.[156] *Shaw v. Norwood* (1600)[157] is often cited[158] as an early successful debt action on behalf of a beneficiary.[159] But in that case, receipt of the money for the beneficiaries' use was acknowledged by a sealed document.[160] The first decision in favour of a beneficiary where no sealed document is mentioned is *Clark's Case* (1614).[161] In a short judgment, 'it was said by Cook, Chief Justice, and agreed by the whole court . . . that if a man deliver money unto I.S. to my use, . . . I may have an action of debt, or account against him for the same, at my election.'[162] An important qualification was subsequently pronounced in *Harris v. De Bervoir* (1624).[163] Debt will lie only where the money delivered to the bailee 'is intended in satisfaction of a debt' owed by the bailor to the beneficiary so that 'it is not countermandable'. Only then, 'he who is to receive it as a debt, [namely the beneficiary] may upon this receipt [by the bailee] have an action [against the bailee] of debt or account'.[164] Otherwise, the beneficiary may bring 'account only'.[165] Bailment of money designed to be paid over by the bailee to the beneficiary, in discharge of a debt owed by the bailor to the beneficiary, was thus singled out as the only situation where debt might be brought by the beneficiary against the bailee as an alternative to the account.[166]

The final clarification or expansion[167] took place towards the end of the eighteenth century, after *Indebitatus Assumpsit* had taken over debt and parts of account.[168] Thus,

[151] Dette, Pl. 130, or according to Hening, above n 23, at 351, Dette, Pl. 129 in the 1573 edition. (Jackson, above n 23, at 31, fn 6, also cites Dette, Pl 129): '[D]ebt by Wange & Bittinge where 10 pounds is paid to W.N. to my use I shall have action of debt or of account against W.N. and this agrees with an old book of entries of pleas.' Translation is taken from Hening, above n 23, at 351, fn 3.

[152] See *Anon.* (1458) YB 36 Henry VI, fo. 9, pl. 5. See also nn 131–3 above and accompanying text.

[153] See nn 135–43 above and accompanying text.

[154] See Brooke, above n 150, Fitz. Abr. Accompt. pl. 61.

[155] In a statement similar to that translated in n 151 above, the availability of debt is qualified by 'query'. See Jackson, above n 23, at 31, fn 3.

[156] According to Hening, above n 23, at 351, '[l]ong prior to 1573 the alternative remedy of the beneficiary by writ of debt was clearly established.' It follows from the previous discussion that this is an exaggeration.

[157] *Shaw v. Norwood* (1600) Moore (KB) 667, 72 ER 827.

[158] See, e.g., Baker, above n 28, at 365, fn 20.

[159] Specifically, this was an action by the administrator of one of the two beneficiaries against the bailee's executor. The court held that he could sue either in debt or in account, at his election, and upheld the debt action.

[160] See *Shaw v. Norwood* (1600) Moore (KB) 667, 72 ER 827. See text accompanying n 27 above. Nonetheless, in that case, the sealed document only *evidenced* the receipt of money, in which case debt might have been brought on the facts. See, in general, Jackson, above n 23, at 22. Also, *quaere* whether under the orthodox rule a third party beneficiary (as opposed to the promisee) could bring debt on a sealed document.

[161] *Clark's Case* (1614) Godb. 210, 78 ER 128.

[162] Ibid. See also dicta in *Whorewood v. Shaw* (1602) Yelv. 25, 80 ER 18: 'although no contract is between the parties, yet when money or goods are deliver'd upon consideration to the use of A. A. may have debt for them.'

[163] *Harris v. De Bervoir* (1624) Cro. Jac. 687, 79 ER 596.

[164] Ibid., plaintiff's argument, with which the judges agreed, supports this proposition. Plaintiff's counsel cited the unreported judgment of *Greenvile v. Slanina* (1616), where a successful debt action was brought by the beneficiary.

[165] *Harris v. De Bervoir* (1624) Cro. Jac. 687, 79 ER 596.

[166] Where the money is to be delivered to the beneficiary by way of gift, presumably only account lies. *Quaere* whether such a distinction is justified. Inasmuch as this chapter is primarily concerned with payment of debts, the distinction and its implications will not be pursued further. For liability in account for money given 'for the relief of' a third party beneficiary, see *Robert v. Andrews* (1580) Cro. Eliz. 82, 78 ER 341.

[167] Ironically, this was the rise before the subsequent fall, discussed at the end of Section V.

[168] See Section VI of this chapter.

Israel v. Douglas (1789)[169] allowed the beneficiary to recover in *Indebitatus Assumpsit* from a bailee who, having held the bailor's money, was instructed by the bailor to pay it to the beneficiary. The court did not find any meaningful distinction between that case and the 'usual' case of the bailment of money, under which the bailor gives the bailee money to be paid to the beneficiary. It did not matter to the court under what original arrangement the bailor's money had been held by the bailee in the first place. Stated otherwise, assent by the bailee to pay the beneficiary is in any event required even in the usual case of money bailed for the purpose of such payment;[170] hence, there is no difference between the bailee's assent to receive the bailor's money for the use of the beneficiary, as in the 'usual' case, and the bailee's assent to appropriate the bailor's money already held by him for the use of the beneficiary, as in the case at bar.

In the final analysis, medieval authorities point to the lack of privity as the most decisive doctrinal ground underlying the resistance to the beneficiary's debt remedy.[171] Thus, in the 1368 *Anonymous* case,[172] Cavendish argued for the defendant that, in connection with the bailment of money, debt lay only where 'at the time of the bailment the property was in him by whom the bailment was made',[173] meaning that only the bailor could bring debt. Cavendish also argued that the beneficiary 'cannot have an action by a writ of debt';[174] Fifoot tied this proposition to lack of privity.[175] As well, in 1479 Brian CJ denied the beneficiary's debt remedy on the basis of lack of contract with the bailee,[176] which points at the lack of privity between them.[177] In fact, the 1458 argument allowing debt,[178] being the only fifteenth-century statement in that direction, was concerned with a situation where the beneficiary instructed the bailor to pay the bailee.[179] Thereby, the beneficiary appointed the bailee so that privity between them was not altogether absent.

Emphasis on privity emerges also from early sixteenth century reports. Thus, in the 1506 *Anonymous* case,[180] Frowicke CJ explained that the beneficiary may bring account only, and hence no debt, since he was a 'stranger'.[181] Likewise, lack of privity is mentioned in the Spelman's report of *Core's Case* (1537)[182] as a rationale for not permitting the beneficiary to sue the bailee in debt.[183]

In fact, in providing for the beneficiary's debt remedy,[184] Brooke explicitly acknowledged lack of privity. The *Abridgement*'s marginal note to the rule[185] is, '*Vers estranger sans privitie*',[186] that is, 'Against a stranger without privity'. Lack of privity was thus considered to form the principal objection. The beneficiary's debt remedy could be conceived by

[169] *Israel v. Douglas* (1789) 1 H. Bl. 239, 126 ER 139.
[170] See text following n 124 above.
[171] Notwithstanding Jackson, above n 23, at 31, who downplays the importance of privity in medieval law relating to this point. Another obstacle, at least in some cases, is discussed in n 127 above.
[172] See *Anon.* (1368) YB Pasch. 41 Edward III, fo. 10, pl. 5.
[173] Ibid. (emphasis added).
[174] See, text accompanying n 125 above.
[175] Fifoot, above n 21, at 223, fn 34.
[176] See *Core's Case* (1537) Dyer 20a, 73 ER 42 and above nn 132–3 and accompanying text. The 'no contract' objection was raised but dismissed in *Harris v. De Bervoir* (1624) Cro. Jac. 687, 79 ER 596. See also above n 162 for dicta in *Whorewood v. Shaw* (1602) Yelv. 25, 80 ER 18. For contract in medieval common law as referring to the receipt of *quid pro quo*, see text accompanying n 27.
[177] For the action of debt in situations involving contracts but nevertheless lacking privity, see, in general, Simpson, above n 23, at 153–60.
[178] See *Anon.* (1458) YB 36 Henry VI, fo. 9, pl. 5. See, in general, above nn 131–3 and accompanying text.
[179] See text accompanying n 133 above.
[180] See *Anon.* (1505) Keilway, at 77, 72 ER, at 239.
[181] Ibid. In account, the walls of privity fell early in the fourteenth century.
[182] See above n 142.
[183] See *Foley v. Hill*, (1848) 2 HLC, at 43, 9 ER, at 1008 and text accompanying n 108 above.
[184] See above nn 150–1 and accompanying text.
[185] Hening's translation of the rule is cited and quoted above n 151.
[186] See Jackson, above n 23, at 31, fn 6. In the original, it is spelled '*Vers etrãger sãs privitie*'.

Brooke only in connection with the fall of the walls of privity, or with its dispensation in any event. Ironically, however, the authority relied upon by him as allowing debt[187] dealt with a situation involving privity between the beneficiary and the bailee.[188] Nevertheless, it is obvious that in establishing the ground for the beneficiary's remedy against the bailee it was essential to overcome privity requirements.[189]

Undoubtedly, pragmatic considerations were quite instrumental in leading medieval law to recognize the beneficiary's debt remedy. Already in 1379,[190] it was 'conceded by everyone' that the bailee is liable to the beneficiary in account only for 'that same amount of money' bailed to him, even if he, the bailee, 'retains it in his hand for ten years'.[191] Stated otherwise, the amount in which the bailee was accountable to the beneficiary was in a sum certain and did not require any calculation. Not surprisingly, as in connection with the bailor's debt remedy,[192] the avoidance of redundant lengthy proceedings had been the primary motive impelling the beneficiary to prefer debt over account. Professor Hening spoke of 'moral pressure' which 'finally forced the courts to treat a [bailee] as a debtor'.[193]

In terms of legal doctrine, the beneficiary's debt remedy can be viewed as consistent with property concepts. In general, being derived from writs of right and related to detinue,[194] debt was conceived as 'an action of property',[195] so that 'in contemplation of law what the debtor owes is "representative" of what he has received . . . as if he were called upon to give up the very same thing.'[196] What the creditor owns in debt is thus a claim to a specific sum of money, representing the benefit conferred upon the debtor.

Indeed, the concurrent property of the bailor and the beneficiary was conceded in the 1368 *Anonymous* case.[197] The case dealt with a bailment of money for a purpose other than the delivery to a beneficiary;[198] it was argued for the defendant by Cavendish that in those circumstances 'property was in him by whom the bailment was made, so that he shall have a writ of debt'.[199] Indeed, inasmuch as a bailee of a chattel was liable to the bailor in detinue, a bailee of a specific sum of money must have been held liable to the bailor in debt.[200]

Unfortunately, however, the beneficiary's property in the sum of money bailed to be delivered to him was not universally recognized. Moreover, an acknowledgement of property did not necessarily lead to making debt available to the beneficiary. As for the former, in rejecting the beneficiary's debt remedy, *Core's Case* (1537)[201] denied altogether the beneficiary's alleged property right.[202] At the same time, as for the latter, as indicated, even an acknowledgement of the beneficiary's property right was not accompanied by an admission as to the availability to him of debt against the bailee. Thus, in his argument for

[187] See *Anon.* (1317–18) YB 11 Edward II, (1942; repr. 1996) 61 *Selden Society* 264, and text accompanying n 117 above.

[188] See text following n 134 and accompanying n 179 above.

[189] But cf. Simpson, above n 23, at 184 who submits that 'property' analysis ranked highly in the reasons. But to that end, cf. discussion that follows the ensuing paragraph.

[190] *Hastynges v. Beverley* (1378–9) YB 2 Richard II, repr. in Arnold, above n 122, at 122–3.

[191] Ibid., at 123, hypothetical by Belknap CJ. It was assumed in that case that the bailee was not required to put the money in trade for the plaintiff's profit.

[192] See, in general, text accompanying nn 34–9 above.

[193] Hening, above n 23, at 351.

[194] See, in general, Section II, first paragraph, of this chapter.

[195] See, e.g., *Edgcomb v. Dee* (1670) Vaugh. 89, at 101, 124 ER 984, at 990.

[196] A. V. Levontin, 'Debt and Contract in the Common Law', (1966) 1 *Israel Law Review* 60, at 68–9.

[197] See *Anon.* (1368) YB Pasch. 41 Edward III, fo. 10, pl. 5, Fifoot, above n 21, at 285.

[198] For a discussion of the case, see nn 29–33 above and accompanying text.

[199] See *Anon.* (1368) YB Pasch. 41 Edward III, fo. 10, pl. 5, repr. in Fifoot, above n 21, at 285.

[200] See, in general, Section II of this chapter, opening paragraphs.

[201] See above n 142.

[202] See text accompanying n 143 above.

the defendant in the 1368 *Anonymous* case,[203] Cavendish conceded that a bailment of money 'to you to bail to one John' confers upon John property, or more specifically, that 'the property is in him as soon as you receive [the money] from [the bailor's] hands'. Nevertheless, according to Cavendish, the beneficiary John 'will have a writ of account... and he cannot have an action by a writ of debt.'[204] Furthermore, those who allowed the beneficiary to bring debt against the bailee chose not to mention property.[205] Perhaps they were disturbed by the notion of property residing simultaneously with the bailor and the beneficiary,[206] so as to justify the bailee's concurrent liability in debt to each of them.

However, in fact, this notion of property residing simultaneously with the bailor and the beneficiary is quite consistent with the relativity of personal property under the common law. Where the bailee is sued in debt by the bailor, the former cannot hold the money and defend the latter's action pleading *jus tertii*, namely that property is in the beneficiary's hands. Likewise, when he is sued in debt by the beneficiary, the bailee cannot hold the money and invoke the bailor's property.[207] The beneficiary comes ahead of the bailor, who may not countermand.[208] As against the bailor's action, the beneficiary's right is, however, no defence to the defaulting bailee who holds the money.[209]

It seems then that the emergence of the beneficiary's debt remedy against the bailee, while thin on direct support in the medieval cases, is an outcome of pragmatic considerations. It is one aspect of the transformation of debt from a narrow form of action into a broad legal relationship, underlying an unconditional title to a specific sum of money.[210] Indeed, as a matter of legal doctrine, the beneficiary's debt right had neither been originally rejected necessarily on the basis of lack of property nor was it subsequently expressly premised on the existence of property. However, the beneficiary's debt remedy against the bailee is consistent with property concepts; in the final analysis, these concepts provide the best explanation for it.

During the seventeenth century, *Indebitatus Assumpsit* took over debt and substantial parts of account.[211] In *Indebitatus Assumpsit*, the beneficiary's action against the bailee fell

[203] See *Anon.* (1368) YB Pasch. 41 Edward III, fo. 10, pl. 5, repr. in Fifoot, above n 21, at 285.

[204] Ibid. According to Simpson, Cavendish referred to the beneficiary's property in the specific coins delivered by the bailor to the bailee. Simpson, above n 23, at 184. But, to pursue this reasoning, could the beneficiary not then bring detinue against the bailee? Compare with nn 148 and 206 above. Note, however, that the beneficiary's debt remedy was rejected in *Anon.* (1368) YB Pasch. 41 Edward III, fo. 10, pl. 5 (see also text accompanying n 125), notwithstanding the concession as to his property right. At the same time, in rejecting the beneficiary's debt remedy, the Spelman's report of *Core's Case* (*Core v. May* (1537) Spel. Rep. vol. 1, (1976) 93 *Selden Society* 132), denied altogether the beneficiary's alleged property right. See text accompanying n 143.

[205] See, e.g., *Clark's Case* (1614) Godb. 210, 78 ER 128 and *Harris v. De Bervoir* (1624) Cro. Jac. 687, 79 ER 596.

[206] Unlike in connection with the bailment of money, it was not disputed that the bailment of goods for the benefit of a third party passed title from the bailor to the third party beneficiary. See Jackson, above n 23, at 30 and fn 4. For that reason, the beneficiary's right to bring detinue against the bailee of goods (discussed above in n 148) did not 'compete' with a concurrent right of the bailor, and thus was not controversial.

[207] For a short discussion on relative titles, see Lawson and Rudden, above n 54, at 50–2. See also Fifoot, above 21, at 112–13.

[208] Where the bailment is countermandable, namely, is not intended in satisfaction of a debt, the bailor may bring debt against the bailee after countermand, even in the absence of the bailee's refusal to carry out the purpose for which the money was bailed to him. See, e.g., *Core's Case* (1537) Dyer, at 22a, 73 ER, at 46, and Fifoot, above n 21, at 287 in connection with money bailed 'to give away in alms'. Under those circumstances, the beneficiary may not bring debt against the bailee. See above n 166, and accompanying text.

[209] Nevertheless, it seems that, even when faced with competing demands, the bailee could comply with an ineffective countermand, return the money to the bailor, and avoid liability to the beneficiary. See text accompanying nn 236–8 below.

[210] This transformation is the subject of Levontin, above n 196.

[211] The turning point is *Slade's Case* (1602) 4 Co. Rep. 91a, at 92b, 76 ER 1072, at 1074, repr. in part in Fifoot, above n 21, at 371. For an extensive discussion, see D. Ibbetson, 'Assumpsit and Debt in the Early Sixteenth Century: The Origins of the Indebitatus Count', (1982) 41(1) *Cambridge Law Journal* 142, and D. Ibbetson, 'Sixteenth Century Contract Law: *Slade's Case* in Context', (1984) 4 *Oxford Journal of Legal Studies* 295.

under the count of money had and received.[212] Nevertheless, until the late eighteenth or early nineteenth century, the substantive law governing the beneficiary's remedy against the bailee remained unaltered.[213] The beneficiary could sue the bailee in money had and received irrespective of the absence of any consideration or privity between them.[214]

Under medieval legal doctrine a framework dealing with the discharge of the bailor's debt to the beneficiary emerged. According to *Harris v. De Bervoir* (1624),[215] bailment of money to be delivered to the beneficiary in payment of a debt owed to him by the bailor is not countermandable.[216] This suggests that control of the funds passes to the beneficiary upon the delivery of the money to the bailee. Upon delivery to the bailee, the bailor may not countermand payment to the beneficiary. It follows, then, that delivery of money to the bailee discharges the bailor, and the beneficiary must look for payment, as of that time, to the bailee. Yet, as discussed in Section II, the bailee's refusal to pay the beneficiary entitles the bailor to bring debt against the bailee. This suggests that the bailment of money operates as conditional, rather than absolute payment;[217] after all, it would not have made sense to allow the return of the money to the bailor unless he remains liable to the bailee.[218] Presumably, a bailee who returns the money to the bailor is excused as against the beneficiary.[219]

V. Bailment of Money and Bill of Exchange Compared

The conclusion as to the conditional discharge affected by the bailment of money is foreshadowed by the reasoning of case law rejecting the application of *Indebitatuts Assumpsit* to the payee's action against the acceptor of a bill of exchange. Thus, it was held in *Anon.* (1668)[220] that:

> [A]n action of debt would not lie upon a bill of exchange accepted, against the acceptor: but that a special action upon the case must be brought against him. For that the acceptance does not create a duty, no more than a promise made by a stranger, to pay . . . if the creditor will forbear his debt. And he that drew the bill continues debtor, notwithstanding the acceptance; which makes the acceptor liable to pay it.

Similarly, shortly thereafter, *Browne v. London* (1670)[221] dismissed the endorsee's claim in *Indebitatus Assumpsit* against the acceptor of the bill of exchange. In reaching the decision, the court acknowledged similarity with the earlier case,[222] and went on to reason that 'acceptance is but conditional' or 'collateral' so that upon the acceptor's default 'the drawer of the bill . . . remains liable'.[223]

[212] The transition is discussed by Jackson, above n 23, at 93–5.

[213] For the nineteenth-century 'transformation' (or in fact demise), see Section VI of this chapter.

[214] According to Jackson, above n 23, at 94, 'the first clear case of indebitatus assumpsit' by the beneficiary against the bailee is *Beckingham and Lambert v. Vaughan* (1616) 1 Rolle Rep. 391, 81 ER 557, where '[n]othing was said about consideration or privity.' See also *Brown v. London* (1670) 1 Vent. 152, 86 ER 104; 1 Mod. 285, 86 ER 889.

[215] See *Harris v. De Bervoir* (1624) Cro. Jac. 687, 79 ER 596.

[216] See text accompanying nn 163 and 164 above.

[217] As to the nature of this conditional payment, see text accompanying nn 231–3 below, and compare with that accompanying nn 242–4 below.

[218] Certainly, a bailor excused from making payment to the beneficiary may keep the money returned by the bailee. I am dealing here with the case in which the bailee's refusal is not on the basis of the beneficiary's lack of entitlement from the bailor.

[219] For the anomaly created thereby, see text accompanying nn 236–8 below.

[220] *Anon.* (1668) Hardres 485, at 487, 145 ER 560, at 561.

[221] *Browne v. London* (1670) 1 Mod. 285, 86 ER 889.

[222] Referring to it as '*Milton's case*', ibid., 1 Mod, at 286, 86 ER, at 889.

[223] Ibid.

Stated otherwise, the conditional discharge of the drawer/debtor effected by the acceptor/'stranger' is said to preclude liability in debt or *Indebitatus Assumpsit*.[224] It seems then to follow that since the latter became the action of the beneficiary against the bailee, the bailment of money is incapable of effecting the conditional discharge of the bailor/debtor to the bailee/beneficiary.

Certainly, this analysis flies in the face of the reasoning that led to the conclusion as to the conditional payment effected by the bailment of money on the basis of the survival of the bailor's claim against the bailee.[225] This suggests that the reasoning in both cases is flawed; as a matter of fact, rather than precluding an *Indebitatus Assumpsit* on a bill of exchange, the cases are to be understood as questioning the standing of a third party, a 'stranger' to a promise,[226] whether a payee of a bill of exchange or a beneficiary under the bailment of money, to bring an *Indebitatus Assumpsit*. Indeed, in *Anon*. (1668), 'privity' played a role in argument;[227] under *Browne v. London* (1670), the reporter explains, *Indebitatus Assumpsit* is allowed between parties in privity, such as the payee and the drawer, the drawer and the acceptor, or an endorsee and his immediate endorser, but not between parties not in privity, such as the endorsee and the acceptor.[228] As will be seen below, it is 'privity' that ultimately led to significantly restricting the beneficiary's right against the payee.[229] It would have been enough for the court to say that in contrast to a bailee of money, a drawee/acceptor does not necessarily hold funds for the drawer, and hence, as a general rule, debt or *Indebitatus Assumpsit* is too narrow and hence is inappropriate for a payee's action against the acceptor.[230]

It may thus be concluded that the bailment of money gave rise to a debt owed by the bailee to the bailor, to a debt owed by the bailee to the beneficiary, and to the conditional discharge of the debt owed by the bailor to the beneficiary. Payment by the bailee to the beneficiary discharged both his debts, to the bailor as well as to the beneficiary. It also gave absolute discharge to the bailor's debt to the beneficiary. Payment by the bailee to the bailor discharged the bailee's debt to the bailor and presumably also the bailee's debt to the beneficiary. Upon such payment, the bailor's debt to the beneficiary must have been revived.

The operation of the bailment of money as a payment mechanism left open four major questions. The first was concerned with the bailee's failure to pay both the bailor and the beneficiary, and its effect on the discharge of the bailor's debt to the beneficiary. Did the bailor's debt to the beneficiary revive upon the bailee's failure to pay the beneficiary[231] or, rather, was it revived only upon the bailee's payment to the bailor, following the bailee's failure to pay the beneficiary? As a matter of policy, the bailor to whom the bailee did not return the money, should have been excused, if at all, only where the defaulting bailee was initially nominated or at least approved by the beneficiary. It could have been argued that,

224 The latter was an action in *Indebitatus Assumpsit* and, in the former, interchangeability between debt and *Indebitatus Assumpsit*, set out above in the second paragraph of this section, is repeatedly mentioned throughout the report.

225 See nn 215–19 above and accompanying text.

226 Indeed, inasmuch as the acceptor is a 'stranger' vis-à-vis the payee (see text following n 290 below), so is the payee vis-à-vis the acceptor.

227 See, e.g., second argument, *Browne v. London* (1670) 1 Mod., at 485, 86 ER, at 560.

228 See ibid., 1 Mod., at 286, 86 ER, at 889.

229 See Section VI below.

230 This reasoning would have been consistent with the judgment of Lord Holt in *Anon.* (1696) Holt. KB 296, 90 ER 1063, where he allowed *Indebitatus Assumpsit* brought by an endorsee against an acceptor where a debt actually existed.

231 As it does in connection with bills of exchange. See text accompanying n 242 below.

in such a case, the beneficiary had assumed the risk of the bailee's default.[232] This question relates to the nature of the conditional discharge affected by the bailment of money.[233]

The second question related to the scope of the rule providing that the bailment of money was not countermandable.[234] Did this rule apply also to situations where the bailor had defences against the beneficiary? Did the rule mean that the bailment could not be rescinded by the bailor on the basis of his defences against the beneficiary, so that under no circumstances could money be recalled by the bailor from the bailee who had not paid yet to the beneficiary? Medieval common law provided for limited rescission rights of defrauded parties.[235] Whether a defrauded bailor had such rights had not been determined or even discussed.

The third question related to the position of a bailee who complied with the bailor's ineffective countermand and returned the money to the bailor. Was the bailee liable to the beneficiary under these circumstances? No discussion is available. Nevertheless, prior to the introduction of actions on the case, such liability seemed quite tenuous.[236] Inasmuch as repayment by the bailee to the bailor discharged both debts owed by the bailee, the one to the bailor and the other to the beneficiary,[237] no liability on the bailee's part seemed conceivable. This would, however, lead to the incongruous result where the bailee, while not being obligated to abide by the bailor's countermand, was completely free to comply with it, as long as he had returned the money to the bailor.[238]

Finally, the fourth question was concerned with the beneficiary's position towards the state of account between the bailor and the bailee. At stake was the bailee's possible right to act in defiance of the bailor's instructions as well as the beneficiary's demand, and apply the money bailed to him to the satisfaction of a pre-existing liability or indebtedness of the bailor to the bailee. Did the bailee have such a right? Did his state of account with the bailor supersede the debts created by the bailment of money? Stated otherwise, the question was whether the beneficiary's right against the bailee was free from claims and defences the bailee might have had against the bailor.[239] Medieval common law did not consider this question.

Compared to the bailment of money, the bill of exchange reflects a more sophisticated application of legal doctrine to the transfer of funds. In the course of the seventeenth century, the bill of exchange became a mechanism under which a drawer transmitted funds to a payee via a third party drawee.[240] In general, the drawer of a bill of exchange corresponds to the bailor of money. The acceptor, namely the drawee of a bill of exchange who undertook to pay it, corresponds to the bailee. Finally, the payee of a bill of exchange corresponds to the beneficiary. It was accordingly stated that 'if A. delivers money to B. to pay C. and gives C. a bill of exchange drawn upon B. and B. accepts the bill, and doth not pay it, C. may bring an *Indebitatus Assumpsit* against B. as having received money to his use: but then he must not declare only upon a bill of exchange accepted'. Stated otherwise, C could sue B either as the bailee of the money or as the acceptor of the

[232] Cf. text accompanying nn 176–7 above. [233] Cf. text accompanying n 218 above.

[234] For this rule, see nn 163–6 above and accompanying text.

[235] See, e.g., Milsom, above n 21, at 320. The question remained unanswered also under the law of bills of exchange. See text accompanying nn 253–4 below.

[236] Cf. above n 78. [237] Cf. text accompanying nn 207–9 above.

[238] For the treatment of the corresponding question under the law of bills of exchange, see text accompanying nn 244–6 below.

[239] For the treatment of the corresponding question under the law of bills of exchange, see text accompanying nn 247–62 below.

[240] A landmark case is *Chat and Edgar Case* (1663) 1 Keble 636, 83 ER 1156. See, in general, Geva, above n 1, at 442–53 (ch 9, section 4).

bill.[241] The law relating to the latter action will now be compared with that relating to the former. In turn, this discussion will shed light on the contemporary relevance of the medieval concepts developed to accommodate the bailment of money as a payment mechanism.

Three doctrines developed by the law of bills of exchange were central to the superior nature of the bill of exchange as a payment mechanism. The first is the doctrine of conditional payment. The second is the doctrine relating to the acceptor's liability. The third is the doctrine of the holder in due course as may be understood in its original form.

Under the doctrine of conditional payment, when a bill of exchange is taken by a creditor in payment of a debt, unless otherwise agreed, the debt is suspended. If the bill is paid, the debt is absolutely discharged. If the bill is dishonoured, the original indebtedness is revived.[242] This doctrine provides for an answer to the first question left open in connection with the operation of the bailment of money as a payment mechanism.[243] Thus, unless otherwise agreed, the drawer/bailor's liability to the payee/beneficiary revives upon non-payment, irrespective of whether the drawee/bailee returned the money to the drawer/bailor.

The second doctrine related to the acceptor's liability. During the seventeenth century, the courts adopted the principle that an acceptance by the drawee was equivalent to a promise to pay enforceable by the payee in 'an action on the case upon the custom of merchants',[244] irrespective of lack of consideration or privity between them.[245] This provides an answer to the third question left open in connection with the operation of the bailment of money as a payment mechanism.[246] Thus, the drawee/bailee's liability to the payee/beneficiary is on the basis of the former's engagement as an acceptor of the bill, and irrespective of whether he holds funds. Having complied with the drawer/bailor's ineffective countermand and returned the money to him, the acceptor/bailee is nevertheless not discharged towards the payee/beneficiary.

Finally, the third doctrine of bills of exchange law will be considered. In its original form, what is now broadly described as the holder in due course doctrine could be seen as related to the freedom of the payee's right against the drawee from the drawee's defences against the drawer. The defence-free position of the payee appears to be traced to *Baker v. Lambert* and *Grelle v. Lambert* (1510–13)[247] where, according to Beutel, 'a drawee [who was sued] . . . by a payee . . . [did] not offer as a defence that the drawer . . . [had been] indebted to him'.[248] However, this was an exchange transaction, so that the drawee was in fact an agent of the drawer and the payee was an agent of the remitter; the payee's action must have been that of

[241] *Brown v. London* (1670) 1 Vent. 152, at 153, 86 ER 104.

[242] For historical origins, see J. M. Holden, *The History of Negotiable Instruments in English Law* (1955, repr. 1993), at 85–6 and 109–11, and Holdsworth, above n 129, vol. 8, at 169–70. Early leading authorities are *Ward v. Evans* (1702) 2 Ld. Raym. 928, 92 ER 120 and *Hill v. Lewis* (1709) 1 Salk. 132, 91 ER 124. Both cases, decided by Lord Holt, were concerned with notes, but the latter referred to bills as well. Cases providing for recourse against the drawer upon the acceptor's default, such as *Brown v. London* (1670) 1 Vent. 152, 86 ER 104, are to the same effect.

[243] See text accompanying nn 231–3 above.

[244] See, in general, Holden, above n 242, at 32–3; and Holdsworth, above n 129, vol. 8, at 162. Leading cases are *Oaste v. Taylor* (1612) Cro. Jac. 306, 79 ER 262; *Barnaby v. Rigalt* (1635) Cro. Car. 301, 79 ER 864; and *Brown v. London*, note 241.

[245] But cf. Holden, above n 242, at 28–9. Earlier, during the sixteenth century, the payee's action against the acceptor could be facilitated only with the aid of fictitious agency allegations.

[246] See text accompanying nn 236–8 above.

[247] *Baker v. Lambert* and *Grelle v. Lambert* (1510–13), (1929) 46 *Selden Society Select Cases Concerning the Law Merchant* 138.

[248] F. K. Beutel, 'The Development of Negotiable Instruments in Early English Law', (1938) 51 *Harvard Law Review* 813, at 832, fn 94. The facts as to the drawer's indebtedness to the drawee 'appear in the same case' (ibid.)

the remitter-lender against the drawer-borrower.[249] In such an action, the drawee's defences against his principal, the drawer, are certainly irrelevant. Hence, the case cannot be cited for the broader proposition as to the independent right of the payee against the drawee free of the latter's defences against the drawer.

In any event, in *Baker v. Lambert* and *Grelle v. Lambert* (1510–13), the drawee did not even accept the bill. Some time later, towards the end of the first quarter of the seventeenth century, Malynes confirmed the view that a drawee who accepted a bill could not raise against the payee defences available to him, the drawee, against the drawer.[250] A similar view was expressed by Marius in the middle of the seventeenth century.[251] Both, however, addressed their remarks only to the acceptor's defence based on the insolvency of the drawer. To the extent that they can be taken to have in mind a whole spectrum of defences of the acceptor against the drawer, this provides an adequate answer to the fourth question left open in connection with the operation of the bailment of money as a payment mechanism.[252] The payee/beneficiary's claim against the drawee/bailee is free from the drawee/bailee's defences against the drawer/bailor.

Nevertheless, the operation of the bill of exchange as a payment mechanism became subject to three setbacks. First, the law relating to bills of exchange did not provide for an answer to the second question left open in connection with the operation of the bailment of money as a payment mechanism.[253] It has not been clear whether the drawer/bailor could effectively prevent the acceptor/bailee from paying the payee/beneficiary on the basis of the drawer/bailor's defences against the payee/beneficiary.[254]

Second, whatever was its original meaning, the holder in due course doctrine has been completely transformed. To accommodate the function of bills and notes as paper currency, the holder in due course doctrine became concerned with the free circulation of the instrument, or with the freedom of its purchaser from adverse claims and prior parties' defences.[255] Indeed, with the recognition of the holder's legal title to a bill of exchange transferred to him by negotiation,[256] it would be quite appropriate nowadays to regard the payee of an accepted bill of exchange as having a derivative title to it, by reference to the debt owed by the drawee to the drawer.[257] From a modern perspective, albeit 'unhistorically',[258] this would have eliminated the need to rely on the 'custom of the realm' as an explanation for the payee's right against the drawer with whom he has not dealt directly,[259]

[249] See J. S. Rogers, *The Early History of the Law of Bills and Notes: A Study of the Origins of Anglo-American Commercial Law* (1995), at 44–51. See also S. E. Sachs, 'Burying *Burton*: *Burton v Davy* and the Law of Negotiable Instruments' (21 May 2002), available at http://www.stevesachs.com/papers/paper_burton.html. Also, De Roover disagrees with Beutel's interpretation: R. De Roover, *L'Evolution de la lettre de change XIVe–XVIIIe siècles* (1953), at 111.

[250] G. Malynes, *Consuetudo, vel Lex Mercantoria* or *The Ancient Law-Merchant* (1622), at 401. See Holden, above n 242, at 41–2. See also Holdsworth, above n 129, vol. 8, at 157.

[251] J. Marius, *Advice Concerning Bills of Exchange* (1684), at 20 (at 24 in the original shorter edition, *Advice Concerning Bills of Exchange* (1651). See Holden, above n 242, at 47.

[252] See text accompanying n 239 above.

[253] See text accompanying nn 234–5 above.

[254] For a modern discussion, see, e.g., B. Geva, 'The Autonomy of the Banker's Obligation on Bank Drafts and Certified Cheques', (1994) 73 *Canadian Bar Review* 21, and B. Geva, 'The Issuing Bank's Defences Against the Payee of a Bank Draft: Addendum to "The Autonomy of the Banker's Obligation on Bank Drafts and Certified Cheques"', (1994) 73 *Canadian Bar Review* 280 (hereafter 'Addendum').

[255] The turning point is *Miller v. Race* (1758) 1 Burr. 452, 97 ER 398, discussed at length in Geva, above n 1, ch 11, section 4, at 541–7 and section 6.2, at 554–67.

[256] Currently, per BEA, above n 10, ss 31 and 38(1).

[257] For my take on the subject, albeit in the context of a certified cheque case, see, e.g., B. Geva, 'Defences on Cheque Certification: *Esses v Friedberg*', (2009) 24 *Banking & Finance Law Review* 359.

[258] As, certainly, this option was not available to the seventeenth century cases.

[259] As in *Chat and Edgar Case* (1663) 1 Keble 636, 83 ER 1156.

and would have allowed such a payee to be a holder in due course of the instrument, as he is a remote party to the drawer–drawee dealing.[260] However, the prevailing view is that a payee, as an original party to the instrument and not its purchaser, cannot be a holder in due course.[261] In this framework, the freedom of the payee/beneficiary from the drawee/bailee's defences against the drawer/bailor has been cluttered with uncertainties.[262]

Finally, the law of bills of exchange has not adequately considered the effect of the actual bailment of money on the drawee's position. It defined the drawee's liability to the payee in terms of the drawee's formal acceptance of the drawer's payment order.[263] While, by the nineteenth century, the holder of a bill of exchange had been clothed with a legal title so as to be able to sue in his own name,[264] the law of bills of exchange in England firmly rejected the view that the payee could be treated as an assignee of the drawer for the funds entrusted by him to the drawee.[265]

In the process, the law of bills of exchange had overlooked the drawee's possible position as a bailee of money given to him by the drawer to the use of the payee.[266] Indeed, the informal agreement between the drawer and payee could have narrowed the gap between the lack of assignment from the drawer to the payee and the binding effect towards the payee of the drawee's acceptance on the bill of exchange. Thereby it could have also provided for the English common law a version of the French doctrine of *la provision*.

Thus, in the late seventeenth century,[267] under French law of bills of exchange, *la provision* was understood to be constituted by the sum of money held by the drawee for the drawer, or perhaps, more specifically, provided to the drawee by the drawer, with which the drawee was obligated to pay the bill of exchange.[268] In its original meaning under French law, *la provision* gave rise to either a debt or, effectively, a deposit,[269] though the latter term may not have been explicitly mentioned. Thus, upon the delivery of *la provision* by the drawer to the drawee, the drawee's obligation originally inured to the benefit of the drawer; entitlement passes to the payee and each subsequent endorsee with the passage of the instrument to each one as a holder.[270] True, in French law this was possible on the basis of *cessio*[271] or of the assignment of debts (or even a fictive 'sale of money'); in light of the

[260] A conclusion effectively reached in *Yan v. Post Office Bank Ltd* [1994] 1 NZLR 154 (CA), in a very indirect way, albeit without acknowledging the holder-in-due-course status of the payee. See Geva, 'Addendum', above n 254.

[261] The *locus classicus* for this proposition is *Re Jones Ltd v Waring and Gillow Ltd* [1926] AC 670.

[262] For the view that the payee, though not a holder in due course, may have similar rights against the acceptor, see N. Elliott, J. Odgers, and J. M. Phillips, *Byles on Bills Of Exchange and Cheques* (28th edn, 2007), at 237–8. But see *Ayres v. Moore* [1940] 1 KB 278, at 288 (CA), treating the payee as an immediate (rather than remote) party with the acceptor who, as such, is unable to overcome the acceptor's defence based on a third party's fraud.

[263] See, e.g., BEA, above n 10, ss 23, 53(1), and 17.

[264] See, e.g., *Liversidge v. Broadbent* (1859) 4 H. & N. 603 at 610, 157 ER 978, at 980 (per Martin B), and *Crouch v. Crédit Foncier of England* (1873) LR 8 QB 374, at 380–2 (per Blackburn J), presently codified in the BEA, above n 10, s. 38(1).

[265] Which is the position to this day under the BEA, above n 10, s. 53. An earlier precedent is *Shand v. Du Buisson* (1874) LR 18 Eq 283. For a critique, see I. F. G. Baxter, 'The Bill of Exchange as an Assignment of Funds: A Comparative Study', (1953) 31 *Canadian Bar Review* 1131.

[266] At least when this was in fact the case. See text accompanying n 230 above.

[267] For the statutory reference in 1673, see, e.g., J. V. Tardon, *La Provision de la lettre de change (droit comparé–loi uniforme)* (1939) at 6.

[268] See Geva, above n 1, ch 8, section 4, at 387–401, and text accompanying n 216 above.

[269] Cf. the distinction in Jewish law between money owed on a loan and on deposit, discussed in Geva, above n 1, ch 7, section 2, at 309–30. For an earlier meaning, used by Italian and German authors, denoting a commission charged in connection with the issue of a bill of exchange, see, e.g., R. Voegeli, *La Provision de la lettre de change et son attribution au porteur—Étude d'histoire du droit et de droit comparé (systèmes français, allemand et suisse)* (1947), at 7–12.

[270] For *la provision* in French law, see above n 11.

[271] For *cessio* under Roman law, see Geva, above n 1, ch 5, section 9, at 233–41. For *cessio* in connection with *la provision*, see ibid., ch 8, at 352–422, and text accompanying fns 220 and 313.

impossibility for such theories to apply under English law, the bailment of money could have achieved a similar result insofar as it required the consent of the bailee, as expressed between himself and the bailor.

VI. The Fall of the Transferable Deposit: Loss of Beneficiary's Right

Not only did the English law of bills of exchange not recognize the transfer to the payee and each successive holder of the drawee's debt to the drawer, but furthermore, the law of bailment of money itself regressed. This regression occurred when the common law that governed the bailment of money began requiring not only the bailee's agreement, but also his agreement with the beneficiary. This undermined altogether the efficacy of the bailment of money as a mechanism for transferring a debt to the payee, and further precluded the convergence with the French doctrine of *la provision* in the law of bills of exchange.

Thus, as of the beginning of the nineteenth century, the potential of the medieval doctrine relating to the bailment of money to shape funds transfer law and complement the role of the law of bills of exchange in that regard was significantly compromised. This was concurrent with the imposition of restrictions to which the beneficiary became subject in *Indebitatus Assumpsit*. Briefly stated, the classification of *Indebitatus Assumpsit* as a category of *assumpsit* led to the reconstruction of the walls of privity,[272] which seemed to have earlier crumbled under debt.[273]

Williams v. Everett (1811)[274] is widely considered the turning point.[275] This action in *Indebitatus Assumpsit* concerned the entitlement to proceeds collected by the defendant for a third party who was indebted to the plaintiff and others. The third party (bailor) instructed the defendant (bailee) to pay the plaintiff (beneficiary) and his other creditors. The beneficiary's action against the bailee failed since the defendant-bailee did not appropriate the money for the plaintiff/beneficiary. It was correctly pointed out[276] that, as such, the decision was in line with previous case law requiring the bailee's agreement,[277] and in fact followed *Israel v. Douglas* (1789).[278] However, in *Williams v. Everett* (1811), the court treated the bailee's assent as part of the broader 'privity' required to exist between the bailee and the beneficiary.[279] Subsequent case law took this 'privity' to mean an agreement between the bailee and beneficiary. More specifically, even mere 'attornment' by the bailee to the beneficiary did not suffice; rather, a binding contract supported by 'consideration' must have existed between them, created by the offer of the bailee to pay the beneficiary, and accepted by the beneficiary's release of the bailor.[280] Such a binding contract, but not an actual promise made by the bailee to the beneficiary, was dispensed with when the bailee was a holder of actual assets or 'funds' belonging to the bailor.[281] Under such circumstances the beneficiary became entitled to a remedy in money had and received, effectively to enforce the bailee's promise to pay either the fund,[282] or out of the fund.[283] Overall, case

[272] For an extensive discussion of the broader context of *Assumpsit* and the doctrine of consideration, see Simpson, above n 23, at 406–88. The privity aspect is discussed ibid., at 475–88.

[273] See text accompanying nn 171–93 above.

[274] *Williams v. Everett* (1811) 14 East 582, 104 ER 725.

[275] See, e.g., S. J. Stoljar, *A History of Contract at Common Law* (1975), at 141.

[276] Ibid.

[277] The requirement for the bailee's agreement is explained in text following n 123 above.

[278] See *Israel v. Douglas* (1789) 1 H. Bl. 239, 126 ER 139.

[279] *Williams v. Everett* (1811) 14 East, at 597; 104 ER, at 731 (per Lord Ellenborough).

[280] *Wharton v. Walker* (1825) 4 B. & C. 163, 107 ER 1020.

[281] Granted, this distinction is very subtle. Possibly, a depositary of money delivered to him by the bailor is a fund holder, while one who owes money to the bailor on the basis of some contract between them is a mere debtor.

[282] See, e.g., *Liversidge v. Broadbent* (1859) 4 H. & N. 603, 157 ER 978.

[283] *Griffin v. Weatherby* (1868) LR 3, QB 753.

law was not consistent, and in any event, in imposing privity requirements for a remedy in money had and received, it turned nineteenth century law relating to the bailment of money into 'an intractable mass of conflicting authority'.[284] For our purposes, suffice it to say that, in requiring a promise made by the bailee to the beneficiary, this case law arrested the evolution of any convergences between the medieval law of bailment of money and the law of bills of exchange along lines introducing to English law a concept analogous to the French *provision*.

To a large extent, this process of disintegration of the medieval legal doctrine governing the bailment of money highlights the importance of the bailee's consent in according the beneficiary a remedy against him. Thus, in the early medieval cases, the bailee's receipt of the money delivered to him by the bailor to the use of the beneficiary sufficed to entitle the beneficiary to sue the bailee, first in account and subsequently also in debt. Subsequently it was held that it made no difference whether the money had physically been delivered to (and received by) the bailee for the use of the beneficiary, or whether the bailor instructed the bailee to direct, to the use of the beneficiary, money already held by him (the bailee) for the bailor.[285] Logically, a remaining issue as to the bailee's assent inuring to the benefit of the beneficiary was whether such assent could be premised on, or relate back to, an agreement given by the bailee to the bailor to apply the bailor's money in his (the bailee's) hands as instructed (by the bailor). An affirmative answer would have entitled a payee to claim directly from a depositary instructed by the depositor to pay the payee out of the deposit, provided of course that the depositary had agreed in advance with the depositor to comply with the depositor's instructions, as is usual under a standard bank account contract.[286] However, in requiring privity in the form of a direct agreement between the bailee/depositary and the beneficiary/payee, so that under no circumstances would the bailee's consent given to the bailor suffice, the common law did not even give itself a chance to address the requirements for the consent of the beneficiary under the medieval law of the bailment of money.

VII. The Metamorphosis of the Transferable Deposit in Modern Law

In the modern monetary system, the money supply (or monetary stock) consists of currency (banknotes and coins) held by the public, and 'commercial-bank money', that is, deposits of the public in commercial banks. The money supply is to be distinguished from the 'monetary base', consisting of banknotes and 'central-bank money', the latter being funds on deposit with the central bank held by commercial banks in settlement or reserve accounts. It is the 'commercial-bank money' which is referred to as 'bank money.'[287]

Both 'central-bank money' and 'commercial-bank money' are in the form of credit to a bank account.[288] However, unlike banknotes and 'central-bank money', 'commercial-bank

[284] Jackson, above n 23, at 99. This development is extensively discussed, e.g., ibid., at 93–103; J. D. Davies, '*Shamia v Joory*: A Forgotten Chapter in Quasi-Contract', (1959) 75 *Law Quarterly Review* 220; Stoljar, above n 275, at 140–3; and R. Goff and G. Jones, *The Law of Restitution* (7th edn, 2007), at 693–7.

[285] See text following n 169 above (per *Israel v. Douglas* (1789) 1 H. Bl. 239, 126 ER 139).

[286] The promise to repay deposited or collected funds as instructed by the customer is of the essence to the bank account agreement. See *Joachimson v. Swiss Bank* [1921] 3 KB 110 (CA), at 127.

[287] Components of, relationship between, and role of central banks in, money supply and monetary base, are discussed in Geva, above n 1, ch 10, section 3.4, at 497–505.

[288] For their treatment as 'scriptural money' explained by one theory, see A. Sáinz de Vicuña, 'An Institutional Theory of Money', in M. Giovanoli and D. Devos (eds), *International Monetary and Financial Law: The Global Crisis* (2010) 517.

money' does not carry with it the obligation of the central bank. At the same time, since it 'passes freely from hand to hand throughout the community *in final discharge of debts*' (emphasis added), 'commercial bank money' is to be treated as 'money'.[289] Its acceptance in final discharge of debts is premised on the typical intention of a person who having been paid by receiving banknotes, intends to deposit them to his account. Thereby such a person is taken to intend to take the risk of default by his own bank. Similarly, a payee receiving 'commercial-bank money' bears the risk of default by his own bank. Accordingly, when a creditor agrees to be paid in 'commercial-bank money',[290] it is as if he agrees to be paid by receiving banknotes that he intends to deposit to his bank account. Upon the deposit of the banknotes so received, he would have come to be owed by his bank instead of by the issuer of the banknote. Receipt of 'commercial-bank money' is a 'short-cut' to the same end; it gives a rise to a debt owed to the creditor by his bank which replaces the debt paid by it.[291]

Having received payment into his bank account, does the beneficiary have rights against the payer's bank? Having laid down the fundamentals of the bank deposit, the medieval bailment of money failed to form a basis for its transferability. A question arises then as to the availability of other legal doctrines as grounds for the beneficiary's rights against a drawee instructed to pay money to him.

It is universally accepted that 'there is no express or implied trust in favour of the [beneficiary] resulting from the [payer's] bank accepting instructions to make a . . . transfer'.[292] As outlined below, a similar conclusion was ultimately reached as to the lack of an assignment of a debt.

In *Keene v. Beard* (1860),[293] Byles J thought that a cheque 'is an appropriation of so much money of the drawer's in the hands of the banker upon whom it is drawn, for the purpose of discharging a debt or liability of the drawer to a third person'.[294] However, in *Hopkinson v. Forster* (1874), Jessel MR was perplexed by the meaning of this 'expression'. In effectively 'sterilizing' if not overruling it, he was 'quite sure that [Byles J] never meant to lay down that a banker who dishonours a cheque is liable to a suit in equity by the holder'. Jessel MR went on to hold that '[a] cheque is clearly not an assignment of money in the hands of a banker.'[295] Subsequently, this view was confirmed by statute.[296]

Similarly, in *Libyan Arab Foreign Bank v. Banker's Trust Co* (1989),[297] Staughton J rejected the assignment view for an account transfer. Rather, he stated, '[a]n [interbank] account transfer means the process by which some other . . . institution comes to owe money to the [beneficiary] . . . , and the obligation [of the originator's bank to the originator] is extinguished or reduced *pro tanto*.' Specifically rejecting 'dicta in one American case', apparently referring to *Delbrueck v. Manufacturers Hanover Trust Co.* (1979),[298] he went on to note that in this context, '[t]ransfer may be a somewhat misleading word, since

289 As defined in *Moss v. Hancock* [1899] 2 QB 111.

290 For the requirement as to the payee's agreement to be paid into his bank account, see, e.g., *Mardorf Peach & Co. v. Attica Sea Carriers; The Laconia* [1977] 1 All ER 545 (HL).

291 For the accrual to the payee of 'the unconditional right to the immediate use of the funds transferred' as the crucial point for 'payment', see *The Brimnes; Tenax Steamship Co. Ltd v. The Brimnes (Owners)* [1973] 1 All ER 769 (QBD), at 782.

292 R. R. Pennington, A. H. Hudson, and J. E. Mann, *Commercial Banking Law* (1978), at 285. 'Accepting' is used here in the sense of receiving, rather than engaging to pay as under the BEA.

293 *Keene v. Beard* (1860) 8 C.B. (NS) 372, 141 ER 1210.

294 Ibid., 8 C.B., at 381, 141 ER, at 1213.

295 *Hopkinson v. Forster* (1874) LR 19 Eq. 74, at 76, per Jessel MR.

296 BEA, above n 10, s. 53(1), providing, other than for Scotland, that '[a] bill, of itself, does not operate as an assignment of funds in the hands of the drawee available for the payment thereof, and the drawee of a bill who does not accept as required by this Act is not liable on the instrument.'

297 See *Libyan Arab Foreign Bank* [1989] QB 728.

298 See *Delbrueck*, 609 F. 2d 1047 (US Court of Appeals (2nd Cir.), 1979).

the original obligation is not assigned . . . ; a new obligation by a new debtor is created'.[299] This is in line with the conclusion of Pennington, Hudson, and Mann. Having thoroughly reviewed pertinent case law, they stated that '[i]t is . . . generally accepted that a mere mandate to pay does not constitute an equitable assignment of funds, whether the payee is notified of the mandate or not.'[300]

Indeed, the treatment of the transfer of funds as an assignment to the payee-beneficiary of the debt owed by the payer's bank to the payer so as to confer rights on the payee-beneficiary against the drawee upon the receipt of the payer's payment order by the drawee is fraught with difficulties. First, this view presupposes that a payment order is irrevocable, so as to confer, from its issuance, rights on the beneficiary. This is, however, contrary to the prevailing view on the matter.[301] Second, a transfer involving one or more intermediary's banks is not easily accommodated by the assignment view. Rather than one assignment from the payer to the beneficiary, such a transfer may be seen as involving a series of assignments. Each such assignment is to the participant which is subsequent to the sender/assignor's own receiving bank. This introduces complications to the analysis and is in contradiction with the payer's intention; the latter cannot be taken to intend to benefit any third party other than the beneficiary.

Complications in the analysis also arise if an interbank transfer (whether or not involving an intermediary bank) is viewed as the assignment of the debt owed to the payer by the payer's bank as directed to the payee-beneficiary's bank (and not the payee-beneficiary). Were the beneficiary's bank to be seen as receiving such a payment order on behalf of the payee-beneficiary, the first issue would not disappear. In the case of an intermediary bank, the second issue would be present as well.

Third, the debt owed by the beneficiary's bank to the beneficiary, at the conclusion of the credit transfer, is in fact viewed as distinct and original, rather than as derivative of the original debt owed at the initiation of the transaction by the payer's bank to the payer. Otherwise under the assignment theory, the beneficiary, or alternatively, the beneficiary's bank, as the assignee, is to be owed directly by the payer's bank, as the debtor of the assigned debt. Furthermore under the assignment theory, the entitlement of the beneficiary or the beneficiary's bank would have been subject to defences which may be raised by the payer's bank against the payer, under the universal rule governing the subjection of the assignee's claim against the debtor to the debtor's defences against the assignor.[302]

Fourth, a payer's bank may carry out a transfer even in the absence of funds in the payer's account, thereby creating a debt owed by the payer to the payer's bank, rather than transferring a debt owed by it to the payer. Fifth, an account transfer may take place between two accounts belonging to the same person, in which case no assignment can be said to occur.

Nonetheless, an assignment conferring rights to the beneficiary against the payer's bank is workable in limited circumstances. Such is the case where the payer issues the payment order to the payee, as in a debit transfer, rather than in a credit transfer, in which the payment order is issued by the payer directly to the payer's bank. The former situation, that in which the payer issues the payment order to the payee, is the one that gave rise to *la provision* in France. Moreover, this is the same situation in which no impediment appears

[299] *Libyan Arab Foreign Bank* [1989] QB 728, at 750.

[300] See Pennington et al., above n 292, at 288.

[301] For the revocability of payment orders under the common law, see, e.g., B. Geva, *Bank Collections and Payment Transactions—Comparative Study of Legal Aspects* (2001), at 289–91.

[302] See, in general, B. Geva, *Financing Consumer Sales and Product Defences* (1984), ch 3.

to the recognition of the payee's right against a drawee who agreed to pay him—as under the acceptance of the bill of exchange. Lack of convergence between the bill of exchange and the bailment of money has restricted the benefits of such concepts in the common law.

In the absence of the assignment of the debt owed by the payer's bank to the payer, the conceptual difficulty in viewing 'commercial-bank money' as money is based on the fact that receipt of 'commercial-bank money' is 'payment' only from the point it becomes the obligation of the payee's bank. That is, a banknote that changes hands in payment is still the same banknote, reflecting the original obligation of its issuer, the central bank, to pay the bearer on demand. Conversely, 'commercial-bank money' is the obligation of the payer's bank while it is in the payer's hands; once 'transferred' to the payee's hands, the same amount of 'commercial-bank money' becomes the obligation of the payee's bank. Payment in commercial bank money thus consists of the transformation of one debt between two parties to another debt between two other parties. That is, the 'transfer' is actually not a true transfer; it is not an assignment, but rather it is the extinction (or reduction) of one debt between two parties, and the creation (or increase) of a debt between two other parties.[303] It is this metamorphosis that makes it difficult to view 'commercial-bank money' as an 'object' on its own, in the same way that the banknote is viewed. Instead of the 'circulation' of 'commercial-bank money', we have the extinction of one 'commercial-bank money' debt, and its replacement by another.[304]

At the same time, form ought not to be allowed to prevail over substance; inasmuch as 'commercial-bank money' 'flows' rather than 'circulates' and is accepted in the payment of debts, it has become an intangible subject-matter that constitutes 'money'. Staughton J's explanation for the account transfer in *Libyan Arab Foreign Bank v. Banker's Trust Co* (1989)[305] gave a new, albeit not literal, meaning to 'transferable deposit' to fit its role as 'bank money'. By extinguishing one debt and creating another—in effect, and even in the absence of strictly speaking, the transfer of a debt, a 'transfer' nevertheless occurs—albeit of 'that which passes freely from hand to hand throughout the community in final discharge of debts.'[306] In the final analysis, it is this metamorphosis, by the extinguishment of one debt, and the creation of another, that facilitates a legal basis for the 'transferable deposit' and its use as 'bank money'.

[303] Unless of course the payer and payee use the same bank, in which case the debtor-bank remains the same and it is only the two creditors, payer and payee, that switch.

[304] *Libyan Arab Foreign Bank* [1989] QB 728, at 749; and *R v. Preddy* [1996] AC 815 (HL).

[305] *Libyan Arab Foreign Bank* [1989] QB 728, at 749.

[306] *Moss v. Hancock* [1899] 2 QB 111.

19

Early English Law of Checks

James Steven Rogers

I. Checks—or Cheques

Aside from the bank note, the principal paper monetary instrument in modern practice and law is the check, that is, a written instruction to a bank directing that a certain sum of bank credit be transferred to another person. This chapter examines the origins of English private law of checks in the late eighteenth and early nineteenth centuries.

First though, let us consider a perhaps less significant, but nonetheless intriguing issue: Is it 'cheque' or 'check'? It is usually said that 'cheque' is the British spelling, and that 'check' is an Americanism. One might think that this is simply another instance of we heathen Americans getting it wrong, but the story is actually more complex. Through the middle part of the nineteenth century, British authors commonly used the 'check' spelling. That was true both in cases and in treatises.[1] By the middle of the nineteenth century, British usage changed, and the 'cheque' spelling became more and more common, both in cases and treatises.[2] Several of the leading treatises show the change in clear form. The first nine

[1] E.g. *Ex parte Dickson* (1789) 2 Cox 195, 30 ER 90; *Tate v. Hilbert* (1793) 2 Ves. Jun. 111, 30 ER 548; *Russell v. Hankey* (1794) 6 TR 12, 101 ER 409; *Boehm v. Sterling* (1797) 7 TR 423, 101 ER 1055; *Aubert v. Walsh* (1812) 4 Taunt. 293, 128 ER 342; *Down v. Halling* (1825) 4 B. & C. 330, 107 ER 1082; *Hall v. Fuller* (1826) 5 B. & C. 750, 108 ER 279; *Young v. Grote* (1827) 4 Bing. 253, 130 ER 764; *Marzetti v. Williams* (1830) 1 B. & Ad. 415, 109 ER 842; *Boddington v. Schlencker* (1833) 4 B. & Ad. 752, 110 ER 639.

There are, however, also instances of the 'cheque' spelling as early as the end of the eighteenth century, e.g. *Charlwood v. Berridge* (1795) 1 Esp. 345, 170 ER 379; *Franco v Lindo* (1795) 1 Esp. 300, 170 ER 364; *Hammet v. Yea* (1797) 1 Bos. & Pul. 144, 126 ER 826.

Treatises using the 'check' spelling include: J. Chitty, *A Treatise on the Law of Bills of Exchange, Checks on Bankers, Promissory Notes, and Bank-Notes* (1799); E. W. Manning, *The Law of Bills of Exchange, Promissory Notes, Bank-notes, Bankers Notes, Drafts and Checks* (1801); J. I. Maxwell, *A Pocket Dictionary of the Law of Bills of Exchange, Promissory Notes, Bank Notes, Checks, &c.* (1802); R. Thomson, *A Treatise on the Law of Bills of Exchange, Promissory-notes, Bank Notes, Bankers' Notes, and Checks on Bankers in Scotland* (1825); J. B. Byles, *A Practical Compendium of the Law of Bills of Exchange, Promissory Notes, Bank-notes, Bankers' Cash-notes & Checks* (1829); H. Roscoe, *A Digest of the Law Relating to Bills of Exchange, Promissory Notes, and Bankers' Checks* (1829).

[2] E.g. *Rothschild v. Corney* (1829) 9 B. & C. 388, 109 ER 144; *Esdaile v. La Nauze* (1835) 1 Y. & C. Ex. 394, 160 ER 160 (1835); *Swan v. Bank of Scotland* (1836) 10 Bligh. N.S. 627, 6 ER 231 (1836); *Bank of England v. Anderson* (1837) 3 Bing. N.C. 589, 132 ER 538; *Lubbock v. Tribe* (1838) 3 M. & W. 607, 150 ER 1287; *Serle v. Norton* (1841) 2 M. & Rob. 331, 174 ER 331; *Bosanquet v. Corser* (1841) 9 C. & P. 664, 173 ER 1002.

Treatises using the 'cheque' spelling include: G. J. Shaw, *A Practical Treatise on the Law of Bankers' Cheques, Letters of Credit, and Drafts* (1850); G. G. Newman, *A Summary of the Law Relating to Cheques on Bankers* (1870); M. Chalmers, *A Digest of the Law of Bills of Exchange, Promissory Notes and Cheques* (1878); B. Jacobs, *A Short Treatise on the Law of Bills of Exchange, Cheques, Promissory Notes, and Negotiable Instruments Generally* (1913).

editions of Chitty's treatise, published from 1803 through to 1840, use the 'check' spelling. A tenth edition was published in 1859, and the new editors went to the trouble of not only changing to the 'cheque' spelling in the title, but also going through the full text changing all appearances of 'check' to 'cheque'.[3] The same change was made from the twelfth edition of Byles' treatise, published in 1876, to the thirteenth edition, published in 1879, though the editor of both versions was Byles' son Maurice.[4] In his work on the history of negotiable instruments, Holden speculates that the change may be attributable in part to the influence of J. W. Gilbart, whose mid-nineteenth-century work on banking theory and practice had urged use of the 'cheque' spelling.[5] Inasmuch as I am American, and am writing principally about developments in the eighteenth and early nineteenth centuries, I will use the original 'check' spelling.

II. Checks and Bills of Exchange

Now, let us turn to the principal subject of investigation here, how English law adapted to the development of the system of making payment by checks. The heart of the matter can be found in an offhand comment in Holden's *History of Negotiable Instruments*: 'It must be emphasized that a cheque is merely a special type of bill of exchange.'[6] That remark encapsulates a view that is by no means obvious, either as a matter of law, or of legal history. Does the system of payment by writing checks on bankers require special legal treatment, or is the matter best treated as merely an aspect of the general law of negotiable instruments? As it happens, the law governing checks developed as merely a special case of the general law of bills and notes. Indeed, modern English law defines a 'cheque' as 'a bill of exchange drawn on a banker payable on demand'.[7] Similarly, modern American law defines a 'check' as 'a draft . . . payable on demand and drawn on a bank'.[8] Thus, the inquiry undertaken in this chapter is how and why this happened. In a sense then, the issue is why there wasn't a law of checks.

In order to examine that issue, one must first get a general sense of the state of the law of negotiable instruments, more specifically, bills of exchange, at the time that the practice of making payment by checks developed, that is the late eighteenth and early nineteenth

[3] *Chitty on Bills of Exchange, Promissory Notes, Cheques on Bankers, Bankers' Cash Notes and Bank Notes*, ed. J. A. Russell & D. Maclachlan (10th edn, 1859).

[4] J. B. Byles, *A Treatise of the Law of Bills of Exchange, Promissory Notes, Bank-notes and Cheques*, ed. M. B. Byles (13th edn, 1879).

[5] J. M. Holden, *The History of Negotiable Instruments in English Law* (1955), at 208–9. Gilbart explained the point as follows:

> Should I write *check* or *cheque*? This word is derived from the French, *echecs*, *chess*. The chequers placed at the doors of public-houses, are intended to represent chess-boards, and originally denoted that the game of chess was played in those houses. Similar tables were employed in reckoning money, and hence came the expression—to check an account; and the Government Office, where the public accounts were kept, was called the Exchequer. It probably obtained this name from the French *echiquier*, a chess-board, though Blackstone states that this court was called the exchequer from the chequered cloth which covered the table. Of the two forms of writing this word *check* and *cheque*, the latter seems preferable, as it is free from ambiguity, and is analogous to ex-chequer, the public treasury. It is also used by the Bank of England, 'cheque-office'. In Bayley both forms are employed. 'A *cheque* upon a banker was lost, and paid to a stranger the day before it bore date, the banker was obliged to repay the money to the loser.' 'By the usuage of trade, a banker in London will not render himself responsible by retaining a *check* drawn on him, provided he return it at any time before five o'clock in the evening of the day in which it was drawn.'

J. W. Gilbart, *A Practical Treatise on Banking* (4th edn, 1836), at 98–9.

[6] Holden, above n 5, at 204. Benjamin Geva has recently suggested that it is a mistake to assume that the origins of the law of checks are to be found in the general law of bills of exchange. See B. Geva, *The Payment Order of Antiquity and the Middle Ages* (2011), at 547–52.

[7] Bills of Exchange Act 1882, 45 & 46 Vict., c 61 s. 73.

[8] Uniform Commercial Code s. 3-104(f).

centuries.[9] By that time the bill of exchange had developed into an instrument of general commercial and legal significance, divorced from its origins in the exchange contract of earlier times. In a typical bill transaction, a merchant would have shipped goods to his representative in a distant location for sale on commission and would have drawn a bill on his representative for the proceeds of the sale. For example, in *Maber v. Massias* (1776) a bill of exchange was drawn by William Watts, an English merchant, on his factor in Gibraltar, Moses Massias, payable 'out of the produce of goods you have of mine, now lying at Gibraltar, Barbary, and Leghorn'.[10] The relationship between drawer and drawee was not though, confined to that of merchant drawing on his factor. Rather, any situation in which one person had or might have funds in his hands belonging to another might form the basis of a bill transaction.

In the era in which the commission merchant system of distribution predominated, merchants would invariably find that they had balances due to them from their correspondents in various locations around the country or the globe. Bills of exchange were the mechanism by which they could make use of these distant balances in the era before the development of a specialized financial system. That the bills were transferable facilitated this system, but it was not the essential key to it. Indeed, one finds many cases in the classical era in which bills are used as a payment device without any transfer of the bill itself. For example, if a merchant in Bristol had funds in the hands of his factor in London, and needed to make a payment to someone else in London, the Bristol merchant could do so by drawing a bill on his London factor, payable to his London creditor. The London creditor, as payee, could simply present the bill to the drawee and receive payment. No transfer or indorsement would be involved, but the bill would have served an essential role as a payment mechanism.[11]

To be sure, bills were commonly transferred, but the characteristic of transferability is perhaps best understood not as an end in itself, but as a mechanism by which bills could be used to enable a merchant to make use of funds in the hands of correspondents in distant locations. For example, a Bristol merchant might be able to make a payment to his creditor in Bristol by giving him a bill drawn on his factor in London. The creditor would be willing to accept such a payment whether or not he had immediate need of funds in London, because he knew that many other people would have need of funds in London. The well-known case of *Peacock v. Rhodes* (1781)[12] is a perfect example. Rhodes, in Halifax in western Yorkshire, drew a bill on his London bankers payable to Ingham or order. The bill passed through several hands before being stolen from Joseph Fisher at York, about forty miles northeast of Halifax. We next find the bill forty miles further to the northeast at the coastal port of Scarborough where a mercer took it in payment for cloth. From Scarborough the bill presumably was sent down to London by the regular coastal shipping routes, but was dishonoured by the London bankers. Thus, from the bare facts of the report we can literally trace the physical path of the bill through a series of transfers closer and closer to the drawee.

These typical bills of exchange transactions differed from the use of bank checks in a significant fashion. Bills of exchange were not so much a way of directing the transfer of funds held with specialized financial institutions as they were a means of making payments in a

[9] The account herein is a brief synopsis of the treatment in J. S. Rogers, *The Early History of the Law of Bills and Notes: A Study of the Origins of Anglo-American Commercial Law* (1995).

[10] *Maber v Massias* (1776) 2 Black. W. 1072, 96 ER 631.

[11] For example, in *Aymar v. Beers*, 7 Cow. 271 (N.Y. 1827) a Virginia farmer travelled to New York to sell his crop of wheat. The buyers paid by giving the farmer a bill drawn on their correspondent in Richmond, which the farmer took back with him when he returned home. The issue in the case was whether the drawer had been discharged by the payee's delay in presenting the bill for acceptance.

[12] *Peacock v. Rhodes* (1781) 2 Doug. 633, 99 ER 402.

world in which people did not have ready access to banking institutions. People made payments not by directing transfer of bank balances, but by making use of funds due to them held by various other non-financial institutions. By the nineteenth century, commercial payments were routinely made by checks as an instrument for transfer of bank balances. It is, then, at least a bit odd that the law of bills of exchange—which evolved for a world of payments without banking facilities—became the law for payments made through banks.

III. Early Practice and Cases Concerning Checks

Let us then examine briefly the origins of the practice of making payments by checks, and then turn to an examination of how English law adapted to this practice. The term 'check' seems to have derived from the practice of early English banks, such as the Bank of England, of providing a means by which one could be assured that the customer was in fact authorized to draw on the bank. Clapham explains that in the early years of the Bank of England, a customer could simply write out an instruction on ordinary paper:

> But during the next twenty years the Bank, in this an innovator, gradually induced a great proportion of its clients when drawing to utilize its 'cheque' paper—or better in the modern American spelling its 'check' paper. For this it got its name not because it was chequered but because it was something printed so as to serve as a check, at once a counterfoil and evidence that its user was a bona fide client of the Bank with a balance. Only such people could get the paper. The printed slips had some scroll work at the left-hand end. This could be cut through, leaving part on the 'cheque' and part on the 'counterfoil'—the real 'check'.[13]

Various historians have located examples of what we would today call checks in records of late-seventeenth-century Goldsmith bankers. The earliest examples, all handwritten, given by Holden date from 1659, 1665, and 1675.[14] The earliest reads as follows:

> Mr. Morris & Mr. Clayton,
> Pray pay the bearer hereof Mr. Delboe or order four hundred pounds I say £ 400:—:— for.
> Yrs: Nic Vanacker
> London the 16th of February 1659

A history of the early days of Hoare's bank[15] reproduces a handwritten example, dated 11 July 1676, reading as follows:

> Mr. Hoare,
> Pray pay to the bearer hereof Mr. Will Morgan fifty four pounds ten shillings and ten pence and take his receipt for the same.
> Your loving friend,
> Will Hale
>
> For Mr. Richard Hoare
> At the Golden Bottle in Cheapside

[13] J. Clapham, *The Bank of England: A History* (1945), vol. 1, at 142–3. A similar account is given in W. Beawes, *Lex Mercatoria Rediviva* (1752), at 363. Beawes states that a person who wishes 'to keep Cash with the Bank [of England]' gets a book of the account 'commonly called the Drawing Accounts' and 'the Person will likewise receive a Parcel of Checks (of whose Numbers an Account is taken by him that delivers them out) on which he is to draw on the Bank as he shall have Occasion'. Beawes further states that 'when you want to pay, you draw the Sum on one of your Checks, in the following manner' giving the form as pay to AB or Bearer on demand. Beawes states that if one wants one's account examined, one could bring the book to the bank, and when it is returned 'you will find every Draught you have made, entered, and your Checks returned you, cancelled'.

[14] Holden, above n 5, at 209–10 and App. V.

[15] *Hoare's Bank: A Record 1673–1932* (1932), at 14. Several late-seventeenth-century examples are printed in R. D. Richards, *The Early History of Banking in England* (1958), at 50–2.

Thus instruments of the form that we would now call checks were in use as early as the late seventeenth century.

There is, however, some problem in identifying which cases and events should be regarded as part of the story of the development of English law of checks. Consider two well-known late-eighteenth-century cases on the law of bills of exchange, *Grant v. Vaughan* (1764) and *Peacock v. Rhodes* (1781). The instrument in Grant was described in one of the reports as 'a cash-note' drawn by someone 'upon his banker'.[16] Thus the instrument can readily be identified as what we would today call a check. The instrument in *Peacock v. Rhodes* was described as a 'bill drawn . . . by the defendants, upon Smith, Payne, & Smith, payable to William Ingham, or order, 31 days after date'.[17] Nothing in the opinion indicates that the instrument might have been anything like a check. In fact, however, Smith, Payne, and Smith were a well-known London banking firm,[18] though nothing in the case seems to turn on the fact that the instrument was a draft drawn on a banker.[19] Perhaps the only way to resolve the problem is to confine one's attention to cases and materials where the courts or authors refer to the instrument in question using the explicit term 'check', or some similar phrase.

That raises a question of terminology. In the late seventeenth century, written instructions to goldsmiths directing a payment would commonly have been referred to as 'drawn notes' as distinguished from the 'receipt notes' issued by the goldsmith himself.[20] Throughout most of the eighteenth century, cases involving what we would today call checks referred to the instruments by a variety of terms. The opinions in *Thorold v. Smith* (1706)[21] refer to the instrument as a 'goldsmith's note' or 'note to another upon a banker', or 'bill of exchange or goldsmith's note'. *Hankey v. Trotman* (1746)[22] refers to a 'bill on another banker'. *Grant v. Vaughan* (1764)[23] refers to a 'cash-note upon his banker'. *Russel v. Langstaffe* (1780) states that a party 'indorsed his name on five copper-plate checks, made in the form of promissory notes, but in blank; i.e. without any sum, date, or time of payment, being mentioned in the body of the notes'.[24]

The earliest explicit reference to a 'check' that I have been able to locate in reports of English decisions is *De Silva v. Fuller* (1776), a brief squib of which appears in the 1793 second edition of Espinasse's *Digest of Actions at Nisi Prius*. The entry is as follows:

> For where in trover for a bill, draft, or check, drawn by one Cox on the defendants, who were bankers, payable to No. 437, or bearer, on demand, it was drawn the 17th of June, but dated the 18th. On the 17th the plaintiff received it, that day he lost it, and the same day (17th) it was

[16] *Grant v. Vaughan* (1764) 3 Burr. 1516, 97 ER 957. In another report the instrument is described simply as a 'bill' drawn 'in London on Sir Charles Asgill', though the report of the defendant's lawyer's argument refers to the instrument as 'a draught drawn in London on a banker there'. *Grant v. Vaughan* (1764) 1 Black. W. 485, 96 ER 281.

[17] *Peacock v. Rhodes* (1781) 2 Doug. 633, 99 ER 402.

[18] L. S. Presnell, *Country Banking in the Industrial Revolution* (1956), at 105–9.

[19] The instrument in Peacock, however, was somewhat different from the usual form of check in that it was payable to order rather than to bearer and was not payable on demand.

[20] *Hoare's Bank*, above n 15, at 14. See also Richards, above n 15, at 50–2.

[21] *Thorold v. Smith* (1706) 11 Mod. 71, 88 ER 896, s.c. 11 Mod. 87, 88 ER 912; Holt KB 462, 90 ER 1155; Holt KB 463, 90 ER 1155.

[22] *Hankey v. Trotman* (1746) 1 Black. W. 1, 96 ER 1.

[23] *Grant v. Vaughan* (1764) 3 Burr. 1516, 97 ER 957, s.c. 1 Black. W. 485, 96 ER 281.

[24] *Russel v. Langstaffe* (1780) 2 Doug. 514, 99 ER 328. The phrase 'copper-plate check' might just mean an engraved form. See, e.g., *Snaith v. Mingay* (1813) 1 M. & S. 87, 105 ER 33 (referring to 'copper-plate impressions of four bills of exchange'). However, in *Master v. Miller* (1791) 4 TR 320, at 325, 100 ER 1042, at 1045, one of the attorneys described *Russel* as a case in which 'the Court held . . . that a person who had indorsed his name on blank checks which he had entrusted to another, was liable to an indorsee for the sums of which the notes were afterwards drawn'.

> presented to the defendants, who paid it; it was proved to be contrary to the usual course of business, to pay drafts before the day on which they were dated, and on that ground the plaintiff had a verdict.[25]

By 1789, checks seem to have been regarded as sufficiently common that they could be referred to in decisions by that name and without any special discussion. For example, in *Ex parte Dickson* (1789),[26] one Robert Parker, who had bought sugar, gave the seller an instrument described in the opinion as 'a check or order upon Messrs. Thomas, Samuel, and Joseph Cranes of Liverpool, the bankers of [the buyer]', dated 25 February 1788. Although explicitly described as a check, the instrument was not in precisely the form one would expect. The instrument directed that the Cranes 'on demand pay the bearer one bill value £235 2 *s* at three months'. That is, rather than directing a payment in cash on demand, it specified that the bankers were to pay the check in the form of a bill due three months later.[27] The Cranes did so, delivering to the seller a three-months bill drawn by Cranes on Livesay, Hargreaves, and Co., described in the opinion as Cranes 'correspondents or bankers' in London.[28] Several of the parties became bankrupt, and the opinion in *Ex parte Dickson* deals with some of the issues of bankruptcy law presented by that scenario. For present purposes, the significance of the case is merely that it shows that by that time checks were regarded as a matter of everyday financial practice. By the first half of the 1790s, it is common to find cases in which either specific points about the law governing checks were raised, or in which checks were referred to in other sorts of disputes in such a fashion that it seems apparent that they were regarded as an everyday matter.[29]

[25] *De Silva v. Fuller*, London, Easter Term 1776, MSS, I, Espinasse, *Digest of the Law of Actions and Trials at Nisi Prius* (1793), assumpsit 41. The case does not appear in the 1790 first edition of Espinasse.

[26] *Ex parte Dickson* (1789) 2 Cox 194, 30 ER 90.

[27] A similar instrument was involved in *Bolton v. Richard* (1795) 6 TR 139, 101 ER 477.

[28] To those familiar with late-eighteenth-century English finance, the rest of the story will hardly seem surprising. Livesay, Hargreaves, and Co. was one of the largest manufacturing and finance firms in England. The failure of that firm in 1788 set off shock waves through the English financial system, especially since it was discovered that the firm had been financing itself by the then disreputable mechanism of issuing accommodation bills. See Rogers, above n 9, at 223–49. The consequences to the parties in the *Dickson* case were that as a result of the failure of Livesay, Hargreaves, and Co., the Cranes banking firm failed, and as a consequence of the failure of the Cranes, Parker failed.

[29] *Doe v. Martin* (1790) 4 TR 39, 100 ER 882 (in dispute about land conveyed in marriage settlement, court refers to an amount as 'paid by a draft or check drawn by Martin on the house of Messrs. Martin and Co.... in favour of... Richard Willis or bearer'); *Sowerby v. Harris* (1791) 4 TR 494, 100 ER 1138 (in dispute about annuity, court refers to an amount as having been 'paid by a banker's check'); *Rex v. Lyon* (1793) 2 Leach 597, 168 ER 401 (in argument in a criminal prosecution for forgery of various receipts, one of the lawyers says: 'Suppose a man were to drop out of his pocket a check or draft signed but not filled up with a name, or other word designating a person as its payee, the mere signature of such a name, though not the name of the writer, would not be forgery'); *Tate v. Hilbert* (1793) 2 Ves. Jun. 111, 30 ER 548 (in litigation about decedent's assets, dispute whether a 'gift of a common check on a banker, payable to bearer' could be regarded as *donatio mortis causa)*; *Puller v. Roe* (1793) Peake 260, 170 ER 149 (in dispute about debt collection, one of the lawyers notes that 'bills had been drawn by Caldwell & Co. for checks drawn upon them by the defendants as their bankers'); *Russell v. Hankey* (1794) 6 TR 12, 101 ER 409 (dispute about whether it was proper for bankers to receive in collection of a bill 'a check upon a banker in London' when 'it turned out that the check was dishonoured'); *Ridley v. Blackett* (1792) Peake Add. Cas. 62, 170 ER 195 (headnote referring to 'the usual time of bankers clearing their checks with each other'); *Charlwood v Berridge* (1795) 1 Esp. 345, 170 ER 379 (in action for price of goods sold, reference to 'a cheque on a banker for £7 10s, which sum was meant to pay the debt and costs then incurred'); *Bolton v. Richard* (1795) 6 TR 139, 101 ER 477 ('check or order in writing, signed by the defendant on Caldwell and Co., then his bankers' directing bankers to make payment in the form of a bill due at seventy days'); *Rex v. Lara* (1795) 6 TR 706, 101 ER 706 (dispute about whether criminal prosecution was proper against a person who gave 'a check on his banker' knowing that it would not be paid); *Franco v. Lindo* (1795)1 Esp. 300, 170 ER 364 (dispute about whether pleading had properly alleged payment when it said that amount had been 'paid by a cheque on a banker'); *Swears v. Wells* (1795) 1 Esp. 317, 170 ER 370 (dispute about payment made partly by 'a check on a banker' and partly by a promissory note containing incorrect stamp); *Cousins v. Thompson* (1795) 6 TR 335, 101 ER 581 (dispute about whether pleading had properly alleged payment when it said that amount had been paid by 'a banker's check').

One difference between modern and early practice concerning checks is that in eighteenth century English practice, checks were commonly made payable to bearer rather than to the order of a specified person. By the latter part of the century, the reason is easy to discern—the stamp acts. The 1694 Stamp Act had imposed a stamp tax on various forms of documents, but explicitly provided that the duty did not apply to 'any Bills or Notes (not sealed) for Payment of Money at Sight, or upon Demand, or at the End of certain Days of Payment'.[30] The 1782 Stamp Act imposed a stamp tax only on bills or notes payable other than on demand,[31] and so would have excluded checks since they were commonly payable on demand. The 1783 Stamp Act imposed a broader stamp duty, but exempted 'any Draft or Order, for the Payment of Money on Demand, upon any Banker, or Person or Persons acting as a Banker, residing or transacting the Business of a Banker, within ten Miles of the Place of Abode of the Person or Persons drawing such Draft or Order'.[32] A slight modification later the same year limited the exemption to checks payable to bearer.[33] Thus, from the time of the 1783 Stamp Act until the middle of the nineteenth century, when the stamp tax was changed,[34] checks in England were presumably always made payable to bearer, since they would otherwise have been subject to stamp duty. By the middle of the nineteenth century, however, the order form of checks had largely replaced the bearer form.[35]

The fact that early checks were commonly made payable to bearer is somewhat puzzling. The requirements of the stamp acts do not completely explain this practice, for checks were commonly made payable to bearer long before the stamp acts. Among the late-seventeenth-century examples given by Richards and Holden, some are payable to order and some to bearer.[36] By the middle of the eighteenth century, however, the bearer form of check seems to be universal. The examples of checks given in merchant manuals published in the early and middle parts of the eighteenth century all seem to be in bearer form.[37] Yet, as noted above, the stamp act exemption for checks in bearer form dates from the late eighteenth century. Moreover, it is at least a little odd that the bearer form seems to have become so common early in the seventeenth century. Today instruments payable to the bearer are the simplest form of negotiable instruments. Yet the precise legal effect of the bearer clause remained somewhat unsettled until the latter part of the eighteenth century.[38]

IV. A Law of Checks, or the Law of Bills and Notes?

Now, let us turn to the principal subject of investigation here, how English law adapted to the development of the system of making payment by checks. In particular, there is the question of whether the system of payment by writing checks on bankers required special legal treatment, or was best treated as merely one part of the general law of negotiable instruments.

[30] 5 & 6 William & Mary c 21 (1694).

[31] 22 George 3 III c 33 (1782).

[32] 23 George 3 III c 49 s. 4 (1783).

[33] 24 George 3 III c 7 s. 3 (1783).

[34] The 1858 Stamp Act repealed the exemption, so that all checks, whether payable to bearer or order, were subject to a stamp duty of one penny. 21 & 22 Vict. c 20. The same pattern was adopted in the 1870 Stamp Act, 33 & 34 Vict. c 97.

[35] Holden, above n 5, at 221–2.

[36] Ibid., at 209–10 and App. V; Richards, above n 15, at 50–2.

[37] W. Markham, *A General Introduction to Trade and Business or The Young Merchant's and Tradesman's Magazine* (1738), at 123 (at the end of a section giving examples of bills of exchange, notes that 'Person of Large Dealings, keep their Cash at the Bank, and draw Orders occasionally' giving form of pay X or bearer); W. Beawes, *Lex Mercatoria Rediviva* (1752), at 363.

[38] The significant case is *Grant v. Vaughan* (1764) 3 Burr. 1516, 97 ER 957, 1 Black. W. 485, 96 ER 281, discussed in Chapter 24 in this volume.

Consider one setting in which the issue might have arisen. Suppose that A wrote a check on a banker payable to B or the bearer. Suppose that B transferred the check to C. Then suppose, for whatever reason, that the banker did not pay the check. Under the ordinary law of bills of exchange, A would have been liable as the drawer of the bill if the drawee dishonoured. Suppose, however, that if B still had the check and sued A, A would have been able to raise some defence against B's action. Should C be treated merely as an assignee of B, or, to use modern terminology, should C be treated as a holder in due course who takes the instrument free from any defences that A might have raised against B? Although the significance of the holder in due course principle has probably been overstated in accounts of the history of the law of bills and notes,[39] it is certainly true that disputes of this form have played some role in the law of negotiable instruments. Let us see how these matters were played out in connection with checks.

In *Boehm v. Sterling* (1797),[40] Sterling gave Muilman a check on Sterling's bankers, payable to another person (Dobson) or bearer, dated 17 February 1796. Apparently the date was erroneous and should have been 17 February 1797. That check was given to Muilman as security for any expense that Muilman incurred by reason of Muilman's acceptance of a bill drawn by Sterling on Muilman. Muilman did not pay the acceptance, but Muilman had transferred the check to Boehm. Boehm sued Sterling on the check when the bankers did not pay it, presumably at Sterling's request. Sterling sought to defend on the basis of the failure of consideration between Sterling and Muilman. Boehm responded that they had taken the check from Muilman for value and without notice of any defects, and so should be allowed to recover. Sterling responded with a trick argument. By then it was well settled that a person who took a bill of exchange after it was overdue could not qualify as a purchaser for value without notice who took free from claims or defences.[41] Sterling argued that because the check bore the erroneous date of 17 February 1796, some nine months before it was issued, Boehm should be treated as a person who took an overdue bill of exchange.

Sterling first argued that the holder in due course rules should not be applied to checks: 'for bank notes and other like notes are negotiable, and are so considered by the parties; whereas a banker's check is not so considered, and whoever receives it in payment takes it on the credit of the person giving it, and not on the intrinsic credit of the instrument itself'. Mr Justice Kenyon's opinion states that 'at the time of this trial I thought that there was a difference between bankers' checks and bills of exchange: but on further consideration I do not think that that distinction is well founded'. Kenyon noted that the defendant's argument that 'bankers' checks are not considered by merchants as negotiable instruments appears most extraordinary' since the check involved in the case had been made payable to Dobson or bearer, but was immediately delivered to Muilman. Sterling then contended that even if the holder in due course rules applied to checks, Boehm should not be treated as a holder in due course because when Boehm took the instrument it was already overdue. The court rejected that contention as well. On the whole, Sterling's arguments for treating checks in a different fashion from bills of exchange arose in a most unfavourable setting. After all, Sterling's argument was, in essence, that Boehm should lose because Sterling had, by mistake or perhaps disingenuously, put the wrong date on the check.

39 See, generally, Rogers, above n 9.

40 *Boehm v. Sterling* (1797) 7 TR 423, 101 ER 1055.

41 E.g., *Brown v. Davies* (1789) 3 TR 80, 100 ER 466. As Lord Ellenborough put it in another case, 'After a bill or note is due, it comes disgraced to the indorsee, and it is his duty to make enquiries concerning it. If he takes it, though he gives a full consideration for it, he takes it on the credit of the indorser, and subject to all the equities with which it may be incumbered.' *Tinson v. Francis* (1807) 1 Camp. 19, 170 ER 861.

Suppose, however, that the issues were presented in a less artificial setting. For example, in *Down v. Halling* (1825),[42] a check was taken by a shopkeeper in payment for goods purchased by a customer. It turned out that the check had been stolen, and the true owner brought suit against the shopkeeper. The shopkeeper would have taken free of the true owner's claim if the shopkeeper qualified as a holder in due course. In the case itself, there was some question whether a person seeking such rights must show that he took the instrument without negligence, but that issue did not really matter.[43] Rather, the outcome turned on the fact that the check was tendered to the shopkeeper six days after the date it was issued. As Mr Justice Bayley noted:

> If a bill, note, or check be taken after it is due, the party taking it can have no better title to it than the party from whom he takes it, and, therefore, cannot recover upon it if it turns out that it has been previously lost or stolen. Now, a check is intended for immediate payment, and not for circulation. It is the duty of the person who receives it to present it for payment on the same or the following day, and if he neglects to do so, and the parties upon whom it is drawn should become bankrupt in the meantime, he must bear the loss.

A result seemingly at odds with *Down v. Halling* was reached in *Rothschild v. Corney* (1829).[44] A person was induced to draw checks by fraud. Six days after the date of the checks, they were transferred to Corney, who obtained payment from the drawee bank. In an action to recover the amount that Corney had received for the checks, Corney argued that he had taken the checks for value and without notice of any defects or defences. The jury returned a verdict for Corney, finding that he had acted with sufficient caution. On a motion for a new trial, the plaintiff contended that the fact that the checks were taken six days after their date meant, as a matter of law, that Corney took the checks at his peril. The court upheld the verdict. Chief Justice Tenterden stated:

> It cannot be laid down as matter of law, that a party taking a cheque after any fixed time from its date does so at his peril; and therefore the mere fact of the defendants having taken the cheques six days after they bore date, from a person who had not given value for them, did not entitle the plaintiff to a verdict. It was indeed a circumstance to be taken into consideration by the jury in determining whether the defendants had taken the cheques under circumstances which ought to have excited the suspicions of prudent men. If the case were sent to a new trial, the same question must be presented to the jury; and as we cannot say that their former verdict was wrong, I think that we ought not to disturb it.[45]

Mr Justice Bayley, who had said in *Down* that one who takes a check after maturity takes it at his peril, stated that he would have ruled against the defendant had he been a juror, but that the verdict could not be set aside. Mr Justice Littledale provided a little further explanation, stating that '[i]t has been urged as matter of law, that a party taking a cheque overdue has it with the same title, and no other, as the person from whom he receives it. But although the rule of law certainly is so with respect to bills of exchange and promissory notes, I think it cannot be applied to cheques.'[46] The apparent inconsistency between *Down v. Halling* and *Rothschild v. Corney* was resolved much later in *London & County Banking*

[42] *Down v. Halling* (1825) 4 B. & C. 330, 107 ER 1082.

[43] The question whether a lack of care in taking an instrument disqualified one as a holder in due course was fairly controversial in the early nineteenth century. See *Lawson v. Weston* (1801) 4 Esp. 56, 170 ER 640; *Gill v. Cubitt* (1824) 3 B. & C. 466, 107 ER 806; *Crook v. Jadis* (1834) 5 B. & A. 909, 110 ER 1028; *Goodman v. Harvey* (1836) 4 Ad. & E. 870, 111 ER 1011.

[44] *Rothschild v. Corney* (1829) 9 B. & C. 388, 109 ER 144.

[45] Ibid., 9 B. & C., at 390–1, 109 ER, at 145.

[46] Ibid., 9 B. & C., at 391, 109 ER, at 145.

Co. v. Groome (1881)[47] where the court, in essence, ruled that checks were not governed by the rule that a person taking an instrument after maturity could not qualify as a holder in due course.[48]

The dispute involved in these cases provides a nice illustration of the problem of fitting checks into the scheme of negotiable instruments law. One approach would have been to say that the negotiable instruments law rules designed to protect transferees of bills should simply not apply to checks. Justice Kenyon toyed with, but ultimately rejected, that approach in *Boehm v. Sterling.* Other prominent authorities seem to have been inclined towards that view. Joseph Story, for example, remarked that 'it may be said, that Checks are not usually intended for circulation, but to enable the holder immediately to demand and receive the money stated therein, and therefore negotiability is not of their essence, but, at most, merely an optional quality'.[49] Even if checks were regarded as negotiable instruments, the status of a holder would not have been clear. Under the general law of bills of exchange, a person who took an instrument under unusual circumstances might not qualify as a holder in due course. One application of that general principal was the rule that a person who took an instrument after it had matured could not take advantage of the holder in due course rules. Now, apply that to checks, which, by definition, are payable on demand. The chances are that anyone to whom a check was transferred would have taken it at least a couple days after it had been issued. Thus, the result, as in *Down v. Halling,* would be that the transferee of a check would often be disqualified from holder in due course status. Curiously, under that approach while the courts would be saying that checks were governed by the usual rules for bills of exchange, the actual result of the application and development of those rules would be that checks ended up being treated differently from other bills of exchange because it would almost always be the case that a check was transferred after maturity. The final resolution of the specific issue, represented by *Rothschild v. Corney,* was to say that although checks were bills of exchange, it was necessary to adapt the general rules of the law of bills of exchange to fit the particular attributes of checks.

Most of the law of bills and notes was concerned with the rights of holders of bills and notes against persons obligated on the instruments. A major part of the law of the check system is concerned with a different sort of issue. Suppose that a banker pays a check in circumstances where the customer wished that the check had not been paid, or that a banker fails to pay a check that the customer wished to have paid. In either case, the customer might complain that the banker's action was wrongful. In the terminology of traditional bills law, these would be disputes between the drawer and the drawee, rather than between the holder and a party obligated on the instrument. Though the issues raised by such cases were at the heart of the system of payment by checks, a lawyer confronted with such problems in the early nineteenth century would have found little assistance in the standard treatments of the law of bills and notes.

[47] *London & County Banking Co. v. Groome* (1881–2) LR 8 QBD 288.

[48] Under the Bills of Exchange Act 1882, 45 & 46 Vict., c 61 s 36(3), a bill payable on demand is deemed to be overdue only if it appears on its face to have been in circulation for an unreasonable length of time.

[49] J. Story, *Commentaries on the Law of Promissory Notes, and Guaranties of Notes, and Checks on Banks and Bankers* (1845), at 615, § 488. Story, however, went on to say that the law of bills might be applied to checks, albeit with some modifications: 'Indeed, Checks have many resemblances to Bills of Exchange, and are, in many respects, governed by the same rules and principles, as the latter. But, *Nullum simile est idem*; and their nature, obligation, and character are in some respects different from those of common Bills of Exchange.' Ibid., at 615–16, § 489.

In 1860 a lawyer mounted a heroic argument to the effect that although his client had indorsed a check, he was not liable on it because checks should not be treated as ordinary bills. Judge Bayley dismissed the argument, remarking that 'I may add that I do no injustice to the able argument of Mr. Grant when I observe that it would have been deserving of more attention if it had been addressed to the court a hundred years ago'. *Keene v. Beard* (1860) 8 CB NS 372, 141 ER 1210.

In *Scholey v. Ramsbottom* (1810),[50] a bank customer drew a check on his bankers, and then, realizing that he had written the incorrect amount, tore up that check and wrote a new one for the correct amount. The correct check was presented and paid, but then, days later, the check for the incorrect amount was presented and paid. Apparently someone had gotten hold of the pieces and pasted them together, and although 'the four pieces into which it had been torn were . . . neatly pasted together upon another slip of paper . . . the rents were quite visible, and the face of the cheque was soiled and dirty'. When the customer sued to recover the balance of the account, the bankers claimed credit for both checks. The case went against the bankers. 'Lord Ellenborough was of the opinion that, under these circumstances, the bankers were not justified in paying a cheque; and the jury found a verdict for the plaintiff.' Nothing in the brief report suggests that the case was seen as presenting any special issue of the law of negotiable instruments, nor that the customer–banker relationship was seen as implicating any special body of law. Apparently the issue was seen simply as whether the bankers owed the full amount, or were entitled to credit for the amount of the erroneous check payment.

In *Hall v. Fuller* (1826)[51] a customer of a bank had written a check for £3. The amount of the check was altered to £200, 'but in such a manner that no one in the ordinary course of business could have observed it'. The court ruled that the excess could not be charged to the customer. As Chief Justice Abbott put it, '[b]ankers can only charge their customers with sums of money paid pursuant to order. Here, unfortunately, the bankers have paid more than the order authorised them to do; for by that they were directed to pay no more than £3. I have no doubt the bankers cannot charge their customer beyond that sum.' No bills and notes cases were cited in opinions. The lawyers had referred to a few, for example *Scholey v Ramsbottom*, but said that although there was no direct authority on the point in English law, the point was treated in Pothier's treatise on contracts of exchange. The defendant's attorney, however, recognized the significance of the issue, saying that the 'case is one of novelty and great importance to bankers, who, if the defendants are held liable, will be exposed to constant hazard without any means of prevention'. A similar issue was involved in *Young v. Grote* (1827).[52] A bank's customer had signed blank checks and left them with his wife to fill out as needed to meet the demands of his business while he was away. His wife filled out one of the checks in the amount of £50 2 *s.*, but did so leaving a large space before the 50 figure, in both words and numbers. The amount of the check was altered to £350 2 *s.* and was paid in that amount by the bankers. The court ruled that the loss must rest with the customer, who had allowed his wife to fill out the check in a negligent fashion, permitting the undetectable alteration.

In *Marzetti v. Williams* (1830),[53] a banker dishonoured a check although the customer had made a deposit earlier that day that brought the bank balance to an amount sufficient to cover the check. The court held that the banker was liable for damages, though the damages were only nominal in the case itself. The case marks the beginning of what would become a major strand in the law of checks, to wit, the principle that a bank is liable for consequential damages resulting from wrongful dishonour of a check.[54] The issue is interesting for present purposes because although it arises out of the bank–customer relationship with respect to checks, the issue does not turn on anything about the law of

[50] *Scholey v. Ramsbottom* (1810) 2 Camp. 485, 170 ER 1227.
[51] *Hall v. Fuller* (1826) 5 B. & C. 750, 108 ER 729. [52] *Young v. Grote* (1827) 4 Bing. 253, 130 ER 764.
[53] *Marzetti v. Williams* (1830) 1 B. & Ad. 415, 109 ER 842.
[54] Similar issues would arise if someone's acceptance of a bill drawn on him specified that the bill was to be payable at his bankers, but the banker thereafter failed to pay. E.g. *Whitaker v. Bank of England* (1835) 1 C. M. & R. 744, 149 ER 1280.

the check itself as a negotiable instrument. The arguments in *Marzetti* were addressed principally to the question whether the action should be thought of as based on tort or contract principles, and whether the plaintiff could prevail without proof of injury. The opinions suggest that it was not thought necessary to go into the details of the line between contract and tort, because the bankers' obligation to pay checks for which the customer has sufficient funds on deposit arose out of the implied agreement of the banker and customer. Thus the case could be treated as one of contract, for which nominal damages are appropriate. It is noteworthy that nothing in the case turned on anything that might be regarded as part of the law of bills and notes. Neither the arguments of the lawyers nor the opinions of the judges contain any reference to any cases or authorities concerning the law of bills. Rather the case was regarded as akin to an action of slander. As Lord Tenterden observed, 'it is a discredit to a person, and therefore injurious in fact, to have a draft refused payment for so small a sum, for it shews that the banker had very little confidence in the customer. It is an act particularly calculated to be injurious to a person in trade.'

It is hard to see how the lawyers or judges in *Marzetti* could have found any useful guidance in the law of bills. This was, so far as I can tell, the first case to establish that a bank is liable for wrongful dishonour, so there were no explicit precedents, nor was there any discussion of the point in any of the then current treatises on the law of bills and notes. Perhaps the lawyers might have contemplated some analogy to the law concerning virtual acceptances, that is, the principle that a drawee might become liable as an acceptor by acts or conduct other than an explicit acceptance of the bill. That, however, would have been relevant only to the possible claim of the holder of the check against the drawee; it would furnish no clear support for an action by the drawer against the banker.

Now let us consider how checks were treated in the principle treatises on the law of bills and notes in the early nineteenth century. One of the first major treatises was produced by John Bayley in 1789.[55] Six editions of Bayley were published in London from 1789 through to 1849, as well as two American editions in 1826 and 1836, and the usual bootleg Dublin printings of some of the London editions.[56] In neither the first edition, nor any later edition, did Bayley's treatise refer explicitly to checks in the title. Moreover, the book had no separate chapter or section dealing with checks. Looking at the last edition of Bayley, published in 1849, one finds that the issue involved in *Boehm v. Sterling*—whether a person who took a check after its date could qualify as a holder in due course—is treated in the chapter on transfer of instruments.[57] The issue involved in *Hall v. Fuller* and *Young v. Grote*—whether a bank can charge its customer's account for the amount of an altered check—is treated in the chapter on payment of instruments.[58] One can imagine that the editor faced some puzzlement in figuring out how to fit the issue involved in *Marzetti v. Williams*—whether a bank is liable to its customer for wrongful dishonour—into the organizational scheme of the treatise. The solution was to include the discussion of the

[55] J. Bayley, *A Short Treatise on the Law of Bills of Exchange, Cash Bills, and Promissory Notes* (1789). Bayley himself prepared the second edition, published in 1799, but after his appointment as a Judge of the King's Bench in 1808, the work was taken over by William Barnes, who put out a third edition in 1813. Barnes, however, died at a young age, and Bayley, while still on the bench, supervised the fourth and fifth editions in 1822 and 1830. The sixth, and last, edition, edited by George Dowdeswell appeared in 1849, eight years after Bayley's death.

[56] The first edition of Bayley, published in 1789 when Bayley was still a student at Gray's Inn, is a remarkable book. It runs to only seventy pages, and consists of concise statements of black-letter law, unencumbered by any explanation or description of the cases. It has very much the appearance of the 'nutshells' and other such summaries so beloved by students even today. Evidently, though, the market called for more exegesis, for the second and all later editions added extensive case summaries in the footnotes.

[57] J. Bayley, *Summary of the Law of Bills of Exchange, Cash Bills, and Promissory Notes*, ed. G. W. Dowdeswell (6th edn, 1849), at 165–6.

[58] Ibid., at 315.

Marzetti case in the chapter on remedies on bills of exchange,[59] despite the fact that all of the rest of that chapter was about actions by holders of bills against parties to the bills.

Another major bills and notes treatise was that of Joseph Chitty, the first edition of which appeared in 1799.[60] At least eleven editions of Chitty were published in London from 1799 through to 1878, and sixteen editions in the United States from 1803 to 1885. By its later editions, it became a massive tome; the 1885 American edition was a two-volume work running to over 1,000 pages. From the 1799 first edition, Chitty's treatise did explicitly refer to checks both in the title of the work and in most of the chapter headings. The book did not, however, contain a separate chapter on checks until the fifth edition, published in 1818. The chapter on checks came near the end of the discussion of bills and was very brief—about two and a half pages.[61] The chapter explained that '[m]ost of the rules respecting bills of exchange affect checks on bankers, and therefore it may suffice to refer to the preceding part of the work, and to the Index, title Check'. That chapter remained quite brief in successive editions. It was only five pages long in the last edition produced during Chitty's life.[62] The first edition published after Chitty's death appeared in 1859 with the new editors reporting that '[i]n this Edition the whole of the work has been carefully revised, and the greater part of it re-written'.[63] Despite that general revision effort, there seems to have been no significant reworking of the checks chapter, which still amounted to only ten pages.[64]

The issue involved in *Boehm v. Sterling*—whether a person who took a check after its date could qualify as a holder in due course—is discussed in the chapter on checks, added to Chitty in the 1818 edition, but that repeats the treatment found in the chapter dealing with general rules on transfer of bills.[65] The discussion of *Scholey v. Ramsbottom*—where a bank paid a check that had been torn up by the customer but was found and pasted together by someone else—is found in the chapter on payment of bills.[66] The issue involved in *Hall v. Fuller* and *Young v. Grote*—whether a bank can charge its customer's account for the amount of an altered check—is mentioned briefly in the chapter on checks of the eighth edition, published in 1833, but is treated more fully in the general discussions of alteration of bills, transfer, loss of bills, and payment of bills.[67] The issue involved in *Marzetti v Williams*—whether a bank is liable to its customer for wrongful dishonour—is mentioned briefly in the chapter of the 1833 edition on acceptance, noting that the rule in *Marzetti* was contrary to the usual rule that a drawee had no duty to accept.[68] Chitty's principal treatment of the issue, however, was at the end of a chapter on checks on bankers, where the discussion was appended as a final paragraph, without any reworking of the basic

[59] Ibid., at 329.

[60] J. Chitty, *A Treatise on the Law of Bills of Exchange, Checks on Bankers, Promissory Notes, and Bank-Notes* (1799). Joseph Chitty, who lived from 1776 to 1841, might well lay claim to being the patron saint of legal writers, having been the first to make a good living publishing law books. He produced treatises on a myriad of subjects from Apprentices to Variances, as well as an edition of Blackstone and numerous collections of precedents and statutes. His four sons carried on the family tradition of law publishing. Joseph Chitty Jr (*c.*1800–38), best known as the author of 'Chitty on Contracts', also published in 1834 a book on the law of bills, which, confusingly, bears the same name as many of the editions of his father's work, *A Practical Treatise on Bills of Exchange, Promissory Notes, and Bankers Checks.*

[61] J. Chitty, *A Practical Treatise on Bills of Exchange, Checks on Bankers, Promissory Notes, Bankers' Cash Notes, and Bank Notes* (5th edn, 1818), at 411–13.

[62] J Chitty, *A Practical Treatise on Bills of Exchange, Checks on Bankers, Promissory Notes, Bankers' Cash Notes, & Bank Notes* (9th edn, 1840), at 511–5.

[63] *Chitty on Bills of Exchange, Promissory Notes, Cheques on Bankers, Bankers' Cash Notes and Bank Notes*, ed. J. A. Russell & D. Maclachlan (10th edn, 1859), at iii.

[64] Ibid., at 341–50. [65] Chitty, above n 61, at 142. [66] Ibid., at 360.

[67] J. Chitty, *A Practical Treatise on Bills of Exchange, Checks on Bankers, Promissory Notes, Bankers' Cash Notes and Bank Notes* (8th edn, 1833), at 547, 213–4, 287, 463.

[68] Ibid., at 308.

structure of that brief chapter.[69] Thus, on the whole, Chitty's treatise never really gave a significant degree of special attention to checks.

Perhaps the major treatise on the subject of bills and notes, both in England and the United States, through most of the nineteenth century was 'Byles on Bills', first published in 1829.[70] John Barnard Byles, born in 1801, was a student of Chitty, and had a distinguished career in practice before being appointed a Justice of Common Pleas in 1858. He authored and edited the bills treatise through the first nine editions, from 1829 to 1866. Thereafter, the work seems to have been handed down like the family jewels; M. B. Byles appears as editor in 1874, with W. J. B. Byles taking over in 1899.

Although the title of Byles' treatise had mentioned checks from the first edition in 1829, it was not until the fourth edition, published in 1843, that Byles added a new chapter on checks on bankers.[71] The chapter was relatively brief, amounting to nine pages, and was placed near the beginning of the book. Evidently, Byles felt some unease about the suggestion that checks warranted separate discussion, for he began the chapter on checks with what amounts to an apology for treating this as a separate subject:

> In this chapter it is intended to point out some of those qualities and incidents which distinguish checks from other bills. The learned reader will perhaps think, and the student will no doubt find, that such observations are at present premature, but it has been thought conducive to perspicuity, that the rest of the book should be disembarrassed of distinctions applicable solely to checks, and that a summary of the law particularly relating to them should be attempted in the same part of the work where the observations relating peculiarly to bills or notes are to be found. It is hoped that any obscurity, caused by anticipating what is to follow, will be removed by turning to subsequent chapters, where it may be found necessary.[72]

Although the chapter on checks grew somewhat in later editions, it never really occupied a central place in the organization of the work. In the 1874 eleventh edition, the checks chapter still accounted for only fifteen pages of a work that had grown to over five hundred pages.[73]

The issue of whether a person who took a check after its date could qualify as a holder in due course is not treated in the checks chapter of the 1843 edition of Byles, but in the discussion of the transfer of bills and notes.[74] The discussion of *Scholey v. Ramsbottom*—where a bank paid a check that been torn up by the customer but was found and pasted together by someone else—is found in the chapter on payment.[75] Several of the issues concerning the bank–customer relationship discussed above were moved from other sections of the book to the new chapter on checks. The issue involved in *Hall v. Fuller* and *Young v. Grote*—whether a bank can charge its customer's account for the amount of an altered check—had been treated in the chapter of the 1839 third edition dealing with forgery of bills and notes.[76] In the 1843 fourth edition that discussion was moved to the

[69] Ibid., at 547.

[70] J. B. Byles, *A Practical Compendium of the Law of Bills of Exchange, Promissory Notes, Bank-notes, Bankers' Cash-notes & Checks* (1829). Indeed, it is still a standard work on the subject in England; the twenty-eighth edition having been published in 2007.

[71] J. B. Byles, *A Practical Treatise of the Law of Bills of Exchange, Promissory Notes, Bank-notes, Bankers' Cash-notes & Checks* (4th edn, 1843), at 9–17. A good deal of the chapter was devoted to the requirements for exemption from stamp duty.

[72] Ibid., at 9–10.

[73] J. B. Byles, *A Practical Treatise of the Law of Bills of Exchange, Promissory Notes, Bank-notes & Checks*, ed. M. B. Byles (11th edn, 1874), at 13–27.

[74] Byles, above n 71, at 124.

[75] Ibid., at 167.

[76] J. B. Byles, *A Practical Treatise of the Law of Bills of Exchange, Promissory Notes, Bank-notes, Bankers' Cash-notes & Checks* (3d edn, 1839), at 221.

chapter on checks.[77] The issue involved in *Marzetti v. Williams*—whether a bank is liable for wrongful dishonour—was discussed in the 1839 third edition in the chapter on acceptance, contrasting *Marzetti* with the usual rule that a drawee had no duty to accept.[78] In the 1843 fourth edition, Byles moved the principal discussion of *Marzetti* to the new chapter on checks.[79]

In the latter part of the nineteenth century, a few books appeared that were devoted exclusively to the law of checks. George Shaw published one such book in 1854 and G. G. Newman produced a similar work in 1870.[80] None of these, however, could be regarded as works that broke out of the negotiable instruments framework. Rather, they were essentially abridgements of the larger works on bills. As Shaw put it in his preface:

> The only information on the Law of Cheques which could hitherto be obtained is scattered through some of the large and expensive works on Bills of Exchange. It is considered that the diffusion of banking, and the large number of persons who now require to be practically acquainted with the Law of Cheques, render it desirable to have a small and accessible volume devoted to the subject.

Thus, by the latter part of the nineteenth century, the notion that checks were merely one species of negotiable instrument seems to have been so universally held that there was no room for treatises treating the law of checks as a subject in its own right.

V. The Development of Crossed Checks

The development of the law governing crossed checks provides a fine illustration of the tension between the idea that checks require special legal treatment and the idea that checks should be regarded merely as one type of bill of exchange.[81] In English practice, checks have been routinely written as 'crossed checks', that is, two parallel lines are drawn across the face of the check, and language is added to indicate that the check is to be deposited either to any bank, or to a specified bank. In rough form, the effect of crossing a check is to ensure that the check will not be transferred from the payee to another person outside the banking system, but will simply be deposited in a bank by the payee.

The device of crossing checks apparently originated as part of the practices of the London Clearing House.[82] The clerks for all the member banks would place checks drawn on other members in a drawer maintained for each drawee bank. To keep track of who had placed the checks in that drawer, the clerks for the presenting banks would write the name of that bank across the face of the check. In time, users of checks came to know of that practice and made use of it as a way of reducing the risk of loss or theft. Either the payee or the drawer of the check would place the crossing on the check, either by designating a specific bank that was to act as the payee's depository or by simply writing '& Co' on the check to indicate that it was to be collected through a bank. Parties who crossed checks would have done so with the thought that the instrument was not to be transferred among other persons outside the banking system.

[77] Byles, above n 71, at 16–17.

[78] Byles, above n 76, at 117–18. *Marzetti* is also mentioned briefly in the chapter on payment. Ibid., at 143.

[79] Byles, above n 71, at 12.

[80] G. B. Shaw, *A Practical Treatise on the Law of Bankers' Cheques, Letters of Credit, and Drafts* (1854); G. G. Newman, *A Summary of the Law Relating to Cheques on Bankers* (1870). See also E. R. Watson, *The Law Relating to Cheques* (2nd edn, 1902).

[81] Holden gives an excellent account of the development of the law governing crossed checks. Holden, above n 5, at 229–43. The factual account in this section is based largely on Holden.

[82] W. J. Lawson, *The History of Banking* (1850), at 215–17.

The English courts seem to have encountered considerable difficulty in adapting the law to this commercial practice. There are cases as early as the 1820s and 1830s referring to crossed checks in a fashion that suggests that this was a widely known practice.[83] It was not until the middle of the nineteenth century, however, that the courts dealt with the precise legal effect of crossed checks. In *Bellamy v. Majoribanks* (1852),[84] the drawer of a check had crossed the check indicating that it was to be collected through the Bank of England and credited to a specific account at the Bank. The payee, however, struck out that crossing and crossed the check in a different fashion, indicating that it was to be collected through a different bank. After the payee applied the funds in a fashion inconsistent with the drawer's original crossing, the drawer sued the drawee bank. The court rejected the drawer's claim that the drawee bank had acted wrongfully. Baron Parke's opinion analysed the effect of the crossing solely through the lens of traditional negotiable instruments law. He said that the crossing was not a special indorsement to the banker, nor could it be regarded as a direction by the drawer to pay only a specified person. He concluded that 'crossing the cheque with the name of a banker cannot have the effect of restricting its negotiability to such banker alone. To hold it to have this effect would be to render the instrument no longer a cheque.'[85]

Parliament responded to the *Bellamy* case with a statute that seems to have been intended to give the device of crossing checks the effect presumably intended by the users of such checks.[86] That hope, however, proved futile. In *Simmons v. Taylor* (1857)[87] the drawer sent a crossed check to the payee, but the check was stolen from the mail. Someone else presented the check after having skilfully obliterated the crossing. The court rejected the drawer's suit against the bank. While the decision might have been based on the fact that the bank would have had no way of knowing that the check had once been crossed, the court instead based its ruling on the notion that the crossing device could not easily be squared with the fact that checks were negotiable instruments. The opinion says that the statute does not make the crossing 'a part of the check' nor does it 'alter the instrument'. The court recoiled in horror at the notion that the statute should be interpreted in that fashion, for '[i]f it were to have that effect, it would be a strange thing . . . and would have the effect of creating a new sort of instrument, hitherto unknown to the law, viz. a cheque payable to bearer, or conditionally, that is, if presented by or through a banker'.[88] The Court of Exchequer Chamber affirmed, in an opinion where Baron Bramwell made the astonishing comment that 'I cannot refrain from remarking that this piece of legislation is an abortive attempt to perform the impossible feat of rendering a draft which upon the face of it purports to be payable to the bearer not payable to him. It is a thing which cannot be done.'[89]

Parliament then enacted another statute on crossed checks that attempted to reject the notion adopted in *Simmons* that a crossing was not part of the check.[90] That statute came before the Court of Appeal in *Smith v. Union Bank of London* (1875).[91] A check was made payable to the order of the payee, who indorsed it in blank but crossed it for collection through his bank. The check was then stolen and ultimately was paid to a purchaser from

[83] *Bleasby v. Crossley* (1826) 3 Bing. 430, 130 ER 578; *Boddington v. Schlenker* 4 B. & Ad. 752, 110 ER 639.
[84] *Bellamy v. Majoribanks* (1852) 7 Exch. 389, 155 ER 999.
[85] Ibid., 7 Exch., at 400–1, 155 ER, at 1004–5.
[86] Crossed Cheques Act 1856, 19 & 20 Vict., c 97.
[87] *Simmons v. Taylor* (1857) 2 CB NS 528, 140 ER 523.
[88] Ibid., 2 CB NS, at 539–40, 140 ER, at 527.
[89] *Simmons v. Taylor* (1857) 2 CB NS 463, 467–8, 140 ER 1165, 1167.
[90] Crossed Cheques Act 1858, 21 & 22 Vict., c 79.
[91] *Smith v. Union Bank of London* (1875) 1 QBD 31.

the thief. The payee brought suit, contending that he should be treated as the owner of the check and that, by virtue of the crossing, it was wrongful for the drawee bank to pay it to someone else. Once again, the user lost the argument that crossing a check meant what everyone presumably thought it meant. Yet again, the court could see the issue only in terms of negotiable instruments concepts. According to the court, the only thing that mattered was that once the check had been indorsed, it was to be treated under the established rules governing negotiable instruments payable to bearer.

> By the plaintiff's indorsement in blank the cheque became payable to bearer, and would have continued payable to bearer, whoever that bearer might be, banker or other. The legislature might have enacted that any one taking a crossed cheque should take it at his peril, and get no better title than his transferor had. It has not done so. We cannot say that it has by implication restrained the negotiability of the cheque.[92]

Parliament tried yet again, enacting another statute on crossed checks in 1876. That statute tried in various ways to give effect to the device of check crossing, including what might be seen as an acknowledgment that the courts would never be able to adapt negotiable instruments to accommodate the crossed check device. The statute said that a crossed check could include a legend stating that is was 'not negotiable', and that '[a] person taking a cheque crossed generally or specially, bearing in either case the words "not negotiable", shall not have and shall not be capable of giving a better title to the cheque than that which the person from whom he took it had'.[93] When the Bills of Exchange Act was adopted in 1882, it incorporated the provisions of the 1876 Act.[94]

As we have seen, in the late seventeenth and early eighteenth centuries, lawyers, judges, and treatise writers seem to have realized that there were significant differences between checks and traditional bills of exchange. Prior to the development of specialized banking institutions, the ability to transfer a bill of exchange from party to party was an important part of the system by which merchants could make use of balances held with a variety of other parties by drawing bills of exchange on their correspondents and transferring the bills to others. Once virtually all significant commercial actors had bank accounts, payments could be made simply by having one party issue a check to the other. In the routine case, the check would not be transferred to anyone else, other than the banks involved in collection. The device of crossing checks was designed to ensure that everyone understood this limited role of the check. A crossed check was intended to operate merely as an instruction to the banking system directing the transfer of bank credit from one person's account to another person's account. Yet by the time the crossed check device developed, lawyers, or at least judges, had become so used to seeing checks as merely one species of bill of exchange that they could not imagine how checks or check disputes could be addressed other than through the concepts of the by then well-settled law of negotiable instruments.

VI. Conclusion

So, is it true, as Holden and others have said, that 'a cheque is merely a special type of bill of exchange'?[95] The honest answer would have to be Yes, and No. In the late seventeenth century, the line between banking and other commercial endeavours was by no means

92 Ibid., 1 QBD 31, at 33.

93 Crossed Cheque Act 1876, 39 & 40 Vict., c 81, s. 12.

94 Bills of Exchange Act 1882, 45 & 46 Vict., c 61, ss 76–82. Confusion over the effect of crossings with the words 'account payee only' led to further legislation in 1992. 'Legislative Comment, The Cheques Act 1992', (1993) *Journal of Business Law* 270–1 (1993).

95 Holden, above n 5, at 204.

distinct. Financial transactions might, over time, have come to play a larger and larger role in the business of a firm that was originally established for mercantile ventures. In such cases it might be difficult, or impossible, to say whether the firm was a 'bank' or another sort of enterprise. At that time, it is hardly surprising that the term 'check' was not universally used and that no sharp distinction was drawn between drafts drawn on bankers, and drafts drawn on other sorts of firms. Accordingly, it is hardly surprising that disputes concerning checks in this era were seen as simply another instance of the general law of bills of exchange, and that cases involving checks were digested in the corresponding categories of treatises on the law of bills and notes.

By the mid-nineteenth century, however, people would not have had much difficulty telling the difference between a check and a bill of exchange. Moreover, as we have seen, many of the legal issues presented by the system of payments via checks—such as determining the rights of customers vis-à-vis the bank with which they maintained checking accounts—were not matters on which lawyers or judges would have found much guidance in the bills and notes treatises. If one could have started afresh, there would have been much to be said for creating a special law of checks in the mid-nineteenth century. But of course, the slate is never clean in a legal system built on precedent. What is unfortunate, however, is that lawyers insisted on treating checks as merely a subspecies of the bill of exchange long after the check had become an independent payment system. Human beings are, one supposes, merely a special type of ape, but for most purposes it would not be particularly useful to treat the study of human beings as merely a special case of the biology of apes.

The curious history of the crossed check device in English law is particularly instructive in this regard. We have seen that it took many attempts for Parliament to succeed in unseating the negotiable instruments framework that the courts insisted on applying to crossed checks. Yet, once that battle was won, English law on checks was, to a considerable extent, freed from the ill-fitting clothes of negotiable instruments law. By the late twentieth century, it became natural for English lawyers to regard the check system as one of a variety of forms of payment systems. Accordingly, treatises appeared in England treating checks in precisely that fashion.[96] Thus, in England, the law of checks eventually developed into a part of the subject of payment systems law as opposed to being treated as part of the law of negotiable instruments.

American law, by contrast, never went through that experience. The crossed check device never became established in the United States. Accordingly, American courts never confronted openly the tension between seeing checks as merely payment instructions and seeing checks as freely transferable negotiable instruments. American legislatures never had to deal with problems of the sort that Parliament faced in the crossed checks legislation of the late nineteenth century. Perhaps as a result, the law of the check system in the United States has continued to be treated as part of the general law of negotiable instruments. Today that presents considerable difficulty. Even now, at the beginning of the twenty-first century, the American law of checks is still mired in a swamp of negotiable instruments law.[97]

In a companion piece on the early law of bank notes, I noted that the practice of making payments by transfer of bank notes seems to have developed despite the fact that the law

[96] M. Brindle and R. Cox (eds), *Law of Bank Payments* (3rd edn, 2004); R. Goode, *Payment Obligations in Commercial and Financial Transactions*, ed. C. Proctor (2nd edn, 2009).

[97] The problems that come from treating checks as negotiable instruments are examined in detail in J. S. Rogers, *The End of Negotiable Instruments: Bringing Payment Systems Law Out of the Past* (2011).

governing bank notes remained a matter of considerable uncertainty. The brief survey of the law of checks in this piece illustrates a somewhat different lesson. By the middle of the nineteenth century, the English courts seem to have treated the law of negotiable instruments as embodying eternal verities. The idea that the check system should be treated under anything other than the established principles of negotiable instruments law seems to have been regarded as anathema. Baron Bramwell's remark in *Simmons v. Taylor* says it all. In Bramwell's view not even Parliament could accomplish the 'impossible feat' of recognizing the obvious fact that checks were a different sort of device from traditional bills of exchange. It is unlikely that one could find as extreme an example of 'that well-known ailment of lawyers, a hardening of the categories'.[98]

[98] J. P. Dawson, 'Restitution or Damages?', (1959) 20 *Ohio State Law Journal* 175, 187.

III

CIVIL LAW

20

The Order to Pay Money in Medieval Continental Europe

Benjamin Geva

I. Introduction: Bankers, Banking, and Payments in Medieval Continental Europe

In the early centuries of the Middle Ages, the economy in Europe collapsed and trade was reduced to a trickle.* Monetary economy survived only in a rudimentary form; the last Roman banks disappeared in the course of the sixth and seventh centuries, and banking and non-cash monetary payment systems ceased to exist altogether.[1]

Banking services reappeared in Europe in the later part of the Middle Ages to satisfy the growing demands of trade. Bogaert points to Genoa as being the first city in which money-changers became bankers.[2] Clearly, 'banking' in continental Europe was reborn in Italy[3] and

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[1] R. S. Lopez, 'The Dawn of Medieval Banking', in Centre for Medieval and Renaissance Studies University of California, Los Angeles (ed.), *The Dawn of Modern Banking* (1979) 1, at 3–5 (hereafter *The Dawn of Modern Banking*). For payments in kind assessed in monetary value and on occasion supplemented with low-value coins, which took place in the Carolingian Empire (eighth century CE), see, e.g., A. Murray, *Reason and Society in the Middle Ages* (1978, repr. 2002), at 31–5. For Roman banks, see B. Geva, *The Payment Order of Antiquity and the Middle Ages—A Legal History* (2011), ch 3, section 4.

[2] R. Bogaert, *Les Origines antiques de la banque de dépôt* (1966), at 167. Lopez, above n 1, at 10, is more cautious; rather, he states, 'Genoa happens to preserve the earliest notarial minute books that have survived (from 1154 on) . . . [which] are the first source that contains a fairly large number of documents showing bankers at work'.

[3] For developments in Medieval Spain, see A. P. Usher, *The Early History of Deposit Banking in Mediterranean Europe* (1943), vol. 1, at 237–504 (covering 1240–1723 in Catalonia); and further M. Riu, 'Banking and Society in Late Medieval and Early Modern Aragon', in *The Dawn of Modern Banking*, above n 1, 131. Particularly for extensive documentation, see also: A. E. Sayous, 'Les méthodes commerciales de Barcelone au XIVe siècle, surtout d'après des protocoles inédits de ses archives notariales', (1933) 18 *Estudis universitaris Catalans* 209, particularly at 217–23 (as well as at 231 and 233–4); and A. E. Sayous, 'Les méthodes commerciales de Barcelone au XVe siècle, d'après des documents inédits de ses archives' (1936) 15 (ser. 4) *Revue historique de droit français et étranger* 255, at 274–86 (hereafter Sayous, 'Méthodes commerciales XV'). For a broader earlier Christian- (namely West European-) Mediterranean perspective, see A. E. Sayous, 'L'histoire universelle du droit commercial de Levin Goldschmidt et les méthodes commerciales des pays chrétiens de la Méditerranée aux XIIe et XIIIe siècles', Pt. II (1931) *Annales de droit commercial français, étranger et international* 309, at 310–12, 317–20.

'exported' elsewhere[4] in the course of the twelfth and thirteenth centuries, as part of a commercial revolution that took place as of the eleventh century or so. The revolution occurred in the aftermath of the feudal anarchy of the manorial economy in the Middle Ages.[5]

Medieval 'banking' was not limited to financial intermediation. Broadly speaking, the medieval continental financier fell into one of three categories.[6] A financier could be a pawnbroker, a moneychanger who accepted deposits, or a merchant banker dealing in exchange.[7] The first category, pawnbrokers, consisted of lenders who lent out of their capital.[8] They lent small amounts primarily for consumption, and played no role in the development of the payment system. The second category consisted of moneychangers who accepted deposits and whose practices were rooted in the manual exchange of coins. The third category consisted of exchange bankers whose practices emerged from the exchange of money in long distance trade. The principal activities of those belonging to the second and third categories were outside the usury prohibitions.[9] Between the second and third categories, it was only the second category, that of deposit–transfer banking, that is associated with financial intermediation in the modern sense.

The second category is that of deposit bankers. These were moneychangers who began to obtain funds via deposits from the public. In accepting deposits they primarily borrowed funds with a view to lending or investing them. They further provided non-cash payment services, facilitating transfers on their books from one account to another, and were thus sometimes called transfer bankers. Members of the public were eager to deliver funds to them for safekeeping as long as these funds would remain available to depositors on demand.

The third category is that of merchant bankers. Large merchants, particularly those having branch networks or correspondents throughout Europe, became involved in the transmission of money from place to place. In the fourteenth and fifteenth centuries, they were predominantly Italian; in the sixteenth century, the centre of gravity shifted to Germany.[10] A merchant banker received money in one place in one currency and had it paid in another place in another currency. Merchant bankers thus combined their foreign trade with exchange activity. The mechanism they used for the exchange gave rise to the modern bill of exchange. Since they dealt with currency exchange by means of the bill of exchange, they are also called exchange bankers. They settled their payment obligations in

[4] See, e.g., A. E. Sayous, 'Les Opérations des banquiers italiens en Italie et aux foires de Champagne pendant le XIIIe siècle' (1932) 170 *Revue historique* 1; and M. Prestwich, 'Italian Merchants in Late Thirteenth and Early Fourteenth Century England', in *The Dawn of Modern Banking*, above n 1, 77.

[5] For a detailed discussion on this general context, see R. De Roover, 'The Organization of Trade', in M. M. Postan, E. E. Rich, and E. Miller (eds), *The Cambridge Economic History of Europe*. Vol. 3: *Economic Organization and Policies in the Middle Ages* (1963, repr. 1979) 42.

[6] Lopez, above n 1, at 6–7.

[7] R. De Roover, 'Banking and Credit in the Formation of Capitalism', in *Fifth International Conference of Economic History Leningrad 1970* (1979), at 9. See, in detail, R. De Roover, *Money, Banking and Credit in Mediaeval Bruges: Italian Merchant Bankers, Lombards and Moneychanger/Moneychangers: A Study in the Origins of Banking* (1948; repub. as *The Emergence of International Business, 1200–1800* (1999) vol. 2).

[8] Members of this group could have been further divided into pawnshops, and retail banks, as was the case in Florence in the fifteenth century. The latter gave loans secured by jewellery, took time deposits but did not carry out book transfers. See, e.g., R. De Roover, *The Medici Bank: Its Organization, Management, Operations and Decline* (1948), at 1–2.

[9] R. De Roover, 'La structure des banques au moyen âge', in *Troisième conférence internationale d'histoire économique, Munich, 1965* (1974), vol. 5, 159.

[10] For the transition, see, e.g., J. F. Bergier, 'From the Fifteenth Century in Italy to the Sixteenth Century in Germany: A New Banking Concept?', in *The Dawn of Modern Banking* above n 1, 105.

fairs by a mechanism that heralded organized interbank clearing and settlement systems in a multilateral setting.[11]

The following discussion outlines the evolution of the principal institutions and mechanisms associated with the second and third categories of medieval financiers. Section II deals with deposit and transfer banking. Sections III and IV deal with the bill of payment: Section III covers its evolution and Section IV discusses the legal relations under it. Section III also covers the interbank settlement mechanism for bills of payment that is the forerunner of organized interbank clearing in a multilateral setting. Section V provides a summary of the medieval contribution to the evolution of the modern payment system.

II. Deposit and Transfer Banking in Medieval Continental Europe

The term designating a banker, *bancherius*, is derived from *banca*, meaning 'table', which refers to the table at which the moneychanger did business. Genoese notarial records from the period between 1155 and 1216 clearly identify moneychangers as the first bankers. Moneychangers made their first appearance as such late in the twelfth century.[12] The same records also identify wealthy merchants as conducting isolated banking transactions as incidental activities earlier in that same century. It is, however, the moneychanger that came to conduct different types of banking transactions as a principal business activity. At the same time, the banker did not have a monopoly on such transactions and services, which continued to be provided by other businesses despite the transformation of the moneychanger into a banker.[13]

As far as these Genoese notarial records indicate, 'banking' ought to be understood as consisting of intercity exchange, the extension of credit, and deposit-taking. Most of the exchanges took place between Genoa and the fairs and were carried out by wealthy merchants and not moneychangers. Credit operations were in the form of business loans. Deposit-taking originally took the form of 'a strong-box sort of contract, which obliged the custodian to return the identical objects entrusted to his care'.[14] However, with the advent of the commercial revolution, depositors became more and more interested in having their funds produce a profit; at the same time, the bankers came to view the deposits they received as capital to be invested by them for their own profit. Gradually, business arrangements began to develop between depositor and depositary-banker. At the start, the banker would invest deposit funds for the mutual benefit of both himself and the depositor under a profit-sharing agreement. Subsequently, bankers commenced to give depositors a fixed rate of interest.[15] It was thus primarily the moneychangers who began to take deposits and extend credit.

[11] For 'the great international merchant-bankers', inventors of the bills of exchange as a separate category from 'the moneychangers, who dealt in actual exchange of coins and the trade in bullion and precious stones', see, e.g., I. Origo, *The Merchant of Prato* (1957; repr. 1986), at 147. But see Holdsworth, who (I submit, erroneously) attributes the invention, use, and development of the bill of exchange to moneychangers, or in his language, to 'the exchangers, whose business it was to give coins of one state in exchange for the equivalent value of coins of another state': W. Holdsworth, *A History of English Law* (2nd edn, 1937; repr. 1966) vol. 8, at 128. 'Money change' and 'exchange' are also used interchangeably by C. Verlinden, 'Markets and Fairs', in Postan et al. (eds), above n 5, 119, at 136–7.

[12] And yet parallel developments took place around the same time elsewhere in Italy. See T. W. Blomquist, 'The Dawn of Banking in an Italian Commune: Thirteenth Century in Lucca', in *The Dawn of Modern Banking*, above n 1, at 53.

[13] See in detail M. W. Hall, 'Early Bankers in the Genoese Notarial Records', (1935) 6 *Economic History Review* 73.

[14] Ibid., at 76–7.

[15] The rate of interest was agreed in advance, and yet, in order not to be in flagrant violation of usury laws, the agreement could have nominally called for a rate of return in the banker's profits, determined at the banker's 'discretion'. See R. De Roover, 'New Interpretations of the History of Banking', in J. Kirshner (ed.), *Business,*

Genoese notarial registers do not record non-cash payment activities.[16] Other records do. An important source of information as to the existence of book transfers is a set of testimonies relating to a lawsuit in Genoa in 1200, which was recorded by a notary. Witness statements make the following germane points regarding the operations of Genoese bankers.[17] First, merchants had bank accounts and used them to make payments by means of a book transfer; second, credit was extended to depositors by means of overdrafts; and third, interbank arrangements existed for the facilitation of non-cash payments between accounts kept with different bankers.

To make book transfers, customers were required to appear in person at the bank. Apparently, then, payment orders were oral. The procedure for an interbank payment and settlement is unclear,[18] and procedures as well as perhaps bookkeeping methods may not have been completely reliable.[19]

In the medieval era, deposit banking is said to be the outgrowth of manual exchange.[20] As originally in ancient Greece,[21] it was the moneychangers who began to take deposits from the public. By 1350, in becoming bankers,[22] moneychangers developed a system of local payments by book transfers, with a view to eliminating '[t]he great inconvenience of making all payments *in specie*, especially the waste of time involved in counting coin.'[23] As in twelfth-century Genoa, the system that developed was strictly local; no facility for intercity book transfers is known to have existed throughout the Middle Ages.

Indeed, this pattern is evidenced by Venetian banking experience. Between the late thirteenth and early fourteenth centuries, the moneychangers of Venice, the *campsores*, became bankers.[24] They accepted deposits, lent deposited money, and provided payment services from and to current accounts kept with them.[25] According to a study on Venice banks in the fourteenth and fifteenth centuries:

> The convenience offered by medieval banks was conceivably as important to contemporary businessmen as are chequing accounts today. The potential depositor was likely to acquire many various currencies, foreign and local, legal and non-legal tender, good and bad. These he would bring to the banker, who would weigh and evaluate them and accept them at their intrinsic or market value calculated in money of account. The money of account, in turn, was the expression of the legal tender standard maintained by the government mint. The money changer/banker, perhaps after deducting an exchange fee or commission, gave the depositor credit on his books by opening an account in his name. The demand deposit is a liability on the banker's balance sheet and is the client's claim on the *specie* he deposited. His transferable asset now merely 'consists of figures in bank ledgers and is money only because of confidence in the ability of the banks to honour their liabilities when called upon to do so.' It becomes a kind of fiduciary

Banking, and Economic Thought in Late Medieval and Early Modern Europe: Selected Studies of Raymond de Roover (1974; 1976), at 201–2 and R. A. Goldthwaite, 'The Medici Bank and the World of Florentine Capitalism', (1987) 114 *Past and Present* 3, at 14. See also De Roover, above n 8, at 5, nominally 3 and, in general, 52–9.

16 Hall, above n 13, does not even mention them.

17 R. L. Reynolds, 'A Business Affair in Genoa in the Year 1200: Banking, Book-keeping, a Broker(?) and a Lawsuit', in *Studi di storia e diritto in onore di Enrico Besta* (1938), vol. 2, 165, at 171–2.

18 De Roover, above n 15, at 202.

19 Reynolds, above n 17, at 171.

20 The view that attributes an important role in the early era of banking to the lending function, expressed by Sayous, above n 4, at 2 and 6, is now disfavoured. See, e.g., Hall, above n 13, at 76 and De Roover, above n 15, at 202.

21 See Geva, above n 1, ch 3, section 3, at 118–24.

22 De Roover, above n 15, at 213.

23 See R. De Roover, 'What is Dry Exchange?', in Kirshner (ed.), above n 15, 183, at 184.

24 Holdsworth, above n 11, at 178.

25 See, in detail, R. C. Mueller, 'The Role of Bank Money in Venice, 1300–1500', in Fondazione Giorgio Cini et al. (eds), *Studi veneziani* (NS) (1979), vol. 3, 47. The ensuing discussion is based on this paper.

money, a claim for which the banker has substituted his 'promise to pay' for that of the depositor in the making of payments.[26]

Customers held current accounts, in which deposits were made, to be used for book transfers. Parties to a book transfer had to appear in person before the bankers; that is, only oral payment orders were accepted. Written orders, as distinguished from letters authorizing agents to act on behalf of parties, did not exist. The inscription by a banker of a debit and credit in a current account was authoritative as a notarial instrument, and hence reliable. Bankers held accounts with each other. This allowed for interbank transfers, albeit under a mechanism which is not clear to researchers today.[27]

Accounts among major banks may have been settled only on irregular intervals. In fact, the holding of correspondent accounts by banks with each other was often abused. Such was the case when a customer wishing to withdraw cash was sent by his banker to a correspondent (holding an account for the customer's banker)—who may have sent the customer to another correspondent (holding an account for the correspondent of the customer's banker)—and so on.

Banks kept with them only a fractional reserve, namely a limited amount of coined money, ready to satisfy an anticipated demand for cash withdrawal; they lent or invested most money received on deposit. Availability of payment by book transfers, recognized by early-fourteenth-century legislation in Venice, allowed banks to reduce cash holdings even further and increase their investments and credit extensions.

Loans were made by banks in coin, by way of an overdraft allowed to be incurred on a current account, and in the form of a credit entry to a current account. This required tight regulation dealing with a variety of subjects, such as banks' obligations to pay in cash on demand, the discouragement of banks to send customers seeking cash from one bank to another, and above all, the licensing of banks, a procedure which included a requirement to post surety with a state magistracy before being licensed. While there were no circulating banknotes, the system as a whole expanded the monetary base, so that money actually consisted of coins in the hands of the public plus deposits kept with banks. Such deposits served as 'bank money' and were very popular in making a variety of commercial, rental, and government payments.

This local banking system was typical for continental Europe throughout the fourteenth and fifteenth centuries. According to Huvelin, the banker's promise to the payee could be explained under Roman law as *receptum argentarii*.[28] The *receptum* was a banker's promise, acting under the instruction of his client and for the client's accommodation, to perform on a fixed date towards a third party.[29] Huvelin was cognizant that, by the time of Justinian's reform projects in the sixth century, the *receptum argentarii* had gone into

[26] Mueller, above n 25, at 48.

[27] Possibly, the procedure for an interbank transfer also required each banker to appear before the other. One may speculate that, first, the two parties appeared together with the payee's banker before the payer's banker, and, subsequently, the two parties appeared together with the payer's banker before the payee's banker. Alternatively, the presence of the bankers was dispensed with, as they relied on each other, and anyway would settle only periodically, so that it was only the parties themselves that had to attend at each banker. Either way, it looks as if the procedure required two 'attendances' at a banker's place as opposed to one only in an in-house transfer on the books of the same bank. Note, however, that contrary to Mueller, above n 25, at 74–6, M. Manning, E. Nier, and J. Schanz (eds), *The Economics of Large-value Payments and Settlement: Theory and Policy Issues for Central Banks* (2009), at 24 find 'no conclusive evidence' for interbank transfers in Medieval Venice.

[28] P. Huvelin, 'Travaux récents sur l'histoire de la lettre de change', (1901) 15(1) *Annales de droit francais, étranger et international* 1, at 20–1 and fn. 1.

[29] See Geva, above n 1, ch 5, section 5, at 210–14.

disuse,[30] but claimed that this was confined to the Eastern Roman Empire and did not reflect the reality in Italy.[31]

One advantage of this explanation is that under the *receptum argentarii*, the banker's undertaking is independent, namely entirely autonomous, free of defences that may have been available to the client against the third party. At the same time, the banker's undertaking to the third party under *receptum argentarii* does not affect the client's own original obligation to the third party, so that it was not equivalent to be a full discharge of that obligation.[32] This explanation is, however, contrary to the prevailing understanding of the medieval bank book transfer mechanism, which was that it provided a complete discharge of the payer-client's obligation. Hence, the *receptum argentarii* explanation of payment and discharge may be unsatisfactory.

An alternative analysis is provided by De Roover, who speaks of the method of payment by book transfer as an 'assignment in bank', which '[a]ccording to the medieval jurists . . . discharged the debtor from any other obligation'.[33] Relying particularly on the fourteenth-century Italian jurist, Bartolo Da Sassiferrato, he refers to the book transfer as an 'assignation',[34] requiring the consent of the debtor, banker, and creditor. When that transaction occurs in a bank, the debtor is irrevocably discharged, so that the transfer is equal to payment in current coins. This is so 'on condition that the banker or money changer promises the creditor to hold the sum transferred at the creditor's disposition'. This rule effectively treats the book entry on the banker's books as an absolute discharge of the original debt, upon which the creditor forfeits his recourse against the original debtor. The rule is said, however, to apply only to a bank transfer. In other cases of an 'assignation', namely one involving a third party other than a public moneychanger, the creditor keeps his right of recourse against the debtor to be used where the non-bank third party declines to honour his undertaking.[35]

De Roover's reasoning appears to be premised on *cessio*, namely, the transfer to the payee/creditor of the debt owed by the banker to the payer/debtor. However, *cessio* does not explain the autonomy of the banker's obligation, that is, its enforceability by the payee-creditor against the banker free of defences that may have been available to the banker

[30] A point highlighted in Justinian's Code, Bk IV, Title XVIII, para. 2, in *Corps de droit civil romain*, vol. 9 (trans. P. A. Tissot, 1807; repr. 1979), at 39.

[31] Huvelin, above n 28, at 20, fn 1.

[32] As discussed in Geva, above n 1, ch 5 section 5, at 210–14.

[33] De Roover, above n 15, at 215 and 216 (respectively).

[34] For the 'assignation' as the assignment or cession with recourse, see, e.g., J. Duponchel, *De la cession d'actions en droit romain: Du titre à ordre et des conséquences qui s'y rattachent en droit français* (1870), at 10. Terminology on the point is, however, quite confusing. For example, in Scotland, 'assignation' is used to denote 'assignment'. See, e.g., S. Styles and N. R. Whitty (eds), *Glossary of Scottish and European Union Legal Terms and Latin Phrases* (2nd edn, 2003), at 17, defining 'assignation' as 'the act of transferring rights in incorporeal moveable property from one party to another' or 'the document transferring such rights'. See also *British Linen Co. v Hay & Robertson and Brown* (1885) 22 SLR 542 (First Division); and J. Bouvier, *A Law Dictionary: adapted to the constitution and laws of the United States of America, and of the several states of the American Union* (rev. 6th edn, 1856), available at http://www.constitution.org/bouv/bouvier.htm, defining 'assignation' in Scots law as '[t]he ceding or yielding a thing to another of which intimation must be made'. At the same time, the Swiss Code of Obligations distinguishes (in French) between '*assignation*' and '*cession*' (Arts 466 and 164, respectively), the former being an order or authorization to pay and the latter being an assignment of a right.

[35] R. De Roover, *L'Evolution de la Lettre de Change XIVe–XVIIIe siècles* (Paris: Librairie Armand Colin, 1953), at 208. See also ibid., at 212–13. In these three pages he summarizes the views of Bartolo Da Sassofferato (1314–57), Baldo Degli Ubaldi (1327–1400), and Giasone Del Maino (1435–1519). De Roover acknowledges (ibid., at 208) Bartolo's text to be 'obscure' but claims to follow its usual interpretation including by the two other jurists. Ibid., at 85–7: De Roover refers to the distinction between a book transfer with a banker and that with another debtor, a point to be revisited in Section V in relation to the origins of 'endorsement'.

against the payer-debtor.[36] In fact, De Roover's explanation is not based on *cessio*, as he specifically mentions a requirement as to the consent of *all* three, namely the payer, banker, and payee, and not only that of the payer and the payee, as would have been the case under *cessio*. True, a banker is likely to agree to the transfer of a credit balance from the account of one customer to that of another, and may be in breach of contract if he declines to act on the transfer instructions; hence the banker's consent is likely to be routinely given. At the same time, his consent and affirmative response in the form of posting on his books the entries reflecting the book transfer is an essential component of the payment transaction; this precludes the book transfer from being a mere *cessio* from the payer-debtor to the payee-creditor. Rather, inasmuch as the payer's discharge is premised on the banker's autonomous obligation towards the payee, other than the absence of required formalities, the operation of the bank book transfer is reminiscent of a perfect execution of a delegation order by means of novation by stipulation under Roman law.[37]

The medieval banking book transfer thus requires the presence and consent of all three parties, namely, debtor-payer, creditor-payee, and paymaster-banker. Strictly speaking, then, in not being satisfied with a bilateral agreement, it could be classified neither as a delegation,[38] requiring the creditor-paymaster's agreement, nor as an assignment *cessio*, requiring only the debtor-creditor agreement.[39] At least in a superficial way, it is reminiscent of the *Talmudic* 'presence-of-all-three' declaration.[40]

For its part, the presence-of-all-three requirement, and hence, the lack of reliance on a written instruction, had a strong tendency to eliminate fraud. The requirement was not a source of inconvenience, because usually all three parties were situated in the same vicinity and the banker tended to keep his books available on his desk.[41] However, on occasion, the debtor was perhaps ill and thus prevented from coming to the banker. It was on such rare occasions that written payment orders started to be used. Gradually, however, by the fourteenth and fifteenth centuries, written payment orders spread and became common, first in Italy, outside Venice, and particularly in Tuscany, including Florence, and then elsewhere outside Italy.[42] Initially, '[w]ritten instruments could be used . . . only as supplementary memoranda or as instruments appointing an agent'.[43] Ultimately, their presentment to the banker by one party dispensed with the presence of the other party.

It may be that some of these payment orders were, in effect, cheques, each issued by the payer/debtor to the payee/creditor, instructing the banker to pay to the creditor, as well as authorizing the creditor to collect from the banker.[44] It is in this process that a medieval cheque mechanism was born. Medieval cheques were not negotiable, and were usually even non-transferable.[45] It may be that they were not widely used other than at specific

[36] The general rule is that the transferee under *cessio* takes the debt subject to defences available to the obligor against the transferor. See Geva, above n 1, ch 5, section 9, at 233–41.

[37] As discussed in ibid., ch 5, section 6, at 214–23.

[38] For the perfect execution of the delegation by means of novation by stipulation, see ibid.

[39] For *cessio* in Roman law, see ibid., ch 5, section 9, at 233–41.

[40] Discussed at length in ibid., ch 7, section 3, at 330–42.

[41] A point highlighted by Usher, above n 3, at 90, where he speaks of 'the custom of transacting all important business in person if possible' as facilitated by '[t]he compactness of medieval and early modern towns and the concentration of the commercial community'.

[42] For Barcelona, see, e.g., ibid., at 283–8.

[43] Ibid., at 283.

[44] For this nature of the cheque, see Geva, above n 1, ch 4 (possible Talmudic origins) as well as ch 3, section 5, at 140–55 (Greco-Roman Egypt).

[45] However, notwithstanding sources in the ensuing note, see the in-depth discussion (in Italian) of F. Melis, *Note di storia della Banca pisana nel trecento* (1955) on an extensive cheque collection from the second half of the fourteenth century in Tuscany. Melis identifies cheques transferable by the instruction of the payee placed on the back (*recto*) of the cheque (ibid., at 112, by reference to ibid., at 98 fn 244). The example given is of a situation in which the transferee was identified in the original cheque, that is, the payee was authorized to transfer the cheque

times and places.[46] They initiated either a payment in cash or a book transfer. Either way the cheque accomplished 'the transfer of the creditor's right to a third party'[47] and thus did not generate a legal perspective of its own.

Major innovations took place in Amsterdam, presumably in the transition from the sixteenth to the seventeenth century. Thus, moneychangers, who were 'transformed' into 'cashiers' (or *kaissiers* in Dutch), facilitated payments initiated by 'written . . . *assignaties*'. These instruments, which embodied depositors' payment orders given to their 'cashiers', 'acted as checks' that '[l]ike bills of exchange . . . were endorsable and thus might pass, as means of payment, from hand to hand'.[48] In addition, the receipts that 'cashiers' issued to their depositors 'could take the form of promises to (re)pay the sum deposited'. As such, these instruments served as goldsmith notes, and 'equally became negotiable by endorsement'. Gradually, such promises became payable to bearer, and 'effectively raised the money supply'.[49] This reads as a forerunner of the English goldsmith system that heralded modern banking. However, in Amsterdam, a parallel development was arrested with the establishment of the Bank of Amsterdam (the *Wisselbank*) in 1609, whose operations superseded to a large extent, those of the moneychangers.[50]

Indeed, throughout the Continent, during the fifteenth century, private deposit banks declined. Repeated bank failures undermined the confidence of merchants and further triggered hostility by public authorities.[51] Together with a chronic shortage of good coins, increased risk in keeping money with a banker led to a devaluation of 'bank money' compared to that of 'coined money'.[52]

Prohibitions against private deposit and transfer banking were further prompted by the perception of authorities throughout Europe that 'money-changers acting as deposit bankers' threatened 'the integrity of the ducal mints and coins'. This threat was premised on the allegation that moneychangers were involved in 'circulating debased and counterfeit

to a specified transferee, from which I gather that no further transfer could have been made. This is, of course, a far cry from free circulation. I relied on an informal partial translation of Melis.

46 See, in general, De Roover, above n 15, at 216–17, as well as Usher, above n 3, at 90–4. For an extensive discussion, see M. Spallanzani, 'A Note on Florentine Banking in the Renaissance: Orders of Payment and Checks', (1978) 7(1) *Journal of European Economic History* 145. The author points out (e.g., ibid., at 146) the difficulty in identifying with certainty those payment orders which are cheques. Furthermore, his definition of 'check' (ibid., at 148), as 'an order of payment issued on a bank . . . by someone who has funds available', is too broad and in effect does not distinguish between cheques and other payment orders. At the same time, my overall impression from the article is that he speaks of a 'check' in the correct sense.

47 Usher, above n 3, at 91, referring in the quoted language to the depositor-drawer as 'creditor' (of the bank) and to his own (the 'creditor'-depositor-drawer's) creditor, namely to the payee, as the 'third party'.

48 The origins of the endorsement of the bill of exchange is discussed in Geva, above n 1, ch 8, section 5, at 401–18. For such developments during this period, see also D. De Ruysscher, 'Innovating Financial Law in Early Modern Europe: Transfers of Commercial Paper and Recourse Liability in Legislation and *Ius Commune* (Sixteenth to Eighteenth Centuries)' (2011) 19 *European Review of Private Law* 505.

49 All quotes in this paragraph are from P. Dehing and M. 'T Hart, 'Linking the Fortunes: Currency and Banking, 1550–1800', in M. 'T Hart, J. Jonker, and J. L. Van Zanden (eds), *A Financial History of the Netherlands* (1997), at 37, 43. See also P. Spufford, 'Access to Credit and Capital in the Commercial Centres of Europe', in K. Davids and J. Lucassen (eds), *A Miracle Mirrored: The Dutch Republic in European Perspective* (1995) 303, at 306.

50 Dehing and 'T Hart, above n 49, at 43–4. Note that with the establishment of the Bank of Amsterdam in 1609 'the municipal authorities of Amsterdam temporarily prohibited all moneychangers and cashiers and their paper money . . . '. The ban was lifted in 1621 'and the remaining moneychangers and cashiers became licensed officials'. However, in this new capacity, cashiers were required to hold accounts with the Bank of Amsterdam and were prohibited from keeping money *in specie* for longer than 24 hours. The English goldsmith system is discussed in Geva, above n 1, ch 10, section 2, at 469–84.

51 De Roover, above n 15, at 219.

52 F. C. Lane, *Venice: A Maritime Republic* (1973), at 328–9; for the same phenomenon in Venice at a later period, see ibid., at 402. See also F. C. Lane, 'Venetian Bankers, 1496–1533: A Study in the Early Stages of Deposit Banking', (1937) 45 *Journal of Political Economy* 187, at 200–1.

foreign coins and buying coin and bullion for export' in violation of restrictions on coinage and trade in precious metal.[53] Ultimately, in a process that 'did not gain momentum until the last quarter of the sixteenth century', public banks gradually replaced private banks in commercial centres.[54] Heralding this development, Venice gave rise to a 'distinctive style' of banking, referred to as giro banking, under which the primary purpose of banks was the making of payments on behalf of customers rather than making loans.[55]

Continental public banks that followed and expanded on this model were exchange banks, at which bills of exchange, which are discussed in the following section, were required to be payable, so as to compel merchants to open accounts with them.[56] Otherwise, these banks were predominantly deposit and transfer banks. Some allowed the use of cheques (or 'assignations');[57] others insisted on oral orders in the presence of all parties. All were originally precluded, and later strictly restricted, from lending or making investments. At most, they were allowed to make advances to their own governments and to certain select institutions; the extension of credit to others, by way of overdraft or otherwise, was however strictly forbidden.[58] They did not provide financial intermediation and were not 'banks' in the full modern sense of the word.[59]

Public banks provided an efficient mechanism for local payments by means of book transfers. At times, the value of the 'bank money' deposited with public banks was higher than the same amount in coined money.[60] This was so because 'it represented money exactly according to the standard of the mint'. Moreover, such 'bank money' was secure from fire, robbery, and accidents; it was also easily transferable;[61] it reduced risk and was part of a system that provided adequate supplies of good coined money to satisfy actual demand for it.[62] The Bank of Amsterdam, 'established in 1609 under the guarantee of the city',[63] was a leader among the public banks.[64]

[53] J. H. Munro, 'The Medieval Origins of the Financial Revolution: Usury, *Rentes*, and Negotiability', (2003) 25 *International History Review* 505, at 548, speaking of fifteenth-century 'economically advanced Low Countries'.

[54] De Roover, above n 15, at 223. For the public bank in Venice as a successor of the private bank system, which failed primarily due to excessive lending by means of simple book entries, see C. F. Dunbar, 'The Bank of Venice', (1892) 6 *Quarterly Journal of Economics* 308; and G. Luzzatto, 'Les banques publiques de Venice (siècles XVI–XVIII)', in J. G. Van Dillen (ed.), *History of the Principal Public Banks* (1st edn, 1934; repr. 1964), at 40. See further Chapter 17 in this volume.

[55] Lane, *Venice*, above n 52, at 147. See also Lane, 'Venetian Bankers', above n 52, at 187, specifically rejecting earlier such institutions and stating that 'Giro banks did not come into existence until the late sixteenth century, at Venice in 1584'.

[56] For example, for the Bank of Amsterdam (founded at the beginning of the seventeenth century), see J. G. Van Dillen, 'The Bank of Amsterdam', in Van Dillen (ed.), above n 54, 79, at 84.

[57] See, e.g., for the Bank of Amsterdam, ibid., at 86 where it is further stated that '[t]he assignations should be handed by the customer personally or by his proxy'.

[58] De Roover, above n 15, at 228. This is consistent with the description given by G. Malynes, *Consuetudo, vel Lex Mercatoria or The Ancient Law Merchant* (1622), at 133 as to the use of 'money . . . remaining in the Bankers hands'.

[59] For these banks, see Van Dillen (ed.), above n 54.

[60] Van Dillen, above n 56, at 88, specifically speaks of 'banco-florin' or 'banco-money' as distinguished from the inferior metallic 'current florin' or 'current money'.

[61] Adam Smith, *The Wealth of Nations* (1776; ed. E. Cannan 1976), vol. 1, at 504 in relation to the Bank of Amsterdam; cited in agreement (as 'Adam Smith Bk iv chap iii') by Holdsworth, above n 11, at 180.

[62] This is in contrast to the reverse fifteenth-century process devaluating bank money set out at De Roover, above n 15, at 219; Lane, *Venice*, above n 52; Lane, 'Venetian Bankers', above n 52, and text accompanying nn 51–2 above.

[63] Smith, above n 61, at 504. See further Chapter 17 of this volume.

[64] See, e.g., Van Dillen, above n 56; Smith, above n 61, at 503–13; Dehing and 'T Hart, above n 49, at 45–51; and S. Quinn and W. Roberds, 'The Big Problem of Large Bills: The Bank of Amsterdam and the Origins of Central Banking' (22 January 2007). (For an earlier version of this article, see Federal Reserve Bank of Atlanta, Working Papers Series 2005–6 (August 2005), albeit the latter contains lots of econometrics, which is inaccessible to a non-specialist such as myself). For money and banking in Amsterdam, see also J. De Vries and A. Van Der Woulde, *The First Modern Economy: Success, Failure, and Perseverance of the Dutch Economy, 1500–1815* (1997), at 81–91, 129–34.

III. Heralding the Bill of Exchange: The Medieval Continental Bill of Payment

International medieval banking is primarily associated with the exchange activity of merchant bankers. This activity gave rise to the modern bill of exchange.

Under modern legislation,[65] the bill of exchange (or draft) is an unconditional written signed order, addressed by one person to another, requiring the addressee to pay a sum certain in money. It may be payable to the order of a designated payee or (though not everywhere) to the bearer, on demand or at a fixed or determinable future time.[66] It may be transferred from one person to another by 'negotiation', consisting of either a mere delivery in the case of a bill payable to the bearer, or of delivery plus the transferor's signed 'endorsement'[67] in the case of a bill payable to the order.[68] Under certain conditions,[69] it may be enforceable by its holder for its entire sum, free of third party's adverse claims, as well as of any party's contract defences.[70] The instrument is referred to as 'negotiable' due to its transferability by 'negotiation' and the power of 'negotiation' to 'improve' on the transferee's title.[71] Throughout its history it has served as a credit and payment mechanism.

De Roover identified two stages in the history of the bill of exchange from its inception to the end of the sixteenth century. The first lasted approximately from 1275 to 1350. At that stage, liability on the bill of exchange required a notarial confirmation of the signature.[72] This requirement disappeared in the second stage, which lasted until the end of the sixteenth century. With the disappearance of the notarial requirement, the instrument

[65] Particularly the English Bills of Exchange Act 1882 (c 61) (hereafter BEA), on which legislation throughout the world is modelled in common law jurisdictions and others that have been under British influence; Convention Providing a Uniform Law for Bills of Exchange and Promissory Notes, 7 June 1930, 143 LNTS 257, Annex I, on which legislation throughout the world is modelled in civil law countries including those in Continental Europe (hereafter Geneva Bills Convention); the Uniform Commercial Code UCC, Art. 3 (1990, as amended 2002) (hereafter UCC); and United Nations Convention on International Bills of Exchange and International Promissory Notes (UN Doc. A/RES/43/165), (1988) 42 *Yearbook of the United Nations* 834 (hereafter UNCITRAL Bills Convention).

[66] Relevant provisions, in each case in conjunction with immediately ensuing ones, are BEA, above n 65, s. 3(1); Geneva Bills Convention, above n 65, Art. 1; UCC, above n 65, § 3-104; UNCITRAL Bills Convention, above n 65, Art. 3(1) (the latter two do not cover a bill stated to be payable to bearer).

[67] According to J. M. Holden, *The History of Negotiable Instruments in English Law* (1955, repr. 1993), at 44, fn 6, '[t]he spelling "endorse", is more common than "indorse" in commercial practice... At the same time', he goes on to say, '[t]he *Bills of Exchange Act, 1882*, adopted the spelling "indorse"'. I should add that on that point UCC, above n 65, Art. 3 follows suit and uses 'indorse'. In contrast, the Canadian spelling, reflected in the Bills of Exchange Act, RSC 1985, c B-4, and adopted in this text, is 'endorse'.

[68] BEA, above n 65, s. 31; Geneva Bills Convention, above n 65, Art. 11; UCC, above n 65, § 3-201; UNCITRAL Bills Convention, above n 65, Art. 13. The term 'negotiation' appears only in the BEA and UCC Art. 3. An endorsement which does not designate the transferee is an endorsement in blank, which effectively 'converts' the bill into one payable to the bearer. This is true even where instruments originally issued payable to the bearer are not recognized. For the 'conversion' by blank endorsement of the bill payable to order see, e.g., BEA, s. 34(1); Geneva Bills Convention, above n 65, Arts. 12–13; UCC, above n 65, § 3-205; UNCITRAL Bills Convention, above n 65, Arts. 13–16.

[69] Fundamentally, these conditions refer to the taking of the instrument by the holder in good faith, without knowledge, and for value. See, e.g., BEA, above n 65, s. 29(1); Geneva Bills Convention, above n 65, Arts. 16–17; UCC, above n 65, § 3-302; UNCITRAL Bills Convention, above n 65, Art. 29.

[70] See, e.g., BEA, above n 65, s. 38(2); Geneva Bills Convention, above n 65, Arts. 16–17; UCC, above n 65, §§ 3-305 and 3-306; UNCITRAL Bills Convention, above n 65, Art. 30.

[71] For an extensive discussion on the negotiability concept and the definition of a negotiable instrument, see D. V. Cowen and L. Gering, *Cowen on the Law of Negotiable Instruments in South Africa.* Volume 1: *General Principles* (5th edn, 1985), at 1–70.

[72] For the early bill of payment as a notarial instrument, see, e.g., A. E. Sayous, 'L'origine de la lettre de change' (1933) 12 (ser. 4) *Revue historique de droit français et étranger* 66; A. E. Sayous, 'Note sur l'origine de la lettre de change et les débuts de son emploi à Barcelone (XIVe siècle)', (1934) 13 (ser. 4) *Revue historique de droit français et étranger* 315; and Sayous, 'Méthodes commerciales XV', above n 3, at 274–86.

nevertheless retained some formal language,[73] and yet had become an ordinary 'informal letter',[74] written by non-lawyers and without the benefit of legal advice, as part of ordinary commercial correspondence between merchants.[75] During these two stages, the instrument was not negotiable and served as an evidentiary document required for the execution of the exchange contract.[76] During that period, discussed in this section, the instrument is referred to as a bill or letter of payment.[77] This section analyses the effect of bills of payment, and the principal features of their use as a mechanism for the settlement of obligations in the Middle Ages.

The bill or letter of payment existed, and probably originated, as a mechanism for the execution of the medieval contract of *cambium*.[78] The adoption of that use is not contested by those claiming an earlier ancestry of the bill of payment,[79] whose views are in any event strongly contested.[80] The *cambium* contract has three meanings, all denoting certain exchanges.[81] First, in its broadest Romanist jurisprudential sense, it is a contract by which a species of one genus is exchanged for another species of the same genus. Second, in a narrower sense, it is a contract for the exchange of money for money. Third, in the narrowest sense, it is a contract for the exchange of money of one currency with money of another currency and the transportation of the money received to another place. However, transportation need not be physical. Rather, as a mechanism for the execution of the medieval contract of *cambium* in that narrowest sense, the letter of payment 'made it possible to transfer purchasing power without the shipment of actual coins'.[82]

In its broadest sense, as a contract for the exchange between two species of the same genus, *cambium* is a subcategory of barter, or *permutatio*. The latter denotes an exchange in general, which otherwise is concerned with the exchange of a species of one genus with a species of another genus.[83]

[73] M. T. Boyer-Xambeu, G. Deleplace, and L. Gillard, *Private Money & Public Currencies: The Sixteenth Century Challenge*, trans. A. Azodi (1994), at 30.

[74] Origo, above n 11, at 147.

[75] Sayous, 'Méthodes commerciales XV', above n 3, at 276. Notarial requirement reappeared however in connection with a proof of dishonour (ibid., at 285).

[76] De Roover, above n 35, at 18–19. A third stage lasted nearly until the end of the eighteenth century. During that stage, the instrument acquired its negotiability features; particularly, it became transferable either by delivery alone, or by delivery and endorsement, and gradually lost its connection to the exchange contract. De Rover enumerates two subsequent periods, one of expansion, in the nineteenth century during which the bill of exchange became discountable, followed by a subsequent contraction in terms of actual use.

[77] Huvelin, above n 28, at 5. Cf. De Roover, above n 35, at 40. An earlier variation was known as a bill or letter of fair ('*lettre de foire*'). See, e.g., M. G. Des Marez, 'La lettre de foire au XIIIe siècle', (1899) 12 *Revue de droit international et de legislation comparée* 533; and A. P. Usher, 'The Origin of the Bill of Exchange', (1914) 22 *Journal of Political Economy* 566, at 566.

[78] De Roover, above n 15, at 203. For the origins of the bills of exchange in medieval international trade practices, see also Boyer-Xambeu et al., above n 73, at 17.

[79] For a review of such views, see Huvelin, above n 28, at 5–9.

[80] De Roover, above n 35, at 12–17.

[81] A possible fourth meaning, effectively overarching the second and third meanings, is any contract dealing with money or credit as opposed to merchandise (or logically, also to services). See Huvelin, above n 28, at 2.

[82] Origo, above n 11, at 82.

[83] *Permutatio* is '[t]he exchange of one thing for another, a barter. It differs from sale in that instead of money a thing is given as compensation. *Permutatio* is an innominate contract . . . not concluded by mere consent of the parties, as sale, but by an actual, real . . . transfer of ownership from one party to another.' A. Berger, *Encyclopedic Dictionary of Roman Law* (1953), at 628. In Roman law, a contract whose nature is difficult to determine, but which is undoubtedly binding, as for example, where it falls on the border-line between two types, is an 'innominate' contract. See R. W. Lee, *The Elements of Roman Law with a Translation of the Institutes of Justinian* (4th edn, 1956), at 340–2. For the broader context of contracts in Roman law, see Geva, above n 1, ch 5, section 1, at 191–4. *Cambium* is not known in Roman law and thus is not defined by Berger.

In its capacity as an exchange between two species of money, the contract of *cambium* covers three types of monetary exchange:[84] the money change transaction, for the exchange of coins of different denominations or currencies, known as *cambium minitum*; a loan extended in one currency at one place, to be repaid in another currency at another place; and the dry exchange, namely, *cambium siccum* or '*secke* or *drye* exchange', or in one form, *cambium fictivum*, or fictitious exchange.[85]

It is the second type of monetary exchange which gave rise to the bill or letter of payment. That is, the *cambium* or exchange contract is effectively a contract for the loan of money to be repaid in a currency and at a place other than those of the loan itself.[86]

Notwithstanding its substance as a loan, the exchange was not treated by medieval legal doctrine in those terms.[87] Rather, in the eyes of medieval doctrine, the *cambium* or exchange contract involved a genuine exchange between two currencies at a rate reflecting a market price. It further involved the 'transportation' of the money from place to place.[88] Hence, it was exempted from usury laws which regulated only the compensation for a loan, that is, the 'certain gain' for use of money, and neither the price for its transportation from place to place nor its exchange to a different currency.[89] The *cambium* or exchange contract was treated as a simple and genuine currency exchange for which a charge may be imposed as determined at a rate expressing the different value of each currency.

Alternatively, the *cambium* contract was treated not as that of *permutatio* or barter, but rather that of an *emptio-venditio*,[90] namely, of purchase and sale of money. Under that contract, 'absent' money was the thing purchased and sold; it was to be delivered elsewhere, at a specified future time, and for a price paid in 'present' money at the time and place of the conclusion of the transaction.[91] As in connection with *permutatio*, or barter, the transaction was not considered to be a loan, but rather constituted a genuine sale, and as such was

[84] See, e.g., Holdsworth, above n 11, at 126–7.

[85] Thereunder, a loan extended in one currency at one place is ostensibly to be repaid in another currency at another place, as in the monetary exchange transaction between two species of currencies falling into the second meaning of *cambium* just discussed above. However, while in the transaction falling under the second meaning the contracting parties intend repayment to be carried out as contracted, this is not their intent in a transaction falling under this third meaning. Rather, the intent is to convert back repayment to the original currency and place of contract, with the lender profiting from the double conversion, receiving more than lent in the very same original currency of the loan. See in detail De Roover, above n 23, and De Roover, '*Cambium ad Venetias*—Contribution to the History of Foreign Exchange', in Kirshner (ed.), above n 15, 239.

[86] Interestingly enough, both Sayous ('Méthodes commerciales XV', above n 3, at 275) and De Roover (above n 85, at 241) do not rule out the possibility of repayment in the same currency (though always in another place), at least as an exception. And yet neither the former nor the latter analyses this possibility, either from the perspective of the application of usury law or otherwise.

[87] De Roover, above n 35, at 19–21.

[88] Whether the instrument originated as a machinery for transfer, exchange, or the extension of credit, is discussed by Sayous, 'Méthodes commerciales des pays chrétiens de la Méditeranée de XIIe et XIIIe siècles', above n 3, at 316–17.

[89] Regarding the application of usury laws two observations are to be made. First, a charge for a loan repayable in the currency and place of the loan was usurious as it compensated the lender for the use of the money lent. Having involved the exchange between two sets of specific coins, even of different denominations, it was nevertheless not exempted from usury laws. Second, unlike Muslims (Geva, above n 1, ch 6, section 3.4, at 299–301) and in the footsteps of Jews (ibid., ch 7, section 4), Christians did not seem to regard the allocation to the borrower of the risk of loss in transportation as an unlawful gain to the lender in violation of usury laws. Hence, in the case of the Continental letter of payment, involving a loan to be repaid in a place and currency other than of the loan, usury laws did not apply. In any event, cost of 'transportation' was neither explicit nor a factor in the determination of the rate; the conventional wisdom is that it merely set the limits within which the exchange rate between the two currencies fluctuated: De Roover, above n 35, at 11, fn 1 (where the author is sceptical as to the accuracy of that conventional wisdom).

[90] In general for this term, see Berger, above n 83, at 452 ('Emptio venditio').

[91] De Roover, above n 35, at 116, as well as ibid., at 20 where he mentions another possibility, that of a *sui generis* contract. For the terminology of 'absent' and 'present' money, see also Boyer-Xambeu et al., above n 73, at 29.

exempt from usury laws. In this context, it was thus the genuine execution of this sale that gave rise to the bill of payment.

In any event, the terminology of 'present' and 'absent' money, denoting the two currencies involved in the exchange, was not limited to the *emptio-venditio* theory for the *cambium* contract. Rather it was equally applicable to the *permutatio* or barter theory, under which 'absent' money was exchanged or bartered (rather than purchased and sold as under the *emptio-venditio* theory) in the *cambium* contract for 'present' money.

Originally, bills were payable at medieval fairs, mostly those of Champagne. Fairs were, however, soon replaced by commercial centres. According to De Roover:[92]

> By 1325 . . . the rôle [sic] of the fairs of Champagne was played out . . . In the fourteenth and fifteenth centuries, the banking places of Europe were: Bologna, Florence, Genoa, Lucca, Milan, Naples, Palermo, Pisa, Siena, Venice, and the court of Rome in Italy; Avignon, Montpellier, and Paris in France; Barcelona, Valencia, and Palma de Mallorca in Spain; Bruges in Flanders; and London in England. . . . Paris declined shortly after 1400 . . . as a result of the Hundred Years War, and its place was taken by the fairs of Geneva and, after 1465, by those of Lyons.[93] There were no banking places east of the Rhine, although the fairs of Frankfurt-on-the-Main began to emerge . . . toward the end of the fifteenth century . . .[94]

Medieval bills were payable either at sight, at so many days after sight, at so many days from a specific date, or sometimes at the conclusion of a fair.[95] Typically, however, a bill was paid at *usance*; it became due after a certain period of a fixed time determined by the mercantile custom for each pair of commercial centres. It could also be paid either at a slightly lower rate at *half-usance* or a slightly higher rate at *double-usance*. In each case, the amount to be repaid was fixed in advance; in theory it reflected the anticipated value of the loan in the currency measuring the repayment obligation according to the anticipated exchange rate upon maturity. However, in practice, it also included hidden interest charges to cover the use of the money actually lent. At the same time, not being based exclusively on the hidden interest charge, the rate of return to the lender was unknown,[96] as it depended on how the exchange rate would swing. In fact, a lender could even lose money in case of unanticipated fluctuations.[97] In other words, the transaction was speculative, which is another reason why usury laws did not apply.

Thus, the bill or letter of payment was a credit instrument facilitating the transportation of money from place to place, particularly in the execution of the payment obligation by the obligor of the exchange contract. It gave the obligor the use of the money between receiving it at one place and paying it at another. It further relieved him from the risk of loss in transit. In other words, the bill 'was not only a loan instrument but also a remittance contract that "transferred funds", or more accurately, effected payments between distant cities without any movement of precious metals between them'.[98]

[92] De Roover, above n 15, at 205.

[93] For a map titled 'The European Triangle of Exchange by Bills during the Heyday of the Lyons Fairs, 1533–75', see Boyer-Xambeu et al., above n 73, at 80. Cities linked to Lyon, and in some places, also bilaterally, are Palermo, Messina, Rome, Lucca, Florence, Venice, Milan, Genoa, Antwerp, London, Rouen, Median del Campo, Lisbon, Seville, and Valencia.

[94] However, there may not be a universal agreement as to exact timing. Cf. Bergier, above n 10, at 116–29, speaking of the 'irresistible' ascent of German banks to hegemony in the financial life of Europe as occurring between 1480 and 1520 or 1530.

[95] R. De Roover, *The Rise and Decline of the Medici Bank 1397–1494* (1963, 2nd print. 1968), at 110. Already in the early period Sayous noted the rarity of bills payable on demand. Sayous, 'Méthodes commerciales XV', above n 3, at 282. The sight bill did not become widespread until seventeenth century. See Boyer-Xambeu et al., above n 73, at 40.

[96] De Roover, above n 35, at 55.

[97] De Roover, above n 85, at 243.

[98] Munro, above n 53, at 543

In practice, the bill or letter of payment served as an instrument for payment of debts incurred in commerce in a setting under which the caravan trade had been replaced by a sedentary commerce. In the former, the seller accompanied the goods. In the latter, the seller shipped them to a fair outside his place of business; that is, the merchant shipped goods to a foreign market in order to sell them there. To that end, he secured permanent representation in the foreign market by means of factors/agents, partners, or correspondents. In the sedentary commerce, the seller expected to be paid in a place and currency other than his own. To that end, the bill or letter of payment served as a facility for both the transmission of funds or payment from place to place as well as for the conversion of one currency to another.[99]

The document's roots are in a notarial instrument called an *instrumentum ex causa cambii*. It contained the authenticated signature of a debtor who thereby acknowledged receipt of money in local currency and promised to repay it elsewhere and in another currency. Such was the document originally used by Genoese bankers who usually promised to repay at the fairs of Champagne.[100] Over the years, particularly in light of the close circle of signers involved in issuing such documents and their familiarity with each other, the notarial requirement was abandoned. Nevertheless, adherence to form was preserved: a bill or letter of payment had been required to use 'exact formulas' and 'customary wordings' and must have been handwritten by its issuer, rather than a scribe.[101]

In the process, the notarial promise to pay transformed itself to a signed order[102] given to an agent or correspondent in the place of payment, who would then give the promise to pay by means of accepting the order. In terms of its contents, the bill or letter of payment was thus a written order given by the borrower, as the drawer of the letter. The drawer's order was addressed to a drawee. The drawer's order to the drawee was to pay to the payee, i.e. the recipient of the letter. The payment to be made by the drawee was denominated in the designated 'absent' currency, and was to be made at the designated place of payment. This payment was in repayment of the loan received by the drawer/borrower from the remitter/lender, denominated in the 'present' currency, made at the place of the loan. To obtain payment, the payee was to present the document to the drawee either directly for payment, or first for acceptance and subsequently for payment. Endorsement was introduced in the course of the sixteenth century but did not become prevalent until the seventeenth century; hence, no practice of negotiation had been known, so that bills or letters of payment did not circulate.[103] To that end, bills were *issued*—and not 'sold'[104]—by drawers/borrowers to remitters/lenders, who collected on them.[105]

It was once thought that, in the typical scenario, the letter or bill of payment was for the payment of a debt owed by the remitter/lender (located in one city) to the payee/receiver (located in another city). In this setting, the drawer and drawee were exchange bankers,

[99] For a detailed analysis in a broad context, see De Roover, above n 5, at 42.

[100] De Roover, above n 15, at 203.

[101] Boyer-Xambeu et al., above n 73, at 30.

[102] P. Huvelin, *Essai historique sur le droit de marchés des foires* (1897), at 553–4 speaks of an interim stage of two signed documents, one, being the foreign exchange contract, containing a promise to pay (directed to the remitter), and another, being the bill of payment, containing the order to pay in execution of the contract contained in the first document.

[103] De Roover, above n 15, at 221.

[104] From a legal perspective, it is inaccurate then to refer to 'bills . . . bought and sold,' as referred to, for example, by De Roover, 'Banking and Credit', above n 7, at 10. See also Boyer-Xambeu et al., above n 73, at 26 speaking of the drawer as a 'buyer of bills of exchange'. It is even more inaccurate to speak of 'negotiating commercial paper' as in De Roover, above n 95, at 110. All such terms suggest complete instruments being transferred from one person to another.

[105] For example, 'issue' is defined in BEA, above n 65, s. 2, as 'the first delivery of a bill . . . , complete in form, to a person who takes it as a holder'. See also UCC, above n 65, § 3-105(a).

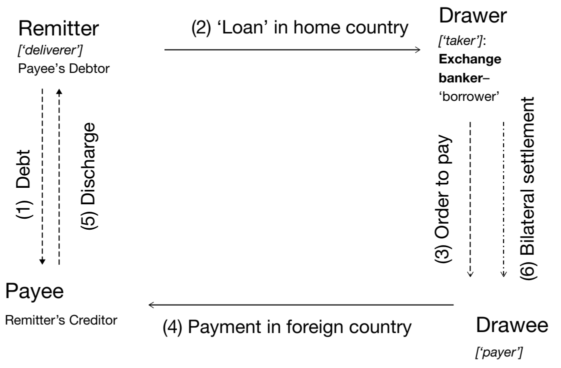

Figure 20.1 Four-party medieval bill of payment in the Continent—Remittance Bill.

respectively located in the place of the loan and the place of repayment. The drawee could thus have been an agent or a correspondent of the drawer.[106] In this case, shown in Figure 20.1, the 'loan' given by the remitter/lender to the drawer/borrower was not a true extension of credit; rather, it was merely a device designed to render the drawee-exchange banker a debtor for the amount deposited in his hands by the drawer in order to carry out payment to the payee. Put another way, in this setting the bill or letter of payment was a contract for the transportation of money and of *cambium* and no more. As a contract for the transportation of money it operated then very much like the Islamic *suftaj*.[107]

This view on the typical setting for the original use of the bill or letter of payment understates and in fact overlooks the credit function of the instrument, and is not favoured anymore. This view possibly reflects a later period, in the course of the transformation of the bill of payment to the negotiable bill of exchange. Instead, current thinking envisages a more sophisticated use of the original instrument. Rather than as a remittance facility for an intercity payment from a debtor to a creditor, the original bill was viewed as a facilitator of trade-finance. As such, it was issued in connection with a borrower's obligation for the repayment of a loan in a foreign market that financed the purchase by the borrower, in his local market, of goods to be exported by him to that foreign market.

Under this second view, illustrated in Figure 20.2, the drawer was typically a seller of goods who sent them for sale in a foreign market. Originally, that foreign market was likely to be a fair. To finance his own procurement of the goods, the seller obtained a loan from a local exchange banker. In return for the money lent, the exchange banker received from the drawer-seller a letter of payment. Under that letter, the drawer-seller instructed a drawee, located in the foreign market to which the goods were to be shipped, to make payment to a payee located in that market. For his part, the exchange banker acted as a remitter; having delivered the money to the drawer-borrower, he sent the letter of payment issued to him by the drawer to the payee.

[106] On this point, Holdsworth, above n 11, at 128–37, following Huvelin, above n 28, at 5. See also C. H. S. Fifoot, 'The Development of the Law of Negotiable Instruments and the Law of Trusts', (1938) 59 *Journal of the Institute of Bankers* 433, at 434.

[107] Except that Islamic *suftaj* did not involve currency exchange. See Geva, above n 1, ch 6, section 3.2, at 284–90 (as well as section 3.3, at 290–9). Briefly stated, the *suftaj* was an early Medieval Islamic payment instrument containing an obligation of a paymaster or his correspondent, acting under the instruction of a remitter, to pay at a place other than that of the issue of the document. It was used for payment or transfer of funds between two places, possibly but not exclusively, from a debtor to a creditor, particularly over routes serving permanent business connections.

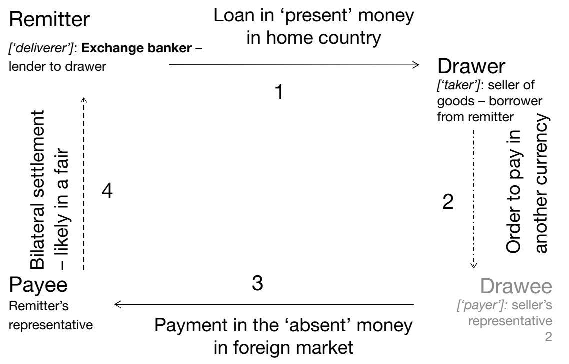

Figure 20.2 Four-party medieval bill of payment in the Continent—Export (trade) Bill.

The drawer-seller used the actual loan proceeds to buy the goods at his own place; subsequently, he shipped the goods to the foreign market. Having anticipated receipt of payment for the goods in the foreign market, in his loan agreement with the exchange banker, the seller undertook the repayment of the borrowed money in the foreign market.[108] As explained below, the bill was stated to be payable in a territorial unit of account of one of the cities, rather than in the actual money of payment.

In this setting, the seller drew the bill or letter of payment on the person who was to sell it on a retail basis in the foreign market, such as a fair. In the letter, the drawer-seller instructed the drawee to pay. Where the drawer-seller knew the identity of his own foreign buyer in advance, prior to the procurement or at least shipment of the goods, the drawee who was instructed to pay by the drawer-seller could also be the buyer. Such would be the case for example where the drawer-seller was a wholesaler in one city who sold the goods to a foreign retailer (in another city) who was to resell the goods in the foreign market, in which case, the foreign buyer could act as the drawee.

However, in most cases, the identity of the buyers was not known in advance; that is, the sale at the foreign market was to be carried out not by a buyer from the drawer-seller, but rather by the drawer-seller's own agent, principal, partner, or correspondent. Under such circumstances, the drawee, who was instructed by the drawer-seller to pay the payee, was the drawer-seller's agent, partner, or correspondent in the foreign market. He was to be paid by the buyers of the goods shipped by the drawer-seller, and use the money received from them for the repayment of the loan originally taken by the drawer-seller from the exchange banker.

Similarly, the designated payee was an agent, principal, partner, or correspondent of the lender in the foreign market. Upon receiving the letter, the designated payee would present it to the drawee for acceptance, and in due course, upon maturity, for payment. The bill was most likely drawn payable at maturity set by reference to the applicable *usance*,[109] so as to target maturity to coincide with the availability of the proceeds from the sale. By reference to the money (or more broadly, value) for which the bill was issued, the exchange banker-lender was the 'deliverer', the drawer-borrower was the 'taker', the drawee was the 'payer', and the lender's correspondent or agent was the 'payee'.[110] Presumably, any profit from the sale formed part of the drawee's commission to the extent that the amount realized was higher than the sum repaid to the payee. It was thus left in the hands of the drawee, acting for the seller-drawer. Any balance, could either be reinvested, for example in the purchase

[108] See, e.g., De Roover, above n 35, at 29–31 and 43–5.
[109] For this term, see text following n 95 above.
[110] See, e.g., Boyer-Xambeu et al., above n 73, at 30.

of goods in the place of repayment, or repatriated to the seller-drawer's place, under the same mechanism. The sum paid to the payee could be repatriated to the remitter, with further profit, by having the payee lending it, against a new 'reverse' bill of payment given by a local borrower, namely an exporter in the payee's place, who was to ship goods for sale at the remitter's place. On that 'reverse' bill, the borrower-exporter would instruct a drawee at the remitter's place, such as his (the exporter's) own agent, to pay to the remitter on the original bill. In the process, the remitter and payee on the original one reversed their roles, and respectively became the payee and the remitter on the 'reverse' one.[111]

It may be thought that the exchange transaction relieved participants from risks associated with counterfeit coins, to which they would have been exposed, had they been dealing with foreign currency with which they were unfamiliar.[112] This is, however, a misconception; generally speaking,[113] coins of the diverse currencies circulated throughout the entire Continent and, as a rule, merchants were familiar with them. Hence, the essence of the exchange was not a change designed to achieve payment in a particular currency as money of payment.

Rather, 'exchange by bills concerned moneys of account'.[114] In practice, bills of payment issued and payable in fairs indicated both units of accounts of the 'present' and 'absent' money.[115] They thus specified the amount paid by the remitter in the unit of account of one place ('present' money) and the amount payable by the drawee in the unit of account of the other place ('absent' money); at the same time, they did not specify money of payment by either party. Moreover, the territorial unit of account in which the bill was payable, that is, the amount of 'absent' money, was not necessarily that of the place of payment by the drawee; rather, between each pair of cities, 'the sum for which the bill was a payment order was always drawn in the exchange money of one of the cities concerned, regardless of the direction of the remittance'.[116]

As a rule, a 'payment fair' (or central exchange fair), which was effectively the medieval money market, took place next to each merchandise fair.[117] Payment procedures were not static. They developed over time and were subject to local variations.[118] A developed payment procedure in the Fairs of Lyons in the fifteenth and sixteenth centuries consisted

[111] J. S. Rogers, *The Early History of the Law of Bills and Notes: A Study of the Origins of Anglo-American Commercial Law* (1995), at 32–6.

[112] Cf. Holdsworth, above n 11, at 128, speaking of the exchangers as coin experts.

[113] Though not without exceptions: Boyer-Xambeu et al., above n 73, at 77.

[114] Ibid., at 70. 'The *money of account* is the currency in which an obligation is measured . . . The *money of payment* is the currency in which the obligation is to be discharged': *Woodhouse Ltd. v Nigerian Produce Ltd.* [1971] 2 QB 23, at 54 per Lord Denning MR (original emphasis). For money of account in the Middle Ages, see P. Spufford, 'Appendix: Coinage and Currency', in Postan et al. (eds), 576, at 593.

[115] For this terminology, see text accompanying n 91 above.

[116] Boyer-Xambeu et al., above n 73, at 83, who further note (ibid., at 82 and 94) how this facilitated 'the systematic enrichment of the exchange bankers' through a 'double exchange transaction' which they explain, ibid., at 82–91 and 94–100. Briefly stated, the mechanism was premised on the fact that in terms of the currency of the amount remitted ('*pretium*' or 'moveable'), the amount in which the bill was drawn payable ('*res*' or 'certain') was lower in the place of origin than in the place of destination. Accordingly, for example (ibid., at 84–5), a Florence remitter would deliver the equivalent of 64 écus (the 'moveable') per one marc (the 'certain') to the drawer who needs this sum in Florence and who would order the drawee (the drawer's associate) in Lyons, under the original bill, to pay the marc equivalent, as specified in the bill (according to the same rate of one marc equals 64 écus), to the payee in Lyons. The payee is associated with the remitter; he would be instructed by the remitter to deliver the sum received, under which one marc in Lyons is worth 65.5 écus, to a borrower in Lyons. Under a return bill, the Lyons borrower would order another person, associated with him, in Florence (and acting as a drawee on the return bill), to pay to the original Florence remitter an amount denominated in marcs, for which he paid in Lyons an equivalent denominated in écus, at the rate of 65.5 écus per marc. The original Florence remitter had thus lent at the rate of 64 écus per marc and received an amount with which he can purchase 65.5 écus per marc. His profit is then 1.5 écus. In this case, the marc and the écus are the relevant units of accounts. For both bills, namely the original (remitting funds from Florence to Lyons) and the return one (remitting funds from Lyons to Florence), the écus is the 'present' money while the marc is the 'absent' money.

[117] See ibid., at 70–91. See also De Roover, above n 35, at 74–82.

[118] See Usher, above n 3, at 110–33. See also Huvelin, above n 102, at 534–93.

of three stages, each taking place on a different day.[119] These stages were acceptance (first day), exchange (third day), and settlement (sixth day). On the day of acceptance all participants would meet; payees would present bills payable in an amount denominated in the territorial money of the fair on respective drawees. In the next one or two days, participants drew up balances. A *conto*, namely a set of exchange rates, was determined on the day of exchange. These exchange rates were designed to apply to future transactions in the aftermath of the fair as well as facilitate further exchanges at the fair itself until day of settlement, so as to allow participants to improve on their exchange balances. Finally, on the day of settlement, all transactions falling due in the fair were settled. Each participant would endeavour to pay his debts by either cancelling out mutual debts or by substituting his claim on another participant; a creditor who accepted this substitution of debtors did so at his own risk. Substitution was by delegation. Thus, where X owed Y who owed Z, Y would instruct X to pay Z. Execution of this delegation was 'perfect':[120] upon the agreement of both X and Z, Y was discharged. Unless X was in a position to cancel this debt by either offsetting it against a debt in the same amount owed to him by Z, or by replacing himself by means of a delegation to his own debtor, he would be in the same position as any debtor who was unable to cancel a debt. A debtor unable to pay a debt by cancellation or delegation would try to defer payment to the next (succeeding) fair, for which he had to pay a fee. Debts that could not be settled in any of these ways had to be settled *in specie*, that is, in a specific currency, serving as money of payment.

This procedure is the forerunner of organized multilateral interbank clearing. Its operation was premised on bilateral netting. However, it allowed the substitution of debtors by agreement and was the genesis of interbank clearing operating in an organized multilateral setting.

The mechanism was workable only in the context of functioning networks of merchants and bankers.[121] In fact, in practice, as indicated, the banking network was superadded to an existing mercantile network. Also, in this setting the letter of payment was more than an instrument for the transportation of money and the conversion of currency, and in which the extension of credit was a mere incident of the transportation of money. Rather, in this setting, its use as a credit facility was a distinctive cardinal feature of the mechanism. Thus, the drawer was a 'true' borrower and the remitter was a 'true' lender. As for the nature of the loan under medieval law and practice, the shipper-drawer-borrower was absolutely and strictly liable to repay the loan, or more specifically, the amount of the instrument, regardless of the safe arrival of the goods to their destination, and irrespective of whether their sale generated adequate proceeds. In this respect it was unlike the older 'sea loan' for whose repayment the borrower was not responsible in case of the loss of the goods.[122]

Certainly, for such a mechanism to work, the drawer/exchange banker in the first setting (that of a straightforward remittance from place to place) and the remitter/lender in the

[119] The ensuing discussion draws on Boyer-Xambeu et al., above n 73, at 91–4.

[120] For the perfect execution of the delegation under Roman law, see Geva, above n 1, ch 5, section 6, at 214–23. Briefly stated, the delegation is an order given by one person ('delegant') to another ('person to be delegated') to pay to, or assume an obligation towards, a third person ('delegatee'). Where the delegant (Y) is discharged towards the delegatee (Z) upon the acceptance by the person to be delegated (X) who thereby becomes liable to the delegatee (Z), the execution of the delegation is said to be perfect.

[121] In the words of De Roover, above n 5, at 43, 'How to get satisfactory representation in foreign parts was perhaps the major problem of [the] sedentary . . . merchant, and success or failure often depended on the selection of efficient and honest representatives.'

[122] For the various types of sea loans, see ibid., at 55–9. Huvelin, above n 28, at 2 mentions the distinction alluded to in the text above by referring to the sea loan as '*prêt à la grosse*' in which the 'transporter', namely the borrower, does not assume operational risks. See also A. E. Sayous, 'Le commerce de Marseille avec la Syrie au milieu du XIII siècle', (1929) 95 *Revue des études historiques* 391, at 405–7.

second setting (that of a remittance to finance the export of goods)[123] envisaged some use, at the place and currency of payment, for the actual funds to be repaid at the place of payment. Such use may have been a profitable contract for the repatriation of the funds.[124] Alternatively, the drawer and drawee in the first setting, and the remitter and the payee in the second, were correspondents, with mutual dealings going back and forth in both directions.

The bill of payment was a flexible facility that could be used to fulfil various functions. The two functions already mentioned were first, a remittance to a distant creditor, and secondly, trade-finance, i.e. the repayment of a loan for the purchase of goods with the proceeds of the sale of the goods in a foreign market. While as stated above, it is likely that the trade-finance function was predominant, it does not follow that the remittance facility did not exist at all. In the remittance setting, the exchange banker acted as a 'borrower';[125] in the trade-finance scenario, he acted as a lender. Either way, the medieval exchange banker neither accepted deposits—other than for transmission—nor lent money out of deposits; rather, he either 'borrowed' for transmission or lent out of his own capital for transmission. It follows that unlike medieval transfer and deposit banking, discussed in Section II above, medieval exchange banking did not involve financial intermediation and unlike modern commercial banking did not thrive on the 'spread' between interest paid on deposits and received on loans. Rather, the medieval exchange banker acted as money-transmitter; his profit flowed from the use of the money in the course of its transit (when he acted as a borrower) and from the exchange and hidden interest rates (when he acted as a lender).

The entire exchange banking enterprise could be profitable only in connection with large capitalization as well as an existing trade network. The latter was put to use for the extra task of transmission and receipt of funds lent or borrowed elsewhere rather than established specifically for the purpose of transmission. Medieval exchange banking was not a retail operation; a merchant participating in the transaction ought also to act on an international scale. Thus, as a 'lender' to the drawer-banker in the first scenario (that of a straightforward remittance from place to place), the merchant must have dealt with a foreign creditor, while as a borrower from the remitter-banker in the second scenario (that of a remittance to finance the export of goods), the merchant must have been a shipper of goods to a foreign market where he either must have dealt with a buyer or, more likely, had a representative.

However, as an adaptation of the function of remittance to a distant creditor, the bill of payment could be utilized also on a smaller scale, for what we call today a traveller's letter of credit.[126] For example, the remitter may be a traveller, student, or pilgrim who gave funds to the drawer, an exchange banker at the place of departure in the currency of that place, with a view to receiving their equivalent at the place of the destination in the currency of that place. Such payment was to be received by the remitter/payee from the agent, principal, partner, or correspondent of the drawer, acting as a drawee. In such a case, the payee was the remitter; however, this particular use could also become a four-party facility, where a

[123] For the two settings, see text accompanying nn 106–8 above.

[124] See text accompanying nn 109–11 above.

[125] This does not preclude the possibility of lending the funds for transmission, which would then be a separate transaction under which the remitter-payer will have to pay the drawer separately in the place and currency of the loan.

[126] See, e.g., De Roover, above n 35, at 44. Ibid., at 90, he describes the letter of credit and bill of exchange as twin documents, with the former usually issued in favour of a non-merchant and payable against a discharge note ('quittance').

remitter forwarded funds to a relative in the point of destination. Moreover, the letter of credit was not limited to personal affairs of individuals. Rather, as happened, for example, at the times of the crusades, 'Popes, kings and princes' extensively used letters of credit instructing payments in faraway lands.[127] Such letters may have invariably been four-party facilities.

In fact, any bill of payment could be a two-, three-, or four-party facility. Stated otherwise, in each case, the drawer and the payee, and/or the remitter and the payee, could be the same person. As a mere machinery for the transmission of funds from place to place it could even comprise four units of the same legal entity. However, for the completion of the picture, the ensuing legal analysis supposes the involvement of four participants, namely a remitter (or deliverer; lender), drawer (or taker; borrower), drawee (who may become an acceptor upon agreeing to pay), and payee.

IV. The Bill of Payment: Legal Relationships

Under modern law, a remitter in possession of a bill of exchange may sue parties liable on it. The basis of this right is his ownership of the instrument[128] rather than any specific statutory provision.[129] Otherwise, under modern negotiable instruments legislation, liability on a dishonoured bill of exchange inures to the benefit of the holder.[130] The holder is either the bearer of an instrument payable to the bearer, or the named payee or endorsee of a bill payable to order while he is in possession of it.[131]

The general rule is that a signature is an absolute requirement for liability on a bill of exchange.[132] One exception is under French law, which allows the holder to recover from the drawee, on the basis of *la provision*, that is, what the drawee owes the drawer, even without an acceptance.[133] Otherwise, a drawee incurs liability to the holder only by signing as an acceptor.[134] The holder always has the option of suing the drawer as well as any endorser.[135] A drawer who pays the holder has recourse against the acceptor.[136]

[127] See, e.g., Usher, above n 77, at 569.

[128] For the remitter as the first owner of an instrument, see F. K. Beutel, 'Rights of Remitters and Other Owners not within the Tenor of Negotiable Instruments', (1928) 12 *Minnesota Law Review* 584; and W. E. Britton, *Handbook on the Law of Bills and Notes* (2nd edn, 1961), at 179. See also B. Geva, 'The Autonomy of the Banker's Obligation on Bank Drafts and Certified Checks', (1994) 73 *Canada Bar Review* 21, at 30–4.

[129] An exception is UCC, above n 65, Art. 3, under which a remitter (defined in § 3-103(a)(15)), while in possession of the instrument, is said by Official Comment to § 3-301 to be a non-holder in possession, who under § 3-301(i) 'has the rights of a holder' so as to be entitled to enforce the instrument issued to him.

[130] BEA, above n 65, s. 38(1); cf. Geneva Bills Convention, above n 65, Arts. 16–19 and 40; UCC, above n 65, § 3-301(i); UNCITRAL Bills Convention, above n 65, Arts. 27, 70, and 77.

[131] BEA, above n 65, s. 2; Geneva Bills Convention, above n 65, Art. 16; UCC, above n 65, § 1-201(b)(21)(A); UNCITRAL Bills Convention, above n 65, Arts. 5(f) and 15.

[132] BEA, above n 65, s. 23; Geneva Bills Convention, above n 65, Arts. 7–8; UCC, above n 65, § 3-401; UNCITRAL Bills Convention, above n 65, Art. 33.

[133] For *la provision* in French law, see, e.g., C. Gavalda and J. Stoufflet, *Instruments de paiement et de crédit*, ed. J. Stoufflet (7th edn, 2009), at 105–14; and for a summary, see P. Ellinger, 'Negotiable Instruments', in U. Drobnig and K. Zweight (eds), *International Encyclopedia of Comparative Law*. Vol 9: *Commercial Transactions and Institutions*, ed. J. S. Ziegel (2000), ch 4, at 110–13. See also G. Ripert and R. Roblot, *Traité de droit commercial* (13th edn, 1992), at 181–6. For a more extensive analysis, see P. Lescot and R. Roblot, *Les effets de commerce* (1953), vol. 1, at 389.

[134] BEA, above n 65, s. 53; UCC, above n 65, § 3-408; UNCITRAL Bills Convention, above n 65, Arts. 37 and 40. Cf. Geneva Bills Convention, above n 65, Arts. 21 and 28.

[135] In principle, a cause of action against the drawer and endorsers is available to the holder upon compliance with formalities, such as presentment to and dishonour by the drawee, and notice given to parties to be held liable. See BEA, above n 65, s. 55; Geneva Bills Convention, above n 65, Arts. 9, 15, and 43–5; UCC, above n 65, §§ 3-414, 3-415, and Art. 3 Part 5 ('Dishonour'); UNCITRAL Bills Convention, above n 65, Arts. 38 and 44.

[136] Particularly, see BEA, above n 65, s. 59(2)(a).

A remitter does not sign the bill; as such, he is not liable on it. Whether he can be sued on the transaction for which the bill was given once the bill has reached the payee depends first on whether the bill was issued to the payee in payment of a debt owed by the remitter to the payee. Second, it depends on whether the payee had taken the bill of exchange in conditional or absolute discharge of the debt owed to him by the remitter. Only where a bill is taken in conditional payment is recourse on the underlying transaction available to the holder against the remitter.[137]

This section will now endeavour to trace the foundations of the rules set out above in the medieval application of principles derived from Roman law. Briefly stated, Roman law dealt with the delegation order given by a debtor, to his own debtor (paymaster) to pay to the debtor's creditor. Upon receiving the delegation order, the paymaster does not automatically become obliged to pay the creditor. Nor does the paymaster's agreement to comply with the instruction necessarily discharge the debtor's debt to the creditor. Rather, it is payment by the paymaster which discharges both his own debt to the debtor and the debtor's debt to the creditor. Accordingly, a paymaster who declines to follow the delegation order remains indebted to the debtor who remains indebted to the creditor.[138]

At the same time, execution of the payment order by means of the paymaster's agreement is fully recognized; Roman law facilitates both the imperfect and perfect execution of the debtor's delegation order, instructing the paymaster to pay the debtor's debt to the creditor.[139] As pointed out below, such execution may or may not discharge the debtor's debt to the creditor.

Furthermore, Roman law facilitates the issue of a delegation order by a paymaster to his correspondent acting as his own paymaster.[140] Such 'sub-delegation' may have been the model for the Islamic s*uftaj*, under which, in connection with the transfer of funds from one place to another, a paymaster at the point of origin instructed a correspondent at the point of destination to make the payment.[141] Under some circumstances a sub-delegation may also explain the legal effect of the letter of payment.

Thus, in circumstances under which the letter of payment was a mechanism for the payment of a debt owed by the remitter to the payee, the letter corresponded to the sub-delegation of the remitter's delegation order to the drawer. In this context, the remitter was the first delegant, instructing the taker-borrower to pay to the payee; in turn, the taker-borrower, being in effect the paymaster-drawee in the first transaction, upon the sub-delegation, becomes the delegant-drawer of the letter of payment instructing the drawee under the letter of payment to pay to the payee.

The distinction between the imperfect and perfect execution of the delegation order was expressed in the effect of the acceptance by the drawee, upon which he became liable to the payee, on the obligation of the debtor to the creditor. Thus, upon an imperfect execution, the order-giver, that is the debtor, remained liable to the payee-creditor even after acceptance by the order-recipient, that is, the drawee. Conversely, in the perfect execution of the delegation order, the acceptance by the drawee discharged altogether the debtor. The two classic means for the imperfect execution are the *receptum* and *constitutum*.[142] At the same time, the novation by stipulation[143] was the classic mode for the perfect execution.[144]

[137] The distinction is codified in UCC, above n 65, Art. 3, § 3-310. A good common law discussion is *In re Charge Card Services Ltd.* [1988] 3 All ER 702, 707 (CA).

[138] See, in general, Geva, above n 1, ch 5, section 3, at 201–8.

[139] See, in general, ibid., ch 5, section 4, at 208–10.

[140] See, in general, ibid., ch 5, section 10.3, at 244–6.

[141] The *suftaj* is fully discussed in ibid., ch 6, section 3, at 277–301.

[142] Fully discussed in ibid., ch 5, section 5, at 210–14.

[143] Fully discussed in ibid., ch 5, section 6, at 214–23.

[144] See Figures 20.1 and 20.2 in Section III above for an illustration of the principal features of payment mechanisms under Roman law.

Receptum argentarii[145] was limited to the case of a promise undertaken by a banker (*argentarius*), acting under the instruction of his client, to perform towards a third party, on a fixed date. The banker's obligation was entirely autonomous, namely, free of defences that may have been available to the client against the third party, and enforceable by the third party against the banker even when the client's obligation to the third party was invalid.[146] At the same time, the banker's undertaking to the third party did not affect the client's own original obligation to the third party; that is, until satisfaction, both obligations to the third party, that of the client and his banker, subsisted side by side, and were enforceable by the third party.

The *constitutum* was a promise to pay an existing debt on a stated date and at a stated place. The existing debt was either that of the promissor or of another party. The former was a case of *constitutum proprii* and the latter was that of *constitutum debiti alieni.*[147] The promise given under the *constitutum* was that of an assurance as to the availability to the creditor on the due date of the sum owed under the original debt. No formal requirements were to be met by the promise in order to be binding; it could be given orally, in writing, *in absentia*, and even by messages; most frequently, it was given by means of a letter sent (rather than directly delivered) by the promissor.[148] The rationale underlying the *constitutum* promise was that of modification to the promise to pay an existing debt, by an additional promise simultaneously given at the time the loan was extended.

Like the banker's promise on *receptum argentarii*, the *constitutum* promise did not lead to the novation of the pre-existing debt and did not supersede it; it gave the creditor the option of an alternative remedy. Contrary to the stipulation discussed further below, the *constitutum* promise was given at the initiative of the party to become liable on it, and not in response to a creditor's question; as such, and contrary to the *receptum argentarii*, the *constitutum* promise was not presumed to be autonomous and free of defences arising from the pre-existing debt, including as to its validity. However, the lack both of a novatory effect and of autonomy may have been based on the intention of the parties, and hence were more certain to exist in *constitutum proprii* than in *constitutum debiti alieni*; the latter might nevertheless be taken to be intended both to discharge the original debtor, so as to have a novatory effect, and to be autonomous in relation to the original debtor's pre-existing debt.[149] And yet, in the absence of novation, it was not so obvious what legal doctrine could implement such intent.

[145] For a comprehensive discussion, see G. Platon, *Les banquiers dans la législation de Justinien*, Pt 1 (1912), at 43, ch 2 'Receptum argentarii', as well as ensuing chapters, dealing with the relationship between the *receptum argentarii* and various other legal obligations.

[146] Or else, as put by Platon, ibid., at 46, the *receptum* does not require any '*causa*'; it thus stands on its own absolute or abstract terms.

[147] See Berger, above n 83, at 410; H. Coulon, *Droit romain: Du constitut debiti alieni* (1889); A. Philippin, *Le pacte de constitut: actio de pecunia constituta* (1929); and J. Déjardin, *L'action pecuniae constitutae* (1914). See also Platon, above n 145, at 164, ch V.bis, 'Histoire et rôle du constitut', and E. Guillard, *Les banquiers athéniens et romains—trapézites & argentarii, suivis du Pacte de constitut en droit romain* (1875), at 104–30.

[148] A point highlighted by Platon, above n 145, at 191, who calls such a mode of communication by letter, '*epistola*', and notes the similarity of the letter to the subsequent bill of exchange. According to Berger, above n 83, at 454, *espitula* is a private letter that becomes the property of the addressee upon receipt: 'Certain agreements, primarily consensual contracts . . . might be concluded by letter (*per epistulam*)'.

[149] On this point see, in particular, Philippin, above n 47, at 88–93, where the Praetorian basis of the *constitutum* is cited as the justification for reliance on the parties' intention. For the role of the intention of the parties, see also E. Bodin, 'Des effets du pacte de constitut', (1866) 12 *Revue historique de droit français et étranger* 209. For a detailed analysis as to whether particularly the *constitutum debiti alieni* is to be taken as substituting the debtor, adding a co-debtor, or giving rise to a guarantee, see J. Déjardin, *L'action pecuniae constitutae* (1914), at 67–98.

A most frequently used route for a perfect execution of the delegation was *stipulatio*.[150] Contrary to both the *receptum* and *constitutum*, the *stipulatio* served as a model for the perfect execution of the delegation order. It was an oral, solemn contract concluded in the form of a face-to-face exchange of a question and an answer between two persons who, on the basis of the successful completion of the exchange, became parties to a contract. It was a formal, verbal, unilateral, and *stricti juris* contract;[151] its formation required a question to be asked by the stipulator, a would-be promissee-creditor, immediately followed by an affirmative answer given by the person to whom the question was directed, who thereby became the promissor-debtor. The two parties had to be in the presence of each other and the question and answer had to be spoken; furthermore, 'there should be precise correspondence between question and answer'.[152] Typically, in our setting, the drawee's agreement to abide by the drawer's order by means of incurring a stipulatory obligation to the payee discharged the original obligation of the drawer to the payee and was autonomous with respect to it, namely, free of defences that might be available to the drawer against the payee.

Finally, there was the alternative of *cessio*.[153] In this context, a debt owed by the drawee to the drawer was transferred by the drawer to the payee. The payee, as an assignee, was to enforce against the drawee the debt owed by the drawee to the drawer, and as such was subject to defences available to the drawee against the drawer.

Indeed, Roman law could facilitate the payment to a distant party;[154] as such it was capable of producing a mechanism similar in function to the letter of payment. However, in Roman law there was no role for the written document. As well, the classic *stipulatio* was unable to support a contract between two distant parties. Moreover, in the course of the first millennium CE, key concepts such as the *stipulatio*, *receptum*, and *constitutum* ceased to exist as avenues for recovery.[155] Also, notwithstanding Roman law's recognition of *cessio* in the sixth century CE, strong doubts as to its effectiveness to transfer rights persisted in civilian legal systems which drew on the Romanist tradition until the middle of the nineteenth century.[156] It is against this background that the possibility of direct derivation of the bill of exchange from Roman law was forcefully denied by Holdsworth. In his view, 'it is clear that there is nothing in Roman law which in any way resembles the bill of exchange'. Indeed, he acknowledged, '[n]o doubt the *adstipulatio*, the *delegatio*, and the *novatio* could be made to fulfil some of the functions fulfilled by the bill of exchange; but we cannot find in the classical texts any institution which resembles it in form, or in mode of operation.'[157]

An apparent obstacle in Roman law was its strict privity requirements. However, in the course of the twelfth and thirteenth centuries these requirements had been under attack. The scholarly view that prevailed at the end of the fifteenth century built on developments in canon and some local laws, as well as on the need to satisfy evolving societal and mercantile requirements. This view allowed a third-party beneficiary, claiming under an assignment from the promissee, to sue the promissor, provided the latter took an oath confirming his promise. Ultimately, in the course of the seventeenth and eighteenth

[150] For a definition, see Berger, above n 83, at 716 and for analysis, see, e.g., Lee, above n 83, at 298–304 and B. Nicholas, *An Introduction to Roman Law* (1962), at 193–6.

[151] For classification of contracts see concluding paragraphs in Geva, above n 1, ch 5, section 1, at 191–4.

[152] Lee, above n 83, at 298. See also Nicholas, above n 150, at 193. Berger, above n 83, at 716 ('Stipulatio') states that '[t]he answer had to agree perfectly with the question; any difference or restriction (addition of a condition) made the stipulatio void'.

[153] Fully discussed in Geva, above n 1, ch 5, section 9, at 233–41.

[154] See ibid., ch 5, section 10.3, at 244–6.

[155] See ibid., ch 5, section 8, at 229–32.

[156] See ibid., ch 5, section 9, at 233–41.

[157] Holdsworth, above n 11, at 132–3.

centuries, courts came to recognize a direct right of the beneficiary against the promissor.[158]

A scholarly view that precipitated the culmination of that process relied on the direct right of the holder of a bill of exchange or note payable to the bearer against the issuer of the instrument.[159] However, the process was not unidirectional: the recognition of the payee's right against the drawer had evolved during the Middle Ages in a legal environment in which the walls of privity were crumbling, particularly through the use of *cessio* and agency.

The ensuing analysis will demonstrate the manner in which the adaptation of principles derived from Roman law underlay the legal relations among participants in the bill of payment transaction. In fact, this was acknowledged by Holdsworth.[160] Stated otherwise, medieval lawyers used terminology derived from Roman law either by analogy, or by varying its contents.

Among the four parties to the letter of payment transaction, privity existed between the remitter and drawer, the drawer and the drawee, and the remitter and the payee. Thus, the remitter delivered the money to the drawer for the delivery of an equivalent sum of money denominated in another currency to the payee. The drawer and drawee were correspondents, if not a principal and agent.[161] In the remittance scenario the drawer and drawee acted as fellow bankers. In the trade-finance setting they acted as fellow merchants. In the remittance setting, the remitter and the payee might respectively be a debtor and creditor under a pre-existing transaction. Alternatively, in the more prevalent trade-finance setting, the remitter and payee acted as bankers.[162]

The bill of exchange transaction was completed by the drawee's payment to the payee. At that point, the drawer was discharged towards the remitter; the drawee was either discharged towards the drawer or became owed by the drawer. In the remittance scenario, the remitter was discharged towards (his fellow merchant) the payee-creditor. Fellow bankers, namely the drawer and the drawee in the remittance scenario and the remitter and payee in the trade-finance setting, would typically make periodic settlements on bills going in both directions, possibly in a fair as outlined in Section III above. For their part, the drawer and drawee acted in the trade-finance setting as fellow-merchants; the drawer was to settle either for a single transaction, or again, for a balance reflecting a periodical activity, by means of another remittance, made from the place of the indebted party to that of the creditor.

The payee was not in privity with the drawer; he might nevertheless be in privity with the drawee-acceptor. At the same time, the remitter was in privity with the drawer but not with the drawee-acceptor. According to De Roover, under medieval law, privity requirements still persisted; thereunder, the drawer was solely liable to the remitter and the drawee might

[158] See J. Hallebeek, 'Roman Law', in J. Hallebeek and H. Dondorp (eds), *Contracts for a Third-Party Beneficiary: A Historical and Comparative Account* (2008) 8; J. Hallebeek, 'Medieval Legal Scholarship', in Hallebeek and Dondorp (eds), 21; H. Dondorp, 'The Seventeenth and Eighteenth Centuries', in Hallebeek and Dondorp (eds), 47; and J. Hallebeek, '*Ius Quaesitum Tertio* in Medieval Roman Law,' in E. J. H. Schrage, *Ius quaesitum tertio* (2008) 61.

[159] See Dondrop, above n 158, at 67 and 68.

[160] Ibid.

[161] Where they are mere correspondents, namely, neither the same person nor a principal and agent, Huvelin, above n 28, at 12–13 rationalizes their relationship as premised on a *commenda*, that is, a form of partnership, under which the drawer puts the drawee in funds in performance of a joint business purpose, viz., their delivery to the payee. In theory at least, in the trade-finance setting, they may be a debtor and creditor, for example where the drawee bought the goods from the drawer.

[162] Either way, as indicated at the end of Section III above, the four parties to the bill of payment are the remitter (or deliverer; lender), the drawer (or taker; borrower), the drawee (who may become an acceptor upon agreeing to pay), and the payee. Charts illustrating the transaction flow in each scenario are incorporated in this chapter. The reader may follow them in pursuing the discussion which follows.

be liable only to the payee. Between these two beneficiaries, it was however the remitter and not the payee who was the 'master' of the bill.[163] Though he was not in privity with the drawee, the remitter might revoke payment even after acceptance by the drawee,[164] presumably any time until maturity. This would appear to have posed a serious limitation on the payee's right against the acceptor, except that this subjection to the revocation power of the remitter fitted very well with De Roover's view as to the position of the remitter as a banker-lender associated with the payee—rather than as a debtor of the payee.[165]

De Roover's analysis treats the bill of payment transaction as a mechanism for the execution of the exchange contract. Thus, there was an exchange contract to which the remitter and drawer were the parties. In turn, though the letter of payment was issued by the drawer, it was the drawee who might be liable to the payee thereon. Accordingly, though derived from the same transaction and yet effectively from two separate contracts in relation to it, the drawer's obligation and that of the drawee were 'two species of obligation' which were 'conceptually and practically distinct'.[166] Their only link was the mutual impact of their performance. Thus, payment by the drawee to the payee discharged not only the drawee towards the payee but also the drawer towards the remitter; similarly, payment by the drawer to the remitter discharged not only the drawer towards the remitter but also the drawee towards the payee.

De Roover's perspective on the legal relationships is thus unlike that of the modern law as outlined above. Nor does De Roover purport to derive explicit support for his position from principles of Roman law.[167] A most extensive analysis to the contrary, covering a range of views, as to the liability of the drawer and the drawee-acceptor towards the payee and the remitter, is that of Huvelin; the picture he depicts purports both to derive from Roman law and be consistent with modern law.[168]

Regarding the drawer, Huvelin raises a preliminary question as to the very existence of his liability on the bill of payment. Indeed, already in the course of the fourteenth century, it was recognized that having received money from the drawer to be repaid by the drawee to the payee elsewhere, the drawer of the letter of payment was liable to the remitter, the deliverer of money to him, on the basis of the transaction between them. That transaction was either *emptio-venditio*,[169] namely purchase and sale, or *permutatio*, namely barter.[170] However, this position had not been free from doubt.[171] In the absence of a signature expressed to be 'with recourse', the document did not contain any undertaking by the drawer; it was merely an instruction by the drawer directed to the drawee to pay to the payee. From this perspective, even the specific drawer's acknowledgement of issuing the instrument against 'value received' was not explicit enough to charge him with an obligation to pay. For these reasons, liability could not be fastened on the drawer on the basis of the Roman law *constitutum*, which required an undertaking directed to a creditor to pay a pre-existing debt owed to him. Conversely, the bill of payment was a letter addressed to the drawee-paymaster, rather than to the payee-creditor, which did not contain any undertaking. By the same token, in the absence of an explicit engagement to that effect, the drawer could not be taken to agree to become a guarantor.

[163] See J. Marius, *Advice Concerning Bills of Exchange* (1684), at 17.
[164] De Roover, above n 35, at 92–4. [165] See text following n 107 above.
[166] Rogers, above n 111, at 98. See also Usher, above n 3, at 88.
[167] But cf. text accompanying nn 206–7 below for the reconstruction of De Roover's position according to principles derived from Roman law.
[168] Huvelin, above n 28, at 4, 9–21.
[169] See, e.g., De Roover, above n 35, at 207, summarizing the position of Baldo Degli Ubaldi (1327–1400).
[170] See above n 83 and accompanying text.
[171] For a brief discussion on the fourteenth-century debate on this point, see, e.g., Usher, above n 77, at 575.

According to Huvelin, the drawer was to be made liable on the basis of the delivery of the letter by him to the remitter for further transmission to the payee. That is, while the letter was addressed by the drawer to the drawee, it was not sent by the drawer to the drawee; rather, it was given to the remitter, who was to send it to the payee for presentment to the drawee. According to Huvelin, this circuitous route to the final destination was not devoid of meaning; rather it showed a voluntary undertaking, an assumption of liability, by the drawer as sender towards the party to whom he sent the instrument.

However, it seems to me that Huvelin is not entirely clear as to whose benefit the drawer's liability inures on that basis. Thus, as long as the bill of payment was in the remitter's hands, the drawer's liability ran to the remitter. Conversely, once the bill of payment was in the payee's hands, liability might run in the payee's favour. The theory of drawer's liability towards each one might differ, and Huvelin is not sufficiently clear in explaining as to whom liability ran and on what theory. More specifically, having analysed the issue from the perspective of the drawer-remitter relationship,[172] he appears, in my view abruptly, to jump to the conclusion that the drawer was nevertheless liable both to the remitter, on the basis of *constitutum*, as adjusted by mercantile usage, and to the payee, as the destination party who was ultimately to receive the letter of payment, and present it to the drawee, to whom it was addressed.[173] Against this background, it is hard to tell whether the drawer's undertaking to the payee was autonomous and free from defences available to the drawer against the remitter. Also, the relationship between liability to the remitter and payee was not clear; did the drawer's liability to the payee replace or was it added to the drawer's liability to the remitter? Possibly, Huvelin may be taken to address a transformation in the identification of the party entitled to enforce the drawer's obligation,[174] and yet he was far from clear in setting out the process.

Alternatively, it is possible to understand Huvelin as saying that on the basis of the route of the letter, the drawer's liability thereunder was not towards the payee, but rather, towards the 'taker'[175] of the letter from him, namely, the remitter. In such a case, Huvelin's theory as to the original liability of the drawer to the payee, namely prior to acceptance by the drawee, must be taken to be premised on *cessio*. The transfer was by the remitter to the payee of the remitter's right against the drawer; it was carried out by the delivery of the bill of payment to the payee. This would mean that the payee took the bill of payment subject to all defences the drawer had against the remitter.[176]

The drawer was thus liable in connection with the *issuance* of the bill of payment; at the same time, the *presentment* of the instrument by the payee to the drawee precipitated the latter's liability. Originally, the drawee was held liable upon the presentment of the instrument without signing it unless he had disclaimed liability. Subsequently, the drawee's liability became associated with a positive act on his part in response to the presentment, namely the placing of a signature on the instrument, signifying an acceptance by him of the drawer's order to pay.

Two issues arise. The first is the theory underlying the drawee-acceptor's liability. The second is the impact of the drawee-acceptor's liability on that of the drawer.

172 Huvelin, above n 28, at 9–10.

173 Ibid., at 10–11. This is how Huvelin is understood by Holdsworth, above n 11, at 137 and 139.

174 As claimed by Usher, above n 3, at 89. This transformation is discussed in Section V.

175 '*Preneur*' in French is both payee and taker. This, however, is not a mere semantic. For the transition from 'taker' of money, viz. the drawer, to 'taker' of the instrument, hence, the payee, as part of the transformation of the bill of payment to a negotiable bill of exchange, discussed in Section V, see De Roover, above n 35, at 117.

176 For *cessio*, see Geva, above n 1, ch 5, section 9.

Two alternative approaches exist with regard to the first issue, that of the drawee-acceptor's liability. Each is derived from Roman law. Thus, the view that ultimately prevailed in Germany is that the basis of this liability is that of a literal contract, namely, a contract created on the basis of a special kind of writing. It is a formal contract, by definition *stricti juris*, that is, binding the promissor to the very thing he has promised, and hence unilateral; it may be referred to as abstract.[177] My own impression is that this contract could be either a variant of, or inspired by, the *stipulatio*.

At the same time, the alternative, and according to Huvelin the earlier, view that prevailed in France is premised on the theory of *la provision*, or 'the provision'.[178] As understood in French law in the late seventeenth century,[179] *la provision* was constituted by the sum of money held by the drawee for the drawer, or perhaps, more specifically, provided to the drawee by the drawer, with which the drawee was obligated to pay the bill. However, over the years, *la provision* acquired a subtler, and in fact broader, meaning, having become the drawer's right towards the drawee, that might not necessarily be constituted only by a sum of money held by the latter for the former. *La provision* was thus distinguished from 'cover' or 'value'; 'cover' required an actual asset, possibly a sum of money, and 'value' refers to what was, or ought to be, provided by the payee in return for the bill. On the other hand, *la provision* might be formed by an overdraft that the drawee agreed to provide to the drawer. However, it appeared that in its original meaning under French law, *la provision* was understood to give rise to either a debt or, effectively, a deposit,[180] though the latter term may not have been explicitly mentioned. The drawee's obligation arising from holding 'the provision' originally inured for the benefit of the drawer; entitlement passed to the payee when he took the bill.[181] Its passage to the payee (and subsequently, to each ensuing endorsee) was either a matter of *cessio* or of 'sale of money'. To that end, the drawee's acceptance was viewed not as a new obligation, but rather, in the footsteps of the *constitutum*, as an acknowledgement, or confirmation, of an existing one, based on the receipt of 'the provision'.[182]

Under the *cessio* theory, the drawer transferred to the payee the debt owed to the drawer by the drawee. The drawee's acceptance served the limited function of confirmation; as a matter of legal theory, it was not required to bind the drawee towards the payee.[183] At the same time, the 'sale of money' theory was premised, first, on viewing the manual money

[177] For all these types of contract, in the context of the classification of contracts under Roman law, see ibid., ch 5, section 1, at 191–4.

[178] See also Sayous, 'Méthodes commerciales XV', above n 3, at 281.

[179] For the statutory reference in 1673, see, e.g., J. V. Tardon, *La provision de la lettre de change (droit comparé—loi uniforme)* (1939), at 6.

[180] Cf. the distinction in Jewish law between money owed on a loan and on deposit, discussed in Geva, above n 1, ch 7, section 2, at 309–30. For an earlier meaning, used by Italian and German authors, denoting a commission charged in connection with the issue of a bill of exchange, see, e.g., R. Voegeli, *La provision de la lettre de change et son attribution au porteur—Étude d'histoire du droit et de droit comparé (Systèmes français, allemand et suisse)* (1947), at 7–12.

[181] See Gavalda and Stoufflet, above n 133; Ellinger, above n 133; Ripert and Roblot, above n 133. For the meanings of '*la provision*', 'value', and 'cover', see Lescot and Roblot, above n 133, at 390, 411–12. For the transfer of *la provision* as a 'sale' which defeats the drawer's creditors, see, e.g., H. Lévy-Bruhl, *Histoire de la lettre de change au France aux XVIIe et XVIIIe siècles* (1933), at 91–5. In any event, drawer's creditors are to be defeated also under the *cessio* theory.

[182] For explaining the acceptor's liability as a confirmation of liability, and the procedural advantage accorded to the plaintiff suing on the acceptance in the Low Countries, see W. D. H. Asser, 'Bills of Exchange and Agency in the 18th Century Law of Holland and Zeeland—Decisions of the Supreme Court of Holland and Zeeland', in V. Piergiovanni (ed.), *The Courts and the Development of Commercial Law* (1987) 103, at 112.

[183] See Geva, above n 1, ch 5, section 9, at 233–41.

change transaction as a sale.[184] Second, it hinged on the analogy between the exchange and the manual change. The former was viewed as if the drawer physically gave coins to the drawee, possibly the same coins delivered to the drawer by the remitter, with a view to charging the drawee with the obligation to give their equivalent to the payee in the currency of payment. In this setting, the drawee's acceptance was the redirection of his agreement to abide by the instruction to the payee's benefit.

Huvelin preferred the 'sale of money' explanation[185] but acknowledged that ultimately in French law it was the *cessio* explanation which prevailed. Be that as it may, he pointed at a fundamental distinction between the French and German approaches. Under the German approach, the acceptor's liability as a paymaster was based on his own undertaking to pay off a sum of money, and thus stood on its own; it was for the full amount of the instrument and was not subject to defences that might be available to him as a drawee against the drawer. In short, it is autonomous. Conversely, under the French system, what the acceptor owed to the payee was what, as a drawee, he received from the drawer. In other words, the acceptor was able to meet the payee's action by raising defences available to him as a drawee against the drawer. Stated otherwise, according to Huvelin, under the French system and in contrast to the German one, the acceptor's engagement to the payee was not autonomous; rather, the acceptor's engagement to the payee was that of the drawee-acceptor towards the drawer.

Finally, there is the second issue arising in connection with the presentment to the drawee and the ensuing drawee's liability. This is the question of the payee's recourse against the drawer, either side by side with the payee's entitlement against the drawee-acceptor, or upon the default by the drawee-acceptor in dishonouring the instrument. In this scenario, the starting point is the fact that the drawer and payee were not in privity on the bill. It is against this background that De Roover adamantly stated that in case of non-payment, the sources are unambiguous in their denial to the payee of any recourse against the drawer, who under Medieval law was liable solely to the remitter.[186]

Conversely, Huvelin appeared to assume the existence of the payee's recourse against the drawer, though he may have glossed over its underlying theory;[187] as indicated, he may have explained the payee's right against the drawer as based either on *cessio*, or on the routing of the letter from the drawer, not directly to its addressee, the drawee, but rather, indirectly, to the payee via the remitter.[188] Regardless, Huvelin explained that neither the drawer's order nor the drawee's agreement to abide by it contained any release of the drawer's obligation to the payee. To that end, Huvelin unequivocally rejected the explanation of the drawee's acceptance as the execution of a delegation order in the form of novation by stipulation, as in his view this would have meant the release of the drawer.

Huvelin does not discuss the drawer's recourse against the drawee. Nor does he discuss the drawee-acceptor's liability to the remitter as well as the relationship between the remitter and payee. Presumably, being in privity, relationships between the drawer and the drawee, as well as between the remitter and payee, were governed by respective underlying contracts. In other words, the drawee was likely to be liable to the drawer,

[184] For this perspective, see text accompanying nn 118–19 above. At the same time, and notwithstanding Huvelin, above n 28, at 15–16, I do not see why a different result is produced if the 'sale of money' theory is replaced by barter.

[185] See, in particular, ibid., at 29, where he sees 'the provision' as an extension of the *commenda* (see discussion in n 161 above), on which he rationalizes the drawer–drawee relationship.

[186] De Roover, above n 35, at 92–3.

[187] Huvelin, above n 28, at 19–20.

[188] For his discussion as to whom the drawer is liable, see text accompanying nn 172–6 above.

from whom the payee or remitter recovered, on the basis of the *commenda* or '*provision*'.[189] By the same token, the unpaid payee might recover from the remitter if the latter owed the former and the bill of payment was not given in absolute discharge.[190] In turn, the drawee might be liable to the remitter, who had not issued the bill, on the basis of the transfer of 'the provision', but not on the basis of the acceptance, which was the drawee's engagement towards the payee.[191]

The preceding discussion demonstrates that adaptation of principles derived from Roman law played a role in the search for an underlying theoretical basis for the bill of payment. Views set out by Huvelin differ as to both the identification as well as the extent of adaptation of relevant principles. Moreover, between De Roover and views canvassed by Huvelin, there appears to be a disagreement regarding fundamental legal features of the instrument, particularly as to the payee's recourse against the drawer, and more generally, the relative position of the parties in privity.

Each approach is in line with its proponent's view as to the prevalent use of the Medieval bill of payment. Thus, according to De Roover, the two primary parties to the bill of exchange transaction as relating to a genuine loan agreement were the remitter as lender and the drawer as borrower. In this context, the payee and the drawee were typically the respective agents of the remitter and the drawer. Hence, the primary relationship was between the remitter and the drawer. It was the remitter as lender who 'called the shots'; therefore, the drawer-borrower was responsible only to him, and certainly not to the payee, who was a mere agent for the remitter.[192] Undoubtedly, it was only as the remitter's agent, and not on the basis of any right of his own, that the payee might sue the drawer, as well as the drawer's agent, namely the drawee.[193] Conversely, Huvelin views the mechanism as primarily designed for the transmission of a non-cash payment from a debtor (remitter) to his creditor (payee);[194] in this context, it was only logical to provide the payee-creditor with a direct cause of action against the drawee-paymaster, to whom the drawer-debtor delegated his payment obligation to the payee-debtor. It was thus the economic function and not the mechanical application of general principles of Roman law that underlay the disagreement as to fundamental legal features.

Seventeenth-century classic English authors discuss the matter along lines that unequivocally support De Roover's position as to the strict privity requirement. First, writing in 1622, Malynes discussed a somewhat complex bill of exchange transaction involving a chain of remitters.[195] In this context, Malynes was clear as to strict privity requirements. Thus, upon the dishonour by the drawee, it was the drawer who had to pay. In turn, upon his failure to pay, the drawer incurred liability exclusively to the remitter, who gave him the money.[196] Interestingly, in the context of this scenario, Malynes did not discuss—and in fact did not even mention—liability of, or even acceptance by, the drawee. However, elsewhere, Malynes mentioned that according to 'the opinion of . . . Merchants', the payee might recover from the acceptor, notwithstanding the insolvency of the

[189] See Huvelin, above n 28, at 29, and discussion at nn 161 and 185 above.

[190] Whether a bill is taken in conditional or absolute discharge is discussed in text accompanying n 137 above.

[191] *Cessio* was discussed in connection with the payee's entitlement from the drawee as well as from the drawer. See, respectively, text accompanying nn 159 and 179 above.

[192] De Roover, above n 35, at 92–4 and 115–17.

[193] For this position of the payee vis-à-vis the drawee in Holland and Zeeland during the eighteenth century, see Asser, above n 182.

[194] The two conflicting views as to the function and hence the operation of the mechanism are set out in text accompanying nn 106–11 above.

[195] Malynes, above n 58, at 395–6.

[196] Ibid., at 400.

drawer.[197] This confirms both the privity requirements and the acceptor's liability. At the same time, this absolute entitlement in the hands of the payee, irrespective of the drawer's insolvency, suggests that the drawee was liable other than as drawer's agent. Presumably this liability was based on the binding effect of the acceptance. Alternatively, however, the drawee's liability could be seen as derived from his accountability for proceeds realized from the sale of the drawer's goods for whose procurement the drawer owed the payee's associate, namely, the remitter.

Second, writing in 1651,[198] namely, a quarter of a century later, Marius may even be more explicit. To begin with, he confirmed the binding effect of the acceptance, even when given orally.[199] Next, he stated that by delivering the money to the drawer, the remitter 'is rightly and properly Master' of the bill until it falls due.[200] Thereby, Marius undoubtedly inspired De Roover, who nevertheless cited Malynes in support of that proposition.[201] However, it does not follow that the acceptor was liable to the remitter; rather, according to Marius, until satisfaction, the drawer was liable to the remitter, while the acceptor's liability inured to the benefit of the payee. Also in the footsteps of Malynes, Marius treated the acceptor's liability as enforceable by the payee irrespective of the drawer's bankruptcy.[202]

Presumably, satisfaction is either by the drawer's payment to the remitter or the drawee's payment to the payee, so that effectively, payment by one releases the other. Only where the payee was an agent of the remitter, a typical situation according to De Roover,[203] were both the drawer and the drawee/acceptor liable to the remitter;[204] and yet Marius did not even mention the possibility of the drawer becoming liable to the payee.[205]

This is certainly different from the position under modern law as well as from the picture described by Huvelin. Nevertheless, it does not follow that a doctrinal common denominator is not available. Thus, the fundamental practical difference between Huvelin and De Roover is on the issue of the drawer's liability to the payee. It is on the basis of an analysis of general principles derived from Roman law that Huvelin gave a positive answer.[206] On his part, De Roover did not cite Roman law principles; however, it does not follow that they were necessarily contrary to his position. The following is an attempt to juxtapose both alternative views in a framework built on an expanded view of legal principles derived from Roman law.

Thus, the remitter delivered money to the drawer and instructed him to repay its equivalent denominated in another currency to a payee located elsewhere. In return, the drawer delivered to the remitter the letter of payment in which the drawer instructed the drawee, located in the place of payment, to pay to the payee. The remitter sent the letter to the payee who presented it to the drawee first for acceptance and on the due date for payment. The scenario thus involved two payment orders, one by the remitter addressed to

[197] Ibid., at 401.

[198] Marius first published his book, *Advice Concerning Bills of Exchange*, in 1651, albeit in a shorter version. See Marius, above 163, 'Preface to the Reader'. Unless otherwise indicated, all references in this chapter to Marius's book are to the 1684 edition.

[199] Marius, above n 163, at 20 (irrevocability of acceptance) and 16 (verbal acceptance which may be constituted by a witnessed promise to accept) (respectively, at 24 and 10 of the 1651 edition).

[200] Marius, above n 163, at 17 (at 16–17 of the 1651 edition).

[201] De Roover, above n 35, at 116–17 references above n 133.

[202] Marius, above n 163, at 20 (at 24 in the 1651 edition).

[203] See discussion in text accompanying n 108 above.

[204] Marius, above n 163, at 26–7 (at 46–8 of the 1651 edition).

[205] An early case holding the drawer (effectively a paymaster for a buyer) liable to the payee (a seller) is *Chat and Edgar Case* (1663), 1 Keble 636, 83 ER 1156, further discussed in Geva, above n 1, ch 9, section 4, at 442–53.

[206] See above text accompanying nn 168 et seq.

the drawer, and the other, embodied in the letter of payment, that of the drawer addressed to the drawee. They are to be analysed as follows:

(1)
- Where the remitter wished to pay to the payee in the discharge of a debt, the remitter's payment order was viewed by Huvelin as a delegation order. By executing it, the drawer became directly liable to the payee. Depending on the parties' intention and the mechanism chosen, execution might either be perfect or imperfect, with the remitter released in the former and remaining liable in the latter. Moreover, and this is particularly relevant when the payment that the remitter wished to be made was not in the discharge of a debt owed by the remitter to the payee, the drawer might become liable to the payee even other than in the execution of a delegation order, either by forming with the payee a direct contract, or having his debt to the remitter transferred to the payee.
- At the same time, according to De Roover, the drawer's payment order was neither an execution of a delegation order, nor the basis for a direct contract with the payee; nor was there a *cessio* to the payee of the drawer's debt to the remitter. Rather, it was a simple mandate, pursuant to the drawer's agreement with the remitter, which did not affect the payee's relationship with the drawer nor with the remitter.

(2) The second payment order was that of the drawer to the drawee; this was the one contained in the letter of payment:
- Where it was in connection with the payment of a debt owed by the remitter to the payee, it was to be viewed by Huvelin as an imperfect execution of the drawer's payment order so as to leave the drawer liable to the payee.
- Otherwise, and certainly according to De Roover, it gave rise to a separate independent contract formed by the drawee with the payee. In this framework, the drawer did not incur liability to the payee.

Usher refers to what is effectively Huvelin's discussion as 'establishing the letter of payment as a type of the Roman agreement to discharge a debt'.[207] To a large extent, the preceding analysis demonstrates that De Roover's position could have equally been founded on the basis of principles derived from Roman law. In fact, the flexibility of such principles is a source of both strength and weakness; the strength is in the resilience of these principles to support the inclusion of both new and changing circumstances; the weakness is that as such, they can easily be manipulated, so that on their own, they lack predictability as to the ultimate result.

V. Conclusion: Medieval Continental Contribution Assessed

Having discussed medieval private and public banks, De Roover summarized as follows:

> From the sixteenth century until the end of the eighteenth century, the banking system on the European Continent was made up of public banks, which continued the functions inherited from the medieval moneychangers, and of private bankers or cambists who, also in accordance with traditions dating back to the Middle Ages, were mainly exchange dealers. In all the manuals of the seventeenth and eighteenth centuries, a banker is defined as a dealer in bills of exchange who operates with correspondents abroad and speculates on the rates of exchange.[208]

[207] Usher, above n 3, at 89.

[208] De Roover, above n 15, at 229.

It is in this institutional framework, as it has evolved since the twelfth century, that medieval non-cash payment facilities have developed. Thus, the bank book transfer and the emergence of cheques are developments that took place in activities of moneychangers turned deposit bankers. At the same time, the bill of exchange, including its predecessor, the bill of payment, evolved as part of the activities of exchange dealers, namely private merchant bankers.

Outside deposit banking, non-cash payment instruments proliferated in the early Middle Ages in the Islamic lands.[209] Such instruments may have been known in Europe; nevertheless, the bill of exchange appears to be the creation of medieval continental Europe. Building on the flexibility of concepts inherited from Roman law, medieval law facilitated the crystallization of its legal features as a credit and payment mechanism. Ultimately however, the bill of exchange was transformed from a payment and credit facility, into predominantly a credit tool, and yet, it came to confer its features on the cheque. More generally, the post-medieval banking system in England transformed into the true machinery for financial intermediation; this transformation enhanced non-cash payment facilities developed in the Middle Ages and built on them the foundation of the modern payment system.[210] In the final analysis, while having been subsequently transformed, elements of medieval banking, cheques, and bills of exchange, whether original or not, heralded the modern banking and payment systems.

A distinctive contribution of the medieval era is the settlement procedure for bills of payments conducted by merchant bankers in fairs. This procedure is the forerunner of organized multilateral interbank clearing. Its own operation was premised on a series of co-ordinated bilateral nettings occurring in an organized multilateral setting, allowing the substitution of debtors so as to enhance savings in actual payments.[211] This was performed in the context of a multilateral organization, and heralded the next transformative step, that of the clearing house with its multilateral netting. Thus, historically, the medieval fair interbank facility was the genesis of the interbank clearinghouse, and led to the performance of interbank multilateral clearing.

209 For a detailed discussion, see Geva, above n 1, ch 6, at 252–306.

210 Both aspects, that is the characterization of a cheque as a specie of a bill of exchange and the post-Medieval transformation of the banking system in England, are outlined in ibid., ch 10, at 467–527.

211 Indeed, bilateral and even multilateral netting, practised in isolation by banks on ad hoc basis, had been already known in Antiquity. For origins in Ancient Greece, see ibid., ch 3, section 3, at 124–32. At the same time, the Medieval fair interbank facility was premised on all pairs acting in a multilateral setting and taking advantage of this facet by allowing substitution.

21

Giro Payments and the Beginnings of the Modern Cashless Payment System

Stephan Meder

I. Introduction

Already in antiquity—particularly in Egypt, Greece, and Rome—money could be stored more securely and more conveniently outside the home. This allowed, for example, the *argentarii*, whom the Romans entrusted with much of their liquid assets, to conduct payments by mere 'transcription' in their account books.[1] Similarly, it was common in large trading centres of the medieval period for a bank to take custody of the media of exchange, open accounts for its creditors, and transfer portions of the balance from one account to another. Banks in upper Italian cities such as Genoa, Venice, Milan, and Florence pioneered this type of payment.[2] At the beginning of the seventeenth century, the Amsterdam Exchange Bank (1609), the Hamburg Girobank (1619), and the Nuremberg Girobank (1621) gained in importance across continental Europe.[3] Over time, however, banks that specialized in processing payments tended to disappear. In Germany, only the Hamburg Girobank remained.

The history of modern giro commerce in Germany begins with the takeover of the Hamburg Girobank by the *Reichsbank* in 1875. The Reichsbank developed on the model of the Hamburg system of transcription from account to account, and allowed its customers to easily transfer portions of their credit balance to another account.[4] The only requirement

[1] L. Goldschmidt, *Handbuch des Handelsrechts* (1868–83, repr. 1973), at 1186–7, Part C, § 107 fn 6; J. Löffelholz, *Geschichte der Betriebswirtschaft und der Betriebswirtschaftslehre: Altertum-Mittelalter-Neuzeit bis zu Beginn des 19. Jahrhunderts* (1935), at 32–3; R. Merkelbach, *Die Bedeutung des Geldes für die Geschichte der griechisch-römischen Welt* (1992); J. R. Melville Jones, *Testimonia Numaria: Greek and Latin Texts concerning Ancient Greek Coinage.* Vol 1: *Texts and Translations* (1993); Vol 2: *Addenda and Commentary* (2007); J. Andreau, *Banking and Business in the Roman World* (1999); W. Szaivert and R. Wolters, *Löhne, Preise, Werte: Quellen zur römischen Geldwirtschaft* (2005). See also S. Meder, *Die bargeldlose Zahlung* (1996), at 175 for further references.

[2] Cf. Löffelholz, above n 1, at 190 et seq.; W. Kunze et al. (eds), *Die deutsche Bankwirtschaft* (1935–8), vol. 2, at 1 et seq.; E. Nasse, 'Das venetianische Bankwesen im 14., 15. und 16. Jahrhundert', (1879) 34 *Jahrbücher für Nationalökonomie und Statistik* 329.

[3] Cf. R. Fuchs, *Der Banco Publico zu Nürnberg* (1955); E. L. von Halle, *Die Hamburger Girobank und ihr Ausgang* (1891); M. Pohl, *Hamburger Bankengeschichte* (1986).

[4] On the advantages of the Hamburg Girobank compared to other giro systems in Germany see Section II.3 of this chapter.

was that the customer had to hold an account with the Reichsbank or one of its many affiliated branches.[5] The whole of Germany thus became—to use the oft-cited words of Richard Koch, the first President of the Reichsbank—'a giro market'.

These developments presented a great challenge to legal science. A normative framework had to be developed to explain the smooth processing of the payment traffic, which had been growing rapidly since the middle of the nineteenth century. The difficulty of the task lay in the fact that the increasing use of cashless exchange media (such as bills of exchange, cheques, and giro transfers) fundamentally unsettled the traditional conceptions of money. In particular, the so-called 'metallistic' conception of money, which had developed in Roman law and predominated for centuries, was called into question. On the premise that money derived its exchange value from the value of its metal, money could be fully understood as a 'thing' (*Ding*) and, hence, was subject to the rules of property law.[6] But with the expansion of cashless payment, money increasingly became an 'abstract bearer of value'.[7] Today, only a relatively small proportion of money in circulation is in the form of physical cash. The economic function of cash—which requires the cumbersome delivery of coins and banknotes—has been substantially overtaken by 'bank money'.

This development should not, however, obscure the important similarity (which still exists) between cashless exchange media and physical cash. As bearers of value, cashless media are invested with legal power, which, through the action of 'payment', can bring about legally recognized results, such as the creation or the fulfilment of an obligation. As a matter of juridical analysis, 'payment' in a giro remittance is not a monetary transaction; rather, it is a transaction involving a customer's monetary claim against his or her bank.[8]

From the recipient's perspective, therefore, the risks of a cashless payment are greater than those of a cash payment. For instance, a person who has received cash from the sale of a thing can assume that he has become the owner of the money, and that the payment can no longer be rescinded.[9] When the money is physically delivered, substitution of performance is excluded. With a cashless payment, however, it is the legal effect of the payment order which determines when the payment process becomes final.[10]

With a giro remittance, we could pinpoint several moments when the payment might be considered final. These include the point when the payer has lost his opportunity to rescind; when the recipient's bank receives the payment; or when the sum is credited

[5] On this and the differences between the German 'single bank system' and the English 'multi-bank system', cf. R. Koch, 'Über Giroverkehr und den Gebrauch von Checks als Zahlungsmittel', in R. Koch, *Vorträge und Aufsätze hauptsächlich aus dem Handels- und Wechselrecht* (1892), at 140 et seq.; R. Koch, 'Giroverkehr', in *Handwörterbuch der Staatswissenschaften*, vol. 4 (2nd edn, 1900) 728; W. Späing, *Der Girovertrag der Deutschen Reichsbank* (1907), at 3 et seq.; W. O. Schoele, *Das Recht der Überweisung: Eine zusammenfassende Darstellung des deutschen Banküberweisungs-, Postscheck- und Postanweisungsrechts, einschließlich des Girovertragsrechts* (1937), at 7–8. Even today, the difference between cheque-based countries, including, e.g., Great Britain, and giro-based countries plays a significant role in legal and commercial practice (on which in more depth, see S. Meder, 'Rechtsfragen des bargeldlosen Zahlungsverkehrs', (1996) 36(2) Juristische Schulung 89).

[6] Cf. M. Kaser, 'Das Geld im Sachenrecht', (1937) 143 *Archiv für civilistische Praxis* 1, at 5. On the criticisms of the 'metallistic' conception of money and the concept of ownership limited to corporeal objects, see the end of Section II.2 of this chapter.

[7] The formulation in Kaser, above n 6, at 1 and 7.

[8] K. Schmidt, 'Geldrecht', in *J. Staudingers Kommentar zum Bürgerlichen Gesetzbuch* (13th edn, 1997), at 44–6, introductory remarks on § 244 marginal n A.27–30; U. Haug, 'Die Deutsche Bundesbank', in H. Schimansky, H.-J. Bunte, and H.-J. Lwowski (eds), *Bankrechts-Handbuch* (3rd edn, 2007), vol. 2, at 2118, § 123 marginal nn 52–3. In the nineteenth century, the term 'interested party' (*Interessent*) was predominantly used in place of 'customer' (see Section II.1 at n 20 below).

[9] Those rights which the buyer can assert, for instance on the basis of default, remain unaffected. These rights must be strictly distinguished from the buyer's opportunity to cancel the 'payment' itself.

[10] On this, see further R. J. Mann, 'Making Sense of Payments Policy in the Information Age', (2005) 93 *Georgetown Law Journal* 633, at 643; O. Grabe, *Die Risikozuordnung im US-amerikanischen Kreditkartenverfahren: Mit besonderer Berücksichtigung des Kreditkartenmissbrauchs im E-Commerce* (2006), at 59–60.

to the recipient's account. Under the present law, the payment process is not complete until the recipient's bank has credited the sum to the recipient's account. Crediting may be complete, for example, when a sum is documented via manual book entry or when a sum is capable of being spent through an online transfer.[11] Under German law, the recipient does not gain ownership over the credited sum;[12] instead, the act of crediting his account creates an abstract obligation. The recipient's claim against his bank carries a legal power which, for all intents and purposes, is the same as that which follows a transfer of cash.[13]

To perform its function as 'money', the claim created by a cashless payment must fulfil two requirements: it must be created by crediting an account and it must be realizable at any point for making payments. It is only when the recipient's claim against his bank becomes 'final' that one can speak of a 'payment' having been made. Ultimately, it is the legal effect of the payment order that determines the creation of the claim constituting 'bank money'.[14] From a commercial perspective, the transfer of physical money and the transfer of a monetary claim are equivalent. But the two transactions are distinguishable as a matter of legal science, and an explanation has to be found for how they can each be given the same legal effect.

Since giro remittances were first used, many attempts have been made to explain their precise legal basis, but these have failed to solve the problem. It has been unclear what legal grounds or statutory provisions the beneficiary of the remittance should rely upon to enforce his claim against the financial institution holding the credit. A striking number of Roman law grounds has been developed in the last two hundred years and cited as potential solutions. *Datio*, *depositum*, *mutuum*, *condominium*, *confusio*, *commixtio*, *vindicatio pro parte*, *cessio*, *stipulatio*, and *delegatio* are some of the grounds or legal terms which have been often discussed and which, to some degree, still play a role in modern-day analyses.[15] Whatever form of analysis is adopted, it seems that the aim should be to ensure that the beneficiary of a cashless transfer is as secure as if he had received a cash payment.

[11] Cf. S. Meder and A. Czelk, *Historisch-kritischer Kommentar zum BGB* (2013), §§ 675c–676c marginal n 20. It is to be understood here that the question of finality with regard to other forms of cashless payment, such as direct debit or card payment, can be answered differently.

[12] On the restriction of the conception of ownership to corporeal objects, see S. Meder, 'Gottlieb Plancks Vorlesungen über "Immaterialgüterrecht" und das "Geistige Eigentum"', (2012) 2010(1) *Archiv für Urheber- und Medienrecht* 171. The legal position is different in England, see, e.g., D. Fox, *Property Rights in Money* (2008), esp. at 237–63; D. Fox, 'Defective Payments of Incorporeal Money in South African and English Law', (2009) *Tydskrif vir die Suid-Afrikaanse Reg* 638. An overview of the theoretical discussions of ownership in the US is offered by M. Goldhammer, *Geistiges Eigentum an immateriellen Gütern anhand der US-amerikanischen Eigentumstheorie* (2012) (on the discussions in Germany on the admissibility of a vindication of value, see also the end of Section II.2 of this chapter).

[13] According to the presently predominant, though not uncontroversial, interpretation, this is best achieved by means of an abstract promise to fulfil an obligation under § 780 of the *Bürgerliches Gesetzbuch* (BGB) (on which see Section V.2–4 of this chapter).

[14] According to an interpretation widespread amongst economists, even with cash, that is coins and banknotes, the physical aspect should be secondary or even irrelevant. According to this approach, money primarily fulfils a 'record keeping' function; 'money is not a "thing" but rather a unit of account in which we keep track of all the debits and credits': L. R. Wray, 'Keeping Track of Stocks and Flows: The Money of Account', *New Economic Perspectives Blog* (8 August 2011), available at http://neweconomicperspectives.blogspot.com/2011/08/mmp-post-10. For a cashless payment, it can be concluded from this understanding of the concept of money that the legal order produces money by determining the finality of the payment process. Thus 'money' would be created in, for example, an online transfer when the moment of the sum's 'online disposability' is reached, because, at this point in time, the payment is documented so that it fulfils that 'record keeping' function of which Wray speaks.

[15] The present discussion revolves primarily around *stipulatio* (promise to fulfil an obligation) and *delegatio* (order).

II. From its Beginnings until the Foundation of the Reichsbank in 1875

1. Early Juridical Conceptions of Giro Payments

Before the foundation of the Reichsbank in 1875, few authors raised the question of the juridical classification of what we nowadays call 'giro commerce'.[16] Much attention was given to the entry on 'banks' in Wilhelm Eduard Wilda's *Rechtslexikon für Juristen*, a text which gave the first overview of the contemporary state of discussion on cashless payments, and attempted to develop its own juridical conceptualization of the giro. According to Wilda, the most important element of cashless payments was 'credit balance', which he understood as the 'sum of metal money' that is 'left in safekeeping by multiple persons in order to be able to make payments amongst themselves without any real delivery, by mere scriptural crediting and debiting'.[17]

Wilda emphasized the payment function of a credit balance. He stressed the 'unreal', 'notional', 'ideational', and 'immaterial' elements of the new ways of performing money transactions when he said that payments could be made 'without any real delivery, by mere scriptural crediting and debiting'. Thus Wilda opposed those authors who saw the main function of a credit balance as the safekeeping of cash, and who therefore viewed a giro transaction as a deposit (*depositum*), and based the claim of the beneficiary of a credit simply on the return of money paid in (*actio depositi directa*).

2. The Claim of the 'Interested Party' against the Bank on the Basis of Deposit (*Depositum* or *Depositum Irregulare*?)

Deposit (*depositum*) is a real contract which entitles the depositor to reclaim a thing (*datio*) left gratuitously for safekeeping.[18] In antiquity, it was common practice for minted money to be given into safekeeping in sacks closed by lead seals, or in other locked and sealed containers.[19] Liquid assets were also given over 'open' to a 'depositee' or to a 'money changer'.[20] Importantly, it was presumed to be an incident of this sort of bailment that a

[16] The following examples may be highlighted from the literature: S. Kleinwort, 'Rechtsfragen bei Bankverhältnissen', in *Archiv für das Handelsrecht*, vol. 2 (1820) 360; J. H. Bender, *Grundsätze des deutschen Handlungs-Rechts nach den besten Hülfsmitteln und vorzüglichsten Gesetzen älterer und neuerer Zeit* (1824), vol. 1 §§ 171–7; M. Pöhls, *Darstellung des gemeinen Deutschen und des Hamburgischen Handelsrechts für Juristen und Kaufleute*. Vol 1: *Allgemeiner Theil* (1828), at 302–25, §§ 131–42; W. E. Wilda, 'Banken', in J. Weiske (ed.), *Rechtslexikon für Juristen aller teutschen Staaten enthaltend die gesammte Rechtswissenschaft* (1842), vol. 1, 587; C. J. A. Mittermaier, *Grundsätze des gemeinen deutschen Privatrechts mit Einschluß des Handels-, Wechsel- und Seerechts* (6th edn, 1843), vol. 2, at 779–80, § 571; C. E. Morstadt, *Commentar über das Handelsrecht Deutschlands und Frankreichs* (1849), vol. 1, at 31–3, § 16; R. Jhering, 'Unsere Aufgabe', (1856) 1 *Jahrbücher für die Dogmatik des heutigen römischen und deutschen Privatrechts* 1, at 39–41.

[17] Wilda, above n 16, at 589. In place of *Guthaben* ('credit balance'), the terms *Einschüssen* ('sums paid in') and *Einlagen* ('deposits') were often used in the mid-nineteenth century. *Abschreiben* ('debiting') meant the decrease and *Zuschreibung* ('crediting') the increase of the credit balance, whilst with the term *Umschreiben* ('transcription'), likewise frequently used in the nineteenth century, a temporal element comes into play, which expresses the idea of a simultaneous increase and decrease of the respective credit balances. The sequence is ended with the term *Buchung* ('book entry'), which first became widespread towards the end of the nineteenth century and to which the question of the legal qualification of the beneficiary's claim attaches.

[18] See M. Kaser and R. Knütel, *Römisches Privatrecht* (19th edn, 2008), at 209, § 38 marginal n 8 and at 216–17, § 39 marginal nn 14–21.

[19] See ibid., at 217, § 39 marginal n 20 for references.

[20] Terms such as *Geldwechsler* ('money changer', *campsores*), *Banker* ('banker', *banquiers*, *banchieri*), *Buchhalter* ('bookkeeper'), *Bankdirectoren* ('bank manager'), *Mittelspersonen* ('intermediaries'), or *Verwahrer* ('depositee') were largely used as synonyms in the literature around 1800. To designate the account holder or customer, the term *Bankinteressent* ('interested party in the bank') was often used (cf. the terminology in Kleinwort, above n 16,

'moneychanger' was entitled to the 'implied use' of the money.[21] 'Even if not explicitly in each case, then by long-established custom, the use of the money was granted from the very beginning by him who had credited it to him', that is, to the moneychanger.[22] Thus, money given over in open containers could be used by the moneychanger for his own purposes.

When moneychangers did use the money in this way, the depositor was entitled to expect some recompense, such as the payment of interest. The modern savings account serves as a contemporary example of this historic practice. The bank covers its own lending needs with the deposited savings and pays the saver interest in return. With giro commerce, the bank is also authorized to apply the deposits (called the 'substratum of customer deposits') for its own commercial uses. The counter-performance for this lies in the operation of a payments processing service, rather than in the payment of interest.[23]

Cash would not therefore always be deposited gratuitously, as in a *depositum*. Moreover, the claim of the depositor would not extend to the deposited items themselves, but only to their value. This was especially the case if money was handed over in unsealed containers. Put another way, the depositor could claim repayment in coins generally, rather than in the very coins originally advanced. In addition, the credit balance would not necessarily be created by the actual delivery of coins, but by a 'scriptural credit', that is, by a cashless payment. As Wilda noted, '*depositum* [lacked] the return of a deposited *species*'.[24]

The doctrine of *depositum* did not sufficiently accommodate the increasing volatility of the subject matter of money (which continues to this day), its increasingly dematerialized state, and the change from the use of physical cash to credits of 'bank money'.[25] Supporters of the *depositum* theory therefore began to define the bank balance as *depositum irregulare*, an institute known since the classical era of Roman law.[26] The depositor's interest in the safekeeping of his money plays an important role in *depositum irregulare*, as it does in *depositum*. The same was true of the depositary's interest in the use of the money. He had to give some remuneration for the safekeeping by paying interest to the depositor. However, the intricacies of giro commerce could not be satisfactorily explained even on the basis of a *depositum irregulare*.[27] Wilda therefore

at 360–1, or Jhering, above n 16, at 1 and 39–41). An 'interested party' is someone who (a) has citizenship, (b) 'lays down a certain amount of capital in the bank', and (c) 'receives an asset by credit in the bank currency' (see further Pöhls, above n 16, at 306–8 and 310).

[21] Cf. Kleinwort, above n 16, at 374 (see further ibid., at 375, where use of money handed over sealed is also considered possible).

[22] Cf. ibid., at 374. This 'custom' traces back to Roman antiquity, where it was already commonplace to deposit money unsealed and grant the depositee use of it (see D. 16.3.25.1).

[23] Cf. only Mittermaier, above n 16, at 779. Nothing has fundamentally changed up to the present day: see H. Schimansky, 'Girovertrag und Kontokorrent', in Schimansky et al. (eds), above n 8, at 1076, § 47 marginal n 25.

[24] Wilda, above n 16, at 592.

[25] In Wilda's time, there was certainly still no bank money in the present day sense. The *Mark Banko* of the Hamburg Girobank was an ideational bank exchange medium, which as a unit of account represented 59⅓ parts of a pound of fine silver, and was a forerunner to 'bank money crediting'. It differs from modern bank money in that the *Mark Banko* was dependent on a deposit quantity of silver and thus was fully covered 'metallistically' (cf. Pöhls, above n 16, at 316–18; A. Djazayeri, *Die Geschichte der Giroüberweisung: Von den Anfängen im 19. Jahrhundert bis zum modernen Zahlungsdiensterecht* (2011), at 26–8).

[26] In the background there is the idea that contracts concluded by private persons with banks are not to be categorized as any particular type of contract, that is to say such a relationship 'forms no contract named by the Romans in all clarity, but rather belongs in the class of the innominate' (Kleinwort, above n 16, at 372). Given, however, that for the 'innominate contracts' it is the case 'that they orientate themselves with that nominate contract with which they are most alike', and the deposit (or the credit balance) has more in common with a deposit (*depositum*) than with a loan (*mutuum*), it is said that it should not be qualified as *mutuum irregulare*, but as *depositum irregulare* (ibid., at 373).

[27] The differences between *depositum irregulare* and the giro were characterized in the nineteenth century as follows: the credit balance is oftentimes created without any actual handover (*datio*) of money, and ordinarily it also does not attract interest. Its function was to consist primarily in covering the bank in order that it receive a

considered that the bank balance should be classified, like incorporation, as a 'partnership' between the parties.[28]

3. The Claim of the 'Interested Party' against the Bank for Restitution of Ownership

Like Wilda, Rudolf von Jhering saw the credit balance as a key element in the giro system but, unlike Wilda, he would not characterize the credit balance as a partnership. Jhering proposed that the 'characterization' as 'partnership' was not appropriate because of the 'number of interested parties' in giro banks, and because the 'sum of their contributions' could increase at any time without the consent of the 'supposed partners'. In contrast to 'partnership', which is associated with a 'common enterprise', Jhering described the giro bank as associated with 'common assets'.[29]

(a) The establishment of common ownership through mixing

Jhering's deliberations on the 'civilian structure of a giro bank' were written in the context of a fundamental question: whether, and to what extent, new phenomena, such as the rapidly growing cashless payment traffic, could be accommodated within the framework of Roman law.[30] Jhering proposed to examine the 'relationship between the interested parties in a bank' from the perspective of co-ownership (*condominium*), a concept that was 'recognized and developed by the Romans before us'. He illustrated the establishment of this common ownership with the example of a mixture (*confusio*) of solid goods belonging to different owners, who could at any time increase or reclaim their shares of a notional whole:

> However, just as a co-ownership is established when quantities of metal belonging to different owners are melted together, even without their knowledge or consent, so here [a co-ownership is established] when a new interested party joins without the knowledge of the others and he confuses his metal with that of the others, in order to retain some interest when he subscribes his ingots.[31]

The object of common ownership is, according to Jhering, 'the whole metal stock of the bank'. The debiting and crediting at the bank comprise 'nothing but a decrease or increase in the individual shares in the common property, an alienation amongst co-owners, . . . achieved by a purely ideational process (the mere writing)'. The 'juridical structure of the

reimbursement for its expenses arising from the remittance to the beneficiary's account. The differences between the *depositum irregulare*, a bank balance and the giro relationship were only worked out in detail after 1900. The claim for a cash withdrawal is still today based on an 'irregular contract of deposit' (*depositum irregulare*) in the sense of § 700 I BGB, to be distinguished from a giro contract: cf. H.-P. Schwintowski, *Bankrecht*, (3rd edn, 2011), at 90–1, § 4 marginal nn 10–12; Schimansky, above n 23, at 1076, § 47 marginal n 26.

[28] Wilda, above n 16, at 592, following on from Pöhls, above n 16, at 307.

[29] Jhering, above n 16, at 40.

[30] Ibid., at 39. Alongside *Girobank*, in Jhering's time terms such as *Umschreibbank* ('transcription bank'), *Wechselbank* ('exchange bank'), *Zahlbank* ('payment bank'), and *Depositenbank* ('deposit bank') were also common (cf. Mittermaier, above n 16, at 779); these were distinguished from *Zettelbanken* ('note issuing banks') and *Lehnbanken* ('loan banks') (cf. Pöhls, above n 16, at 312 and 322).

[31] Jhering, above n 16, at 41. The question of mixing was also discussed by other authors: cf. Pöhls, above n 16, at 311, § 135; D. C. A. Gründler, *Polemik des germanischen Rechts, Land- und Lehnrechts (ius controversum germanicum privatum et feudale). Nach den Systemen des Herrn Geheimen Raths Prof. D. Mittermaier und Herrn Geheimen Raths D. Böhmer. Vierter Theil. Enthaltend die Polemik über das VII. und VIII. Buch des Mittermaierischen Lehrbuchs* (1838), at 286; H. Baumeister, *Privatrecht der freien und Hansestadt Hamburg*. Vol 1: *Allgemeiner Theil. Sachenrecht. Obligationenrecht* (1856), at 305.

relationship' is hardly changed by the fact that the declarations of will underlying such an alienation take 'an extraordinary form'. Indeed, they are no more relevant to the structure than the circumstance 'that the co-owners do not undertake the transcription themselves, but depute this function and the entire administration to the bank'.[32]

(b) The legal relationships of the participants

These discussions reveal a lack of clarity in the mid-nineteenth century about the legal relationships involved in giro remittance, between depositors and depositaries. What was clear, however, was that the functioning of the giro payment system depended on the contractual relationships between the payer and the payee and between the payer and the 'moneychanger' (or the 'payment service provider' as they would be called in modern terminology).[33]

The legal analysis of the contractual relationship was complicated by a further requirement which was frequently imposed on banks and interested parties. According to the charters of many banks, only native citizens were permitted to open an account.[34] Whoever wished to conduct transactions as an alien needed to avail himself of a burgher who could undertake the payments on his behalf,[35] which added yet another link to the network of contractual relationships in the giro system.

(c) Prospects for a vindication of value

Jhering saw the act of transcribing or crediting the balances as an alienation of money.[36] The beneficiary would gain a claim for restitution of ownership, which arose when the act of scriptural crediting was complete. The appeal of this solution was that it specifically accommodated the needs of today's cashless payment system. People will only participate in a cashless payment if it is as secure as a payment by cash. That security was provided by Jhering's characterization of the crediting as a disposition of money. The fact of ownership establishes an absolute right to the money; it gives the beneficiary a title against all the world which is binding against the bank. It follows from the principle of abstraction in

[32] Jhering, above n 16, at 40–1.

[33] The distinction between the covering, exchange, and execution relationships (*Deckungsverhältnis*, *Valutaverhältnis*, and *Vollzugsverhältnis* respectively) was substantively carried over from the law of bills of exchange into the *delegatio* (on the development of the terminology, see the references in Meder, above n 1, at 179). Early attempts at approaching the giro from the perspective of a three-party relationship can be recognized in the second half of the nineteenth century (cf Section IV.1 and IV.2 of this chapter). From this angle, the bill of exchange, too, can be seen as having had a leading role in the legal conceptualization of cashless payment processes: see further S. Meder, 'Übertragung durch Geld im Zeitalter elektronischer Medien: Zu Aktualität und Rezeption von Friedrich D. E. Schleiermachers "Philosophie des Geldes"', in S. Sanio and C. Scheib (eds), *Übertragung–Transfer–Metapher: Kulturtechniken, ihre Visionen und Obsessionen* (2004) 129. A good overview of the history of the bill of exchange until the fall of the old empire is offered by A. Amend-Traut, *Wechselverbindlichkeiten vor dem Reichskammergericht: Praktiziertes Zivilrecht in der Frühen Neuzeit* (2009).

[34] See Section II.3 of this chapter, at n 51, for further references.

[35] See, e.g., Bender, above n 16, at 387–8, § 174; Gründler, above n 31, at 284, § 794c; Baumeister, above n 31, at 304. Cf. also the cases discussed above in Kleinwort, above n 16, at 360–76.

[36] See also Kleinwort, above n 16, at 375:

> Thus the ownership . . . transfers immediately with the addition or crediting, because as is well-known, the things which are added, measured out or weighed in transfer via such acts immediately into the ownership of the beneficiary when preceded by a transaction which can have as its consequence the transfer of ownership.

At another point, Kleinwort indeed emphasizes that 'the attempt to express the nature of the transfer of ownership must have particular effort dedicated to it' (ibid., at 374). This project was, as far as can be seen, never carried out and would probably also have been doomed to fail.

property law that the beneficiary would even gain ownership of the credited money if the legal transactions or business dealings preceding the transfer of ownership were defective.[37] The result would be that the recipient was effectively the owner of the money credited to him, just as he would be if he received a cash payment.

The question remained, however, as to what object the recipient's claim actually related to. As already explained, the credit balance was available for the bank's commercial use. The restitution of the depositor's money *in specie* was impossible, which had an impact on a claim for restitution of ownership,[38] on the *ius commune*, and eventually on the Bürgerliches Gesetzbuch (BGB), which limited the concept of ownership to corporeal objects. Other analytical problems were presented by the principle of certainty (*Bestimmtheitsgebot*) and the *lex specialis* doctrine. Accordingly, a claim for restitution of a money credit would have been doctrinally impossible unless 'numerals' (or 'monetary amounts' in modern terms) could be the subject of a vindication action. It was asserted in 1800 'that the moneychanger does not mix the money credited to him with his own, because the numbers themselves cannot be mixed', and consequently that the money handled by him could be reclaimed *in specie*.[39] However, a valid objection to this claim for restitution *in specie* is that, with deposits of unsealed money, 'the portion [of the money] which passed to the changer' is mixed with 'the entire quantity of money available in the bank'.[40]

One possible conclusion to be drawn from this observation might have been that ownership passed to the beneficiary of the payment under the rules on mixing (*commixtio* and *confusio*). However, this approach was never taken, since mixing only leads to a vindication of a 'proportionate quantity' (*vindicatio pro parte*). Where the interest of the beneficiary of a credit was in a particular sum of money, an elusive claim for a proportion of a total mass would not serve him well since the mass would be in constant flux. Ultimately, however, the analysis of the beneficiary's interest did not depend on the rules about vindication of proportionate shares since the general legal view was that the rules on mixing (*confusio*) did not apply to money. Thus, if money belonging to different owners is mixed and cannot be differentiated, the person having it in his possession—that is, the bank—would be the sole owner of it.[41] The ownership of the money is extinguished when money is mixed. The creditor is left to fall back on claims in the law of obligations, particularly in unjustified enrichment.[42]

Mixing thus leads to the loss of ownership in the money originally deposited. The beneficiary's claim is limited to the *genus* or the 'value' of the money credited to him. The question whether the value itself could also be the subject of a claim for restitution of ownership has been often debated in literature. To have allowed restitution of ownership would have been a departure from German property law, which applied a narrow conception of ownership, limited to corporeal objects. If ownership were to extend beyond

[37] Cf. ibid., and quotation in n 36.

[38] It was shown above (Section II.1 of this chapter) that the classification as *depositum irregulare* would collapse because the depositee cannot give back the thing which he had received.

[39] References in Kleinwort, above n 16, at 367 (the argument concerns a forerunner to the 'vindication of value' idea described below).

[40] Thus Kleinwort, ibid., at 374, and no doubt also Jhering, above n 16, at 41.

[41] D. 46.3.78. Cf. the references in Kaser and Knütel, above n 18, § 26 marginal n 16; N. Benke and F.-S. Meissel, *Übungsbuch zum römischen Sachenrecht* (7th edn, 2001), at 121 (the special treatment of money stems from the desire to facilitate undisturbed cash management for the 'bank').

[42] Likewise, the categorization of the giro as *depositum irregulare* would lead to the consequence that the money given over for use would be transferred to the ownership of the 'depositee'; cf. only D. 19.2.31: 'If someone gives money in deposit such that he hands over the money neither closed nor sealed, then the person to whom the money is given in deposit owes repayment only of the same sum of money.' See further N. Benke and F.-S. Meissel, *Übungsbuch zum römischen Schuldrecht* (5th edn, 2000), at 61.

corporeal things to include rights, then bank money could also be the subject of a vindicatory claim.

Nonetheless, the attempts to extend the popular understanding of the vindication of physical money to monetary value have been of no avail.[43] Claims based on ownership must ultimately fail because property law ignores the quality of money as a carrier of value, and does not attach any relevance to its numerically expressed denomination. However, there are good reasons for this.[44] A narrow concept of ownership presents the developing cashless payment system with the problem of finding legal grounds which can secure the position of the credit beneficiary to an extent comparable with that of a person receiving a cash payment. If this cannot be achieved in the law of property then it must be done through the law of obligations.

4. The System of the Hamburg Girobank as a Basis for Modern Giro Commerce

The general view of the commentators is that the history of modern giro commerce in Germany began with the takeover of the Hamburg Girobank by the Reichsbank.[45] Apart from Hamburg, there were giro banks in other areas, such as Berlin and Prussia. Why, then, did the Reichsbank view the Hamburg Girobank in particular as a model for giro payments? This question can be answered by considering some of the differences between the Hamburg and Berlin giro banks.

A particular feature of the Hamburg Girobank was that it was not allowed to conduct trade on its own account, and its functions were limited to 'serv[ing] the mercantile community as a communal bank and clearing house'.[46] Originally, a credit balance was created by the deposit of coins. The value of coins was subject to significant fluctuations.[47] To avoid this currency risk, the Hamburg Girobank took steps to introduce a silver exchange. From then on, a credit balance could no longer be created with coins but only by a deposit of silver.[48] Thanks to its silver holdings, the Hamburg Girobank distinguished itself by the exceptional stability of its funds, thus garnering considerable prestige. Another feature was the invention of the *Markbanco*, as a bank medium, indicating a particular weight of pure silver. It was a unit of account rather than actual currency.[49]

The Hamburg Girobank is distinct from the Prussian Bank, which was founded in 1765 and had previously operated for 150 years as the Königliche Giro- und Lehnbanco zu Berlin. The Prussian Bank emerged from this earlier institution in 1845, and became the headquarters of the Reichsbank in 1875. Following an edict of 1765, the Königliche Giro-

[43] See, e.g., the criticism of the 'metallistic conception of money' in the law of property in H. Westermann, *Sachenrecht* (5th edn, 1966), at 135, § 30 V (on the origins of this 'conception of money' in Roman law, see text accompanying n 6 above). For reasons including practicability, the call for the admission of a vindication of value had to be given up again: see Westermann, *Sachenrecht* (7th edn, 1998), at 196–8, § 30 IV. The example commonly cited in textbooks runs, in short, as follows: a finder (F) finds €50 on the floor of a restaurant. He pays his bill in the sum of €30 with it and receives a €20 note in change. The owner (O) claims the €50 belonged to him and demands from F, inter alia, restitution of the €20 note under § 985 BGB. O cannot rely on a claim arising from a property norm, as he was never the owner of the change. He is entitled only to claims in the law of obligations, above all in enrichment, because a vindication of value is, according to general opinion, excluded.

[44] On the limitation of the concept of ownership to corporeal objects and the need for a delineation of property and assets, see Meder, above n 12, at 171 and 180–4. On the different rule in the Anglo-Saxon legal family, see the references cited at n 12.

[45] See Section I of this chapter. [46] Cf. Halle, above n 3, at 10.

[47] A. Soetbeer, 'Die Hamburger Bank (1619–1866). Eine geschichtliche Skizze, 1. Hälfte', in *Vierteljahrschrift für Volkswirthschaft und Kulturgeschichte,* vol. 4/3 (1866) 21, at 23–4.

[48] See text accompanying n 25 above.

[49] See text accompanying n 25 above. See also Soetbeer, above n 47, at 47.

und Lehnbanco zu Berlin was modelled after the example of the Hamburg Girobank.[50] There were similarities between these two banks, such as that foreigners were not permitted to open an account, and that special bank money was created.[51] Unlike in Hamburg, however, the bank money (*Bankopfund*) in Berlin was not dependent on a particular precious metal, which meant that the unit of account used there did not have a fixed rate. A more important difference was that, in Berlin, money paid into an account by credit transfer could not be paid out in cash; only money paid in as cash could be demanded as cash.[52]

The restrictions on cash withdrawals were reinforced by the regulations of the Berlin Bank, which required all bank transactions to be processed in the bank medium. This 'enforced giro' (*Girozwang*) meant that the mercantile community had to keep its books in the Berlin Bank currency. This restriction hampered the execution of cash transactions, and significantly restricted the depositors' freedom of commerce.[53] It is not surprising, therefore, that the Berlin Bank's giro business nearly came to a halt. Repeated attempts were made to reinvigorate the giro business of the bank, but in the long run these had only limited success.[54]

The core business of the Berlin Bank (and later the Prussian Bank) was the issue of banknotes. A note-issuing branch was attached to the Berlin Bank's giro operation from 1766, the year after its foundation, which was a measure of its great importance.[55] Banknotes issued formed the focus of its activities. In comparison, the giro business was poorly developed, and was hindered by a number of transactional obstacles. This was the main reason why the Hamburg Bank was the better model for the Reichsbank: its primary focus was the giro operation, and its activities concentrated on it.

5. An Excursus: Change of Storage Medium and its Effect on the Giro Payment Analysis

As discussed earlier, it was common practice in antiquity for sacks to be filled with minted money and given to moneychangers for safekeeping.[56] Originally, the cash was left with the depositee in sealed containers on a contract of *depositum*. When the depositor requested

[50] See further M. von Niebuhr, *Geschichte der Königlichen Bank in Berlin. Von der Gründung derselben (1765) bis zum Ende des Jahres 1845. Aus amtlichen Quellen* (1854), at 26–7.

[51] Nobody is to be given a folio in Banco before he has become a citizen, or else makes arrangements with the gentlemen and citizens, in J. Klefeker (ed), *Sammlung der von E. Hochedlen Rathe der Stadt Hamburg so wol zur Handhabung der Gesetze und Verfassungen als bey besonderen Eräugnissen in Bürger- und Kirchlichen, auch Cammer-Handlungs- und übrigen Policey-Angelegenheiten und Geschäften vom Anfange des siebenzehnten Jahr-Hunderts bis auf die itzige Zeit ausgegangenen allgemeinen Mandate, bestimmten Befehle und Bescheide, auch beliebten Aufträge und verkündigten Anordnungen. Der Erste Theil, welcher die Verfügungen im siebenzehnten Jahr-Hundert in sich fasset* (1763), at 250–1. See also the Hamburg statutes under the title 'Das von Ihro Römischen Kaiserlichen Majestät allergnädigst confirmierte, und von Dero hohen Commissionen publicierte, neu revidierte Reglement der Hamburgischen Wechsel- und Lehn-Banco' (1 September 1710), in Halle, above n 3, 101, at 105 (Art. 31) and 'Reglement der Königlichen Giro- und Lehn-Banco zu Berlin' (1765), in Niebuhr, above n 50, 188, at 191 (Art. 17).

[52] 'Reglement der Königlichen Giro- und Lehn-Banco zu Berlin', above n 51, at 190 (Art. 9).

[53] Ibid., 188–9 (Arts 2 and 6).

[54] See Niebuhr, above n 50, at 151, 161, 239 (thus, for example, the giro deposits amounted in 1768 to only 3,600 *Reichsthaler*: ibid., at 68–9). On the intense fluctuations in the giro business of the Berlin and later Prussian Banks, see the reports in the *Bremer Handelsblatt* (1866), at 161 and *Bremer Handelsblatt* (1871), at 172. See further C. Schauer, *Die Preußische Bank. Unter Benutzung amtlicher Quellen* (1912), at 99–100; B. Sprenger, *Geldmengenänderungen in Deutschland im Zeitalter der Industrialisierung* (1982), at 59.

[55] 'Reglement der Königlichen Giro- und Lehn-Banquen zu Berlin und Breslau' (1766), in Niebuhr, above n 50, 202, at 204 (Art. 7). See also text accompanying n 30 above.

[56] See Section II.1 and II.2 of this chapter.

the return of the deposit, the legal basis of his demand was either his continuing ownership or the contract of deposit. In a transaction based on a 'sealed' deposit, the claim for restitution pertained to the actual coins given over for safekeeping, which remained in the depositor's ownership. However, in transactions where cash was delivered in open containers, the recipient was impliedly granted the use of the money by a contract of *depositum irregulare*. He had access to the money, for instance to lend it out. In return, the recipient owed the depositor some counter-performance, such as the payment of interest.

Originally, these transactions were effected by the actual exchange of coins. Given that the depositor could demand the return of the money at any time, the recipient had to take care that he could replace at short notice any coins that he had paid away. The effect of the transaction was that coins ended up in a container that had never been in the ownership of the depositor. The concept of ownership both under Roman and German law is confined to corporeal things, and is subject to the *lex specialis* doctrine, which entails that a vindication of value is not allowed. It followed that a depositor in an 'open' deposit could no longer base his claim for return of the coins on the basis of ownership. Rather, it could only be based on the contract of deposit.

The 'open' deposit leads to a certain separation of the value of the coins from its carrier, the metal itself. That is, the claim of the bailor can no longer be directed at the restitution of ownership of the coins, but towards the value embodied in it. This independence has consequences for the so-called metallistic conception of money.[57] According to that conception, money could be regarded as a thing as long as the cost of the metal used to make the coin determined its worth. Over time, however, the constituent value of the coins deteriorated; their use value decreased, though their exchange value was not necessarily affected. The difference in use and constituent values led to the insight that heavy, precious, or 'valuable' money was economically absurd.[58] The function of the coins was increasingly restricted to the denomination of the coin's value. This value was expressed by the numerals stamped or inscribed on the coins. This use of writing therefore needs some special consideration.

The functions and origins of writing have been much discussed in media theory. Marshall McLuhan's thesis that the transition to writing began with the invention of printing—what he called the 'Gutenberg Galaxy'—has become famous. But the technology of printing has now been superseded by the new media, or at least it is nearing its end.[59] Recent research accepts that the most important functions of writing were already developed in antiquity.[60] These functions, as differentiated by the theologian and cultural researcher Jan Assmann, are 'depositive', 'informative', 'performative', and 'commemorative'. The first function is primarily of interest here.[61] Writing is 'depositive' when its function is to support memory. Assmann argued that such a function is fulfilled by the numerals stamped or inscribed onto coins, which serve primarily to file, store, or archive a

[57] See text accompanying n 6 above.

[58] See K. Marx, *Das Kapital. Kritik der politischen Ökonomie.* Vol. 1: *Der Produktionsprozeß des Kapitals* (1867), in *Marx-Engels-Werke*, (1979), vol. 23, 138, at 139. The nominal theory of money, which takes its name from the 'nominating' of the value by the state, provides here the theoretical background. By contrast, the metallistic theory derives money from exchange: see, e.g., B. Laum, *Heiliges Geld: Eine historische Untersuchung über den sakralen Ursprung des Geldes* (1924, repr. 2006), at 15.

[59] M. McLuhan, *The Gutenberg Galaxy: The Making of Typographic Man* (1962). Following from that W. J. Ong, *Orality and Literacy: The Technologizing of the Word* (1982); V. Flusser, *Die Schrift: Hat Schreiben Zukunft?* (2nd edn, 1989).

[60] For further references, see S. Meder, 'Schriftlichkeit, Papier und Recht: Zum Wandel der Speichermedien in Moderne und Postmoderne', (2015) 132 *Zeitschrift der Savigny-Stiftung für Rechtsgeschichte, Germanistische Abteilung* 219.

[61] J. Assmann, *Herrschaft und Heil: Politische Theologie in Altägypten, Israel und Europa* (2002), 178–98.

particular value. They support memory in that they draw a 'trace' of past debts and credits into the present, and thereby aid in remembering a value.[62] This function, which Assmann called an 'exteriorization of the memory', can also be achieved by coins whose material is essentially 'worthless'.

The coin first became a medium in the true sense of the word when its value became independent of the value of its constitutive metal. From that point, it was only a short step to the displacement of the coin by another medium, namely paper.[63] Among other things, the advantage of paper is that it shows less resistance than metal in when it circulates at high velocity. Also, metal is much heavier, which causes practical problems when the value of individual transactions begins to increase and ever more coins are required; whilst 1,000 silver *thalers* can weigh over twenty kilograms, two banknotes of 500 *thalers* weigh less than five grams. There are alternatives even to using banknotes. Cash can be avoided altogether through the issue of written payment promises in the form of a bill of exchange or a cheque. The precursor of these media of exchange was the invention of the *tratta* in twelfth-century Italy; *tratta*, too, served as a new storage medium.

The increasing storage of information on paper also had consequences for the branch of the payment system which we today known as the 'giro'. Particularly since the sixteenth century, credit balances were no longer created through the actual delivery of coins, but increasingly through the mere process of 'crediting', which amounted to cashless payment. This phenomenon of 'writing' and 'script' played a central part in the scientific interests of the authors who first attempted to explain the giro in terms of juridical categories. Thus Wilda, writing in 1842, understood the credit balance as the 'sum of metal money' which was 'left for safekeeping by multiple persons so that they could make payments amongst themselves by mere scriptural crediting and debiting, without any real delivery'.[64] Hence, in Wilda's analysis, the simplification of payments by means of writing represented a great advance. With some admiration, Wilda emphasized that payment could be made in writing, without the physical delivery of cash. In stating his views, Wilda opposed those authors who wanted to see the main function of the credit balance as the safekeeping of cash. These authors characterized the giro transaction as a deposit (*depositum*), and saw the claim of the beneficiary of the credit simply the return of money paid (*actio depositi directa*).

The phenomenon of writing also preoccupied Jhering. He believed that the debiting and crediting at the bank represented 'nothing but the reduction or increase of the individual shares of co-ownership', and that this was 'affected by a purely ideational process (the mere writing)'.[65] By characterizing the depositor's credit balance in terms of ownership, Jhering was the first to attempt an answer to the question of how the beneficiary of 'mere writing' could enjoy the same level of security as a person who received a physical delivery of cash in the classical payment. For present purposes, it does not matter that Jhering's analysis based on ownership was ultimately unsuccessful in law. It is more important that he attempted to grasp the consequences that followed from the change in the money medium. His analysis shows that the question of the 'finality of the payment process' was already

[62] Cf. the formulation in Wray, above n 14. On the function of writing as an aid for memory, see also U. Neddermeyer, *Von der Handschrift zum gedruckten Buch. Schriftlichkeit und Leseinteresse im Mittelalter und in der frühen Neuzeit. Quantitative und qualitative Aspekte* (1998), vol. 1, at 551.

[63] On the beginnings of the development of paper and of paper money, see F. Schmidt, 'Papier: Zur Geschichte eines Materials, ohne das es keine Zeitung gäbe', in K. Beyrer and M. Dallmeiner (eds), *Als die Post noch Zeitung machte: eine Pressegeschichte* (1994) 77; L. Müller, *Weiße Magie: Die Epoche des Papiers* (2012).

[64] Wilda, above n 16, at 587 and 589.

[65] Jhering, above n 16, at 1 and 40–1.

beginning to loom on the horizon. The question was easily determined in the classical situation where coins or cash were transferred. The transfer itself made the payment final.

Jhering subdivided the finality of payments into four stages. In a classical deposit, the depositor can claim restitution at any time. Under property law, the depositor's claim is concerned with the restitution of ownership; however, under the law of obligations, it is concerned with enforcing the recipient's duty to return the deposited object. In an open deposit, the depositor's claim is no longer concerned with the deposited object—the coins themselves—but rather with their value. Since it is agreed that the moneychanger is allowed the use of the money, what he owes is the return of coins which are the same in terms of their kind and value, rather than the actual coins themselves.

In his own way, the lender has the ability to 'use' the money much like the recipient or the 'moneychanger', because he can, if he wishes, increase or decrease his credit balance through a 'transfer' of money. In the case of transactions executed through an actual exchange of coins, the payment process was complete when a certain number of coins were taken from or put into a container. This operation was similar to cash payments, where performance was completed by the simple fact of the money being delivered. If, by contrast, the increase or decrease in the credit balance was executed via crediting or debiting, the legal system had to determine the point of finality for the payment.

Initially, the dominant view was that the claim of the beneficiary did not arise when the sum was received by the recipient bank, but only when it was actually 'credited'. Georg Cohn, one of the pioneers in the analysis of the modern giro system, held that the bank became the debtor of the giro customer 'at the moment of successful crediting'.[66] Cohn's formulation of 1885 suggested that the beneficiary's claim first arose when a specific act of 'crediting' was completed by the recipient bank in the designated documentation papers. Precisely how such a manual 'entry' was executed in the early days of giro commerce warrants closer investigation. It is clear, however, that the entry was what was required for the creation of the 'credit', as well as for the accrual of the 'bank money'. Once a 'claim arising from the credit' was in existence, the legal system gave the beneficiary a level of security comparable to a cash payment.

Today, transfers are generally conducted by interbank electronic data processing. Credits are therefore separated from the physical handling of paper. This raises another question for the law: should the claim arising from the credit come into effect when the documentation is submitted for data processing or when the data is actually allocated and notified to the creditor? The general view is that the claim first arises in the online banking process when the bank allocates the data in such a way that it can be accessed by the customer online, rather than on the submission of the documentation. With this organizational act, the 'money in account' is generated alongside the 'credit entry', which founds an abstract claim for the credit beneficiary against his bank. This credit entry produces the same legal effects as the written procedure. In online banking, too, the function of the credit entry is to provide the beneficiary of the credit, who has agreed to a cashless payment, with security comparable to that of a payment in cash.

In the field of cashless payment systems, the media currently in use are changing. The studies of giro commerce have shown that media theorists had been wrong in prophesizing the end of writing.[67] The transformation of the medium from cash to a cashless system has more to do with the storage medium than it does with writing per se. The new challenge for

[66] References in Djazayeri, above n 25, at 44 (including references to other contemporary authors, whose statements on the requirement of 'crediting' largely agree). See also Section IV of this chapter.

[67] Cf. McLuhan, above n 59, Ong, above n 59, and Flusser, above n 59.

legal scholars is to address writing in the online banking process once it has been emancipated from paper. The concepts of accrual of 'credit' and 'bank money' need to be redefined to operate in a paperless system. On balance, the leap in legal analysis needed to explain the change from the actual exchange of cash to 'crediting' of an account was greater than for the change in storage media from paper to electronic. Ultimately, the same legal effects attach to this new medium as to a manual 'book entry'. In online transactions, the concepts of 'availability for disposal' and 'clearing'[68] correspond closely with the organizational act that used to be expressed by the idea of 'crediting'.

III. Interim Conclusion

Like Wilda, Jhering also saw the cashless payment as a 'purely ideational process', which was carried out by 'mere writing' rather by an actual delivery. This raises the question of the legal basis for the beneficiary of a cashless payment to rely on to enforce his claim. The rules of *depositum irregulare* could accommodate the depositary's interest in the use of the money, alongside the interests of the depositor in its security and safekeeping. However, an analysis based on the real contracts of Roman law could not explain the mere crediting of an account since there was no actual giving over of the money (*datio*) as required by the real contracts. The *depositum* analysis could not explain how the crediting of money to the account could give rise to a claim to physical money.

Even Jhering's suggestion that the 'debiting and crediting at the bank' could be characterized as an 'alienation amongst co-owners' was problematic, because it conflicted with the concept of ownership. Here perhaps lies one of the reasons why Jhering later disavowed the narrow concept of ownership of the pandectists, which was restricted to corporeal objects, and called upon 'today's jurisprudence' to take the last 'step towards the complete immaterialization of the law of property.[69]

IV. New Approaches in the Empire prior to the BGB

1. Overview of Particular Legal Questions

In the years following the foundation of the Reichsbank, between 1875 and 1900, there were very few attempts to explain the proper characterization of the giro in terms of legal doctrine.[70] In addition to the credit balance, other elements of the giro system became the subject of legal analysis.

The questions raised included the proper basis of the bank's obligation to carry out a transfer, and the juristic characterization of the giro payment in particular cases. According

[68] Cf. Mann, above n 10 and Grabe, above n 10.

[69] R. von Jhering, 'Rechtsschutz gegen injuriöse Rechtsverletzungen' [1885], in R. von Jhering, *Gesammelte Aufsätze aus den Jahrbüchern für die Dogmatik des heutigen römischen und deutschen Privatrechts* (1886), vol. 3, 233, at 378 (it is to be assumed, therefore, that Jhering would also have endorsed a 'vindication of value'. Admittedly, though, Jhering did not explicitly address the issue).

[70] Among the pioneering works, see G. Cohn, 'Die Girozahlung', in W. Endemann (ed.), *Handbuch des deutschen Handels-, See- und Wechselrechts* (3rd and 4th edns, 1885) 1041; K. Cosack, *Lehrbuch des Handelsrechts* (6th rev. edn, 1903 [1888]); E. Brodmann, 'Zur Lehre vom Girovertrage', (1899) 33 *Zeitschrift für das gesamte Handelsrecht* 121. See further K. von Gareis, *Das deutsche Handelsrecht: Ein kurzgefaßtes Lehrbuch des im deutschen Reiche geltenden Handels-, Wechsel- und Seerechts* (2nd edn, 1884 [1880]) and critical commentary in G. Cohn, 'Besprechung von Gareis, Karl: Das deutsche Handelsrecht', (1885) 31 *Zeitschrift für das gesamte Handelsrecht* 506. On other authors who have considered the issues of the giro and remittance, see the overview of late-nineteenth-century literature in Späing, above n 5, at 16 fn 6. Case law sources before 1900 are also sparse; there are two supreme judicial decisions in particular which consider the giro in more depth, namely Reichsgericht in Zivilsachen (RGZ), 42, 85 (30 January 1884, I 462/83) and RGZ, 40, 162 (12 October 1897, II 169/97).

to Georg Cohn's account, which was dominant between 1875 and 1900, a giro payment required a 'mandate of the customer whose folio is to be debited'.[71] The allocation of the risk of fraud was also discussed in detail by Cohn, who held that the customer had certain duties to fulfil, but that generally the bank had to bear 'all of the risks of fraud in the transcription order'.[72] Cohn also considered the point in time when the beneficiary's claim on a giro remittance arose. In his view, the payment process was complete when the payment could no longer be rescinded or avoided by the remitter. The moment of book entry was determinative here: 'at the moment of successful crediting' the recipient bank becomes the debtor of the giro customer.[73]

But what legal form did the customer's claim against the bank take? As before, claims on the basis of irregular deposit (*depositum irregulare*) and loan were discussed in the legal literature of the day.[74] Added to these legal grounds were assignment (*cessio*), order (*delegatio*), and the doctrine of contracts for the benefit of third parties, which particularly found many adherents after the BGB had come into force.[75] A number of authors thus already recognized that the legal problems with the giro remittance stemmed primarily from its three-party relationship between remitter, credit institute, and beneficiary.[76] Once again, the persuasive force of each of the suggested solutions depended on how the beneficiary could acquire a legal position against his bank which would offer a measure of security comparable to that afforded by a cash payment.

This security could not, for example, be given by assignment theory. That theory depends on the consideration that the credit balance represents the customer's claim against his bank, which after a remittance is reduced by precisely the same amount as the claim of the beneficiary is increased. As in the case of an assignment, it was thought that a giro payment involved the substitution of one creditor for another in claiming a fixed sum of money. Doubts were raised regarding this approach; in particular, concerns were expressed that the effect of an assignment would be that the bank could assert against the remittee any claims or defences that it could have enforced between itself and the remitter (§ 404 BGB). If these claims could have been enforced by the bank, then the legal position of the recipient

71 Cohn, 'Die Girozahlung', above n 70, at 1051.

72 See further S. Meder, 'Fälschungsrisiken im Giroverkehr—Die Aufteilung der Haftung zwischen Kreditinstitut und Kontoinhaber', in W. Wiegand, T. Koller, and H. P. Walter (eds), *Tradition mit Weitsicht: Festschrift für Eugen Bucher zum 80. Geburtstag* (2009) 529, at 533–6.

73 Cohn, 'Die Girozahlung', above n 70, at 1054.

74 The relationship between *depositum irregulare* and a loan of fungibles (*mutuum*) is also discussed in the literature on Roman private law (cf. only Benke and Meissel, above n 42, at 61). A similarity exists between the two, in that the lender of a loan likewise loses his ownership of the money at the handover. The most important arguments against a claim on the basis of a loan were already presented in the first half of the nineteenth century, namely that such a 'construction' prioritizes the use interest of the borrower over the security interest of the lender (cf. Kleinwort, above n 16, at 373).

75 On which see Section V of this chapter.

76 Debits and credits executed by the Hamburg Girobank and the Reichsbank were generally called 'in-house remittances' (*Hausüberweisungen*—labels such as 'branch-internal' or 'institute-internal'—*filialinterne* and *institutsinterne*—remittances were also commonplace). One speaks of an in-house remittance when the remitter and the recipient (beneficiary) keep their accounts at the same bank. The classic three-party relationship between remitter, financial institution, and beneficiary exists only in the case of such an in-house remittance. Nevertheless, the giro transaction is generally reduced to a three-party relationship even for external remittances. The German Federal Court of Justice treats the recipient bank simply as a point of payment, and banks engaged in the chain of transfer as transit stops in the transfer of bank money, which are apparently to be seen as mere 'intermediaries' as regards the law of enrichment (cf. Bundesgerichtshof in Zivilsachen (BGHZ) 69, 186, at 189; 128, 135, at 137). The reduction of the number of participants in the chain of transfer of money to a *single*-party drawee (financial institution) represents a significant simplification. This simplification does not significantly affect the analysis, though, at least insofar as the intermediate financial institutions do not come into conflict. The distinction between in-house and external remittances, which first became widespread in the second half of the twentieth century, is particularly significant for the question of the time of accrual of the beneficiary's claim against the recipient bank.

would have been so unsettled that he would be hard-pressed to participate in cashless payment transactions.[77]

2. The Claim of the 'Interested Party' as an Abstract Obligation

If the beneficiary of a cashless payment transaction was to obtain a degree of security comparable to that enjoyed by a recipient of cash, then the law had to ensure that he was not 'exposed to objections based on the person of the giro payer'.[78] The question therefore arose whether the claim of the beneficiary of a remittance against his bank could be qualified as an abstract obligation. Among the commentators, Cohn in particular was of the opinion that a new independent claim was created 'by the formal act of book entry on the account concerned, similarly to the Roman *delegatio* promise'.[79] This subject became the central point of the debate, particularly in the early twentieth century.[80]

V. The New Civil Code (BGB) and its Impact on the Giro Payment

1. Overview of the Legal Questions

After the enactment of the BGB on 1 January 1900, the question arose as to how the doctrinal analysis of giro commerce, which had developed under the *ius commune* regime, should be reconciled with the new law.

One example of this can be seen in the discussion of whether the common characterization of the giro contract as a 'mandate' could be maintained after 1900. This was a problem, because a mandate is required to be gratuitous under the BGB (§ 662).[81] As explained above, a giro contract does not comply with this requirement since, in return for processing a payment transaction, the customer owes the bank a counter-performance. He must allow the bank to use the deposits that have accrued. Moreover, transactions involving a single remittance which were often called a 'remittance mandate' were no longer characterized as a variety of mandate contract, but rather as an 'instruction' (correspondingly, the avoidance of a single remittance came to be characterized as a 'counter-instruction' in the sense of §§ 675, 665 BGB).

Other points under discussion included the allocation of the risks of fraud and the nature of the beneficiary's claim against the recipient bank.[82] Many adherents subscribed to a view

[77] See for the reasons why a waiver of objections could not resolve the problems with the assignment theory Djazayeri, above n 25, at 111–14, with further references.

[78] Cosack, above n 70, at 290; Cohn, above n 70, at 1054–5.

[79] Explicitly, so Cohn, above n 70, 1054—at that point in a discussion of further attempted solutions. Similarly L. Kuhlenbeck, *Der Check: Seine wirthschaftliche und juristische Natur* (1890), at 142–3. See further Cosack, above n 70, at 290. With reference to Cohn, Lorenz Brütt would later attempt to define the exclusion of objections with greater precision, under the heading of 'the abstract *delegatio* claim' (*delegationsabstrakten Forderung*): see L. Brütt, *Die abstrakte Forderung nach deutschem Reichsrecht* (1908), at 199. There were also authors who contested this approach and were of the opinion that the beneficiary's claim against his bank could not be qualified as an abstract obligation: see, e.g., Brodmann, above n 70, at 121, 137, 140.

[80] Pöhls was the first to attempt categorizing the legal relationship between the parties to a giro payment on the basis of the law pertaining to orders: see Pöhls, above n 16, at 311.

[81] The BGB thereby follows the Roman law, according to which a 'mandatum nisi gratuitum nullum est' (D. 17.1.1.4). Under *ius commune*, however, even remunerated transactions could be included within the law on mandate: see B. Windscheid and T. Kipp, *Lehrbuch des Pandektenrechts* (9th edn, 1906), vol. 2, at 799, § 409. This was the reason why proponents of the mandate theory, such as Cohn or Brodmann, saw no reason to address the problem of gratuitousness. In conformity with *ius commune*, other codifications (e.g., the ABGB (Allgemeines Bürgerliches Gesetzbuch von Österreich), the Swiss OR (Schweizerisches Obligationenrecht), or the French Code civil) held less strongly than the German BGB (or the Greek ZGB (Zivilgesetzbuch)) to gratuitousness, cf. Kaser and Knütel, above n 18, at 253, § 44 marginal n 11.

[82] On the allocation of fraud risks after 1900, see Meder, above n 72, at 529 and 533–6.

that was adopted in particular by the Reichsgericht in a number of decisions. The court held that the basis of the beneficiary's claim was the provisions on contracts for the benefit of third parties.[83] This view failed for the same reasons as did the assignment theory. For, if the claim really had been for the benefit of a third-party contract, then the bank would have been able to raise against the beneficiary any objections arising from the bank's relationship with the remitter (§ 334 BGB). As in the assignment analysis, this solution would also have come into conflict with the needs of modern payment systems: it could not provide a level of security for the beneficiary of the giro remittance comparable to that afforded by a cash payment.

The analysis of the beneficiaries' claim as abstract appeared to give the remittee of a bank payment the security he needed, as certain authors before 1900 had already argued. After 1900, the question arose as to whether the giro payment was to be put in the same category as the provisions on a promise to fulfil an obligation, an acknowledgment of debt, or an order (*Anweisung*).[84] The question was raised against the backdrop of a legal–political debate conducted under the heading of the 'social function of private law'. As is well known to legal historians, in 1889, Otto von Gierke criticized the BGB for neglecting the 'social function of private law'.[85] In the same year, Anton Menger claimed that the BGB would seriously disadvantage the 'dispossessed classes'.[86] From today's perspective, much of the contemporary criticism of the BGB is 'objectively very one-sided and in many cases unfounded'.[87] The conflict over the 'protection of the weaker' sometimes went so far as to become grotesque, and the conflict over 'abstract obligations' is a good example of how extreme it became.[88]

2. The Need for Protection of 'Less Commercially Experienced Groups' against Abstract Obligations

Abstract obligations form a central legal ground in the conceptualization of cashless payment processes. They are the basis for the promise to fulfil an obligation, the acknowledgment of a debt, and the acceptance of an order (§§ 780, 781, 784 BGB), as well as for special statutory forms such as a bill of exchange, a cheque, or a payment order. Anton Menger suggested that, in abstract transactions, the 'discrepancy between commercial and juristic justice stands particularly clearly and glaringly in the foreground'.[89] Here, it was shown 'how one-sided the new private law is and how it only knows to protect the strong and the cautious'. Yet it was apparently clear

[83] Cf. RGZ, 84, 349 (30 March 1914, IV 60/14). In a leading decision of 1921, the Reichsgericht abandoned this position again: see RGZ, 102, 65 (25 February 1921, VII 439/20). The jurisprudence of the courts was, however, not consistent. Thus RGZ, 141, 287 at 289 (28 June 1933 I 82/33), labelled the giro as a 'contract for the benefit of a third party at least in the sense that the third party (beneficiary) acquires via the credit a direct right to payment of the remittance sum'.

[84] In 1931, the Reichsgericht qualified the credit as an abstract promise to fulfil an obligation: see RGZ, 134, 73, at 76 (14 October 1931, IX 241/31)

[85] O. von Gierke, 'Die soziale Aufgabe des Privatrechts', lecture held on 5 April 1889 at the Law Society of Vienna. See also O. von Gierke, *Der Entwurf eines Bürgerlichen Gesetzbuches und das Deutsche Recht* (expanded edn 1889), first published in (1888–89) 12–13 *Schmollers Jahrbuch* (the expanded edition was used). See in greater detail, T. Repgen, *Die soziale Aufgabe des Privatrechts: Eine Grundfrage in Wissenschaft und Kodifikation am Ende des 19. Jahrhunderts* (2001), e.g. at 55–58.

[86] A. Menger, *Das Bürgerliche Recht und die besitzlosen Volksklassen* (1890, repr. 1968).

[87] See J. Rückert, 'Das Bürgerliche Gesetzbuch', (2003) 58 *JuristenZeitung* 749, at 750.

[88] The discussions in the following section draw substantially from my treatment of the controversy over the 'social function' of the BGB in S. Meder, *Gottlieb Planck und die Kunst der Gesetzgebung* (2010), at 29–32.

[89] Menger, above n 86, at 121.

> that legal disputes were thereby decided, in an immeasurable number of cases, unjustly to the detriment of the weak, who in their intellectual, economic and social dependence could not object to the conclusion of those abstract transactions.[90]

Similarly, Gierke warned tirelessly against the 'hawkish exploitation' of 'less commercially experienced groups' through the rules on 'formal acceptance of an order' (*Anweisung*) in § 784.[91] In his opinion, it was contrary to the social function of private law 'to introduce [the institute of an order] in this egregious expansiveness into civil commerce'.[92] Like Menger, Gierke did not substantiate his claim with a case where the problems he described arose, or with instances where abstract transactions could actually disadvantage 'less commercially experienced groups'. Presumably, such a case was not easy to find. In cashless payment processes, the abstract obligation was generally binding on banks and they did not belong to those 'commercially inexperienced groups' which were exposed to significant risk by admitting the formal acceptance of an order.[93]

The BGB legislator was nevertheless influenced by Gierke's warnings about the apparent dangers of abstract obligations, and the legislator restricted order (*Anweisung*) to very narrow formal requirements. The consequence has been that the BGB provides social protection even where it is not really necessary. This explains why nowadays order is one of 'the problem children of modern private law' and so far 'has not succeeded in capturing a generally recognized position in the system'.[94] The venerable institute of the order based on the Roman *delegatio*, as well as on the bill of exchange and the cheque, narrowly escaped being withdrawn from commerce owing to overblown concerns about the protection of weaker parties, and to the imposition of strict formal requirements.

During the formative period of the BGB, it was Gottlieb Planck who, more than any other theorist, defied Gierke and Menger. He asked that Gierke's call for the protection of the weaker be justified by evidence. He refused to allow the concern about protecting weaker parties to be seen in isolation 'but rather only drawn into consideration alongside many other equally justified perspectives', with particular weight being given to the commercial interest.[95] Planck, '[a]long with Bähr, ... believe[d] that the provisions in the draft are too narrow rather than too broad' with regard to abstract obligations.[96] Planck was also clear in his view that to formulate the requirements of order too narrowly would ultimately be to 'dispose of' this 'form of transaction which had grown out of commercial need because of potential misuse of it'.[97]

3. The Giro Remittance as Order (*Anweisung*)

By 1900, many authors had already attempted to conceptualize the giro in terms of an order (*Anweisung*).[98] After the commencement of the BGB, the relationship between the giro and

[90] Ibid., at 121.

[91] See the formulations subsequent to Gierke in the protocols: B. Mugdan, *Die gesammten Materialien zum Bürgerlichen Gesetzbuch für das Deutsche Reich.* Vol. 2: *Recht der Schuldverhältnisse* (1899), at 960; Gierke, 'Entwurf', above n 85, at 249–51.

[92] Gierke, *Entwurf*, above n 85, at 250–1.

[93] See in detail S. Meder, 'Abstraktes Schuldversprechen oder angenommene Anweisung? Zur Rechtsgrundlage für den Anspruch des Begünstigten bei Zahlungen im Mehrparteiverhältnis', in *Spuren des römischen Rechts: Festschrift für Bruno Huwiler zum 65. Geburtstag* (2007) 441, at 443, 451, and 454.

[94] Thus the still valid statement of Brütt, above n 79, at 169.

[95] G. Planck, 'Zur Kritik des Entwurfes eines bürgerlichen Gesetzbuches für das deutsche Reich', (1889) 75 *Archiv für die civilistische Praxis* 327, at 408–9.

[96] Ibid., at 410. [97] Ibid., at 410–11.

[98] See Section IV.2 of this chapter; see also Cosack, above n 70, at 290, along with the references in Späing, n 5, at 41 et seq.

the order needed to be reconsidered.[99] It was obvious that the giro remittance departed in some respects from the narrow factual requirements applying to an order set out in §§ 783 et seq. BGB. Unlike an order, a giro remittance is not concerned with furnishing money, securities, or other fungibles. Rather, it is concerned with bank money, that is to say, the creation of a claim. The remitter (drawer) does not deliver a document to the beneficiary (payee), but instead gives a remittance instruction to the bank (drawee). The remittance form creates no direct rights in the beneficiary (payee) and therefore cannot be characterized as an actual security. At the outset, the legal relationships are restricted to the drawer and drawee. The remittance instruction not only authorizes the drawee bank to perform on behalf of the payee, but also imposes an obligation on it to execute the transfer. The requirements of § 784 II BGB are not fulfilled in giro remittances, either, because the bank which makes the transfer does not provide a written notation of acceptance on the remittance form submitted by the drawer.

In spite of these departures from the narrow definition of an order as it appears in the BGB, a giro remittance does still show some of the broad features of an order. The payment made by the drawee bank to the payee can be analysed as simultaneous performance, because it involves both the drawee's performance towards the drawer in the covering relationship (*Deckungsverhältnis*) and the drawee's performance towards the payee in the exchange relationship (*Valutaverhältnis*). Nor is it an obstacle that the giro remittance involves both the authorization from the drawer and the drawee's obligation to perform.[100] Moreover, there are parallels in cases of rescission for fraud. With a fraudulent transfer, the drawee bank has recourse against the recipient beneficiary by way of a restitutionary claim in the *condictio* founded otherwise than on performance (*Nichtleistungskondiktion*). It is particularly important that the payee's claim is largely unaffected by any objections arising from the underlying causal relationship.[101]

4. Differences between an Order (*Anweisung*) and the Abstract Promise to Fulfil an Obligation (*Schuldversprechen*)

It is the bank's acceptance of the drawer's order that explains why the recipient is not bound by any objections arising from prior transactions (§ 784 BGB). The consequence of these features of the law pertaining to orders (*Anweisung*) is that the credit beneficiary is effectively put in the same legal position as the owner of cash. Nevertheless, the view that still prevails in Germany today is that the abstract claim of the payee does not follow from the order itself (§ 784 BGB), but from the bank's abstract promise to fulfil an obligation (*Schuldversprechen*; § 780 BGB). It is argued that a giro remittance does not fulfil the formal requirement provided for in § 784 II BGB. Moreover, the difference between the abstract promise to fulfil an obligation and an order turns out to be insignificant. The bank's acceptance of the order amounts to an abstract promise to fulfil so it seems that recourse could be had to § 780 if the formal requirements of § 784 were not fulfilled.

Through this solution based on an abstract promise to fulfil an obligation, the sphere of application of the acceptance of orders (§ 784 BGB) (and, indeed, the whole body of law relating to orders) has been greatly reduced. Max Rümelin, in particular, argued for

[99] See crucially E. Ulmer, 'Akkreditiv und Anweisung', (1926) 126 *Archiv für die civilistische Praxis* 129 and 257.

[100] For a detailed commentary, see Meder and Czelk, above n 11, §§ 783–92, especially on the question whether the giro is also characterized by a 'double authorization'.

[101] The discussion in the following section draws substantially on my presentation of the differences between an accepted order (§ 784 BGB) and the abstract promise to fulfil an obligation (§ 780 BGB): see Meder, above n 93, at 441–68.

an explanation of giro remittances based on an abstract promise to fulfil an obligation (§ 780 BGB). But his apparent solution is problematic,[102] since a promise to fulfil pursuant to § 780 BGB can be subject to a restitutionary claim (§ 812 II BGB). Nor can the abstract promise to fulfil (§ 780 BGB) justify the exclusion of objections. Only an accepted order provided for by § 784 BGB is capable of providing the beneficiary with the measure of security he needs to be able to accept a cashless payment instead of a cash payment. The infringement of a single formal requirement pertaining to orders in § 784 II 1 BGB does not stand in the way of applying this provision (§ 784 I BGB). In modern payment transactions a bank is usually the drawee and the protective function of § 784 II 1 BGB is inapplicable to it.[103]

VI. Summary

The central question in the giro relationship is how we should define the legal basis that the beneficiary of a 'credit' can rely upon to enforce his claim against the bank. In the first half of the nineteenth century, money was primarily defined as a physical object; whoever left cash in sealed containers for safekeeping for a given period of time expected to recover his money *in specie*. The case where money was deposited unsealed and for the use of the 'depositee' was more complicated. Here the 'depositee' acquired ownership. Leaving interest aside, the claim of the 'depositor' was limited to repayment of the value of the money, that is, the same sum. But it was difficult to provide a convincing explanation based on a real contract for sums remitted by third parties and simply credited to the account. The problem was that the person with the claim to the money never in fact performed any physical act of paying it over to the bank (*datio*). The solution framed in terms of ownership was also problematic. If it were correct, then it would have had the advantage of providing the beneficiary of a credit with a similar degree of security as that afforded by a cash payment. But the solution would fail because the law of property applies a narrow conception of ownership, which is restricted to corporeal objects.

These experiences with the questions raised by present law show that the future belongs to a solution that makes the beneficiary of a cashless credit as secure as a person who owns cash. The attempts made since 1875, and particularly after 1900, at a legal categorization of the claim of the beneficiary of a credit against his bank should be measured against this criterion. The early commentators proposed that the principles of abstraction and the exclusion of objections arising from prior transactions were well suited to ensuring that payment processes operated smoothly. But the problem remains unresolved today as is clear from the debate over the relationship between the abstract promise to fulfil an obligation (*Schuldversprechen*) and the accepted order (*Anweisung*).

[102] M. Rümelin, 'Zur Lehre von den Schuldversprechen und Schuldanerkenntnissen des BGB', (1905) 97 *Archiv für die civilistische Praxis* 211, at 259–67. The fact that credit is an abstract promise to fulfil an obligation was highlighted by the Reichsgericht in 1931: see RGZ, 14 October 1931, IX 241/31, at 134, 73, 76. The question, made controversial by Max Rümelin's treatment, whether § 780 could ever guarantee the beneficiary security equivalent to a cash payment, or whether the claim would be better established on the basis of § 784, was never considered by the judiciary.

[103] See for details Meder, above n 93, at 441 and 446–50.

PART IV

THE EIGHTEENTH AND NINETEENTH CENTURIES: THE EMERGENCE OF PAPER MONEY

I

MONETARY ENVIRONMENT

22

Early Public Banks II

Banks of Issue

William Roberds and François R. Velde

I. Sweden (1657)

The early history of public banks in Sweden is unusual in at least two respects.[1,2] The first is that one of Sweden's early public banks, the *Sveriges Riksbank*, survives today as a central bank, in fact the oldest central bank presently in existence. The second is the importance of circulating banknotes, which had already, by the middle of the eighteenth century, become an essential if not predominant component of the Swedish monetary environment.

Plausible explanations for the widespread use of banknotes are not hard to find. One hypothesis is that for much of the period under consideration, Sweden made copper, an abundant local resource, the basis of its coinage standard (in particular, for the years 1643–5, 1675–81, 1709–16, and 1719–45).[3] The weight of copper coins made them unwieldy for most commercial transactions, increasing the appeal of notes as a medium of exchange. A second hypothesis is that frequent shifts in monetary standards created confusion about the valuation of coinage, leading to the emergence of multiple units of account (in particular, Sweden experimented with a silver standard during 1665–74, 1681–1709, and 1777–1809). Fluctuations in the price of coinage may have again increased the attractiveness of notes as a transactions medium. A final hypothesis is that during our period of study, Sweden experienced three episodes of significant inflation and subsequent intervals during which metallic standards were suspended (1716–19, 1745–77, 1809–34). In other words, by the early nineteenth century, Sweden had ample experience with fiat

[1] For an introduction to early banks in general and the money-ledger bank variant, see Chapter 17 in this volume.

[2] This section is based exclusively on English-language sources, primarily the classic study by E. F. Heckscher, 'The Bank of Sweden in Its Connection with the Bank of Amsterdam', in J. G. van Dillen (ed.), *History of the Principal Public Banks* (The Hague: Martinus Nijhoff, 1934) 161, augmented by the recent monograph of K. Fregert, 'The Swedish Riksbank 1668–2010: A View from its Balance Sheet', Working Paper, Lund University (2012), which as of this writing is available only in draft form. Data on Swedish coinage and exchange rates are from R. Edvinsson, 'Foreign Exchange Rates in Sweden 1658–1803', in R. Edvinsson, T. Jacobson, and D. Waldenström (eds), *Historical Monetary and Financial Statistics for Sweden: Exchange Rates, Prices, and Wages, 1277–2008* (Stockholm: Ekerlids Förlag and Sveriges Riksbank, 2010) 238; Edvinsson, R., 'The Multiple Currencies of Sweden-Finland 1534–1803', in Edvinsson et al. (eds), 133; Edvinsson, R., 'Swedish Monetary Standards in a Historical Perspective', in Edvinsson et al. (eds), 26.

[3] See Edvinsson, 'Swedish Monetary Standards', above n 2, at 43–4.

money regimes. This may have led to some greater familiarity with and acceptance of notes than in other countries at the time.

The history of Swedish central banking begins in 1657, when a banking charter was granted to a proprietor named Johan Palmstruch, in return for a pledge to send half the bank's profits to the crown. The design of Palmstruch's bank, the *Stockholms Banco*, was supposedly derived from the examples of the public banks in Amsterdam and Hamburg. As was the case with many other contemporary public banks, the Stockholms Banco was formally divided into two institutions, an exchange bank and a lending bank. From the beginning, however, the exchange bank saw relatively little use, as Palmstruch's main interest was in the profits that could be had through operations of the lending bank.

Credits from the lending bank were not granted as bank balances, but in the innovative form of banknotes (*Kreditivsedlar*), bearer instruments that were pre-printed in round denominations and payable on demand. The sources do not mention that these notes enjoyed any legal privileges, but they did enjoy an initial run of success, perhaps due to the impracticality of the prevalent copper standard. By 1664, however, the bank had become overextended and was closed when it could no longer redeem its notes.

In 1668 a new, publicly owned bank was chartered, the Bank of the Parliament (*Riksens Ständers Bank*). Fearing the bank's exploitation by the crown, the new bank was operated by a governing board appointed by the Parliament. After the experience with Stockholms Banco, the new bank was prohibited from note issue. Formally, the Bank of the Parliament retained the dual structure of an exchange bank and a lending bank. As with the Stockholms Banco, however, the exchange bank was of secondary importance, and the main activity of the new bank was lending. Separate accounts were maintained for deposits in copper and silver coins, meaning that Sweden's 1675 return to a copper standard had no major impact on the bank's operations.

The bulk of the bank's assets consisted of loans to the private sector.[4] Loans were of indefinite maturity, at interest rates that could vary between 6 and 8 per cent, and these were automatically rolled over every six months at the discretion of the borrower. The main form of acceptable collateral was agricultural land, which in practice meant that most borrowers were members of the nobility. Deposits were renewed every six months at the discretion of the depositor. Deposits at the exchange bank did not bear interest, but deposits at the lending bank bore interest at rates between 4 and 5 per cent.

The maturity mismatch inherent in these arrangements left the bank open to liquidity and credit risks. These risks were amplified by the fact that the bank had been endowed with no capital, and the fact that, contrary to its charter, the bank used deposits at the exchange bank to fund the lending bank. Moreover, the bank could not control its risk exposures by varying the interest rates on deposits or loans. Consequently, the bank often resorted to placing restrictions on deposit inflows and outflows. During 1683–5 and 1691–9, lack of profitable lending opportunities caused the bank to be closed for new private deposits. Monetary instability during this period was also increased by the 1681 shift back to a silver standard.

Beginning in 1701 the bank began to issue banknotes, in the form of 'transport notes' or *Transportsedlar*,[5] despite legal prohibitions on this activity. At first the notes could only be transferred via endorsement, but were later treated as bearer instruments. The transport notes do not appear to have had any privileged legal status, at least not initially; they were

[4] Fregert, above n 2, at 25.

[5] Edvinsson, 'The Multiple Currencies', above n 2, at 179.

however redeemable on demand in copper coin. The notes were apparently little used at first.

The fiscal demands of the Great Nordic War (1700–18) caused the bank to venture into the realm of government finance.[6] From 1700 to 1709, the bank's lending to the government caused its deposits to approximately double, from 4.6 million *dsm* ('dollars silver money') to 9 million *dsm*.[7] Faced with a drain on its metal reserves, the bank suspended withdrawals of private deposits in 1710. The government reintroduced the copper standard in 1709, but suspended it again from 1716 to 1719. Other than bank deposits, the main form of money in use during the latter period was token copper coins.

From 1720 to 1740, the bank attempted to repair its balance sheet through a number of defensive strategies. The lending bank was closed to new loans, and deposits remained inconvertible, although interest was paid in metal (copper). Transport notes became increasingly popular after 1726, when they were allowed for tax payments in all public offices. Convertibility of deposits was restored about 1735.[8]

The year 1740 saw the outbreak of war with Russia, which was largely financed via the issue of transport notes. By 1743 the outstanding stock of notes hit 9.9 million *dsm* versus 5.5 *dsm* in 1740. The first consequences of this inflationary policy were relatively benign: a silver drain and a 25 per cent depreciation of Swedish money against the silver-based currencies of Amsterdam and Hamburg. By 1745, however, a copper drain was in full progress and the bank was forced to suspend convertibility of deposits and notes. Circulating money was reduced to banknotes and token copper coinage.

Inflationary pressures on the bank only increased following suspension, and peaked during the Seven Years' War (1757–63). In addition to financing the government's activities, the bank was expected to continue providing mortgage credit on generous terms, on instructions from Parliament. In 1754 it even reduced the interest rate on mortgages from 6 to 4 per cent,[9] perhaps the first documented episode of a central bank fuelling a real estate bubble. Note issue by the bank peaked at 45 million *dsm* in 1762.[10] Not surprisingly, this was a profitable period for the bank, due to the interest spread between loans extended by the bank and their primary source of funding, non-interest bearing notes. By 1763, the bank had accumulated 22 million *dsm* capital through retained earnings.[11]

The ongoing paper-money inflation caused a collapse in the external value of Swedish money. In 1736, one Swedish dollar silver money would buy one *mark* (*banco*) at the Bank of Hamburg; by 1762, it took 2.4 *dsm* to buy a Hamburg *mark banco*.[12] It is known that for much of this period, the Bank of the Parliament attempted to smooth fluctuations in the exchange rate via open-market operations. These operations were contracted out to groups of private merchants (*Växelkontor*). The private merchants were funded in part through their own borrowing, and in part through interest-free loans made by the Bank of the Parliament. Unfortunately no quantitative record of this activity has been preserved.

The conclusion of the Seven Years' War gave rise to policies designed to contract the bank's balance sheet. The first of these came in 1762 with a halt to new loans and the

[6] Fregert, above n 2, at 25.

[7] Heckscher, above n 2, at 195. Monetary figures cited for Sweden before 1777 can be confusing due to the existence of multiple units of account. Following Heckscher (ibid.), figures for this period are given in 'dollars silver money' (*daler silvermynt*, abbreviated *dsm*). This is a unit of account that does not necessarily correspond to the actual value of silver coin in circulation.

[8] Fregert, above n 2, at 37. [9] Ibid., at 41.

[10] Heckscher, above n 2, at 197. [11] Fregert, above n 2, at 35.

[12] Exchange rates cited by Edvinsson, 'Swedish Monetary Standards', above n 2, at 281, are *marks* copper money against *reichsthaler banco*. These are converted at 1 *dsm* = 12 *marks* copper money and one *reichsthaler banco* = 3 *marks banco*.

imposition of a 4 per cent per year amortization requirement for both government and private credits. In 1765 this was followed by the development of a covert plan to gradually (over a five-year period) restore the currency to its pre-war parity with the Hamburger *mark banco*, to be accomplished through open-market purchases of notes. The plan was supposed to be carried out in utmost secrecy, but the public soon got wind of it, and began hoarding transport notes in expectation of their appreciation. The result was a sudden, massive deflation: from 1766 to 1768, the exchange rate of the Swedish dollar silver money appreciated from two *dsm* to one Hamburg *mark banco* to 1.2 *dsm* to one Hamburg *mark banco*.[13] Over the same two-year period, Heckscher estimates that the general level of domestic prices contracted by about 50 per cent.[14]

After King Gustav III seized power from the Parliament in 1772, the decision was made to stabilize the value of the Swedish currency at a lower value than pre-war parity. More open-market operations were undertaken, this time by one of the bank's officers, Samuel Söderling, who was authorized to trade for the bank on his own account.[15] Söderling eventually succeeded in stabilizing the value of a dollar silver money to a level of 1.94 Hamburger *marks banco*.[16] In 1777, a monetary reform restored the silver standard and introduced a new, single unit of account, the *Riksdaler*, which became equal to six dollars silver money at the official rate. The bank's transport notes (originally payable in copper) were made payable in silver at a rate corresponding to 1.94 *dsm* to one Hamburger *mark banco*, a devaluation of almost 50 per cent relative to their pre-war 'par' value.

The new regime also required the bank to write off its holdings of government debt, a move that eliminated virtually all of the bank's capital. The bank responded by halting new loans to the private sector, requiring mortgages to be amortized at a rate of 2 per cent annually, and contracting the stock of notes in circulation. These policies were to be kept in place until the bank's metallic reserve had reached 75 per cent of the value of notes outstanding.[17]

War with Russia in 1788–90 led to renewed demands on the bank to finance the government's military expenditures. When the bank resisted, Parliament responded by creating a parallel currency, 'treasury notes' (*Riksgäldssedlar*). These new notes were issued by a governmental agency created specifically for the purpose of inflationary finance. Treasury notes were inconvertible from the beginning, but as they were accepted for tax payments, they soon displaced the bank's transport notes in circulation.[18] Contrary to the intent of the 1777 reform, the flood of treasury notes led to the emergence of a parallel unit of account, the 'treasury dollar' (*Riksdaler riksgäld*), which applied to transactions in treasury notes, as opposed to the 'bank dollar' (*Riksdaler banco*), which applied to transactions in bank money and specie. The bank dollar traded at a premium over the inconvertible treasury dollar. By 1800, over 18 million (treasury) dollars in treasury notes had been issued, as compared to the remaining stock of approximately one million (bank) dollars of notes issued by the bank. At the same time, the agio on the bank dollar reached 50 per cent.[19]

In 1803 the government attempted another monetary reform. The bulk of the treasury notes were made convertible to bank notes at an official ratio of 1.5:1. To enable the bank to maintain convertibility, the Swedish government sold off its colony in Pomerania and used the proceeds to augment the capital of the bank. However, progress towards monetary

[13] Edvinsson, 'Foreign Exchange Rates', above n 2, at 282.
[14] Heckscher, above n 2, at 182. [15] Fregert, above n 2, at 46.
[16] Edvinsson, 'Foreign Exchange Rates', above n 2, at 282.
[17] Fregert, above n 2, at 52–3. [18] Ibid., at 52–5.
[19] Edvinsson, 'The Multiple Currencies', above n 2, at 187.

stability came to a halt with the resumption of war with Russia in 1808. Called upon once again to help finance the war effort, the bank responded this time with the issue of almost 15 million (bank) dollars in new notes. Convertibility was suspended in 1809, leading to the emergence of three parallel units of account: the specie dollar (applied to silver coins), the bank dollar (applied to the now inconvertible bank money), and the treasury dollar (applied to the treasury notes remaining in circulation).[20]

The weak state of government finances at the conclusion of the Napoleonic era meant that a definitive monetary reform was not possible until 1834. This reform re-established the silver standard and the *Riksdaler* as the sole unit of account. The bank's notes were declared convertible to silver at three-eighths of their face value, while the outstanding treasury notes were made convertible at one-quarter of their face value. This regime remained in place until Sweden's transition to the gold standard in 1873. The bank received its current name, Sveriges Riksbank, following a change in government in 1865.[21]

II. England to 1821

An examination of the first few decades of the Bank of England's history, when compared to the other institutions reviewed in this chapter, cannot but evoke a sense of wonder and puzzlement.[22] As is well known, the bank after a century became the paragon of a central bank, a model envied everywhere and imitated in many places. Its beginnings were far from auspicious and its survival, never mind its success, becomes mysterious when one manages to forget its later history.

The bank was founded in precarious circumstances. The English government had just undergone a momentous revolution, with the forcible expulsion of the legitimate ruler James II by an invading force led by his nephew and son-in-law William of Orange at the behest of a faction of Parliament. A perfectly illegal convention bestowed the Crown of England on William and his consort in exchange for a contract, the Bill of Rights, which placed a number of restrictions on the executive's powers. England, with its new government, was immediately involved in a Europe-wide conflict with the Netherlands and the German Empire against France, which conflict included military attempts at restoring James II to his throne. This government was soon forced to seek funding for an expensive conflict and met great difficulties. The foundation of the bank took the form of a large loan of £1.2 million, in exchange for which the Crown granted an annuity at 8 per cent and a banking license to the incorporated shareholders.

The bank could not trade anything except bills of exchange, bullion, and goods pawned with it; it could lend to the crown with parliamentary consent. It received deposits and either kept accounts or issued receipts or bearer notes; it also issued sealed bills bearing 3 per cent or 4.5 per cent interest accruing daily, which circulated for large payments to the Treasury or in place of inland bills. With time, the use of sealed bills gradually ceased, and the main liabilities of the bank were its bearer notes and deposits.

The wartime circumstances made the first years of the bank particularly difficult. Aside from the initial loan, the bank was immediately pressed by the government to provide further assistance, for example in providing foreign exchange for the payment of troops in Flanders. The great recoinage of 1695, in which the bank was not directly involved, put pressure on its bearer notes, as the lack of circulating coinage induced heavy demands for

[20] See Edvinsson, 'The Multiple Currencies', above n 2, at 187.
[21] Fregert, above n 2, at 7.
[22] This section mostly follows J. Clapham, *The Bank of England: A History* (1945).

conversion of the notes into coin. By May 1696, the bank was forced to suspend payments, and the notes went at a discount that reached 17 per cent by November of that year. To replenish reserves, the bank did not pay any dividend and made a capital call on its shareholders. The following year, the government again made demands on the bank. It asked for a variant of the operation that started the bank, namely a conversion of heavily discounted existing Exchequer tallies (medium-term government bonds) into capital of the bank, on which the government promised the same 8 per cent rate. In exchange, the bank bargained for an extension of the charter by another four years, a promise by Parliament not to charter another bank, and the protection of its notes from forgery with the same penalties as for the royal coinage. Another government request was for help in circulating a new form of bearer liabilities payable on demand, the Exchequer bills, issued by the government itself in small and large denominations and bearing interest; a request which the bank's shareholders initially refused to meet.

The end of the war in 1697 ended the pressure on the bank for a few years. When England went to war again in 1702 the Treasury was more adept at raising funds on its own and placed fewer demands on the bank, which nevertheless was induced to circulate the Exchequer bills in 1708 and a few years later set up a fund that would stand ready to buy them at par. The approaching expiration of the charter required negotiations over renewal, setting a pattern that would continue throughout the eighteenth century at twenty-one year intervals.[23] Amid some polemical writing questioning the bank's usefulness, the bank and the government would negotiate in private; a settlement would be promptly passed through Parliament with little discussion, whereby the bank received an extension, and the government received in exchange a cheap loan. Occasionally, an opposition politician might query whether the government had sufficiently extracted from the bank's franchise value. Importantly, the charter renewal in 1709 included a monopoly on note issue, specifically the prohibition (in England and Wales) on all other corporations or partnerships of more than six from issuing bank notes. This monopoly would remain unaltered until 1826.

The War of Spanish Succession left Britain with a heavy burden of long-term debt and unfunded short-term debt. Walpole proceeded to take advantage of falling interest rates to refinance or lower the interest cost on what portion of the debt he could, including the bank's loan. The South Sea Company's proposal in 1720 was to allow the government to refinance the unredeemable debt by offering a conversion into rapidly rising stock rather than cash, thereby inducing the bondholders with the promise of capital gains. The operation failed spectacularly, and the Bank of England survived the episode unscathed, but not for want of trying to get involved. In early 1720, it felt compelled to compete with the South Sea Company for the privilege of attempting this debt conversion, but had the good fortune to lose out. Aside from imprudently lending on the security of its shares (which led to a brief suspension of discounting) the bank remained mostly aloof from the bubble of 1720, resisting pressures to assist the South Sea Company when the speculation unravelled. In the aftermath, a plan to engraft South Sea stock (like the tallies of 1697) was considered but dropped; instead, the bank was able to do the same thing but on its own terms by issuing stock to buy a little over 10 per cent of the South Sea stock (effectively a form of government debt).

The bank increased its holdings of long-term government debt again in 1728–9 and 1746 to replace Exchequer bills in its portfolio; it also accepted reductions in interest in 1717, 1727, 1742 (through an interest free loan), and 1750, roughly in step with like reductions on

[23] J. L. Broz and R. S. Grossman, 'Paying for Privilege: The Political Economy of Bank of England Charters, 1694–1844', (2004) 41(1) *Explorations in Economic History* 48.

publicly held debt. Other than in these operations, the bank's relations with the government had ceased to involve funding of long-term debt; rather, the bank was the government's bank, holding the deposits of various treasurers and officials, 'circulating' the government's short-term debt, and handling the service of the debt. The rest of the eighteenth century was relatively uneventful; the liquidity crises of 1763 (originating in Hamburg), 1772, 1783, and 1793 were handled defensively by rationing discounts rather than changing the discount rate, but otherwise mark the first instances of a lender-of-last-resort behaviour.[24]

In effect the government issued claims (Exchequer bills, which were theoretically backed by tax revenues, and navy and supply bills which weren't) that it knew the bank would honour. The volume of these claims typically increased during wartime and fell once the floating debt was converted to long-term debt. This arrangement was strained after 1793 as the government's demands grew rapidly. In 1796 France's paper currency collapsed and precious metal flowed with the subsequent remonetization; the subsequent drain on the Bank of England's reserves forced a suspension of convertibility of the Bank's notes in February 1797. The emergency measure, approved after the fact by Parliament, was initially temporary but within months it was extended for the duration of the ongoing war. The peace of Amiens in 1802 was too short-lived to allow a resumption of payments, and the so-called 'Restriction' was extended until six months after the ratification of a definitive treaty of peace.

The role of the Bank of England in wartime finance was rather subtle, giving the government 'critical flexibility in short-term finance and debt management'.[25] The Bank of England's principal business had always been turning the government's short-term debt into a circulating medium of exchange, and it continued to do so, only freed from the constraint of maintaining its gold value. Quantitatively this role was not large: public debt held by the Bank of England (all of it short-term) never amounted to more than 5 per cent of the total public debt, and remained around half of outstanding short-term debt during the period of suspension—if anything, less than what it had been in the late eighteenth century. Likewise, the share of public securities in the Bank of England's portfolio was, if anything, smaller during suspension, albeit never less than 40 per cent. Nor did seigniorage play much of a role in government finance, since a large part of it accrued to the bank's shareholders as profits. The Restriction did allow an increase of the bank's balance sheet by a factor of 2.5 at its peak in 1814. Two distinct factors account for this growth: the bank felt duty bound to purchase government debt to support the war effort, but it also continued to discount private securities as before, regulating the demand not by the discount rate (which remained at the 5 per cent legal ceiling) but by discretionary rationing. Both factors were at play. Indeed, the first of the two peaks of balance sheet expansion in August 1810 is due to the bank's accommodation of a commercial expansion while the second in August 1814 is due to war finance.

The money supply expanded substantially as a result. The bank's note circulation peaked at £28 million in 1814, more than the gold coined during the recoinage of 1773–9. In addition, the bank was allowed to issue notes in smaller denominations (£1 and £2, the equivalent of the gold guinea), which reached a third of the bank's circulation. Country banks (not subject to the bank's monopoly on note issue) also contributed to the increase in

[24] M. C. Lovell, 'The Role of the Bank of England as Lender of Last Resort in the Crises of the 18th Century', (1957) 10(1) *Explorations in Entrepreneurial History* 8.

[25] M. D. Bordo and E. N. White, 'A Tale of Two Currencies: British and French Finance During the Napoleonic Wars', (1991) 51(2) *Journal of Economic History* 303, at 311.

paper money, possibly as much as the bank itself. At the same time the currency depreciated, whether measured by foreign exchange rates, the domestic price of gold bullion, or overall prices. Although the currency was never declared legal tender outright, an act passed in 1811 (51 George III c. 127) made it illegal in Great Britain to exchange notes for coin at a premium, or coin for notes at a discount. The following year penalties of imprisonment were added, Bank of England notes were declared 'good payment' for any court-ordered payment, and the provisions were extended to Ireland (52 George III c. 50). Under these provisions, which remained in force for the duration of the Restriction, a creditor was not forced to accept notes (that would have made them legal tender) but he was deprived of the means to collect anything else. Bank of England notes were explicitly made legal tender in England in 1834 (3 & 4 William IV c. 98).

Restriction and the Bank of England's policy were suspected by many of being at the root of this depreciation, with some believing that the bank's management utterly failed to understand how an effectively fiduciary currency differed from a convertible one. However many other factors, such as war expenditures of the order of 15 per cent of gross domestic product (GDP) (mostly abroad) and lasting disruptions to trade, could be cited by the bank and its defenders. Parliament's inquiry into the high price of bullion in 1810 created a forum for this debate and marked an important moment in the history of economic thought, but it did little to alter the bank's conduct. The bank's directors probably understood the situation better than their evasive answers to Parliament suggested, and while aware of the relation between note issue and depreciation, treated the Restriction period as one long emergency, both commercial and national.[26]

The 'definitive treaty of peace' that was to end the Restriction was signed in June 1815 at the Vienna Congress. During the commercial downturn that followed the end of hostilities and the reopening of European trade, the bank shrank its balance sheet and built up its cash reserves, partly in preparation for a resumption of payments and perhaps wary to avoid an embarrassing monetary expansion as in 1810. The government, however, was stymied by Parliament's refusal to extend the wartime income tax, and needed several years to redeem its debt to the bank. Progressively, small notes were replaced by the newly issued gold sovereign (now sole legal tender) and the bank's notes finally became convertible on demand in May 1821. The United Kingdom was now on a gold standard with a still private but increasingly regulated bank of issue whose transformation into a central bank would continue for decades.

III. France

1. John Law's Bank (1716–20)

John Law's bank was founded not long after, and partly inspired by, the Bank of England, but its fate was very different.[27] Law, an itinerant Scotsman, who had been proposing banking schemes throughout Europe (in England probably, in Scotland, and in Piedmont),

[26] I. P. H. Duffy, 'The Discount Policy of the Bank of England during the Suspension of Cash Payments, 1797–1821', (1982) 35(1) *Economic History Review* 67.

[27] Classic references include E. Faure *La Banqueroute de Law* (1977); L. Neal, *The Rise of Financial Capitalism: International Capital Markets in the Age of Reason* (1990); and A. E. Murphy, *John Law: Economic Theorist and Policy-Maker* (1997); see also F. R. Velde, 'John Law's System', (2007) 97(2) *American Economic Review Papers and Proceedings* 276; F. R. Velde, 'French Public Finance between 1683 and 1726', in F. P. Caselli (ed.), *Government Debts and Financial Markets in Europe* (2008) 135; and F. R. Velde, 'Was John Law's System a Bubble? The Mississippi Bubble Revisited', in J. Atack (ed.), *The Origins and Development of Financial Markets and Institutions* (2008) 99.

arrived in Paris in late 1713. The War of Spanish Succession was coming to an end (France and Great Britain were at peace but fighting against the German Emperor continued into 1714). The war had led France to a partial default on its long-term debt in 1710–13, and several failed attempts at circulating government-backed notes. With the peace the government faced large amounts of unfunded short-term debt, exhausted fiscal revenues, and an economic slump due in part to revaluations of the metallic currency. Law was introduced to the Duke of Orléans, Louis XIV's nephew, who put him in touch with government officials. Law's bank proposal was being considered when the King died. The Duke became Regent and supported the proposal, but had to submit it to the regency council. Law's proposed state-owned bank intended to replace the specie remitted in payment of taxes with notes, the bank serving as the government's fiscal agent. The notes were to be backed, at least initially, with the specie, although the ultimate goal was to improve credit conditions and increase the money supply. The proposal was rejected by the regency council in October 1715 as premature. The government turned instead to drastic measures to stabilize the financial situation, including a devaluation and conversion of the floating debt into 4 per cent bonds without redemption date. A few months later, in May 1716, Law was instead granted a charter to open a purely private bank, the *Banque générale*.

The bank was presented as a way to reduce the outstanding floating debt. It was set up as a shareholding company: shares were issued in exchange for the 4 per cent bonds. Thus, in contrast to the Bank of England which was designed to attract new capital in the middle of a war, the Banque was created to enhance the value of a small proportion (3 per cent) of existing bonds. It otherwise closely followed the model of the Bank of England. The bank's assets and liabilities were restricted, like the Bank of England's. On the asset side, it could only hold bills of exchange and commercial bills, coin, and bullion. On the liabilities side, aside from shares it could only issue demandable notes and sight deposits. It was specifically prohibited from trading merchandise or selling insurance, and from issuing bonds.

The bank's only advantage was the ability to issue bearer notes, because it was specifically excluded from a prohibition on letters and bills payable to bearer issued in the same month. In the following two years, the bank prospered in part with the help of the government, which made the bank's notes redeemable on demand at the offices of tax collectors and receivers throughout France, and later made them legal tender in payment of taxes. Tax collection was at the time in private hands: the government in effect made the bank's notes into bills drawable not only on the bank in Paris but on any of a large number of private bankers; at the same time, the government accepted the notes in discharge of the tax receivers' obligations. Finally, all tax collectors and receivers were required to use the bank's notes, thus achieving Law's original plan.

The notes had the interesting feature that they were denominated and payable on demand in silver coins of a specific weight, rather than in units of account. It was at the time fairly common for the government to change the specie equivalent of the unit of account, either by changing the value of an existing coin or by issuing a new coin. At first sight this gave the note-holders some protection against monetary manipulations, but only to a limited extent, as became apparent in May 1718 when the silver coin worth five *livres* was demonetized and replaced with a new coin containing 20 per cent less silver and worth six *livres*. The mint took the old coins at their nominal value of five *livres* in the purchase of new coins, but the government instructed the mint to redeem the notes in new coins at a 20 per cent premium, in effect waiving part of the seigniorage tax for noteholders. This not only boosted the demand for notes instead of specie; it also supported the notion that denominating the notes in units of account (imaginary money) would be a better protection.

Law also moved the bank toward his original model by bringing it formally under government control. By the middle of 1718 the King of France owned 90 per cent of the shares, and in December 1718 the nationalization of the bank was announced, all shares having been bought at par value. The bank became the *Banque royale* and its profits were turned over to the royal treasury. Interestingly, the bank's deposits were given the privilege from seizure that was common in other European banks.

At that point the bank had been a marked success: its notes were generally accepted at par and the institution had improved credit conditions and facilitated payments throughout France and abroad. The note circulation in early 1719, around 40 million *livres*, was about the same size as the Bank of England's. During the next two years the bank would open branches in twenty French cities.

The political situation had also changed. The Regent had progressively asserted his power and changed his cabinet in January 1718. Law's influence was becoming stronger, particularly in matters of public finance and monetary policy. The devaluation of May 1718 provoked a strong response from the courts, to which the Regent reacted forcefully. At the same time a war broke out with Spain, in which France was allied with Great Britain to enforce the terms of the peace treaties of 1713–4. The Regent needed to finance this war (which was concluded fairly quickly) and he had the authority to implement what Law proposed.

During the year 1719 events unfolded quickly. The bank started issuing notes denominated in units of account in January, and ceased to issue notes denominated in coin in April, citing lack of demand. It also issued smaller denominations, down to ten *livres* (about half of a pound sterling). At the same time the legal status of notes changed: a series of laws deprived gold and silver of legal tender and even of any monetary use for all but small amounts, while notes became the sole monetary instrument. By early 1720 the note issue had increased by a factor of ten and a new monetary system was in place, with silver pieces for small transactions and paper for everything else; the possession of gold and silver above a certain amount was illegal and (as would happen in the United States in 1934) all precious metal had to be exchanged for paper. At that point, however, the bank had become part of a much larger scheme.

In 1717, Law had founded a trading company, the Company of the West, to develop the colony of Louisiana. It was not a shell company, or one based on extremely dubious prospects like the British South Sea Company. Louisiana was a secure French possession with vast potential, but no one had managed to turn a profit from it in forty years. The subscription for the company was on the same model but on a much larger scale, and it languished for a long time until the company secured other sources of revenues through a sequence of takeovers. The fact that many monopolies were farmed out or owned by poorly performing companies allowed Law to outbid or take over a number of more lucrative activities: tobacco, trade with North and West Africa, trade with the East Indies, the mints, and finally (in August 1719) the collection of all direct and indirect taxes. In late August 1719, the company now called The Indies Company launched its biggest venture: refinancing the whole national debt at 3 per cent. Here Law was imitating the South Sea Company, which had refinanced part of the British national debt, but on a much grander scale. The company obviously didn't have the cash to lend, but it financed the venture as it had its previous acquisitions, with shares. The summer of 1719 had seen surging prices for the Indies Company's shares, and the high market price allowed Law to offer bondholders an enticingly high nominal price for their bonds. The key weakness of the plan was that Law's offer came in the form of options: subscribers paid by instalments, which they could decline to pursue (the national debt was callable, but on cash only—an exchange of bonds for shares could not be compulsory). To induce the bondholders to complete the exchange, Law needed to guarantee high returns on the shares.

This he did with the bank, which he controlled and merged in February 1720 with the Indies Company. By that time, he had become Minister of Finances and controlled all levers of government. His company collected all tax revenues in France, from which he deducted the interest owed by the state on the refinanced national debt. The former bondholders were now owners of the residual tax revenues, profiting from any increase over the fixed promised payment to the state: in effect, they were now shareholders in the French State. But to maintain the high value of shares, he pegged their value in banknotes. The pegged price was too high and shareholders massively converted their holdings into freshly printed notes. Inflation and exchange rate depreciation ensued, threatening the whole edifice.

In May 1720, Law made a fateful decision: to reduce the nominal mass of money, he decided to reduce the face value of notes. Panic followed, with a run on the bank. Law was dismissed from his position as minister, but effectively reinstated after a few days as no one else could propose an alternative, and from June to September 1720 he fought to rescue his system. The only hope was to reduce the monetary mass: to that effect he reversed the debt conversion, restored gold and silver coinage, and sold company bonds and shares. Another outlet for notes was bank balances: taking inspiration from the Bank of Amsterdam, he made the use of ledger money mandatory for foreign exchange and large transactions. The efforts were unavailing, and the notes continued to lose value against gold; repeated changes of the valuation in *livres* of coinage failed to stem the decline. During the last months of 1720 the notes were progressively demonetized.

With the Indies Company insolvent and the Treasury depleted, Law was asked to leave France in mid-December 1720. The Indies Company was deprived of all its fiscal activities and the prior system of private tax collectors and farmers was restored. What was to be done with the liabilities of the Indies Company (which included the bank)? The option of letting it go bankrupt was rejected; it was put into receivership, from which it emerged again with its commercial privileges in 1725. Its liabilities other than equity (notes, bonds, bank accounts) were taken over by the state and converted into government bonds. The notes were widely held (over 500,000 claims were submitted) in part because their legal tender status had allowed many debtors to repay longstanding debts. An attempt was made, at enormous cost, to mitigate the distributional effects of the paper's depreciation by adjusting the claims depending on the manner in which the claimants had acquired the paper that they submitted for conversion. By 1726, public finances were in balance and the metallic currency was restored on a standard that stayed unchanged for decades. No bank was chartered for the next half-century.

2. The *Caisse d'Escompte* (1776–93)

The *Caisse d'Escompte*, or Discounting Bank, established in 1776, was not the first entity of that name.[28] It seems that, between 1727 and 1759, the French Indies Company ran some kind of discounting operation, although little is known about it. A company with the same name existed from 1767 to 1769, but under complete government control and providing

[28] This section follows A.-D. Laffon-Ladébat, *Compte-rendu des opérations de la Caisse d'escompte* (1807); R. Bigo, *La Caisse d'escompte (1776–1793) et les origines de la Banque de France* (1927); and H. Lüthy, *La Banque protestante en France de la révocation de l'Édit de Nantes à la Révolution* (1959–61), vol. 2, at 420–63.

the same services as the 'court banker' (short-term loans and foreign exchange operations funded through short-term bills).

The bank of 1776 was created under the following circumstances. The Seven Years' War, concluded in 1763, had left government finance in chaos. The government restored order from 1770 to 1774 through a combination of tax increases, conversion of floating debt into long-term debt, and imposed reduction on annuities. When the economist Turgot was appointed finance minister by the new King in 1774, the budget was close to balancing but the weight of the debt was still heavy. The belief that the Paris capital market would benefit from a note-issuing bank and that the consequent fall in interest rates would allow cheaper funding of the government debt convinced Turgot to accept the proposal brought to him by Isaac Panchaud, a banker born in London of a Genevan father and Dutch mother, and Thomas Sutton, an Irish *émigré* who had served as shareholders' representative in the Indies Company.

The link to the Indies Company is significant. One consequence of the previous war had been the expulsion of France from India and North America, depriving the Indies Company of much of its revenues. While its survival was debated in 1769, Panchaud proposed turning it into a bank, but the government decided in the end to take over the company's assets and convert the shares into perpetual annuities.

The new bank, authorized by a decree of March 1776, was technically a limited partnership but ownership was vested in bearer shares. It held no privilege or monopoly; on the contrary, the decree listed what it could and could not do. It could only issue demandable liabilities, it could not engage in merchandise trade or insurance, and its activities were limited to bullion trade, discounting of securities, and serving as cashier for individuals without fee. The ability to issue notes was implicit.[29] On paper, the company was largely independent: the definition of the securities eligible for discounting was left entirely to the management, itself chosen by the shareholders. The decree, however, put a ceiling on the discount rate of 4 per cent, later raised to 4.5 per cent in wartime; this constraint was partly remedied by adjusting the maturity of eligible securities.

The roster of the first directors (mostly foreign bankers recently established in Paris) suggests that, initially at least, the bank financed long-distance trade which, through the demise of the Indies Company, was now open to competition. With the onset of war with Britain in 1778 and the advent of the banker Necker to the finance ministry, the bank became a bankers' bank, its board enlarged to include the major banking houses of Paris. Necker himself supported the bank by requiring tax collectors to accept its notes, and by depositing government funds with the bank. The bank increasingly discounted government paper, thus supporting the banking houses that were placing the huge loans issued to finance the war. After Necker's fall in 1781 the board began to include financiers (tax collectors and treasurers of the state).

Over the course of its short life, the bank became increasingly entangled with the government. At its foundation the government had requested two thirds of the initial capital as an immediate loan, described as a form of bond money. But as capital was subscribed slowly at first, the requirement was lifted a few months later. A second episode occurred in September 1783, after a change of finance minister. The incoming official asked for a secret loan from the bank. Word got out and note redemption increased, but the bank held very little coin, as most of its cash was in the form of bullion waiting to be minted. The government was asked to pay back the loan: instead it offered the bank power to suspend

[29] There was no regulation of the denomination of notes. From 1784 they ranged from 200 to 10,000 *livres*, roughly £8 to £400.

convertibility. The bank hurriedly declined and published its balance sheet. The incompetent finance minister soon lost his position, convertibility was maintained, and a general assembly of shareholders reformed the by-laws, providing for a retention of earnings above a certain level, an issue of new shares, and mandating a cover ratio between one-quarter and one-third: if the ratio fell before the upper limit, discounting was to be slowed, and halted if it fell to the lower limit.

The autonomy of the bank came into question again in January 1785, after the shares of the bank had become the object of much speculation, and the fixing of the next dividend became contentious. The government decreed that dividends should be based on the current semester's profits, and also voided all futures contracts. The finance minister wrote a sternly worded letter to the bank, reserving for himself the right to supervise the bank's activities, and claiming that the bank's credit depended on that supervision. Mirabeau and others published a pamphlet to justify this position, arguing that the bank belonged to the shareholders but that, as a socially useful institution, it had no right to bankrupt itself.

The next few years were prosperous, but the state's inability to increase the primary surplus led to mounting financial difficulties. In 1787, the government requested a sizeable loan from the bank. In August 1788, the government stopped paying its obligations and authorized the bank to pay its notes from its portfolio of bills, a power the bank had not requested and avoided using as much as possible. As the Revolution began, loans from the bank were the only resource of the state. In the autumn of 1789 Necker, returned as finance minister, proposed to turn it into a national bank. The National Assembly faced a dilemma: a bank too closely tied to the state would have little credit and no usefulness. A bank too independent would enjoy good credit but acquire too much power. To escape the dilemma, the assembly availed itself of another resource, nationalized church lands, to back a new currency issued by the state.

In July 1790, the bank was fully reimbursed by the state and resumed full payment on its notes, albeit in the new currency. But its return to private life did not last; the outbreak of the war in 1792 perturbed business completely and the radicalization of the Revolution led to the closure of the bank in August 1793.

There is, however, a striking continuity. After the revolution's paper currency collapsed in hyperinflation in June 1796, a private bank emerged, the *Caisse des comptes courants*, founded in November 1796 with similar activities and some of the same personnel, among both shareholders and employees. Created as a partnership with unlimited liability, its brief life was marked by the disappearance of its director general in 1798, which led to a crisis of confidence and limitation on redemption. The establishment was dissolved and recreated with a smaller capital base, and its operations remained limited in scope; discounts were rationed and restricted to one-month paper. After Bonaparte's coup in November 1800 a broad coalition of major bankers, including shareholders of the Caisse, organized the foundation of the *Banque de France* in February 1800 with the full support of the new regime, and quickly merged with the Caisse.[30] The Caisse d'Escompte can thus be seen as the 'grandparent' of the Banque de France.[31]

[30] M. Marion, 'La Fondation de la Banque de France et ses premières années (1800–14)', in J. G. van Dillen (ed.), *History of the Principal Public Banks* (1934) 301; Y. Leclercq, *La banque supérieure* (2010).

[31] A. Plessis, 'La Révolution et les banques en France: de la Caisse d'escompte à la Banque de France', (1989) 40(6) *Revue économique* 1001, at 1014.

IV. Vienna (1703–1818)

Austria's first attempt to found a public bank came in 1703 with the chartering of the *Banco del Giro* under Emperor Leopold I.[32] The chief motivation was the poor state of Austrian public finance. Pressure on the treasury (*Hofkammer*) increased with the outbreak of the War of Spanish Succession in 1701. The debt of the state was trading at 60 per cent of face value and many payments were in arrears. To finance its military operations, Austria turned to private bankers such as Samuel Oppenheimer in Vienna. Fiscal pressures became acute in 1703 with the death of Oppenheimer and subsequent collapse of his firm.[33]

As with its Venetian namesake, the envisioned role of the Banco del Giro was to increase the value of government debt by increasing its liquidity. The bank was to take over management of the debt from the treasury, as well as take deposits from private parties. To encourage use of the bank, deposits were given many advantages, including freedom from taxation and attachment, with some exceptions. As with other giro banks, there was a legal requirement for Viennese merchants to settle bills through the bank.

This initial attempt at a public bank was not successful. The bank assumed some debt from the treasury and in return was promised dedicated revenues from the state, but these promises did not inspire market confidence. Instead there arose a widespread suspicion that the bank was simply being used as a device to delay payment to some creditors while favouring others, Oppenheimer's counterparts in particular. When the promised state revenues did not materialize, the leaders of the bank resigned, resulting in closure of the bank in 1705.

The bank was then resurrected as the Viennese Municipal Bank (*Wiener Stadtbank*). The concept of the new bank was essentially the same as that of the Banco del Giro, only the ownership was turned over to the city, which enjoyed a higher market reputation than did the Austrian state. To reinforce the impression of independence, the bank was housed in the Vienna city hall. There was a nominally independent management board, headed however by two 'co-directors' with close connections to the Crown. The legal requirement to settle through the bank was removed, although funds in bank accounts continued to enjoy special privileges (e.g., freedom from attachment). A key aspect of the agreement between the city and the state was that for every 100 *florins* of debt to be taken over by the Municipal Bank, the state would provide a stream of dedicated 'rents' of at least ten *florins*. In return, the bank was to amortize the debt over a fifteen-year period, paying an interest rate that was officially capped at 5 per cent. In practice the rents provided were highly variable and often of questionable quality: tolls, taxes on a cattle market, 'tolerance monies' paid by the Viennese Jewish community, seigniorage rights, and income from various industrial enterprises.

In addition to taking over certain state debts, the Municipal Bank was also required to take over the outstanding debt of the Banco del Giro, which by 1706 was trading at less than 40 per cent of par. Despite this burden, the Municipal Bank initially proved able to make more regular payments to creditors than had either the treasury or the Banco del Giro. Private deposits flowed into the Municipal Bank, partly due to its apparent reliability and perceived independence, but also due to offered interest rates as high as 9 per cent, in violation of the bank's charter. Most of these were time deposits, which allowed for predictable liquidity demands. However, the bank remained under pressure to generate

32 This section draws from H. I. Bidermann, *Die Wiener Stadt-Bank* (1859) unless otherwise noted.

33 R. Fuchs, *Die Wiener Stadtbank: Ein Beitrag zur österreichischen Finanzgeschichte des 18. Jahrhunderts* (1998), at 24.

income sufficient to cover its scheduled interest payments, as well as to amortize the existing stock of debt over the promised fifteen-year horizon. In 1708, the bank, with the agreement of the treasury, forced many of its creditors to accept a three-year prolongation, in return for a 1 per cent increase in the interest rate. Perhaps as a reflection of an absence of alternative investment opportunities, private depositors were not too upset by this development, and deposits continued to flow in.

The biggest threat to the bank's existence was the ongoing hostility of the imperial treasury, which resented the intrusion of a municipal institution into state finances. In 1714, the treasury persuaded Emperor Karl VI to charter a rival public bank, the Universal Bank (*Universal-Bankalität*), which was designed to accomplish many of the same functions as the Municipal Bank, while remaining under direct state control.[34] The Universal Bank could not attract deposits, however, and quickly suffered the same fate as had the earlier Banco del Giro. It was de facto liquidated in 1720, leaving twenty-five million *florins* in obligations to be taken over by the Municipal Bank.[35] Because they lacked the customary 10 per cent revenue cover, these additional debts weighed heavily on the Municipal Bank, even after aggressive rescheduling.

Unfavourable rumours about the Municipal Bank circulated in 1723, 1727, and 1733, leading to the withdrawal of some deposits. Thanks to its assumption of the Universal Bank's obligations and to a general pattern of fiscal exploitation, the Municipal Bank was confronted with an increasingly unsustainable debt load. By 1733, the level of underfunded obligations had reached 27 million *florins* and the bank was essentially operating as a *Ponzi* scheme, with interest payments and required amortizations apparently being funded from new deposits and from secret, high interest loans obtained from private moneylenders.[36]

The Municipal Bank did not collapse, however, and it continued to meet its obligations. Moreover, the bank was successful in its broad mission of reducing the average interest rates on state debt, from a range of 12 to 20 per cent before the bank's inception, to a 6–8 per cent range afterwards.[37] The bank's reputation with the public was such that it was allowed to continue to operate, despite entrenched resentment by the treasury and by other elements of the imperial government. From 1759, however, the bank was drawn ever closer to the state through a succession of organizational changes. Any pretence of independence had vanished by 1782 when the bank was formally merged into the treasury.[38]

Responding to the financial demands of the Seven Years' War (1756–63), the Municipal Bank experimented with its first issue of banknotes (*Bancozettel*) in 1762. The amount of the first emission, fully backed by coin, was a relatively modest 12 million *florins*.[39] To calm fears of possible inflation, the amount of the issue was announced to the public in advance. The notes did not have legal tender status but had certain advantageous features: they could be used to pay up to one-half of tax obligations at face value, and could be used to purchase interest bearing obligations of the Municipal Bank at a favourable price. Through these channels, the notes were retired relatively quickly and were almost entirely out of circulation by 1770. The retired notes were burned in a public ceremony, in an attempt to further assuage public fears of a paper money inflation. Unfortunately, these fears were to be borne out in subsequent events.

[34] Ibid., at 120. [35] Ibid., at 71.

[36] Surviving records are incomplete, but Fuchs (ibid., at 90) estimates that from 1721 through to 1748, the municipal bank assumed a total of 77 million *florins* in debt, against an average annual income of 2.5–3 million *florins*.

[37] Ibid., at 133. [38] Ibid., at 108–9.

[39] As compared to a total war cost of 260 million *florins*, twenty-one million *florins* of which was financed by the Municipal Bank: ibid., at 114.

The success of the Municipal Bank's initial note issue led to further experimentation. In 1770 and 1785 there were two more relatively modest and uncontroversial emissions of 12 million and 20 million *florins*, respectively. The rate of money creation accelerated sharply, however, with the outbreak of the Napoleonic Wars, and by 1796 the stock of banknotes outstanding had reached 44 million *florins*.[40] Demand for the ever-increasing stock of banknotes was reinforced by decrees, in 1797 and 1800, giving the banknotes legal tender status in all public and private transactions.[41] The ability to exchange notes for coin was initially limited and then finally abolished.

In the meantime, Austria's financing needs increased as a result of numerous military setbacks. Throughout much of the Napoleonic period, virtually all of the state's budget was financed through the emission of *Bancozettel*, most other sources of revenue having been exhausted. By 1811, the stock of circulating banknotes had reached 1 billion *florins*,[42] implying an average annual rate of increase of 23.6 per cent over a fifteen-year period. The only effective restraints on monetary creation seem to have been technological ones. The inflationary wave generated by the *Bancozettel* swept all forms of coinage from circulation: gold, silver, and eventually even copper. An absence of money for everyday transactions necessitated the printing of large numbers of small denomination banknotes, as well as the minting of new, token copper coinage with a lower metal content relative to its nominal value.[43] Banknote production was hampered by a need to keep printing facilities out of the reach of Napoleon's armies, necessitating a move at first to Pest (Hungary) and later to Oradea (in modern-day Romania).

By 1810, Austria's monetary situation had reached a crisis state. The public had come to believe that the Municipal Bank's notes would never be redeemed at anything close to face value, and the *Bancozettel* traded at a discount of 85 per cent–90 per cent relative to pre-war silver coins known as *Konventionsmünzen*.[44] In early 1811, the government attempted the first of a series of monetary reforms. A decree required all outstanding *Bancozettel* to be exchanged at one-fifth of their face value for 'redemption certificates' (*Einlösungsscheine*). The latter were to constitute a new monetary unit, the 'Viennese currency' (*Wiener Währung*), the stock of which would eventually be amortized through tax revenues.[45] The basic idea behind the reform was to reduce the future redemption burden for the *Bancozettel* to what treasury officials viewed as a more realistic level. This did little to improve the reputation of the notes with the public, and contemporary accounts invariably refer to the 1811 devaluation as a 'national bankruptcy'.

Ultimately even this extreme devaluation could not restore confidence. Efforts at redemption of the Viennese currency had to be abandoned in 1813 with the resumption of military campaigns against Napoleon. Over 400 million *florins* in new notes were issued between 1813 and 1816,[46] bringing the total outstanding to 678 million *florins* by 1816, despite the 80 per cent write-off achieved by the 1811 devaluation. The government again promised that the notes would eventually be amortized through tax revenues, and the post-1813 notes were optimistically termed 'anticipation certificates' (*Antizipationsscheine*).

The conclusion of the Napoleonic Wars allowed for the creation of a new state-controlled (though privately capitalized) bank, the 'Privileged Austrian National Bank' (*Privilegierte Österreichische Nationalbank*), in 1816. The first task of the National Bank was to attempt

[40] J. Raudnitz, *Das Österreichische Staatspapiergeld and die Privilegierte Nationalbank: erster Theil 1762 bis 1820* (1917), at 9.

[41] Ibid., at 19–26. [42] Ibid., at 86. [43] Ibid., at 47–8.

[44] J. Schneider, O. Schwarzer, and P.Schnelzer, *Historische Statistik von Deutschland. Band XII: Statistik der Geld- und Wechselkurse in Deutschland und im Ostseeraum (18. Und 19. Jahrhundert)* (1991), at 254.

[45] Raudnitz, above n 40, at 86–7. [46] Ibid., at 106.

yet another monetary reform, this one intended to permanently retire the Viennese currency circulating as redemption certificates and anticipation certificates. To this end, in July 1816 the National Bank offered to purchase all outstanding Viennese currency with its own obligations, in fixed proportions of two-sevenths of the proffered amount in banknotes and five-sevenths in interest bearing bonds. The National Bank's notes, unlike those of the depreciated Viennese currency, were to be redeemable in *Konventionsmünzen*. Simultaneously, the legal tender status of the Viennese currency (and indeed all forms of paper money) was abolished.[47]

Initially things did not go well for the National Bank. The government had underestimated the public's distaste for the Viennese currency, and the military had to be called out to control the long lines forming in front of the bank. Redeemability of the National Bank's notes had to be suspended indefinitely. The National Bank then began a programme of open-market purchases of Viennese currency, which lasted through early 1817.[48] Additional quantities of Viennese currency were then absorbed by the offering of time deposits and through the issue of additional equity shares in the National Bank. By early 1820, approximately one-third of the Viennese currency had been removed from circulation and its market price had stabilized at 20 per cent of a *florin*, the official level of the 1811 devaluation. The National Bank was able to resume redemption of its notes later that year.[49]

The Viennese Municipal Bank was formally abolished in 1818,[50] but its notes continued to circulate to some extent. By 1830, however, the great majority of these (about 620 million *florins*, or 91 per cent of the total outstanding in 1816) had been redeemed by the National Bank in *Konventionsmünzen* or the equivalent.[51]

V. Prussia (1765–1847)

Berlin offers an interesting case history in the development of public banks. A state bank operating in Berlin, the *Königliche Hauptbank* (Royal Main Bank), was initially modelled on the Bank of Hamburg, but was completely ineffective in this role. Over time it transformed itself into a more successful institution, first into a state-sponsored savings bank, and later a note-issuing bank on the English model.[52]

Frederick the Great's (1712–86) interest in forming a public bank was awakened by the success of the Bank of England (founded 1694), whose operation demonstrated that a public bank could be compatible with monarchical rule. Frederick believed that a public bank could help ensure a stable currency, while simultaneously providing the state with a ready source of profit. The instability of the Bank of Hamburg around this time (the mid-eighteenth century) reinforced Frederick's desire to form a separate bank that would be under his control.[53]

A number of designs were considered. In 1753 Prussian finance minister Graumann proposed combining an exchange bank, a lending bank, and a note-issuing bank into one institution. An even more ambitious plan was floated in 1764 by the Italian financier Gian Antonio de Calzabigi, one of Frederick's financial advisors. Calzabigi proposed to merge a note-issuing bank with a state insurance company and official trading monopolies. In the end, Frederick opted for a more cautious and modest design: following the Hamburg

[47] Ibid., at 148. [48] Ibid., at 167. [49] Ibid., at 201.
[50] Fuchs, above n 33, at 118. [51] Raudnitz, above n 40, at 254.
[52] This section is drawn from M. Niebuhr, *Geschichte der Königlichen Bank in Berlin* (1854) unless otherwise noted.
[53] H. Sieveking, 'Die Hamburger Bank', in J. G. van Dillen (ed.), *History of the Principal Public Banks* (1934) 125.

example, the state bank would not issue notes, but would combine exchange (giro) and lending operations.

The Royal Main Bank began operations in June 1765 with a 400,000 *thaler* capital from the Prussian state. The bank was chartered as a state agency under nominally independent management. As with other exchange banks, all bills drawn on Berlin were now required to be payable through the bank. The lending bank was split into two parts: a discount window that granted credits against short-term paper (and a few other instruments), and a Lombard facility which was to grant loans against non-perishable goods. Branches of the Lombard facility were to operate throughout Prussia.

The bank in its initial conception suffered from a serious design flaw, which was the decision to tie the value of bank money to Prussian gold coinage (*Friedrich d'or*), in an attempt to shore up the market value of the latter. This meant that bank funds had from the beginning an uncertain value against the more widely circulating silver current money. This was in direct contradiction to the central idea of successful exchange banks: to provide merchants with the means to settle in a stable unit of account.

The management of the Royal Main Bank was also plagued by corruption. The bank's capital was quickly dissipated in loans to insiders and to the State Tobacco Monopoly, where many of the insiders had financial interests. Payments had to be suspended in October 1765 and there were no new deposits. These circumstances led to a reorganization of the bank in 1766.

The new charter of the bank restricted its discounting activity to endorsed bills, but also moved the bank in the direction of the English model, by allowing for the issue of a limited quantity of banknotes. These were guaranteed to be accepted at 'par' (at a fixed agio above current money) at all state institutions. The new charter confidently proclaimed that the reconstituted bank would 'promote the circulation of money, support trade through credit advances, and prevent usury'.

Despite this show of confidence, the reconstituted bank was managed in a conservative fashion. A trial emission of 200,000 *thalers* of notes was circulated in late 1766 and early 1767. Frederick's distrust of the bank's management was such that it was at first not allowed to buy or sell precious metal; this task was delegated to a Dutch banker, Philipp Clement, who was commissioned to trade for the bank in Hamburg and Amsterdam. Clement's activity proved unprofitable, however, and the bank was soon unable to redeem its notes. In 1767, the relationship with Clement was dissolved and the bank shored up its liquidity position by borrowing from the State Lottery and the Fund for Disabled Veterans. Redemptions of notes resumed in January 1768.

Eventually, the credibility of the bank was restored and its business picked up. Additional notes were issued, but more importantly there was a strong inflow of funds from private and state sources, including the Royal War Funds, which from 1770 were deposited at the bank. Additional branches were opened throughout Prussia.

The character of the bank also evolved. Instead of acting primarily as a giro or note-issuing institution, it evolved into a type of savings bank; most of its liabilities were interest bearing deposits. Simultaneously the bank became seen less and less as a quasi-independent operation, and more and more as simply another branch of government. In addition to its commercial lending, the bank ventured into loans to various governmental entities and loans against long-term mortgages. Its liabilities remained essentially 'sight' (redeemable within one week), however, with the resulting maturity mismatch creating the potential for illiquidity and insolvency.

The risks of the bank's business model became apparent with the outbreak of the Napoleonic Wars. During the latter phase of this period (1806–13) economic activity ground to a halt in the wake of Prussian military setbacks; many deposits were withdrawn and mortgage payments were interrupted. Over much of this period, the Main Bank's role as a central bank was taken over by a rival state-controlled institution, the Royal Maritime Enterprise (*Königliche Seehandlung*).

The Maritime Enterprise had been founded by Frederick the Great in 1772, to manage certain trade monopolies and to extend credit to fledgling industries. The bulk of the initial capital for the Maritime Enterprise was provided by the *Landschaft* (credit co-operative) of the Province of Brandenburg. Additionally, some 'shares' (functionally more like preferred stock) were sold to the public, with a 5 per cent dividend guaranteed by the Brandenburg *Landschaft*;[54] additional guarantees of interest and principal were later provided.[55] Fiscal demands brought on by the Napoleonic Wars led the Maritime Enterprise into the business of government finance. Additional shares were issued, which were used to purchase government obligations. The Enterprise's balance sheet ballooned from about 3 million *thalers* in 1795 to over 20 million in 1805.[56] Because of their attached guarantees, shares issued by the Maritime Enterprise remained quite popular with domestic investors.

Fiscal pressures became acute with the military losses of 1806 and subsequent demands by France for war reparations. This led to an emergency issue of circulating banknotes ('treasury certificates' or *Tresorscheine*). Interestingly, the government chose to issue these not through the treasury or through the Main Bank, but under the auspices of the Maritime Enterprise, which was perceived as the strongest credit of the three. The February 1806 edict authorizing the issue of the certificates promised that the government would exchange them on demand for the equivalent value in silver money, and required private parties to do the same.[57] In practice both provisions proved untenable: convertibility of the certificates was quickly abandoned and the certificates traded at substantial discounts. Schwarz puts the size of the initial issue of certificates at five million *thalers*,[58] and by mid-1808, the market value of these had fallen to 23 per cent of par.[59] From this low point, gradual improvement in Prussia's fiscal outlook led to a recovery of the market value of certificates, to 90 per cent of par by 1810.[60] However, additional issues in 1812 (one million *thalers*) and 1813 (eight million *thalers*) led to another collapse in the certificates' market values, to 24 per cent by the middle of 1813.[61]

Extensive monetary reforms were enacted at the conclusion of the Napoleonic Wars. One third of the Main Bank's assets, 7.5 million *thalers* of mostly mortgages, had to be completely written off. Bank operations resumed in 1817, and the balance sheet was slowly repaired through profits obtained through resumption of lending activity. Earlier banknote issues continued to circulate, but to safeguard the bank's fragile reputation, new issues of notes were limited to 'bank cash certificates' (*Bankkassenscheine*) that were fully backed by coin or precious metal.[62] Convertibility of the Maritime Enterprise's treasury certificates was resumed in 1818,[63] and beginning in 1824 the treasury certificates were retired from circulation and replaced by another type of fully backed note, known as 'cash orders' or *Kassenanweisungen*.[64] This effectively marked the end of the Maritime Enterprise's involvement in central banking activity.

[54] H. Schleutker, *Das volkswirtschaftliche Bedeutung der Königlichen Seehandlung von 1772–1820* (1920), at 7.
[55] Ibid., at 32. [56] Ibid., at 39. [57] Ibid., at 99.
[58] O. Schwarz, *Der Staatshaushalt und die Finanzen Preussens* (1904), vol. 3, at 8.
[59] J. Conrad et al., *Handwörterbuch der Staatswissenschaften* (1901), vol. 6, at 30.
[60] Ibid. [61] Ibid.
[62] J. Lichter, *Preussiche Notenbankpolitik in der Formationsphase des Zentralbanksystems 1844 bis 1857* (1999), at 26.
[63] Conrad et al., above n 59, at 30. [64] Schwarz, above n 58, at 41.

In 1847 the Royal Main Bank was restructured as a national institution, the Royal Prussian Bank (*Königlich-Preussische Bank*). The new bank was recapitalized partly by the state, but principally through the public offering of 10 million *thalers* of stock shares, although control of the bank remained in the hands of the Crown.[65] Banknote issue expanded with a limited emission of 12 million *thalers*, gradually rising to 20 million by 1855. In 1856 the bank gained the freedom to issue unlimited amounts of banknotes, subject to requirements to maintain convertibility and one-third metal backing. The use of 'foreign' banknotes (those from neighbouring German states) was simultaneously outlawed, and the note circulation of the bank increased to sixty million *thalers* by 1857. A major beneficiary of this expansion was the Prussian treasury, whose bonds constituted the bulk of the backing assets.[66] In 1876 the Royal Prussian Bank was merged into the *Reichsbank*.

VI. Conclusion

1. Comparisons across Time and Space

Before offering some final remarks, we provide some quantitative comparisons for some of the banks we surveyed in Tables 22.1 and 22.2, as well as Figures 22.1 and 22.2. The dates at which the banks are compared in the tables and the common currency were dictated by data availability. The size of first generation banks is measured by balance sheet, while second generation banks are compared by their note circulation and deposits. To facilitate comparisons over long periods of time estimates of city populations were used to compute per capita balances in Table 22.1.

Figure 22.1 shows that, after 1640, the Bank of Amsterdam was clearly in a league of its own, not only being larger, but also growing until the early eighteenth century, while Hamburg and Venice remained remarkably similar in size to the end, stable but not growing. The size of the Neapolitan banks is striking: far from a negligible phenomenon, these banks were collectively as large if not larger than Amsterdam (admittedly, the population of Naples was several times larger).

Figure 22.2 covers two distinct periods, the eighteenth century and the wars of 1792–1815. The first period shows the steady rise of the Bank of England after 1720 when it breaks away from the Bank of Amsterdam. The second period allows a comparison of Austria and England: the note circulation (in real terms) is similar, but as we saw, the price consequences were very different. Noteworthy is the Caisse d'Escompte: its success, far from negligible in comparison with a much more advanced Bank of England, was cut short by the Revolution. Its successor, the *Banque de France*, remained comparatively modest in its early years, but played no role in public finance.

2. Banks and Governments

The banks surveyed in this chapter are distinguished not only by their date of birth (after 1650) but also by one of their liabilities and by the political nature of their sponsoring entities.

The note-issuing banks were all founded in monarchies, and observers at the time wondered whether public banks could survive outside of a republic. The nature of the monarchical regimes varied, as did the form of ownership. Sweden's bank was owned by

[65] Lichter, above n 62, at 100. [66] Ibid., at 179–81.

Table 22.1 Balance sheets of various public banks.

	Year	'009 ducats	Ducats/cap
Barcelona	1433	477	13
Naples	1597	611	2
Venice	1597	950	6
Genoa, cart. oro	1586	179	3
Hamburg	1621	339	8
Amsterdam	1631	1,646	30
Nuremberg	1631	462	11
Venice	1631	1,462	15
Naples	1631	1,450	5
Venice	1666	876	6
Genoa, cart. moneta corrente	1675	967	15
Amsterdam	1675	2,731	13
Naples	1675	5,147	17
Venice	1721	1,722	12
Genoa, cart. banco	1721	7,531	116
Amsterdam	1721	13,610	68
Naples	1721	4,298	14
London	1719	46,545	72

Note: The amounts are converted to Venetian ducats (a gold coin containing about 3.5g) at current exchange rates taken from P. Spufford, *Handbook of Medieval Exchange* (1986), at 145, and M. A. Denzel, *Handbook of World Exchange Rates, 1590–1914* (2010). The figure for London excludes the exchequer bills circulated by the bank.

Sources: F. Balletta, *La circolazione della moneta fiduciaria a Napoli nel Seicento e nel Settecento (1587–1805)* (2009), at 286–9 (Naples); U. Tucci, 'Convertibilità e copertura metallica della moneta del Banco Giro veneziano', (1973) 15 *Studi Veneziani* 349, at 370 (Venice); H. Sieveking, 'Das Bankwesen in Genua und die Bank von S. Giorgio', in J. G. van Dillen (ed.), *History of the Principal Public Banks* (1934a), at 29, 33 (Genoa); H. Sieveking, 'Die Hamburger Bank', in van Dillen (ed.), at 131–2, 139–41, 152–3, 156 (Hamburg); Van Dillen, 'The Bank of Amsterdam', in van Dillen (ed.), at 117–23 (Amsterdam); Bank of England archives General Ledger 6, fo. 665, ADM7/8 (kindly communicated by Stephen Quinn); P. Bairoch, J. Batou, and P. Chèvre, *The Population of European Cities, 800–1850: Data Bank and Short Summary of Results* (1988) (population).

Table 22.2 Deposits and note issue of various banks in 1788.

	Deposits	Notes
	'000 marks banco	
Caisse d'Escompte, Paris	3,435	52,703
Bank of England	30,649	128,869
Wisselbank, Amsterdam	21,166	–
Wisselbank, Hamburg	6,716	–
Banco del Giro, Venice	5,535	–
Wiener Stadtbank, Vienna	–	27,605
Bank of Stockholm	4,926	18,748

Note: The amounts are converted to marks banco of Hamburg at current exchange rates.

Sources: J. von Hauer, *Beiträge zur Geschichte der österreichischen Finanzen* (1848), at 209–10 (Vienna); A.-D. Laffon-Ladébat, *Compte-rendu des opérations de la Caisse d'escompte* (1807) (Paris); J. Clapham, *The Bank of England: A History* (1945), vol. 1, at 297 (London) and the sources cited in Table 22.1.

parliament in a regime that oscillated between absolutist and parliamentary tendencies. Law's bank was initially private but was soon bought by the King; by contrast, the Caisse d'Escompte was purely private and, during its brief existence, managed to maintain an arms' length relation with the government to whom it owed no privilege. Government attempts at meddling with the bank's management were ultimately successful with its successor, the *Banque de France*, which was also privately owned but included government

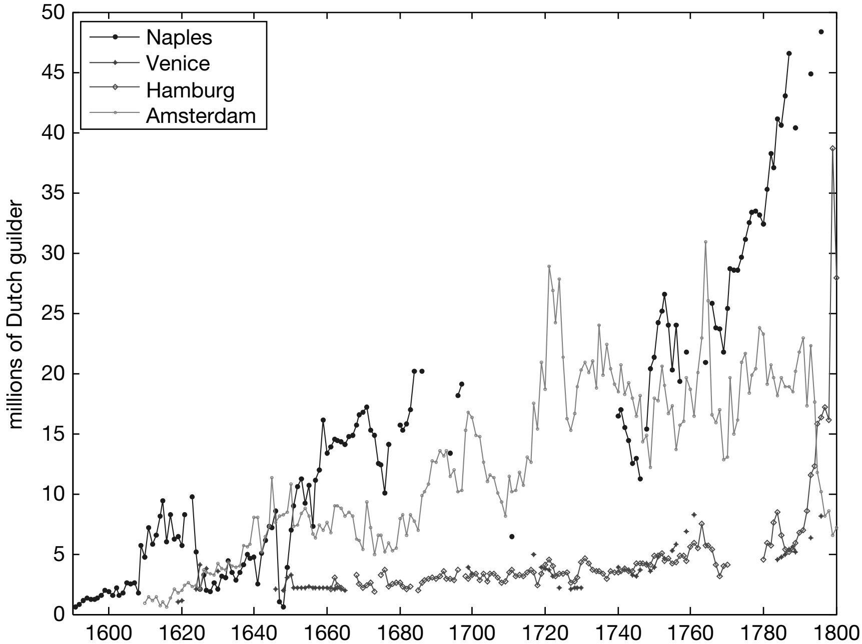

Figure 22.1 Bank balances of various banks, converted into Dutch guilder into current exchange rates (1591–1800).

Sources: See sources cited in Table 22.1.

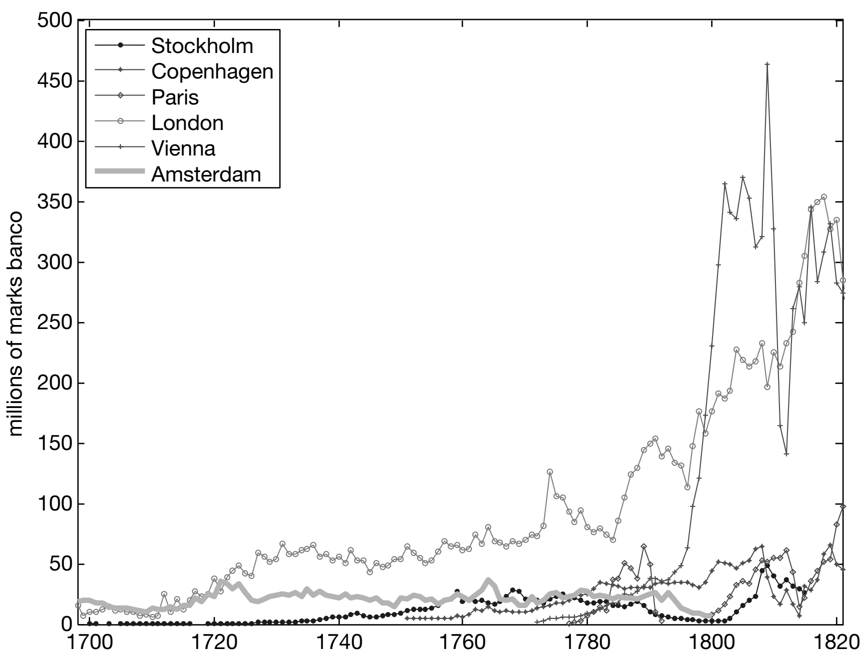

Figure 22.2 Note circulation of various banks, converted into Hamburg marks banco at current exchange rates (1700–1821). The balance sheet of the Amsterdam Wisselbank is plotted for comparison purposes. Paris consists of the Caisse d'Escompte (1776–93) and the Banque de France (from 1800).

Sources: UK Parliament, *Report from the Committee of Secrecy on the Bank of England Charter* (London: James and Luke G. Hansard & Sons, 1832), App. 74–6 (England) and the sources cited in Table 22.2.

appointees in its management. In Austria, the Venetian model of a city bank was implanted in a quite different context and, under the pressures of the monarchy, the bank was reduced to administering the state's fiat currency. The Neapolitan banks, surveyed in the previous chapter,[67] are interesting because they flourished in a monarchy, albeit one ruled from afar by the Spanish monarch until 1713.

The relation between bank and government is not only a matter of direct control but also of the balance sheet. The Bank of England was a private institution in an increasingly parliamentary monarchy, but it had to bargain for renewals of its charter with the government, and a cosy relationship evolved in which the bank primarily held public assets, in return for sizeable profits (notably during the period of 'restriction'). Conversely, the French banks held virtually no government debt, but were capable of providing emergency assistance.

3. Money and the Law

A key tool to give the banks' liabilities an advantage over existing assets was the ability to bestow legal privileges. One of the most common privileges was the exemption of bank balances from seizure, sometimes with limitations. Another important tool was the requirement to settle foreign exchange transactions through the bank. The motivation for this requirement in Venice seems to have been a concern with the lack of final payment among private bankers, but Amsterdam and other states were quick to confer this privilege on their banks. Finally, legal tender was an important component. The finality of a payment with bank balances was a feature of private medieval banking which it seemed natural to extend to the first public banks, but as the public banks' liabilities progressively became the anchor for new units of account they became a natural legal tender.

4. Evolution

The structure of pre-Napoleonic public banks was marked by a great deal of experimentation. The top prize for ingenuity undoubtedly goes to Genoa,[68] where equity-like shares in the public debt (*luoghi*) were already functioning as money by the mid-fifteenth century. Less innovative, but ultimately more popular were the seventeenth century 'exchange banks' of places such as Amsterdam and Hamburg that sought to replace unreliable coinage with book-entry money,[69] with the latter largely backed by metal.

The eighteenth and early nineteenth centuries saw many attempts to replicate the success of the exchange banks, with institutions that were principally backed by government obligations. The design of the Bank of England retained the core of the Genoese innovation, but the bank was funded through bearer debt rather than the unwieldy *luoghi*. This feat of financial engineering brought with it the new solvency concerns, but these were handled through a combination of convertibility and monopoly privilege.[70] Similar experiments with note issue were tried in other countries.

The upheavals of the Napoleonic era posed great difficulties for the early public banks. During this period virtually all municipal banks succumbed to either wartime fiscal exploitation or post-war political irrelevance. A conspicuous exception was the Bank of Hamburg, which successfully resumed operations after 1814 but was later absorbed into the

[67] See Chapter 17 in this volume. [68] See Chapter 17, section III.1.
[69] See Chapter 17, sections III.5.a and III.6.b. [70] See Section II of this chapter.

Reichsbank.[71] In countries such as Austria, Prussia, and Sweden, finance of military operations resulted in significant inflations, and ultimately in either liquidation or extensive reorganization of those countries' banks. The exceptional case of England, which experienced only mild wartime inflation despite heavy banknote issue, is ironically the best remembered. The Bank of England's success at dealing with the temptations posed by banknote issue provided evident proof that a (largely) fiscally backed money was not only possible, but practicable.

Thus, we see that by 1814 the structure of the (still privately owned) Bank of England contained many of the essential components of modern central banks. It should be clear from our survey, however, that by this time the bank was itself the outcome of more than 400 years of institutional evolution. From the fifteenth to the nineteenth century, the idea of a public bank had developed from that of a narrowly specialized facility in a commercial city, to that of an essential component of a nation's financial architecture. This evolution was matched by a parallel shift in the popular conception of money, from something that was tangibly bound to precious metal, to something more abstract in nature, if still connected to metal in some fashion. In the words of one eighteenth-century observer:

> Imaginary money is necessary in all states, for two essential reasons: one is to avoid the decrease in intrinsic content of specie, which, for all private and public reasons, reasons of state and reasons of commerce, must never be touched; the other is to maintain private contracts in a fair and immutable system.[72]

[71] The city itself, as a political entity, fared better than Amsterdam, Genoa, or Venice. It survived a brief incorporation into the French empire to emerge as a full-fledged member of the German Bund, equal in international law to Prussia and Austria. In contrast Genoa became part of the Kingdom of Piedmont and Venice an Austrian possession, while Amsterdam was under the rule of the authoritarian King Willem I. The Neapolitan banks survived unscathed and were later merged into the *Banco di Napoli*.

[72] C. A. Broggia, *Tratatto de' Tributi, delle Monete, e del Governo Politico della Sanità* (1743), at 2849.

23

Deposit Banking and the Use of Monetary Instruments

Helmut Siekmann

I. Foundations

Compared to the use of coins and other commodities as financial instruments, the history of banknotes is rather brief.[1] In the course of the development of monetary symbols, from early materials using precious metals to modern 'fiat (paper) money', deposit-taking institutions have played an important and increasing role. For a long time, a link existed between deposits and notes based on them. Notes were first used as mere receipts for deposited goods and later were issued without prior deposits; eventually, banknotes were created and accepted solely on the faith and credit of their issuer. Finally, certain notes had to be universally accepted as a means of payment, which is the situation we have now reached with modern paper money or its electronic equivalents. Usually, such papers would no longer certify a legal claim for a specific good or service. The use of written documents as instruments of payment is first reported in the seventh century during the Tang Dynasty in China. Paper money was introduced in the Mongol Empire in the course of the thirteenth century.[2] In the Western world, however, it was not until the fifteenth century that financial instruments other than coins came into use for monetary functions.[3] The following reflections concentrate on the evolution of paper money in the Western world from its origins as deposit receipts.

[1] B. Krauskopf, 'How Euro Banknotes Acquire the Properties of Money', in European Central Bank (ed.), *Legal Aspects of the European System of Central Banks*, Liber Amicorum *Paolo Zamboni Garavelli* (2005) 243, at 246.

[2] 'The issue of paper money became a settled and permanent feature of the Mongol government's financial policy. . . . Records have been preserved showing year by year the amount of notes issued through Kublai's reign and that of his successors for ninety-seven years (1260–1356).' T. F. Carter and L. C. Goodrich, *The Invention of Printing in China and Its Spread Westwards*, (2nd edn, 1955), at 107, 109.

[3] H. van der Wee, 'Monetary, Credit, and Banking System', in E. E. Rich and C. H. Wilson (eds), *The Cambridge Economic History of Europe* (1977, repr. 1978), vol. 5, 290, at 311 et seq.; M. North, *Das Geld* (1994), at 91.

1. Types of Notes

Two basic types of notes can be distinguished: 'drafts', which were written receipts for coins or precious metals (usually gold or silver) held in safe custody accounts, and 'bills', which certified the promise to deliver coins or precious metals at a specified date or 'on demand'. The security these instruments offered was quite different. In the first case, the counter-value was deposited with a trustworthy person or institution, and the holder of the receipt had the exclusive right to access it; whereas in the second case, there was only the issuer's promise. The willingness or ability of the issuer to fulfil his obligation might be open to some doubt, as was apparent in the fact that the issuer was allowed to lend deposited coins or bullion to third parties. However, aside from the risk of outright misappropriation or fraud, the drafts were safe, although—in modern terminology—a 'counter-party risk' was added in this case.

The difference between receipts ('drafts') and promissory notes ('bills') becomes less significant when the issuer of the bill is a trustworthy institution with sufficient resources at its disposal to fulfil the obligation. The size of the reserves may be mandated by law. Theoretical and academic opinions varied greatly on the appropriate levels of reserve holdings.[4] As more banks issued promissory notes, the term 'banknote' came into use for all payment instruments issued by a bank other than coins. Receipts, even if they were not transferable, may have also played a part in the creation of modern paper money, but it is unclear whether they can be considered functionally equivalent to banknotes.

2. The Role of the State

The monetary system was frequently used or, more precisely, abused for the purpose of financing government expenditure. The common methods were debasement of coinage, the printing of paper money on behalf of the government, or the issue of treasury notes which had to be accepted by the public at a rate set unilaterally by the sovereign. The raising of government expenditure may also be one of the reasons why the issue of banknotes was never completely free of government participation or interference, although in the beginning, banknotes were mainly created by institutions that were more or less private.[5] Over time, a link of varying intensity has existed between banks, money, and state. From early modern times, banks have been founded, guaranteed, and managed by governments or municipalities, which to a large extent is still the case in Germany. In general, a privilege, licence, or permit of the sovereign was necessary to authorise the issue of banknotes. Banks have also financed government deficits. This remained true even after banknotes had become legal tender, and continues to the present day:[6] 'Quantitative Easing', 'Funding for Lending', and 'Unconventional Measures' are examples of the functional link between note-issuing institutions and government finances, although clearly there are other legal and economic aspects to them.

Joseph A. Schumpeter even came to the conclusion that 'all note issuing banks have their roots in the financial needs of the state'.[7] He further added that this function may have been superseded by other functions, but that it would re-emerge in times of 'extreme need which breaks all commandments'.[8] This may be an overstatement but it is not so far from the

[4] For a more extensive discussion, see Section VII of this chapter.
[5] See Sections II.4(c) and III.2(d) of this chapter. [6] See Section V.1 of this chapter.
[7] J. A. Schumpeter, *Das Wesen des Geldes*, ed. F. K. Mann (1970), at 56 (translation by the author).
[8] Ibid., at 56.

historical truth. Not only was it necessary to obtain state permission to issue notes, but often all or part of the funds raised by note issues had to be given as a loan to the government. Sometimes, the sovereign held all of the stock of a bank and received all profits from the business, including the note issue.[9] Strong arguments have been made for allowing a purely private monetary system with several money-issuing entities competing among themselves,[10] but in reality this has hardly happened.[11]

For some time, governments considered bearer bonds issued by private persons or institutions as a potential threat to the monetary system, or more importantly, as a rival in acquiring loans to finance their needs. As events developed, governments also issued notes intended for direct circulation. This was usually brought about by the treasury or a separate body administering the debt. Such bonds did not always guarantee the redemption of the paper in gold or silver coins but they were accepted by state cashiers as payment of taxes.[12] New means of payments are now being developed which are not issued by a central authority or by licensed credit institutions, such as bitcoins or other financial technologies, so-called 'fintechs'. These new financial instruments could be considered as truly 'private' money, but this topic is beyond the scope of this chapter.

3. Interim Conclusion

Keeping in mind that the predecessors of paper-money originated in private business and that governments part-financed their budgets by issuing (bank)notes, and despite all the links and interdependencies between banks and the state, it is nevertheless essential for analytical purposes to differentiate among government finances, banking business, and the monetary system. In theory, the monetary system has no innate connection to government finance. Disentangling the interconnections that dominate the reality remains a challenging task.

The debate about the resolution of the financial crisis originating in 2007 still shows fundamental deficiencies in this respect. It is often dominated by 'experts' who have their own agenda, even if it is only an old academic theory they want to prove ('I have always said…'), or who covertly argue in favour of special interests. For example, in the debates about supporting the Hellenic Republic, the real issue at stake was the protection of Greece's creditors, and not assistance to the Greek people. The creditors' investment in Greece was saved by the support mechanisms and the policy of the European Central Bank (ECB). The same is true in the debates about saving a currency such as the euro. The real objective of all the support measures was—and is—not to save the single currency but to attempt to shift the burden of miscalculated loans from creditors and debtors to a third party, preferably the taxpayer of another country. This attempt was indeed successful. More than two-thirds of Greek debt, which was originally acquired by private investors, is now held by the ECB, the International Monetary Fund (IMF), and other types of supra-national entities, such as the European Stability Mechanism (ESM). Although financing ships that are idle, houses that remain empty, or government debt that is close to default had been treated as riskless, it is in origin a failure of banks and not a problem of the monetary system. From this perspective, the view that the drive by the EU to establish a 'European Banking Union' is motivated primarily

[9] For details, see Section V.1(b) of this chapter.

[10] Advocated mainly by Friedrich August von Hayek and his followers: see F. A. von Hayek, *Choice in Currency—A Way to Stop Inflation* (1976); F. A. von Hayek, *Denationalisation of Money-The Argument Refined* (3rd edn, 1990); P. Bernholz, 'Review of F. A. Hayek's Denationalisation of Money', (1978) 31 *Kyklos* 136; and for an in-depth discussion, see J. S. Ferris and J. A. Galbraith, 'On Hayek's Denationalization of Money, Free Banking and Inflation Targeting', (2006) 13(2) *European Journal of the History of Economic Thought* 213.

[11] For further discussion, see Section V.4 of this chapter.

[12] See Section III.2(b) of this chapter.

by the attempt to 'break the vicious cycle between banks and sovereigns' begins to appear persuasive.[13]

II. Pawnbrokers, Jewellers, and Exchange Banks

1. Pawnbrokers

Pawnbrokers took a significant first step in the emergence of banks. They were often banned and expelled from the country because of the high interest they demanded, which was judged as sinful. They soon had to be tolerated again, since usurers were an even greater evil, and the ruling class also needed the services of pawnbrokers. But by the end of the Middle Ages, they had lost most of their significance because other forms of credit began to evolve. At that time, the problem of interest-taking became more pressing. Secular authorities and church institutions tried to protect the poorest populations who still depended on pawnbrokers by establishing organizations that did not charge interest for their services. The services of these *monti di pietà* were often restricted to people in exceptional need.[14]

2. Exchange Banks

It was particularly the merchants from northern Italian city-states and the Low Countries, mainly Flanders,[15] who used written documents for payment functions, rather than carrying large amounts of gold or silver coins, since that was impracticable, costly, and dangerous.[16] In the major imperial cities, which held regular trade fairs,[17] a well-organized system of written payment instruments had been established by the fourteenth century.[18] The city-states of northern Italy, Frankfurt am Main, Cologne, and Antwerp played a prominent role. They established an elaborate system for clearing claims, depositing coins, and transferring money.[19]

At trade fairs, merchants exchanged their mutual claims and deposited the balance with a trustworthy person who accepted to pay the deposited amount of money to the merchant or another person named by him ('to the order of…'), or to any person who presented the paper ('the bearer'). In this way, a merchant could use the document at home and transfer it to another merchant who might want to buy goods or services in the town where the money was deposited. All he had to do was to carry a piece of paper—something useless to a potential robber.

[13] European Council, 'Euro Area Summit Statement', Press Release (29 June 2012), available at http://consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ec/131359.pdf; justifying R. Goyal et al., 'A Banking Union for the Euro Area', International Monetary Fund Staff Discussion Note No. SDN/13/01 (February 2013), at 6, para. 3, available at http://www.imf.org/external/pubs/ft/sdn/2013/sdn1301.pdf; J. Pisani-Ferry et al., 'What Kind of European Banking Union?' (25 June 2012), at 3, available at http://aei.pitt.edu/35626/1/What_Kind_of_European_Banking_Union__%28English%29_%28English%29.pdf. For further details, see T. Tröger, 'The Single Supervisory Mechanism—Panacea or Quack Banking Regulation?', Institute for Monetary and Financial Stability, Working Paper Series No. 73 (2013), at 3, 5–7.

[14] H. Houtman-De Smedt and H. van der Wee, 'Die Entstehung des modernen Geld- und Finanzwesens Europas in der Neuzeit', in H. Pohl (ed.), *Europäische Bankgeschichte* (1993) 75, at 75 et seq.

[15] Later: United Low Countries, the Dutch Republic, and Habsburg Netherlands (Belgium).

[16] After the painstaking resurrection of long-distance trade by the Italian port-cities in the tenth century, trade between northern Italy and Flanders had become the major trade connection in the eleventh century. Flanders and northern Italy were at that time the centres of gravity of economic activity in Europe, see M. Körner, 'Handel und Geldwesen im mittelalterlichen Europa', in H. Pohl (ed.), *Europäische Bankgeschichte* (1993) 31, at 35.

[17] Trade fairs played a prominent role, Houtman-De Smedt and van der Wee, above n 14, at 97–113.

[18] Ibid., at 98. [19] See for details ibid., at 97 et seq.

A deep crisis arose, however, when trade slumped and the depositaries could not meet their clients' unexpected claims. Reasons for the downturn of the private exchange business included the multitude of wars in Europe between 1320 and 1480 (e.g. the Hundred Years War), the Black Death, and the Little Ice Age. In addition, a shortage of silver arose from about 1350 on. Due to the negative current of central Europe, considerable amounts of silver went into the near east. Finally, the private exchanges employed unsound and partially illegal business practices which invoked actions against them by the rulers.[20] A more effective system was set up in the course of the fifteenth century in Spain and Italy, as city government establishments. Over time, however, their effectiveness in meeting credit needs became doubtful. The deposit and exchange business services became untenable in the long run, and were eventually dropped. The function of these operations was reduced to stabilizing the fiscal position of the city and its long-term credit.[21] There are no indications that these operations made a significant contribution to the evolution of banknotes.

In the second half of the fifteenth and the first half of the sixteenth centuries, the economic climate grew once more relatively benign. It sparked the foundation of exchange banks, which initially operated only as private initiatives. In the 1550s, exchange banks mushroomed, while those that had already existed became state institutions. These included *Tavoli di Palermo* (1552), *Banco di San Paolo* (Turin 1574), *Monte di Pietà* (Florence 1574), *Casa di San Giorgio* (Genoa 1586), and *Banco di Messina* (1587). The *Banco della Piazza di Rialto* in Venice, founded by a senate resolution of 11 April 1587, became the most prominent. The *Banco di Sant'Ambrogio* of Milan followed in 1597.[22] These banks assumed the task of safekeeping merchants' funds and enabling the transfers of funds without moving coins. A few years later, the Senate of Venice ordered in its resolution of 14 December 1593 that bills of exchange had to be discounted at the *Banco della Piazza di Rialto*. In 1605 and 1607, the senate went even further, requiring that all transactions exceeding 100 *ducats* should be cleared by the state bank.[23] It thus established an early example of a central exchange bank, or in modern terminology, a 'central counterpart'.

North of the Alps, the combination of exchange banks and deposit-taking institutions was further developed by the *Amsterdamsche Wisselbank*, which was founded on 31 January 1609, and was guaranteed by the city of Amsterdam.[24] Hamburg followed in 1619,[25] and Nuremberg in 1621.[26] Frankfurt became one of the most important exchange locations of the eighteenth century.[27] The *Wisselbank* played a key role in the following decades. Initially, its main function was to reduce transaction costs by converting a

[20] Ibid., at 84 et seq. [21] Ibid., at 87.

[22] H. Lapeyre, 'La banque, les échanges et le crédit au XVIe siècle', (1956) 3 *Revue d'histoire moderne et contemporaine* 284, at 289; H. van der Wee, above n 3, at 312. First proposals were already presented two centuries before that in Venice by Giovanni Dolfin (1356) and Michele Morosini (1374): see Houtman-De Smedt and van der Wee, above n 14, at 93; H. van der Wee, 'Money, Credit and Banking Systems', in E. E. Rich and C. H. Wilson (eds.), *The Cambridge Economic History of Europe*, vol. 5 (1977) 290, at 313.

[23] Houtman-De Smedt and van der Wee, above n 14, at 94; van der Wee, above n 22, at 313.

[24] K. Mathy, 'Papiergeld', in K. von Rotteck and K. Welcker (eds), *Das Staats-Lexikon* (3rd edn, 1864), vol. 11, 277, at 278.

[25] Ibid. See also North, above n 3, at 112, with further references.

[26] Bills of exchange were used in Nuremberg from the end of the fourteenth century on, mainly in trade with Venice. Following the example of Amsterdam, Venice, and Hamburg, *Banco Publico* was founded in Nuremberg as an initiative of the municipal trade committee (*Handelsvorstand*). The newly established bank also created its own currency (*Gulden Kurant*) to fight the widespread debasement of coins at the time of the Thirty Years' War in continental Europe. See M. Denzel, 'Der Nürnberger Banco Publico, seine Kaufleute und ihr Zahlungsverkehr (1621–1827)' (2013), available at http://www.gko.uni-leipzig.de/?id=7812.

[27] For a comprehensive treatment of Hamburg and Frankfurt as exchange hubs, including their origins, see C. Zerres and M. Zerres, *Die Bedeutung privater Bankhäuser für die Entwicklung des bargeldlosen Zahlungsverkehrs im 19. Jahrhundert* (2006), at 31–60.

multitude of different types of coins, each with a difficult-to-determine precious metal content, to a common denominator. The Dutch Bank's *guilder* (*gulden*, *florin*) played the function of such benchmark currency, with a fixed exchange ratio to silver. The amount, in *florin*, would be credited to an account, and the balance of this account could easily, and almost cost-free, be transferred to another account, in part or whole. However, more important for the development of banknotes was the Dutch Bank's practice of issuing written receipts (*recipis*) on the counter-value of the coins submitted for exchange. Money orders and receipts issued by the bank could also be used to make payments.

3. Jewellers and Banks

When the exchange banks extended their operations to provide a safe place for storing money (coins) and other precious items, notes were used to certify a deposit, with the primary goal of keeping valuables in a safe place, rather than as a means of transferring monetary sums without using coins or bullion. In London, goldsmiths, who were often associated with the crown, issued receipts for gold or silver deposited with them. The Royal Mint was no longer considered a safe place to keep valuables after Charles I had seized the gold deposited there. In this way, the goldsmiths became known as the keepers of 'running cash'. Jewellers also accepted written orders to repay deposits to third parties, so that the orders took on the functions of bills of exchange or promissory notes. In this way, the receipts could be used as instruments of payment, albeit with a discount that increased according to the distance from the place of deposit.

From 1683 onwards, the clients of the *Wisselbank* could deposit precious metals at the bank without a prior exchange. Thus the bank developed into an institution that was more than an exchange bank. Redemption was possible at any time (on demand), and a fee of only 0.125 per cent had to be paid.[28]

4. Loosening the Tie Between Deposits and Notes

(a) 'Closed bag' deposits

When these instruments and institutions first came into existence, the depositary had to return the exact same metal or coins that had originally been deposited. Mixing them with other species of the same kind was prohibited. The risk of deterioration in the value of the coins, as often happened by debasement of the coins by the sovereign to finance their budget,[29] was avoided, since the very same coins had to be returned as had been deposited.[30] As a consequence, the coins had to be preserved *in specie*, in what was called a 'closed bag' deposit. Moreover, beyond the individual goals and decisions of the depositors, there was no risk of monetary or financial stability arising from transactions of this kind.

(b) 'Open bag' deposits

The deposit-taking business gradually changed. The depositaries started to make use of the goods deposited with them. This was made possible by an alteration in the legal obligation: the bullion or coins deposited only had to be returned in kind. It was

[28] Schumpeter, above n 7, at 46. [29] Description by Schumpeter, above n 28, at 44–6.
[30] In principle, the idea can already be found in Mathy, above n 24, at 280.

permissible to mix them with other species of coin, in what became known as 'open bag' deposits. As the practice developed, and despite the risks involved, depositaries used the deposited bullion or coins for commercial purposes rather than merely holding them for safekeeping.

However, the possibilities for generating additional income remained limited. From a monetary perspective, this increased flexibility was not as such a danger to monetary stability. At this stage, it did not cause an increase in the money volume since exactly the same amount of bullion or coins had to be held in custody at any time to fulfil the issuer's obligations. It did not matter from a macro-economic perspective that the depositary did not have custody of exactly the same items that had been deposited. In modern terms, the legal arrangement had a similar effect as imposing a reserve requirement of 100 per cent. Thus the risk for the individual depositor was also limited, as he could be sure that his counterpart always had the necessary liquidity available to fulfil his claim. His risk would, however, increase substantially if the depositary were allowed to do other types of business involving a risk of loss. In this case, the reserves to be held could be insufficient, and the depositors would incur losses. With a 'closed bag' deposit, the individual depositor could, instead, request the return of his deposit, even if the depositary's reserves were insufficient.

Another risk was even more imminent. After a debasement of the coinage, the deposit-taking person or institution would try to fulfil the obligation in the document by returning 'new' debased coins, i.e. coins with a reduced content of precious metal but with the same face value.[31] This effect is known as 'Gresham's law': bad money drives out good money. The good (old) money is hoarded and goes out of circulation.[32] This was primarily a risk to the individual depositor; a threat to the stability of the system did not arise from the actions of the depositary, but rather from the actions of the ruler in trying to finance his needs by debasing coins and revoking the old (good) ones. It was a crude method of taxing wealth and hoarding cash.

The distinction between a deposit which guaranteed the return of the very item that had been deposited and a deposit that guaranteed the return of an item of the same kind (e.g., when the deposited item was allowed to be mixed with items of the same kind) was already familiar to Roman law, which distinguished between *depositum* and *depositum irregulare*. Money was frequently kept in a closed container or bag, and it could be recovered on demand with the *actio depositi*. If, however, the money had been allowed to be mixed with other coins—an 'open bag' deposit or *depositum irregulare*—the rules governing loans had to be applied. The money could only be demanded with the *condictio*. But even then, Roman law did not automatically allow the depositary to use the money for his purposes. Special permission was necessary, and the claim for interest required a special stipulation.[33]

[31] Economically, the 'new' coins have a reduced value, i.e. lower purchasing power. The ruler will, of course, try to put a cap on prices to make the change less perceptible and difficult to prove.

[32] The law was named in 1858 by Henry Dunning Macleod, after Sir Thomas Gresham (1519–79). Gresham was engaged in finance in the Tudor period and allegedly attempted to explain to Queen Elizabeth I why coins went out of circulation after Henry VIII had substantially reduced the content of precious metal (approximately by 40%). There are, however, numerous predecessors to this idea.

[33] T. Mayer-Maly, *Römisches Recht* (2nd edn, 1999), at 130 et seq.; M. Kaser, and R. Knütel, *Römisches Privatrecht* (20th edn, 2014), at 234. See also H. T. Klami, *'Mutua magis videtur quam deposita'; Über die Geldverwahrung im Denken der römischen Juristen* (1969), at 1, 10 et seq., emphasizing the property rights of the depositor and the problem of interest claims, with many further details.

(c) *Notes without prior deposits*

The next step towards modern banknotes was taken at the end of the seventeenth century. Banks started to issue notes which certified the promise to provide a specified amount of precious metal or coins on presentation to the issuer, even though there had not been a prior deposit. The economic nature of the issued notes underwent a considerable change. The scope of this change can be debated: in any case, notes became more 'abstract' in the sense that the issuer of a note did not need to have the promised commodity at hand when issuing the note. This had two main consequences:

- In principle, it became possible to create a financial instrument that had a face value different from the price or the (supposed) value of the underlying commodity.
- An inherent limit on the amount of issued notes no longer existed.

In essence, it was now possible to create a non-metallic substitute for coined money, and to increase the volume of money and credit, since, in economic terms, money and credit were identical.[34]

The Stockholm *Enskilda Bank*, a private law entity, seems to have been the first institution in Europe to issue notes in this sense. It gained official recognition on 16 July 1661. Its success was limited, as the bank confined itself to issuing only as many notes as it had reserves.[35] A few years later, in 1668, the *Sverige Riksbank* was founded, and it is considered to be the oldest central bank in Europe.[36]

In England, King William III permitted the Scottish merchant Paterson to establish the Bank of England and issue banknotes in return for a major loan (£1,200,000) to fund the government's short-term obligations. The Royal Charter was sealed on 27 July 1694.[37] The bank issued 'sealed bills' as part of the loan; these bills later went into circulation and were widely accepted by the public.

Following the model of the goldsmiths, the Bank of England issued notes certifying clients' deposits, and these assumed the role of running cash. From a legal perspective, they were equivalent to order bonds.[38] A substantial difference between the Bank of England notes and goldsmiths' receipts is evident in the underlying financial basis. Instead of deposits, which result in a claim on the balance sheet of the bank, equity was used to provide the backing for the money issued.

5. Bearer Bonds as Predecessors of Banknotes

(a) *Bills of exchange*

Bills of exchange could also be used as credit instruments and as a common denominator for the multitude of different coins minted in the various territories of the Holy Roman Empire (*Sacrum Imperium Romanum*), despite the restrictions on the imperial money

[34] H. Thornton, *An Enquiry into the Nature and Effects of the Paper Credit of Great Britain* (1802); consenting J. A. Schumpeter, *History of Economic Analysis* (1954), at 718 et seq.; Schumpeter, above n 7, at 181 emphasizing that a prior deposit of funds is not necessary: 'deposit legend' (ibid., at 185); D. Patinkin, *Money, Interest, and Prices* (2nd edn, 1965), at 295 and 300; R. Richter, *Geldtheorie* (2nd edn, 1990), at 333–5.

[35] O. Gasslander, *History of Stockholms Enskilda Bank to 1914* (1962).

[36] H. Runge, 'Schweden', in E. Achterberg and K. Lanz (eds), *Enzyklopädisches Lexikon für das Geld-, Bank- und Börsenwesen* (3rd edn, 1968) 1478, at 1479; C. Goodhart, *The Evolution of Central Banks* (1988), at 122; K. E. Born, 'Geld und Währungen im 19. Jahrhundert', in H. Pohl (ed.), *Europäische Bankgeschichte* (1993) 177, at 183.

[37] Details taken from F. Capie, *The Bank of England 1950 to 1979* (2010).

[38] North, above n 3, at 115, with further references.

Figure 23.1 Bill of exchange, The Bank of the United States 1840.

order (*Reichsmünzordnung*).[39] In principle, the transfer of notes had to be executed by endorsement, which literally meant signing the back of the paper. This was the case with the notes issued by the *Amsterdamsche Wisselbank*.[40]

This mode of transferring ownership of such a paper remained frequent, mainly in the United States. A relatively modern example, from 1840, is shown in Figure 23.1 above.

The requirement of an endorsement was an impediment to wider circulation of these instruments, especially for those denominated in small sums. The (promissory) note in Figure 23.1 was issued by the (second) Bank of the United States after its charter as a central bank (1816–36) had not been renewed and it had become a private bank in 1836. The signature and the identity of the person presenting the paper had to be examined closely, as the person accepting the paper bore the risk of non-payment in the event that the endorsements were invalid, or that the paper had been lost or stolen after issue.

(b) Bearer bonds

In contrast, the possession of a bearer bond was sufficient proof of ownership of the claim certified by it. The issuer (the debtor) could effectively fulfil his obligation by delivering the promised goods or coins to the possessor of the document without further scrutiny. Circulation of such paper was much easier. A bearer bond issued by a bank was effectively equivalent to a modern banknote. A bearer bond issued by the Bank of Scotland in 1716 is considered to be the oldest banknote in existence (Figure 23.2).

The legal validity and enforceability of bearer instruments were open to question. It is doubtful whether in Roman law, or in continental common law (*gemeines Recht*) based upon it, such a promise would be considered to be valid.[41] It was also uncertain whether it could give rise to court action, especially in England.

[39] Minting coins belonged to the reserved rights of the Emperor (*regalia*) but the territorial rulers increasingly assumed this right for themselves as part of their strife for sovereignty: see further Section III.1(a) and (b) of this chapter .

[40] North, above n 3, at 112, with further references.

[41] C. F. von Savigny was convinced that bearer bonds were unknown to Roman law and that they did not comply with the derived rules of the continental common law (*gemeines Recht*), see in detail T. Baums, 'Das preußische Schuldverschreibungsgesetz und F. C. von Savigny', in *Recht, Ordnung und Wettbewerb, Festschrift zum 70. Geburtstag von Wernhard Möschel* (2011) 1097, at 1101.

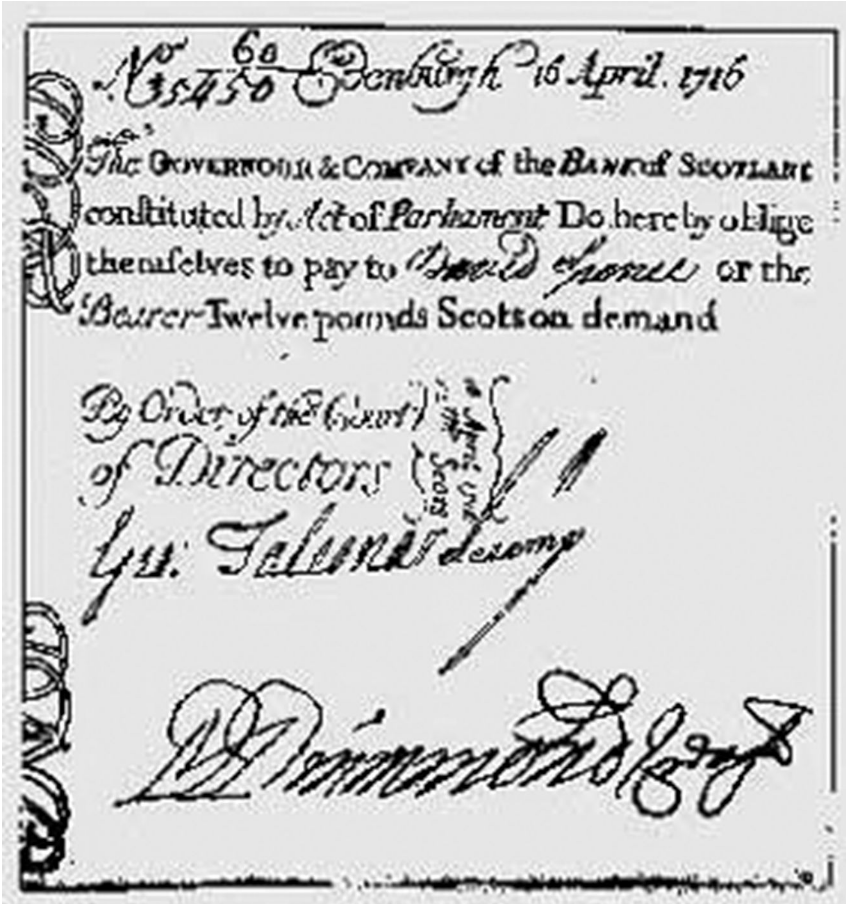

Figure 23.2 Bearer bond, Bank of Scotland 1716.

Despite the legal concerns regarding bearer bonds, at the end of the eighteenth century and throughout the nineteenth, notes were increasingly issued which certified a promise to the bearer to redeem the note's nominal value in 'current' money (*baares Geld*, *Courantmün(t)ze*)[42] upon presentation. Technically, these notes should be categorized as bearer bonds. When the issuer was a bank, they could also be seen as bearer cheques. Regardless of their precise legal characteristics, they were increasingly called 'banknotes' although they were not necessarily treated as having the quality of money. It was also relatively frequent for bearer bonds circulating as money to be issued directly by the sovereign to finance their budget, mainly in times of war.[43]

(c) Restricting the issue of bearer instruments

Bearer bonds were soon considered to be a potential threat to the monetary system; and there were good reasons for this view in the wake of the experiences in France with the

[42] Usually minted gold, silver, or bullion.

[43] For example the King of Prussia during the Napoleonic wars: see Baums, above n 41, at 1109. This was already a substantially more modern approach than King Friedrich II of Prussia had used to finance his war against Russia and Austria—debasement of coins, executed by a Jewish banker: see in detail North, above n 3, at 127. Part of the aversion against Jewish citizens stemmed from measures like this. Another early example was the 'exchequer bill' introduced in England in 1696 during the reign of William III.

Banque Générale and the *assignats* in the eighteenth century[44] and in the Habsburg Empire at the beginning of the nineteenth century.[45] Such concerns were one of the principal motives for the Prussian prohibition on the issue of non-interest bearing notes in small denominations, and subsequent measures of the Prussian-dominated German Reich of 1870.[46] Sections 795 and 808a of the *Bürgerliches Gesetzbuch* (BGB, German Civil Code) imposed the requirement that permission be obtained from the competent authorities for the issue of such notes.[47] These clauses also served as a protection against the sale of dubious financial 'products'[48] and contributed to the stability of the financial markets. The regulation remained in force for more than one and a half centuries, and was officially repealed only in December 1990.[49] Whether these provisions and their enforcement could have prevented the widespread sale of products created by 'financial engineers', which eventually led to the catastrophic crisis after 2007, is open to debate.

The restriction requiring authorization for the issue of banknotes dates back to the Prussian statute on bearer bonds of 1833.[50] The statute prohibited the issuance of new bearer bonds, unless prior permission of the government had been granted. This included the various types of covered and uncovered notes issued by private banks. Initially, bills of exchange were not affected by the statute, and permission was regularly granted to state or state-affiliated banks. The documents issued by municipal savings banks on the balance of savings accounts (*Sparkassenbücher*) were also exempted by the statute on savings banks decreed in 1838 (*Sparkassenreglement*), although in law their documents were treated like small bearer bonds.[51] This legislation also resolved the question of whether bearer bonds were valid and whether a claim derived from them could be enforced in court.[52] These incidents were explicitly granted to them if they were issued in compliance with the new rules.[53]

This initiative of the Prussian Government was instigated by the foundation of the *Kassen-Verein* in Berlin by a group of merchants and bankers in 1824. This private institution issued bearer bonds in small denominations as receipts for deposits and paid no interest on them. The bonds began to circulate as a surrogate for money, despite considerable legal doubts about their validity. A closer investigation by the Prussian government came to the conclusion that the *Kassen-Verein* was an authorized private corporation, and that the notes issued by it could not lawfully be banned, whatever doubts there might have been about their effect in law. Furthermore, according to this opinion, the issued notes did not infringe the *Münzregal*, or the monetary prerogatives of the sovereign.[54]

In contrast to England, the Prussian authorities were not willing to accept the development of private paper money, and did not count competition among various bond-issuing banks (*Zettelbanken*) as a reason in its favour.[55] C. F. von Savigny was convinced that bearer bonds or deposit receipts issued by private persons would pose a significant

[44] See Sections VII.2–3 and VIII.1–2 of this chapter.
[45] See Sections III.1(b) and V.2(a) of this chapter.
[46] Initially only bearer bonds, and since 1925 also bearer bills of exchange.
[47] In force since 1 January 1900.
[48] Baums, above n 41, at 1115.
[49] Gesetz zur Vereinfachung der Ausgabe von Schuldverschreibungen [Act on simplifying the issue of promissory notes], 17 December 1990, Bundesgesetzblatt (BGBl.) I, 2839.
[50] Gesetz, wegen Ausstellung von Papieren, welche eine Zahlungsverpflichtung an jeden Inhaber enthalten [Statute on issue of papers certifying a financial obligation towards the bearer], 17 June 1833, (1833) *Gesetzes-Sammlung für die Königlich Preußischen Staaten* 75.
[51] Reglement, die Einrichtung des Sparkassenwesens betreffend [Regulation setting up savings banks], 12 December 1838, (1838) *Gesetzes-Sammlung für die Königlich Preußischen Staaten* 5, No. 14.
[52] See Baums, above n 41, at 1097, 1099 et seq., 1106.
[53] Gesetz, wegen Ausstellung von Papieren . . . , above n 50, s. 3.
[54] Elaborated in detail by Baums, above n 41, at 1097, 1099 et seq., 1106.
[55] Ibid., at 1098.

threat to the stability of the monetary system.[56] But there was another reason for the new statutory rules: the government saw private bearer bonds, which did not earn any interest, as unwelcome competition to cheap capital funds sought after by the state. The issue of banknotes was still considered as a way of raising cheap loan finance.

6. Interim Summary

Turning to a legal analysis of the financial instruments involved in the evolution of paper money, we see that the following instruments gradually detached themselves from the deposits or the objects of a claim:

- mere receipt;
- transferable receipt;
- promissory note;
- bill of exchange or order cheque; and
- bearer bond or cheque.

In parallel to this development in the legal structures of the instruments themselves, there was a substantial change in the nature and volume of the objects that the issuer of the paper notes had to hold as a reserve. It is an open question whether reduction in reserve holdings was brought about by the drive to relax the requirements in respect of the objects held in custody, or by the changes in the legal form of the notes themselves.

III. Banknotes as Money

The emergence of 'banknotes' paved the way for a new monetary system: 'For the first time in history, money was being substantially created, not ostentatiously and visibly by the sovereign power, but mundanely by market forces'.[57] Moreover, the creation and spread of notes issued by banks has been praised as a 'fundamental reduction . . . in the degree of governmental monopoly power over money'.[58] Not only has the abolition of this monopoly, be it factual or legal, been treated as laudable, but the creation of banknotes has been hailed as a stepping stone to the establishment of democracy: 'Paper money allowed banks to become increasingly competitive sources of money, a development which led not only to significant macro-economic changes but also facilitated contemporary revolutionary constitutional changes.'[59]

These hypotheses need, however, closer scrutiny. The crucial question is whether banknotes can be analysed as money and, if this is the case, what the provisions are that produce this effect.

1. The Rights and Interests of the Sovereign

(a) Minting coins as a reserved right of the ruler

Throughout the medieval and early modern period, there was a widespread consensus that the grant of a mandate to mint coins was part of the reserved rights of the King.[60] In the

[56] Ibid., at 1101.

[57] G. Davies, *A History of Money from Ancient Times to the Present Day* (3rd edn, 2002), at 649.

[58] Ibid. [59] Ibid.

[60] The rights of the ruler were divided into major and minor rights; see Huber Ulricus, *De jure civitatis libri tres, editio tertia* (1694), at 83: 'divisio jurium Majestatis in majora & minora'. The 'jus monetae cudendae' belonged to the latter: ibid., at 88. It could be transferred and used for economic purposes ('ad utilitatem Imperantium pertinent': ibid., at 90, para. 38; as regards the end of the Empire, see N. T. Gönner, *Teutsches Staatsrecht* (1804), §§ 394–6.

wake of the collapse of the Roman Empire and the intervention of Celtic and Merovingian mints, the Franconian King Pippin and his son Charlemagne re-established this right in the eighth century as one of the King's rights (*regalia*). From this time on, money and sovereign power went hand in hand. This was true even when the right of the King and Emperor of the Holy Roman Empire to mint coins was diluted. Although the right to mint coins was granted as a privilege to local mints, it was only under strict conditions. The privilege was much sought after, and it was part of a more general emancipation of the regional rulers from the central power, that is, the emperor. However, as a privilege acquired by grant, the minting right could not be derived from the original rule over a certain territory. Its origin in the right of the King, which in this case meant the Emperor, was not questioned until the end of the Holy Roman Empire.

(b) Notes and the reserved rights of the ruler

In general, a privilege, licence, or permit from the sovereign was necessary for a private person, or an institution, to issue banknotes.[61] However, the issue of notes as bearer bonds intended for circulation was not necessarily considered as an illegal interference with the sovereign's privileged right to mint coins (*Münzregal*). That is why Prussia deemed it necessary to enact a statute to suppress the issuance of bearer bonds by private persons.[62] Today, the power to create (paper) money, in the sense of legal tender, is generally accepted to be the sovereign right of each state.[63] It may, however, be transferred to another state or to a supranational organization, such as the European Union.[64]

However, it was also the state directly which issued paper notes (*Zettel*) as a substitute for 'real' money, that is, money backed by some tangible good. An early example are the *Banco Zettel* in the Austrian Empire, issued after the Holy Roman Empire had, according to common—but legally questionable—opinion, ceased to exist with Franz II's resignation in 1806. The *Banco Zettel* led to the disastrous state bankruptcies of 1811 and 1816.[65]

(c) State-dominated institutions as issuer

At the beginning of the nineteenth century, bank-issued notes were circulating in only a few countries: Great Britain, France, Sweden, and Prussia.[66] The purpose of the Austrian central bank (*Privilegierte Österreichische Nationalbank*) was to redeem all circulating banknotes (*Zettel*),[67] but it was allowed to issue interim notes with a claim for silver coins.[68] Banknotes were used most widely in Great Britain.[69] These notes were issued by three public banks, founded by legal charter: the Bank of England, the Bank of Scotland, and the Royal Bank of Scotland. About 800 private banks also issued banknotes.[70] In the

[61] See Section II.4(c) of this chapter, p. 496. [62] See Section II.5(c) of this chapter.
[63] For comprehensive references, see H. Siekmann, 'The Legal Framework for the European System of Central Banks', in F. Rövekamp, M. Bälz and H. G. Hilpert (eds), *Central Banking and Financial Stability in East Asia* (2015) 43, at 46 with fn 17.
[64] Treaty on the Functioning of the European Union, 2008 O.J. C 115/47, Art 3(1)(c) (hereafter TFEU).
[65] For details, see C. A. Fisher, *Zur Lehre vom Staatsbankrott* (1921), at 52 et seq.
[66] Born, above n 36, at 182.
[67] 'Patent no. 1248' of 1 June 1816, sections 1 and 2: Gesetze und Verfassungen im Justiz=Fache unter Seiner jetzt regierenden Majestät Kaiser Franz vom Jahre 1816, p. 359 et seq.
[68] 'Patent no. 1248', section 4. See above n 67, at p. 360.
[69] The early literature insisted on a clear distinction between paper money, issued by the sovereign, and notes issued by a bank, even if the latter were a public law entity: see, e.g., Mathy, above n 24, at 277, with examples of notes in Great Britain that may be classified between the two types (ibid., at 284).
[70] J. Clapham, *The Bank of England*, 2 vols (1944, repr. 1966), vol. 2, at 1 et seq.

Figure 23.3 Adrian Insurance Company promise to pay the bearer.

Habsburg Empire, after an experiment by the state in issuing notes as paper money had led to disastrous inflation and state bankruptcy in 1811, a note-issuing bank was founded as a public law entity in 1816.[71]

Figure 23.3 is an example of a paper note with the promise to pay the bearer upon demand with an interesting mixture of private and public law elements. The note was issued by an insurance company, but the 'State of Michigan' is also imprinted on its face. Although it might have been a bearer note, and its small face value of two dollars seems to point to its use as paper money, it cannot be considered fully fledged money and it could not be treated as legal tender.[72]

2. The Bearing of the Note-Issuing Institution

(a) Private institutions as issuers of notes

In the beginning, private persons and institutions played a major role in issuing banknotes. It was merchants, traders, and jewellers who issued notes. Early private institutions included the *Enskilda Bank* of Stockholm,[73] the Bank of England,[74] as well as the Berlin *Kassen-Verein*.[75] A closer look, however, reveals that throughout most periods and in most regions, the state or the municipal ruler exerted a major influence, even if it formally was a private institution that was created to issue banknotes. A private person wishing to establish such an institution usually needed at least a permit or licence. An additional permission was needed to issue notes. Often, the ruler held part of the shares of private institutions.

(b) Influence of the state on note-issuing institutions

Following the first wave in the establishment of deposit and exchange institutions in the fourteenth century, the majority of deposit and exchange banks were founded in the fifteenth and sixteenth centuries as state or municipal initiatives.[76] Prominent examples

[71] See Sections III.1(c) and III.2(d) of this chapter.

[72] See Section III.3 of this chapter; Born, above n 36, at 184; Federal Reserve Act, 38 Stat. 251; 12 U.S.C. 221, at 226, as amended by P.L. 111–203, enacted 21 July 2010 (cited at n 106 below).

[73] See Section II.4(c) of this chapter.

[74] See Section II.4(c) of this chapter.

[75] See Section II.5(c) of this chapter.

[76] See Section II.2 of this chapter.

include the *Tavoli di Palermo* (1552), the *Banco della Piazza di Rialto* of Venice (1787), and the *Banco di Sant'Ambrosio* of Milan (1593).[77] The *Amsterdamsche Wisselbank* (1609) was not only guaranteed by the city of Amsterdam, but it was supervised by the city's mayor.[78]

Sometimes a note-issuing institution would be established directly by the ruler or the state, irrespective of whether the equity it needed came from private sources. Examples are the *Königliche Giro- und Lehnbanco* (the Prussian Bank),[79] founded in 1765,[80] and the *Privilegierte Österreichische Nationalbank* founded in 1816 as an entity of public law. The principal objective of the Austrian institution was to exchange notes issued by the state (*Banco Zettel*) against notes issued by the bank that certified a promise to redeem the notes for silver coins.[81] The background was that the treasury notes had wholly lost their credibility owing to the desperate condition of state finances.[82]

However, the state ownership of a note-issuing institution or the state's influence on it do not imply that its notes have to be recognized as money. Additional legal acts are necessary for the notes to obtain this status, and the kind of acts depends on the definition of money that is adopted. For quite some time the ability of being accepted by the state treasury or the state ruler in payment of dues and taxes was considered as an essential feature of money. On this view, it was not essential that the note be a bank note.[83] Often, the treasury would be willing to accept non-interest-bearing bearer bonds or bills of exchange, which it had previously issued to raise revenue (*Kassenscheine*);[84] in this way the bonds returned to the issuer before maturity. At this stage, private persons remained rather reluctant to accept paper money, especially in Germany. To boost acceptance of paper notes, a requirement was introduced that a portion of taxes and other dues had to be paid by using those bearer bonds.

The evolution of notes towards money in the modern sense of the word was not straightforward, and various kinds of notes, sometimes with a mixture of elements, developed;[85] for a long time banknotes were not considered to be money, but rather non-interest bearing bonds, even though they were already fulfilling some of the economically decisive functions of money. Moreover, banknotes faced the competition of non-interest bearing treasury notes in small denominations, which came closer to money in the legal sense of the word, as public cashiers were compelled to accept them.

(c) Private shareholders of state institutions

The majority of banks which developed into central banks had private shareholders who provided all or part of the necessary capital,[86] as in the case of the Bank of England,[87] the *Banque de France*, founded in May 1800 by the order of Napoleon Bonaparte,[88] the (second)

[77] See Section II.2 of this chapter. [78] See the final paragraphs of Section II.2 of this chapter.

[79] The major shareholder was the state of Prussia: cf. Deutsche Bundesbank, *Die Deutsche Bundesbank, Aufgabenfelder, Rechtlicher Rahmen, Geschichte* (April 2006), at 15.

[80] Born, above n 36, at 183. [81] See Fisher, above n 65, at 52 et seq.

[82] Mathy, above n 24, at 296 et seq.; Born, above n 36, at 184.

[83] G. F. Knapp, *Staatliche Theorie des Geldes* (1905), at 123: 'Banknoten sind also nur dann staatliches Geld, wenn sie auch als staatliche Kassenscheine zugelassen sind.' The coins of the *union latine* were mutually accepted by the treasuries as long as, in the case of gold coins, they were not debased more than 0.5% and in the case of silver coins more than 1%; cf. Born, above n 36, at 178.

[84] See end of Section III.2(c) below, n 95. [85] See further Section III.2(d).

[86] K. Borchardt, 'Währung und Wirtschaft', in Deutsche Bundesbank (ed.), *Währung und Wirtschaft in Deutschland, 1876–1975* (1976) 3, at 15: a private basement.

[87] See Section II.4(c).

[88] It had the right to issue banknotes but they were only intended to be an instrument of credit and not a means of payment. For this reason, their face value had to be at minimum 500 francs; cf. Born, above n 36, at 183.

Bank of the United States (1816–36),[89] or the German *Reichsbank*, founded by the German Banking Act of 1875.[90] The legal status of those institutions was often the subject of long-running debates.

Although it had only private shareholders[91] and had to pay a guaranteed dividend of 4.5 per cent,[92] the Reichsbank had sovereign powers and was run by state officials, and as such it must be viewed as a public law entity and a detached part of the government.[93] The same is true of many note-issuing banks in the territory of the German Confederation, founded in 1815 after the Napoleonic wars. Since they were allowed to issue banknotes, they were called *Zettelbanken*.[94]

In 1875, when the German Banking Act was enacted, a total of thirty-three banks had the privilege to issue banknotes. After the transformation of the Prussian Bank into the Reichsbank, there remained thirty-two institutions with the right to issue banknotes. This right was not abolished by the Act. Instead, the Act tried to curb the operation of the *Zettelbanken* in a separate title (*Titel III*) with the aim that they would 'voluntarily' renounce their note-issuing rights. Indeed, most of them did so in the following years. The Banking Act called those banks 'private' (*Privat=Notenbanken*), even though they were effectively institutions of the various member states of the Empire. To achieve this objective, an interesting regulatory technique was employed: a specific quota of issuable notes was apportioned to them; any issuance in excess of this quota was taxed at 5 per cent. In the last days of the Reich of 1870, there remained four banks still issuing banknotes.

Finally, five different types of notes were used as means of payment:

1. banknotes of the Reichsbank (which, from 1875 onwards, were used solely for commercial purposes because of their high denominations);
2. banknotes of the remaining 'private' banks of various states of the federation;
3. imperial treasury notes (*Reichskassenscheine*) (from 1874 on, in small denominations);[95]
4. treasury money orders of the states (*Kassenanweisungen*) (1860); and
5. promissory notes of the debt administration of the German Empire (*Darlehnskassenscheine*) (1914–22).

[89] 80% of the bank's capital was held by private investors: cf. B. Hammond, *Banks and Politics in America, from the Revolution to the Civil War* (1957), at 408. Overall, foreigners held about a quarter of the bank's stock: see ibid. and R. Hofstadter, *The American Political Tradition* (1948), at 61.

[90] Bankgesetz [Banking Act], 14 March 1875, Reichsgesetzblatt (RGBl.), at 177. The act was criticized by leading German economists, e.g. A. Wagner, *Die Zettelbankreform im Deutschen Reiche* (1875). Legal and institutional details are treated in depth by W. Lotz, *Geschichte und Kritik des deutschen Bankgesetzes vom 14. März 1875* (1888), at 163 et seq.

[91] On the basis of the Bankgesetz, above n 90, § 23. The Prussian Bank, which had been transformed into the Reichsbank, had as major shareholder the state of Prussia. It transferred all shares to private investors, see Deutsche Bundesbank, above n 79, at 15.

[92] Bankgesetz, above n 90, § 24 para. 1 no. 1 and para. 2.

[93] The majority of legal opinions agreed on this: Reichsgericht in Zivilsachen, Judgment of 18 January 1886, RGZ 15, 230, at 236; Reichsgericht in Zivilsachen, Judgment of 20 January 1896, RGZ 36, 141, at 150 et seq.; J. Breit, *Bankgesetz* (1911), at 52–3, 210; A. Freyer, *Die alte und die neue Reichsbank* (1929), at 32; H. Beck, *Gesetz über die Deutsche Bundesbank vom 20. Juli 1957*, *Kommentar* (1959), at 28; Borchardt, above n 86, at 15, who emphasizes the similarities of the institutional set-up with the Prussian Bank; (partially) disagreeing: P. Laband, *Das Staatsrecht des Deutschen Reiches* (5th edn, 1913), vol. 3, at 142; G. Meyer and G. Anschütz, *Lehrbuch des Deutschen Staatsrechts* (7th edn, 1919), Pt. 3, at 832: stock corporation (*Aktiengesellschaft*); K. Stern, *Das Staatsrecht der Bundesrepublik Deutschland* (1980), vol. 2, at 466; H. James, 'Die Reichsbank von 1876 bis 1945', in Deutsche Bundesbank (ed.), *Fünfzig Jahre Deutsche Mark* (1998) 29, at 37: institution in private possession administered by state officials.

[94] The German word *Zettel* could be translated as a 'slip' or a 'piece' of paper. For details on *Zettelbanken* and their reform, see Wagner, above n 90.

[95] Gesetz, betreffend die Ausgabe von Reichskassenscheinen [Act concerning the issue of treasury notes of the Empire], 30 April 1874, RGBl. 1874, at 40.

(d) Concentration in one institution

It took quite some time to concentrate the right to issue banknotes in one institution.[96] Austria was one of the first countries to establish a monopoly for issuing banknotes, presumably owing to the unusually poor state of its finances. The monopoly was awarded to the *Privilegierte Österreichische Nationalbank*.[97] The monopoly was renewed in 1841 and the notes were declared legal tender.[98]

In Germany, it was not until 1939 that the exclusive right to issue banknotes was conferred on the Reichsbank.[99] Although an institution can have a monopoly on creating money without that money necessarily being legal tender,[100] that step has finally been taken in most monetary systems. The *Bank Deutscher Länder*, the central bank set up after the Second World War by the allied powers in Germany, had the exclusive right to issue banknotes in *Deutsche Mark* as did its successor in 1957, the *Deutsche Bundesbank*. Also the (exclusive) right to issue banknotes of the common currency of the European Union, the euro, is reserved to the European Central Bank and the national central banks of the Eurozone.[101]

In the United States of America, two attempts to establish a central bank failed, although their conformity with the Constitution had been affirmed:[102] the (first) Bank of the United States (1791–1811) and the (second) Bank of the United States (1816–1836).[103] Only in 1913 in the wake of the First World War was it eventually possible to establish a central bank, which was highly decentralized because of the reservations of the states.

(e) Circumvention of the rules

As a measure aimed at strengthening the central bank's monopoly on the issue of money, statutory rules have prohibited banks from accepting cheques. Historically, this was necessary, as an accepted cheque would have the quality of a private banknote and could circulate as money, regardless of whether it was an ordercheque or a bearercheque. Of course, a bearer cheque would be a closer approximation of a banknote. In Germany, only the *Bundesbank* is allowed to accept a cheque. This is consistent with its status, as it may also issue additional banknotes for circulation. Both instruments have the same reputation and security.

Since the issue of banknotes lacking legal tender status could be a practical and profitable business, attempts were made in the past to bend, breach, or circumvent the rules governing them. The clearest breach of the statutory rules has been the case of cheques accompanied by a specific bank card, issued by the German banks. When a cheque and a card were used together, the bank guaranteed the receiver the payment up to a certain amount. Functionally, this was equivalent to a forbidden bank-accepted cheque competing with legal tender. The only difference was that the acceptance was not written on the cheque but on a separate document.

[96] The evolution of the various institutions in Europe and Japan is presented in detail in Goodhart, above n 36, at 105–60.

[97] 'Patent no. 1248', sections 1 and 4. above n 67.

[98] Born, above n 36, at 184.

[99] Gesetz über die Deutsche Reichsbank [Act concerning the Deutsche Reichsbank], 15 June 1939, RGBl. I, at 1015, § 2 phrase 2.

[100] See end of Section III.3(a) in this chapter.

[101] TFEU, above n 64, Art. 128(1):

> 1. The European Central Bank shall have the exclusive right to authorise the issue of euro banknotes within the Union. The European Central Bank and the national central banks may issue such notes. The banknotes issued by the European Central Bank and the national central banks shall be the only such notes to have the status of legal tender within the Union. . . .

[102] *James McCulloch v. The State of Maryland*, 17 U.S. 316 (1819).

[103] B. Hammond, 'Jackson, Biddle, and the Bank of the United States', (1947) 7(1) *The Journal of Economic History* 1, at 7; B. Hammond, 'The Second Bank of the United States', (1953) 43(1) *Transactions of the American Philosophical Society* 80, at 84; Hammond, above n 89, at 222 and 438; Hofstadter, above n 89, at 35 and 61–2.

3. Banknotes as Legal Tender

As early as the mid-nineteenth century, the function of legal tender was developed as the decisive criterion in determining what is money, and what is not.[104]

(a) The gradual evolution

A crucial step in the evolution of banknotes was taken in the mid-nineteenth century by the Habsburg Empire. The notes of the *Privilegierte Österreichische Nationalbank* were declared legal tender in 1841,[105] long before Germany or the United States had established central banks with the right to issue legal tender. In the United States, it was not until December 1913 that the Federal Reserve System was founded[106] with the right to issue banknotes as legal tender.[107]

Instruments issued by individual American states or their banks could not circulate as legal tender, because the US Constitution reserves the right to issue legal tender[108] to the federal government.[109] Although legal tender had existed in the US since the middle of the nineteenth century, rather than a central bank, it was the US Treasury that was entrusted by Congress with the issuance authority in 1862 through a series of Legal Tender Acts.[110] Their wording[111] was not much different from the pre-existing statutory law.[112] In *Hepburn v. Griswold* (1869), the US Supreme Court initially held that legal tender in the form of paper money violated the US Constitution.[113] A series of 'legal tender cases'

[104] G. Hartmann, *Ueber den rechtlichen Begriff des Geldes und den Inhalt von Geldschulden* (1868), at 12 (section 4).

[105] Born, above n 36, at 184.

[106] Federal Reserve Act, above n 72, 12 U.S.C. 226:

> To provide for the establishment of federal reserve banks, to furnish an elastic currency, to afford means of rediscounting commercial paper, to establish a more effective supervision of banking in the United States, and for other purposes.
>
> SHORT TITLE AND DEFINITIONS: Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the short title of this Act shall be the 'Federal Reserve Act.'

[107] Federal Reserve Act, above n 72, 12 U.S.C. 411, § 16:

> Federal Reserve notes, to be issued at the discretion of the Board of Governors of the Federal Reserve System for the purpose of making advances to Federal Reserve banks through the Federal Reserve agents as hereinafter set forth and for no other purpose, are hereby authorized. The said notes shall be obligations of the United States and shall be receivable by all national and member banks and Federal Reserve banks and for all taxes, customs, and other public dues. They shall be redeemed in lawful money on demand at the Treasury Department of the United States, in the city of Washington, District of Columbia, or at any Federal Reserve bank.

[108] Ibid., § 10 cl. 1: 'No State shall ... coin Money; ... ; make any Thing but gold and silver Coin a Tender in Payment of Debts; ...'.

[109] This was, however, disputed and in the beginning reserved to coins as the wording of the clause suggests.

[110] 12 Stat. 345.

[111] 12 Stat. 345:

> Be it enacted ... That the Secretary of the Treasury is hereby authorized to issue, on the credit of the United States, one hundred and fifty millions of dollars of United States notes, not bearing interest, payable to bearer, at the Treasury of the United States ... and such notes herein authorized shall be receivable in payment of all taxes, internal duties, excises, debts, and demands of every kind due to the United States ... and shall also be lawful money and a *legal tender in payment of all debts, public and private*, within the United States ... [emphasis added].

[112] 31 U.S.C. § 5103:

> United States coins and currency (including Federal reserve notes and circulating notes of Federal reserve banks and national banks) are legal tender for all debts, public charges, taxes, and dues. Foreign gold or silver coins are not legal tender for debts.

[113] *Hepburn v. Griswold*, 75 US 603 (1869).

overruled *Hepburn v. Griswold* (1869), beginning with *Knox v. Lee* and *Parker v. Davis* in 1871,[114] followed by *Juilliard v. Greenman* in 1884.[115] In *Juilliard*, the US Supreme Court extended Article I, section 10, clause 1 of the US Constitution concerning banknotes, and in effect prohibited the issuance of legal tender notes by states or their banks. It is relevant here to note the distinction between 'lawful money' and 'legal tender'.

In Germany, well into the twentieth century, banknotes of the Reichsbank could be legally issued only in high denominations,[116] which far exceeded the financial needs and capacities of the general population.[117] The average person never came into contact with a banknote. This is why the term 'current money', *Courant Geld* or *Kurantgeld*, was used until the beginning of the twentieth century to distinguish 'real' money (coins) from any kind of paper money. The next and final step was to establish the legal obligation to accept banknotes as payment instruments among private persons. Originally, such an obligation was explicitly *excluded* from the German Banking Act of 1875.[118] This prohibition lasted until 1 January 1910 when the obligation to accept banknotes of the Reichsbank as instruments of payment was finally introduced.[119] Banknotes of the other note-issuing banks then in existence were not covered by this obligation.[120] Consequently, only Reichsbank notes became legal tender. The banknotes issued by the German Bundesbank were also declared legal tender.[121]

(b) The present situation in the eurozone

Only euro banknotes are legal tender in those member states whose currency is the euro.[122] As a concession to history, member states have been granted the right to mint euro coins, although under Article 128(2) TFEU, the volume is subject to approval by the European Central Bank.[123] There are hardly any rational reasons for continuing this medieval privilege (*Münzregal*), even when it is subject to the control of monetary authorities. The only reason seems to be to preserve a source of revenue, which is considerable for some smaller states. Even small non-member states of the EU (Andorra, Monaco, San Marino, the Vatican) have made sizable efforts to obtain the limited right to issue euro coins by special contractual agreements.[124]

[114] *Knox v. Lee* and *Parker v. Davis*, 79 US 457 (1871).

[115] *Juilliard v. Greenman*, 110 US 421 (1884).

[116] Only 100, 200, 500, and 1000-mark notes: Bankgesetz, above n 90, § 3.

[117] The lowest face value was about four times the monthly wages of a textile worker: see Borchardt, above n 86.

[118] Bankgesetz, above n 90, § 2: 'Eine Verpflichtung zur Annahme von Banknoten bei Zahlungen, welche gesetzlich in Geld zu leisten sind, findet nicht statt und kann auch für Staatskassen durch Landesgesetz nicht begründet werden.'

[119] Gesetz, betreffend Änderung des Bankgesetzes [Act concerning an amendment of the Banking Act], 1 June 1909, RGBl. 515.

[120] James, above n 93, at 44; Deutsche Bundesbank, above n 79, at 17.

[121] Bundesbankgesetz [Act on the German Bundesbank], 26 March 1957, as amended 22 October 1992, *Federal Law Gazette* I, at 1782: § 14 para. 1 sentence 2.

[122] TFEU, above n 64, Art. 128(1) (quoted at n 101).

[123] Ibid., Art 128(2):

> 2. Member States may issue euro coins subject to approval by the European Central Bank of the volume of the issue. The Council, on a proposal from the Commission and after consulting the European Parliament and the European Central Bank, may adopt measures to harmonise the denominations and technical specifications of all coins intended for circulation to the extent necessary to permit their smooth circulation within the Union.

[124] For details, see H. Siekmann, 'Einführung', in H. Siekmann (ed.), *Europäische Währungsunion* (2013) 1, at No. 14.

(c) Legal tender as promissory note

Originally, many notes issued by banks certified the promise to the respective bearer to deliver the nominal value in 'current' money, *baares Geld*,[125] upon presentation. In Great Britain, the legal obligation of the Bank of England to convert banknotes into gold was abolished in 1797[126] with less fatal results than in France in that it did not inflate the number of notes in circulation to the same extent.[127] Nevertheless, the obligation was re-introduced in 1821.[128] In the course of the nineteenth century, minted gold was established as currency almost worldwide. Gold entered ordinary circulation and was used more than just as a reserve (*Goldumlaufwährung*).[129] If banknotes were issued as a means of payment, they could almost always be redeemed at the issuing bank.[130]

These 'banknotes' were used as legal tender in many countries until the middle of twentieth century, and in Germany until 1937. Provisions of administrative law often abolished the claim for payment of the note without changing the wording of the note itself.[131] These rules overrode the legal effect of the note in private law. US silver certificates had to be fully covered by silver coins or bullion, held at the treasury. The claim of US silver certificates was formally abolished only on 24 June 1968, but they kept their status as legal tender.[132] Prior to that, the possession of gold or silver coins had been forbidden in all circumstances. The constitutional validity of this prohibition was upheld in several court decisions.[133] It is now generally accepted that banknotes do not certify any enforceable claim,[134] and the wording to this effect on the document would usually be removed. But the change has not been universal as, for example, in the case of notes denominated in Hong Kong dollars.

4. The Controversy as to the Nature of Money

(a) State theory of money

Friedrich Georg Knapp, professor of economics at the university of Strasbourg, commenced his treatise on the 'State Theory of Money' in 1905 with the famous words: 'Money is the creation of a legal system; it has appeared in history in various forms: a

[125] Usually minted in gold, silver, or bullion.

[126] Bank Restriction Act of 1797 of the Parliament of Great Britain, 37 George III, c 45.

[127] North, above n 3, at 134.

[128] *Clapham*, above n 70, vol. 2, p. 70 et seq.; North, above n 3, at 143, 151; M. North, *Kleine Geschichte des Geldes* (2009), at 146, 155.

[129] For details see Born, above n 36, at 177–82.

[130] Ibid., at 182.

[131] See Krauskopf, above n 1, at 247: 'However, the practical value of the redemption commitment was always marginal . . . '.

[132] Only the claim for redemption was abolished.

[133] The official statement of the Federal Reserve Board:

> *Milam v US*, 524 F.2d 629 (9th Cir. 1974), is typical of the federal and state court cases holding that Federal Reserve notes are 'lawful money'. In *Milam*, the United States Court of Appeals for the Ninth Circuit reviewed a judgment denying relief to an individual who sought to redeem a $50 Federal Reserve Bank Note in 'lawful money'. The United States tendered Milam $50 in Federal Reserve notes, but Milam refused the notes, asserting that 'lawful money' must be gold or silver. The Ninth Circuit, noting that this matter had been put to rest by the US Supreme Court nearly a century before in the Legal Tender Cases (*Juilliard v Greenman*), 110 US 421 (1884), rejected this assertion as frivolous and affirmed the judgment.

Board of Governors of the Federal Reserve System, *What is lawful money? How is it different from legal tender?* (2 August 2013), available at http://www.federalreserve.gov/faqs/currency_15197.htm.

[134] Bundesverwaltungsgericht (BVerwGE) [German Supreme Administrative Court] 94, 294.

theory of money can therefore only be a work of legal history.'[135] From this starting point, it follows naturally, as has been shown,[136] that '[m]oney is a creation of the state. Only legal tender is money and all legal tender is money.'[137] It was, however, a now almost forgotten economist in Basel who had made the same discovery with partially the same wording, decades before Knapp.[138]

This statement has been questioned for good reasons,[139] but it also contains much sound wisdom. The functional view of money that most economists share today[140] is not necessarily compatible with the significance of the law in determining the nature and function of money.[141] Even one of the fiercest critics, Joseph A. Schumpeter, eventually quoted with approval the definitions of money by John Stuart Mill and George Berkeley as a 'ticket' or 'admission card'.[142] Schumpeter thus came close to the notion of money as a claim or receipt.[143]

(b) The functional view

As early as the beginning of the nineteenth century, when banknotes were already being labelled as 'paper money', a functional view of money emerged.[144] Even in legal treatises, it was finally accepted that 'money in an economic sense' could be any object which is used as an instrument of payment.[145] Broadly speaking, any good accepted by the counterpart can be regarded as money, even if it does not entirely fulfil the traditional and generally accepted functions of being a medium of exchange, unit of account, or store of value.[146] In economics, the term 'money' is predominantly used in this broad, functional sense. A positive balance in any kind of bank account may suffice. The risk of bank insolvency is neglected or downplayed.[147]

The functional view might be helpful in a certain type of analysis, but it conceals some important facts of real life. It is true that private commercial institutions have the capacity to create money in the functional sense, even if they do not have the capacity to do so

[135] Knapp, above n 83, at 1:

> Das Geld ist ein Geschöpf der Rechtsordnung; es ist im Laufe der Geschichte in den verschiedensten Formen aufgetreten: eine Theorie des Geldes kann daher nur rechtsgeschichtlich sein.

[136] Above Section I of this chapter, elaborated in Section III.4(c) below.

[137] Knapp, above n 83, at 123, specifically for banknotes; (partially) agreeing: F. A. Mann, *Das Recht des Geldes* (1960), at 400; K. Schmidt, *Geldrecht* (1983), Vorbem. zu § 244, A 3, A 12, for money signs as consequence of his two-pronged definition of money (A 11).

[138] Hartmann, above n 104, at 4, 7, 12, and 48.

[139] Schumpeter, above n 7, at 83–6; F. Vischer, *Geld- und Währungsrecht im nationalen und internationalen Kontext* (2009), at 4; differentiating between money in an abstract sense and as a denomination of monetary signs (*Geldzeichen* [currency]): Schmidt, above n 138, Vorbemerkung zu § 244, A 2, who shows that the factual use and acceptance of an object for monetary functions can lead to the existence of money even under Knapp's assumptions; agreeing with Knapp: Mann, above n 137, at 14, 400.

[140] See, e.g., Schumpeter, above n 7, at 19–39, 176–205; Patinkin, above n 34, at 295; F. S. Mishkin, *The Economics of Money, Banking and Financial Markets* (10th edn, 2012), ch 3.

[141] Schumpeter firmly stated that Knapp's theory was unable to explain the nature of money but conceded that 'at most' it could explain the nature of money as legal tender: J. A. Schumpeter, *Geschichte der ökonomischen Analyse* (1965), at 1324.

[142] Schumpeter, above n 7, at 75.

[143] F. K. Mann, 'Einführung des Herausgebers zu Joseph A. Schumpeter', in J. A. Schumpeter, *Das Wesen des Geldes*, ed. F. K. Mann (1970) vii, at xx.

[144] Gönner, above n 60, § 393 VII, *Papiergeld.*

[145] Meyer and Anschütz, above n 93, at 831.

[146] The definition of money is usually derived from these three basic functions: North, above n 129, at 7; H. J. Hahn and U. Häde, *Währungsrecht* (2nd edn, 2010), at 9 et seq.; see *contra* Schmidt, above n 138, Vorbem. § 244 A 7.

[147] See, e.g., Mishkin, above n 140, ch 3; Vischer, above n 139 at 17 et seq.; Richter, above n 34, ch 4, at 108, arguing explicitly against Knapp that money is not necessarily the creation of a legal system.

according to a strict legal definition of money. The same is true of the ECB and the Eurosystem, whose definitions are concerned with a broad concept of money and avoid the term 'central bank money' or 'legal tender'.

The Eurosystem distinguishes different 'aggregates' of money: a narrow aggregate (M1), an intermediate aggregate (M2), and a broad aggregate (M3). These aggregates differ in the degrees of liquidity (as assessed on the basis of the criteria of transferability, convertibility, price certainty, and marketability) of the assets they include.[148] In effect, for central banks, money always comprises money created by (private) monetary financial institutions, mainly banks, in the exercise of their commercial functions.[149] The Eurosystem refers only obliquely to legal tender by defining the monetary base[150] as currency (banknotes and coins) in circulation and bank reserves.[151] The disdain for the legal tender aspect of money, together with the failure to refer to claims on a current bank account at a central bank, shows how one-sided the view has become in practice. Having said that, the primary law of the EU clearly acknowledges the concept of money as legal tender under Article 128 TFEU, a clause frequently overlooked by economists and the media.

(c) *Synthesis*

The solution might be to draw a clear line between money as an abstract concept and money as a specific good, 'currency', 'sign', or 'symbol' that is usually tangible (*Geldzeichen*).[152] The latter will become money for legal purposes only by acts of the state. This is demonstrated by the case of Germany, where non-interest-bearing notes in small denominations, issued by a private institution (*Berliner Kassen-Verein*), were suppressed by the law. The banknotes issued by the supposedly private *Zettelbanken* of the various sovereign entities in Germany remained in use, but were not given the status of legal tender. The Banking Act of 1875 still did not acknowledge the banknotes issued by the newly founded Reichsbank to be legal tender; it also tried to limit the issue of notes by the *Zettelbanken*. Reichsbank notes were partly acknowledged as legal tender—namely, as a means of payment for government claims—only in order to boost the acceptance of the *Reichskassenscheine*, or Empire treasury notes created in the late nineteenth century.[153] All this was done by explicit acts of the state, which confirms Knapp's theory, at least with

[148] The ECB uses the following definitions:

- M1 comprises currency, i.e. banknotes and coins, and overnight deposits. These deposits can immediately be converted into currency or used for cashless payments.
- M2 comprises M1 and, in addition, deposits with an agreed maturity of up to and including two years or redeemable at a period of notice of up to and including three months. These deposits can be converted into components of narrow money, although some restrictions may apply, such as the need for advance notification, penalties, or fees.
- M3 comprises M2 and certain marketable instruments issued by the resident MFI sector. These marketable instruments are repurchase agreements, money market fund shares/units and debt securities with a maturity of up to and including two years (including money market paper). A high degree of liquidity and price certainty make these instruments close substitutes for deposits. As a result of their inclusion, broad money is less affected by substitution between various liquid asset categories and is more stable than narrower definitions of money.

European Central Bank, *The Monetary Policy of the ECB* (2004), at 37. The definitions of the ECB are not all consistent. Its 2011 edition of *The Monetary Policy of the ECB* (at 50 and Table 2.12) is less precise; moreover, the wording on the homepage of the ECB follows neither edition.

[149] European Central Bank (2011), above n 148, at 50 and Table 2.5.

[150] European Central Bank (2011), above n 148, at 144.

[151] Held at an account of the central bank.

[152] Schmidt, above n 138, Vorbem. zu § 244, A 11: a two-pronged concept of money. Hartmann, above n 104, at 7, used the concept *Werthzeichen*.

[153] See n 95 above.

regard to the history of money in the German states in the nineteenth century.[154] But only when a banknote must be accepted by everyone as a means of payment can it be considered to be fully fledged money.[155] The acknowledgement of a money symbol (*Geldzeichen*) by the legal system, and the legal obligation to accept it as payment, are integral parts of the recognition of those symbols as money in any legal analysis.[156]

Whenever the term 'money' is used in a legal context, the crucial question is whether the creditor of a claim can be forced to accept a specific symbol as payment, regardless of how widely it may be considered as money in other contexts. Only the specific public law rules in the legal system can ensure this. Money in the legal sense of the word is equivalent to legal tender.

It is within the sovereign rights of a state to declare a note to be legal tender. The note need not be issued by an institution of that state: issuance by another state or a supranational organization such as the EU is also possible. As a matter of law, legal tender status can be attributed to the notes of more than one institution. It is not necessary for every state to have its own currency, since the existence of a national currency is not an essential feature of a sovereign state.

That a note need not be tied to the state is also the theory behind the most recent creation of monetary history, the euro. The euro banknotes issued by the European Central Bank and the national central banks are declared to be legal tender within the EU under Article 128(1) sentence 2 TFEU. This has been approved by the Federal Constitutional Court of Germany.[157] The court also accepted that the expectation that the currency is redeemable for the goods the bearer wishes to acquire (*Einlösungsvertrauen*) is vested in a supranational institution rather than in a traditional nation state.[158]

Initially, the notes of national central banks, such as the Reichsbank, with the right to issue non-legal-tender banknotes, were not money in the legal sense of the word, even though they might have fulfilled monetary functions. They served as a substitute for money (*baares Geld*), and were not intended to have a wider use, partly because of their high face value in terms of buying power.

It is not a requisite to the legal definition of money that the state, or a central bank, hold monopoly on the privilege of issuing legal tender. Its creation by a sovereign entity or an entity licensed by the sovereign suffices. From this point of view, the limitation of the right to issue banknotes by 'private' banks (*Zettelbanken*) in 1875 was not mandatory.[159] There are still some countries which have more than one currency as legal tender.[160]

IV. Book Money as Substitute for Legal Tender

The functional equivalence between money and credit had already been relied upon by the deposit and exchange banks of the seventeenth and early eighteenth centuries. It allowed the volume of money to grow mainly through the discounting of bills of exchange. Reserve requirements and the immediate risk of having to clear accounts or redeem notes at any

[154] Hartmann, above n 104, at 12–17 (section 4) delved into the question as to how a piece of paper turns into money and the question, appropriate at the time, whether banknotes are money (ibid., at 16).

[155] Born, above n 36, at 47.

[156] Schmidt, above n 138, Vorbem. zu § 244 A. 12 (end). The obligation to accept a money symbol is a widely acknowledged feature of money in the sense of legal tender. See Hartmann, above n 104, at 12, 16, and 50, who uses this obligation (*Zwang*) as the decisive feature of money (ibid., at 52). See also Schmidt, above n 138, Vorbem. zu § 244 C 36, 40; Hahn and Häde, above n 146, § 3 fn 30; as well as economists, e.g. Richter, above n 34, at 112 et seq.

[157] BVerfGE 89, 155.

[158] BVerfGE 97, 350, at 371–2.

[159] See Sections III.2(c) and III.4(c) of this chapter.

[160] Cf. Siekmann, above n 124, at No. 58.

time limited the use of these instruments. But, in principle, a monetary system could be established lacking coins or transferable written instruments, which had the effect of evading the guidance and control of the authorities.

1. The Growing Role of Book Money

It has already been mentioned that the restriction on private banknotes was a principal feature of the Banking Act of 1875 and the previous Act on treasury notes of the German Reich. In 1848, after a rather short period of liberalization,[161] there grew a widespread consensus that in the medium range the existing 'private' banknotes (*Zettel*) should be abolished. This had already been the explicit objective of the *Privilegierte Österreichische Nationalbank* in 1817,[162] and was to some extent enforced by the Banking Act of 1875. This might also be one of the reasons why banknotes did not play a significant role in Germany until the First World War. They all had the legal character of bearer bonds, whether they were issued by the treasury (*Kassenscheine*), the central bank (Reichsbank), or another bank. This view even led to restrictions on the issue of notes by the Reichsbank,[163] in addition to its obligation to pay a 5 per cent tax when it exceeded the quota based on its reserves, one-third of which had to be in gold.

To fill the gap, there was a rapid growth in the holding of deposits as money substitutes since they were exempted from the restrictions on issuing banknotes. The question whether it was forgotten, or it was not yet understood, that a balance at a central bank account is functionally identical to a banknote is beyond the scope of this chapter.[164] But the effect was that the economy received the monetary media necessary to foster growth, and the central bank was able to keep its gold reserves.

2. Safeguards to Protect the Public from the Dangers of Book Money

The Prussian answer to the needs of the less affluent sections of society was to set up a system of municipal savings banks (*Sparkassen*), which operated under the close guidance and strict supervision of the state. Their main objective was to safeguard the security of deposits. This regime lasted until 2002 when the government guarantees for these banks (*Anstaltslast* and *Gewährträgerhaftung*)—which still occupy more than half of the retail market—were removed and replaced by a diffuse, de facto guarantee. In practice, it would be impossible for any government to allow tradespersons or professionals, or the population at large, to bear the detrimental effects of a bank failure. The adverse effects of false regulation, insufficient supervision, and widespread management failures are cushioned with taxpayers' money, despite all the rhetoric of 'bail-in' involved in these measures, and the acknowledged necessity that banks may go bankrupt in the future without any prospect of support from the taxpayer. Intense lobbying combined with a programme of 'deregulation' and 'privatisation' that has been ill-designed in its fundamentals have turned a fairly efficient system of financial institutions into a complex cluster of hard-to-judge institutions with an extended risk for the end user (customer) and complicated and costly safety nets of questionable quality.

[161] Baums, above n 41, at 1107.
[162] See Sections III.1(b) and (c) and V.1(a) of this chapter.
[163] See Section III.3(b) of this chapter.
[164] The growth of deposit money in relation to legal tender is shown by Borchardt, above n 86, at 27.

To commercial parties, the Royal Bank (later the Prussian Bank) was an alternative institution. Its successor, the Reichsbank, established an efficient and widespread giro-system, which enabled money transfers within the German Reich, conveniently and without charge.

All book-money regimes may be required to maintain varying degrees of connection with central bank money. But the effect of the increasingly benign reserve requirements, loose banking supervision, and minimal capital requirements has been that the connection to the central bank has tended to vanish. With the spread of electronic means of payment, the link with state-created money is becoming even more remote. The introduction and rapid growth of 'bitcoins' may lead to a purely private form of money. The main safety features of, for example, bitcoins (decentralized network with a complete transaction history in a 'blockchain') might exceed the safeguards for the stability of legal tender: they are costly to produce and their volume has an absolute cap.

3. Unleashing the Destructive Power of Book Money

Over 90 per cent of what economists would call the 'volume' of money has been created in the last two decades by commercial banks, rather than by governments or central banks.[165] The sheer volume of this money, created by the banking system, can substantially undermine the monetary policy and the stability of the whole financial system. And this is exactly what happened. On a global scale, the volume of money expanded disproportionately to GDP or the global trade volume. This was only possible because of deregulation, which removed many legal safeguards that used to stabilize financial institutions and financial markets, and because the supervision by the competent authorities was alarmingly inadequate. It was again demonstrated that competition or 'self-regulation' by the 'industry' would not mitigate the systemic flaws of financial institutions and financial markets.

The private watchdogs and gatekeepers, such as rating agencies, which were intended to replace sovereign guidance, supervision, and control over the financial system have almost completely failed in this respect. They did not live up to expectations when they took on a quasi-sovereign status in monitoring a largely privatized financial system. The quasi-sovereign function has therefore been eliminated by US legislation,[166] but not by the EU.

V. Interdependence between Banking, Money, and State

1. Currency and Government Finances

(a) Financing government deficits by issue of banknotes

A good example of a bank funding a government deficit is the *Amsterdamsche Wisselbank*. The bank was allowed to grant loans only to public entities. However, the city of Amsterdam as well as trading companies, which were mixed private and public entities, could also receive loans. In this way, the *Wisselbank* established a flourishing trade in gold and silver, and could finance public sector deficits.[167]

The bank and its currency enjoyed a high reputation around Europe. However, it lacked the essential features of a central bank: it did not issue monetary instruments such as coins,

[165] Based on ECB monthly reports and figures from European Central Bank (2011), above n 148, at 40 and Table 2.5.

[166] Dodd–Frank Act, Pub. L. No. 111–203, Title IX, Subtitle C., section 939 (2010).

[167] See Section II.2–3 of this chapter.

bearer bonds, or notes, and all its assumed liabilities had to be completely covered by deposits of metal.[168]

Another example of a bank financing government deficits by the issue of notes is the Bank of England.[169] In effect, public-sector deficits were financed by the issue of banknotes.[170] One of the functions of the *Banque de France* was also to provide credit to the government. Part of its equity provided by the shareholders in gold and silver had to be handed over to the government.[171]

To finance the Napoleonic wars, the Prussian treasury directly issued notes that circulated in the economy. Although the volume of paper money increased, Prussia was able to avoid a severe inflation by a policy of strict austerity, the expropriation of precious metals, and by the imposition of extra taxes and forced loans to the government.[172]

The Habsburg Empire initially adopted a similar strategy and issued treasury notes that circulated as money. But government finances deteriorated rapidly and ended in a default in 1811 and 1816.[173] The all but worthless treasury notes were gradually exchanged for the new banknotes of the *Privilegierte Österreichische Nationalbank*, which backed the claims in silver, but they continued to function as a de facto loan to the government.

(b) Financing of government debt by bank profits

A different type of link between state and (note-issuing) banks is the collection of profits from an institution owned or controlled by the state. This mode of financing government deficits, rather than by issuing notes, may partly explain why the economic and industrial development in some countries was not accompanied by a disastrous series of bank and currency crises.

In Prussia, the *Königliche Giro- und Lehnbanco*, founded in 1765, also had the right to issue notes but carried on business mainly as a mortgage institution. The receipts from notes were not directly used to finance government deficits, but all the bank's profits went into the coffers of the state.[174] This was the main link in Prussia between the bank and government finances, and it was not unusual for central Europe. However, collecting the residual profit made by an institution is definitely different from issuing notes and transferring part or all of the revenue to the government. It is the (earned) residual of an economic activity.

2. Government Debt and Deficit as a Risk to the Currency

An unsustainable government deficit or debt does not necessarily jeopardize the currency used in the state, although analysts have regularly assumed so in the case of the European sovereign debt crisis (however—revealingly—not in the case of the de facto insolvency of

[168] Schumpeter, above n 7, at 47, questioned that it had any money-creating power and reduced its function to a convenient method to transfer (precious) metal; for the modern opposing view see S. Quinn and W. Roberds, 'The Big Problem of Large Bills: The Bank of Amsterdam and the Origins of Central Banking', Federal Reserve Bank of Atlanta, Working Paper 2005–16.

[169] For details, see Section II.4(c) of this chapter.

[170] For details see Sections II.4(c) and III.1(b) of this chapter.

[171] Born, above n 36, at 183.

[172] W. Treue, *Wirtschafts- und Sozialgeschichte Preußens* (1984), at 232 et seq.; Born, above n 36, at 183. See also above n 43.

[173] See Sections III.1(b) and III.1(c) of this chapter.

[174] Treue, above n 172, at 186 et seq.; Born, above n 36, at 183. See also above n 79.

the US or other countries).[175] The crucial points which could prevent the emergence of the assumed link between the monetary system, on the one hand, and an unsound fiscal policy and unsustainable sovereign debt, on the other, are:

- the separation of monetary policy from fiscal policy;
- the size of sovereign debt held by the banking system;
- the capital adequacy rules for banks;
- the interconnectedness of financial institutions; and
- the responsibility of the parts of a federal system for their own budgets.

Owing to the inadequate design of the legal regulatory framework,[176] the banking system has been in a position to finance unsustainable government deficits in several European countries over the past two decades. From an overall perspective, this is more than questionable, although the arguments differ depending on the kind of banking system and the objectives the funds are used for. Under certain conditions, government debt held by the banking system poses an imminent danger to financial stability.[177] This danger is facilitated by allowing any privileged access by government entities or any other bodies governed by public law to financial institutions. Therefore, it is prohibited by the primary law of the European Union.[178]

Even more dangerous, from the European experience, is the financing of government deficits and debt by central banks that have the right to issue legal tender. Banks and governments may impose pressure on a monetary system, even if it is notionally independent, to lend them its support. This is legally and economically unacceptable,[179] even if the Anglo-Saxon view might be different.

3. Risk and the Crisis of the Early 2010s

It is a common misperception that municipal or state banks by their very nature perform worse than private banks. Despite the negative experiences with the German

[175] See M. Draghi, Speech at the Global Investment Conference in London, 26 July 2012, available at http://www.ecb.europa.eu/press/key/date/2012/html/sp120726.en.html: 'Within our mandate, the ECB is ready to do whatever it takes to preserve the euro. And believe me, it will be enough.' See also H.-W. Sinn, 'How to Save the Euro', *Ifo Viewpoint* No. 113 (29 April 2010), available at https://www.cesifo-group.de/ifoHome/policy/Viewpoints/Standpunkte-Archiv/stp-2010/Ifo-Viewpoint-No–113–How-to-Save-the-Euro.html; P. de Grauwe, 'The European Central Bank as a Lender of Last Resort', VOX (18 August 2011), available at http://www.voxeu.org/article/european-central-bank-lender-last-resort; and, implicitly, G. Corsetti et al., *A New Start for the Eurozone: Dealing with Debt* (2015), at 2, 8, 35; before the crisis V. Karb, *Währungskrisen und staatliche Schuldenkrisen* (2006), at 272.

[176] For example, 0% risk for exposures to Member States' central governments: see Directive 2006/48/EC of the European Parliament and of the Council of 14 June 2006 relating to the taking up and pursuit of the business of credit institutions (recast), O.J. L 177/1 of 30 June 2006, Annex VI para. 4; 'exposures to regional government and local authorities shall be treated as exposures to the central government in whose jurisdiction they are established, where there is no difference in risk between such exposures because of specific revenue raising powers of the former, and the existence of specific institutional arrangements the effect of which is to reduce their risk of default', ibid., para. 9. The Directive has been replaced by Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC, O.J. of 27 June 2013 and Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012. The material content of this point—in force before and during the crisis—has not changed.

[177] This might be different in an extended period of recession caused by the structure of the economy or as a temporary measure to prevent a collapse of government finances due to external shocks: distinctively arguing in this direction R. A. Werner, *New Paradigm in Macroeconomics* (2005), at 302, 317; R. A. Werner, 'Towards a New Monetary Paradigm: A Quantity Theorem of Disaggregeted Credit, with Evidence from Japan', (1997) 30(2) *Kredit und Kapital* 276.

[178] TFEU, above n 64, Art. 124. [179] Ibid., Art. 123(2).

Landesbanken, the most costly cases to the taxpayer were wholly private institutions in the US, the United Kingdom, and Germany. Bank deposits had to be protected by governments or by government-sponsored 'insurance' corporations in order to shield the public from the failures of private banks, or, more precisely, their mismanagement.

Instead, the financial crisis of the early 2010s vividly demonstrates that the state is indispensable in the functioning of financial markets. Ultimately, the state is necessary when poorly performing financial institutions and their management have to be rescued to keep the financial system alive. A monetary system solely based on private financial institutions and lacking any guarantees or support of the state, would almost certainly have collapsed in the first months of the crisis and in the course of the Greek crisis of 2010–11. Major parts of the 'finance industry' would have been wiped out, had it not been for the intervention of governments and central banks. On the other hand, states have also been a source of instability; their unsustainable borrowing and indebtedness have been a permanent threat to the stability of the financial and monetary systems.[180] Unsustainable borrowing, however, requires both sides: a borrower *and* a lender.

One of the most detrimental developments during the decade before the crisis was the negligence or indifference towards the massive accumulation of book money created by commercial credit institutions. The supervisory system allowed the banking system to hand out loans on an unprecedented scale. It thus created money in the economic sense of the word, since functionally credit is money. Eventually, central bank money amounted only to less than 10 per cent of the total money volume (M3). In this way the money volume got completely out of proportion with respect to the global volume of real goods, and inflation or asset bubbles inevitably came into existence.[181] The reason for the imbalance between bank-created money and tangible goods was mainly the credit-financed expenditure, first, for price-inflated real estate (as in the US, Ireland, and Spain) and, secondly, for unsustainable government consumption (as in Greece, Cyprus, and Italy). Ever-rising real-estate prices and towering government debt cannot, in effect, make a society wealthier. They only create an illusion of wealth, which is false and detrimental in the long term.

Once real estate prices had fallen and governments faced difficulties fulfilling their financial obligations, banks' financial statements got fatally out of balance. One reason was the ridiculously high leverage ratios, which had been made possible by the much-praised new rules on capital adequacy for banks ('Basel I and II').[182] Despite the hundreds of pages of highly complex new legal and non-legal rules (such as Basel III), there remain serious flaws, including substantial increases in equity requirements and new rules on sovereign debt. Another reason was the ongoing failure of regulation, supervision, and control. Legislative bodies were not even allowed to tinker with the detrimental norms of financial regulation that had allowed government debt of EU member states to be treated indiscriminately as risk-free (zero 'risk weight').[183] The complexity of the rules is increasingly

[180] See the data in C. Reinhart and K. Rogoff, 'Growth in A Time of Debt', (2010) 100(2) *American Economic Review* 573, despite the methodological flaws of the work; T. Herndon, M. Ash, and R. Pollin, 'Does High Public Debt Consistently Stifle Economic Growth? A Critique of Reinhart and Rogoff', University of Massachusetts Amherst Political Economy Research Institute Working Paper No. 322 (April 2013), available at http://www.peri.umass.edu/fileadmin/pdf/working_papers/working_papers_301-350/WP322.pdf, in particular table A-1. A serious flaw in many legal rules and academic studies is their failure to consider private indebtedness. Only an assessment of the ratio between the private and the public GDP delivers a halfway realistic picture of the financial situation of an economy.

[181] See for the equivalence of money and credit: Thornton, above n 34; consenting Schumpeter, above n 34 at 718 et seq.; Schumpeter, above n 7, at 181 and 185. See for the sharp increase of money volume in relation to GDP between 1998 and 2006 G. W. Beck et al., 'Monetary Cross-Checking in Practice' (2015, forthcoming) Figure 5. For the fraction of money created by commercial banks, see above n 165.

[182] For a critical review, see Goodhart, above n 36, at 141–4.

[183] See above n 176.

problematic, rather than being a solution to problems. Another reason for the persistent flaws in the system is the ongoing failure of supervision and control—as in the case of the Greek banking system, which was in fact insolvent at the beginning of 2015, but the supervisory authorities failed to act.

At least in Europe, it is now effectively impossible to allow a bank to become insolvent: there is a plausible expectation that it will be saved by the state. Both central banks and governments do what they can to prevent bank bankruptcy, regardless of the legal situation. This level of protection extended to banks is anticipated by market participants, and explains why the soundness of a bank is not judged primarily by its balance sheet but by the solvency of the state in which it is headquartered. This state of affairs establishes another strong link between the bank and the state.

4. Private Money

Purely private money and a genuinely private monetary system with competing issuers have been a cornerstone of Friedrich von Hayek's thought.[184] His vision, however, has seldom become a reality; it has done so only in rare instances that have occurred mainly at the local level or within co-operative systems.

A peculiar example of private money was the so called 'demurrage currency' (*Schwundgeld*) based on the philosophy of the social reformer Silvio Gesell. He proposed a constant decrease in the buying power of money to enhance its circulation. In contrast to the widely used inflation of monetary buying power, the loss was explicitly built in. Technically, this was achieved by the requirement that the note had to be validated at fixed intervals (here weekly) by adding a stamp that had to be purchased onto the back of the note (see Figure 23.4).

The obstacle to the success of this private currency was, of course, persuading or coercing people to use it. The present monetary policy of the European System of Central Banks (ESCB) leading to negative real interest rates over an extended period of time, has similar motivations and consequences, but the population has virtually no means of protecting itself, except hoarding money. This leads to prohibitions on using cash—as in France and Italy—or proposals to relinquish it completely.

The effect of deregulation, privatization, and the growing use of electronic media over the past two decades may aid in overcoming these obstacles. But any change will be

Figure 23.4 Private money.

[184] von Hayek, *Denationalisation of Money*, above n 10; Bernholz, above n 10; and Ferris and Galbraith, above n 10.

accompanied by new dangers and problems. In this context, the spread of so-called internet money, such as 'bitcoins', which are created by private persons,[185] might be of growing importance. 'Bitcoins' already receive growing and leery attention by the authorities. Supposedly, they can be, and are, used for fraud, money laundering, and tax evasion. One court ruling has already held that they are money.[186] Other 'fintechs' may follow.

VI. Balance Sheets of Note-Issuing Banks

1. The Inherent Risks of Issuing Banknotes

The inherent risks involved in issuing banknotes will be demonstrated by the following stylized balance sheets of a note-issuing bank.

(a) The starting point

The table below represents a situation in which there is no risk since the bank's assets are immediately available to meet its liabilities:

Assets		**Liabilities**	
Coins	190	Claims on deposits	190
	190		190

(b) Advance of loans

In the table below, there is little risk of default on deposits.

Assets		**Liabilities**	
Coins	100	Claims on deposits	190
Claims	90		
	190		190

The following table depicts a situation in which a profit is made.

Assets		**Liabilities**	
Coins	200	Claims on deposits	190
		Equity	10
	200		200

[185] D. A. Dion 'I'll Glady Trade You Two Bits on Tuesday for a Byte Today: Bitcoin, Regulating Fraud in the E-Conomy of Hacker-Cash', (2013) 1 *University of Illinois Journal of Law, Technology and Policy* 165, at 167.

[186] *Securities and Exchange Commission v. Trendon T. Shavers and Bitcoin Savings and Trust* (U.S. District Court, Eastern District of Texas, Case No. 4:13-CV-416), Memorandum of 6 August 2013, at 3:

> It is clear that Bitcoin can be used as money. It can be used to purchase goods or services, and as Shavers stated, used to pay for individual living expenses. The only limitation of Bitcoin is that it is limited to those places that accept it as currency. However, it can also be exchanged for conventional currencies, such as the US dollar, Euro, Yen, and Yuan. Therefore, Bitcoin is a currency or form of money. . . .

Leased coins are paid back and interest accrues. The 'money' volume is slightly augmented.

(c) *Buying bills of exchange*

Assets		**Liabilities**	
Coins	200	Issued notes [or credit to an account]	300
Bills of exchange	300	Claims on deposits	190
		Equity	10
	500		500

Buying bills of exchange is equivalent to advancing a loan and increasing money volume. The balance sheet of the note-issuing bank has grown accordingly.

(d) *Loans to the government*

Assets		**Liabilities**	
Coins	0	Issued banknotes [or credit to an account]	300
Bills of exchange	300	Deposits	190
Government bonds	200	Equity	10
	500		500

The advance as a loan of all the deposited money (coins), or a substantial part of it, to the government, was often a prerequisite to obtaining the privilege of issuing notes, as in the case of the Bank of England.[187] A corresponding growth of money volume can be observed with a considerably increased risk of default.

(e) *Default of the government ('debt restructuring')*

Assets		**Liabilities**	
Coins	0	Issued banknotes [or credit to an account]	300
Bills of exchange	300	Deposits	190
Government Bonds		Equity	–190
[restructured, written off]			
	300		300

In the case of a private institution:

> Negative equity = insolvency = dissolution (in earlier times: debtor's prison); or 'recapitalization' with 190 => *forced reduction of money volume.*

In the case of a central bank:

> A central bank which has the right to produce legal tender does not need any equity. Legally it may carry a negative capital indefinitely. In this case the problem of credibility becomes an issue, since someone must be persuaded to accept such a currency.

[187] See Section II.4(c) of this chapter.

2. Consolidated Balance Sheet of the European System of Central Banks

Table 23.1. Stylized balance sheet as of 29 March 2013.

	Assets (Euro billions)			Liabilities (Euro billions)	
1	Gold	435	1	Banknotes in circulation	896
2, 3	Foreign currency (claims)	285	2	Liabilities to euro area credit institutions (deposits) related to monetary operations	669
4	Claims on residents	22	3	Other liabilities to euro area credit institutions (deposits)	7
5	Lending to credit institutions from monetary operations	904	4	Debt certificates issued	0
6	Other claims on credit institutions	89	5, 6	Liabilities denominated in euro	279
7	Securities of residents	618	7, 8	Liabilities denominated in foreign currencies	9
8	General government bonds	30	9	Counterpart of special drawing rights of the IMF	55
9	Other assets	265	10	Other liabilities	237
			11	Revaluation accounts	407
			12	Capital and reserves	89
		2,648			2,648

Source: European Central Bank, 'Consolidated financial statement of the Eurosystem as at 29 March 2013' (4 April 2013), available at https://www.ecb.europa.eu/press/pr/wfs/2013/html/fs130404.en.html.

In Table 23.1, the numbers in the first and fourth column refer to the items in the consolidated balance sheet of the Eurosystem in the Appendix.

To appreciate the scale of the task at hand, it should be remembered that the federal budget of Germany has a volume of approximately 300 billion euro. The position of 'liability (deposits)' is a clear indication of the poor state of the financial markets in the euro area, and specifically banks at that time. Of the 669 billion euro shown in Table 23.1, approximately 400 billion (down from approximately 600 billion in 2010) are excess liquidity that is parked at the central bank because banks still lack sufficient trust in each other. In normal times, this figure ought to oscillate around zero, as had been the case for many years. By early 2013, the figure stood at more than 200 billion. Other problematic positions are 'claims' and 'bonds', as they cover emergency liquidity assistance (ELA) worth a double-digit sum in billions, which is a very questionable value. Moreover, they encompass direct[188] and indirect[189] government deficit financing worth more than 200 billion euro. After a drop, this has considerably increased again due to the ECB's quantitative easing started in March 2015.

3. Insolvency and Illiquidity

The table below illustrates the stylized balance sheet of a bank.

[188] Securities market programme (SMP) of the European System of Central Banks (ESCB).

[189] Via covered bonds issued by private banks containing government debt (covered bonds programme of the ESCB).

Assets		Liabilities	
Bonds	300	Deposits	800
Claims	500	Bonds/Loans	190
• Long-term	400	Equity	10
• Short-term	100		
Cash	200		
	1000		1000

If 300 units of deposits are withdrawn, the bank is illiquid but not insolvent. This maturity mismatch will develop into a solvency problem if long-term assets can only be liquidated at a price substantially below their book value and nobody is willing and able to provide equity or give a loan. This would result in a so-called 'fire sale'. Then the bank is not only illiquid but insolvent.

4. Interim Results

From an economic point of view, there are two aspects which merit a closer look: the irresponsible financing of the debtor, in this case a government, but also what has been done with the borrowed money. If the money has gone into asset price bubbles or government consumption, it is irrevocably lost. Two possibilities then arise: either future generations have to repay the loan without having had a benefit from it, or it is partially or wholly written off. In the case of a write-off, the lenders have to bear the burden. If the lender is a commercial bank it has a severe solvency problem. In the case of a central bank, this unwelcome alternative can be postponed. That is also the reason why politicians are so attracted by the prospect of a central bank directly or indirectly making purchases of government bonds, as has happened to an extreme extent in the crisis of the early 2010s which has seen quantitative easing of the Federal Reserve System and unconventional measures taken by the ESCB: Securities Markets Programme (SMP),[190] Covered Bond Purchase Programme (CBPP),[191] Outright Monetary Transactions (OMT),[192] Public Sector Purchase Programme 'Quantitative Easing' (PSPP).[193]

This will not, however, solve the problem, but only buy a little time. It also brings the unwelcome consequence that it endangers the currency, reduces incentives for structural reforms, and might lead to dangerous asset price bubbles. The acceptance of 'fiat' money depends solely on reputation and credibility, which will eventually be destroyed by the decision of a central bank to acquire government debt, since that is economically equivalent to printing money.

VII. Deposits and Reserve Requirements

1. The Original Use of Deposits

Although, from the very beginning, depositors were entitled to demand the return of the deposited funds at any time, in fact only a small fraction of the deposits actually had to be paid out. On average, the greater portion remained at the depositary. The temptation thus grew for the depositary to keep only a sufficient reserve to enable it to fulfil its obligation to

190 For a limited time from May 2010.
191 So far three programmes since 2009; still continuing.
192 Announced 6 September 2012.
193 Announced 22 January 2015: volume of two trillion euros spread over two years; purchases commenced 9 March 2015.

redeem the notes presented in the usual course of business.[194] Over time, and despite the risks involved, depositaries used the deposited bullion or coins for commercial purposes rather than simply keeping them in a safe place. From an individual's point of view, this presented an opportunity for additional revenue. From the perspective of allocative efficiency, as well, it made sense to channel idle capital into more productive uses. The downside was an increased risk, for both parties to the contract. Also, from a macroprudential perspective, the risks of a possible bank run have to be considered for their possible effect on the stability of the system.

2. Generating Additional Revenue

Notes could also be issued with a view to generating additional growth and corresponding wealth for the population, as was argued, for example, by John Law.[195] But this also led to inflation (and even hyper-inflation) with all its detrimental consequences. The temptation to issue notes grows when notes irresponsibly can be issued without a prior deposit of coin or bullion. In this case, the link between the issued banknote and an intrinsically valuable commodity depends on the reserve requirements, which are externally imposed by markets or by authorities. If they are set too low or not obeyed, or if they are completely absent, then failure becomes more likely.

3. The Risks

A risk of bankruptcy arises as soon as the depositary ceases to hold a permanent stock of coins or bullion—later, legal tender—sufficient to fulfil all the demands for redemption that might potentially be presented to him. In the event of an unforeseeably high demand for redemption, the depositary would first experience a liquidity problem. But this could swiftly turn into a solvency problem, as and when the assets of the depositary, consisting in the claims enforceable by it, had to be liquidated in a 'fire sale'. In this case, the holder of any note issued by the depositary would also have to absorb a loss. The potential negative effects for the participants may materialize and eventually exert a 'domino effect' on the whole system. The aggregate costs of destabilizing the system are likely to exceed the sum of all negative effects for the individuals concerned.

Even if the depositary is able to comply with all claims invoked against him in relation to his stock, there is an added danger involved in reducing reserves. If coins or bullion are channelled back into circulation after notes (receipts) representing the holder's claim have been issued, then, from a functional point of view, the money volume will decrease correspondingly. The parallel use of notes (receipts) and 'surplus deposits' covering them may generate additional growth, as John Law, among others, argued, but it can also lead to inflation or hyperinflation with all its detrimental consequences. The fate of the notes issued by Banque Générale in France,[196] which Law founded between 1716 and 1719, is a warning of the imminent consequences.

[194] Described in depth by O. Hübner, *Die Banken* (1854), at 28, who supposedly developed the so-called *Bodensatztheorie* ('sediment theory') in banking. He demanded a strict match of the maturities (ibid., at 29). Wagner, above n 90, at 162 et seq., already relaxed this requirement to some extent. An even more liberal view was taken by C. Knies, *Geld und Kredit*. Vol. 1: *Das Geld* (1873), at 149–55, explaining at length that the use of bank accounts may render money superfluous as a means of exchange. He explicitly states that the documents certifying a claim are money (see ibid., at 159: 'Diese Werthpapiere sind Geld . . .').

[195] See further Section VIII.1 of this chapter.

[196] See further Section VIII.1 of this chapter.

4. The Crucial Role of Reserves

Even when there was no prior deposit, note-issuing banks might keep a reserve in gold or silver in the amount of the face value—or a certain percentage of it—of the notes they issued. This followed from the promise to redeem the notes in money on demand. Additional economic prospects gained by enhancing and expanding the monetary system have their price. The risk of individual losses will increase the inherent instability of the system. It is therefore necessary to take proper steps to prevent the destabilizing of the system, at least to internalize the external costs, which are not usually taken into account by individual market participants. Owing to these risks, the percentage of the deposits that has to be held as reserves to guarantee liquidity and solvency was usually prescribed by law or other statutory rules. The problem was, and is, however, to determine the appropriate number and quality.

When only gold coins were legal tender or the prescribed reserve consisted of gold, as it often did at the end of the nineteenth century or in the early twentieth century, the system was called 'gold currency' or the 'gold standard'. The reserve was then expected to cover 100 per cent of the bonds in circulation. The so-called 'gold-core currency' operated in cases where a smaller fraction of the circulating notes had to be covered with gold. The reserve requirements were often relaxed in time of need, especially in times of war. But the requirement of gold coverage was re-established after the First World War for the British pound, and for the German *Reichsmark* after the end of the hyperinflation of 1923.

The reserve requirements were also relaxed or abolished altogether during the Second World War. Towards the end of the war, when the Bretton Woods Agreement[197] set up a new global monetary system to be implemented after the war, the US government promised to convert all US dollars into a fixed amount of gold bullion.[198] The currencies of all the other countries that had ratified the Agreement were pegged to the US currency in a fixed, but adjustable, exchange rate. In its economic effect, this system amounted to the introduction or reintroduction of a gold standard. Even though the promise to redeem US dollars into gold was only given to the central banks of the participating countries, its legal structure was similar to that of the early promissory notes or banknotes.

The obligation to redeem dollar notes into gold was renounced unilaterally by the US government on 15 August 1971.[199] From then on, major currencies including the euro were not backed by any kind of reserves. Banknotes became complete 'fiat' money and depended solely on the faith in and credit of the issuing institution. Despite a widespread misconception, the equity of a central bank no longer played any significant role. When the ECB was established, serious consideration was given to removing this requirement altogether. In reality, central banks with the power to create notes as legal tender may even carry a negative equity on their balance sheet. This has happened in the past and is still

[197] Signed 22 July 1944; the German ratification of the agreement of accession to the International Monetary Fund (IMF) and the International Bank for Reconstruction and Development (World Bank): Gesetz über den Beitritt der Bundesrepublik Deutschland zu den Abkommen über den Internationalen Währungsfonds und über die Internationale Bank für Wiederaufbau und Entwicklung [Act on the accession of the Federal Republic of Germany to the International Monetary Fund and to the International Bank for Reconstruction and Development] of 28 June 1952, BGBl. II 637.

[198] 35 US dollar per ounce fine gold, with 31.104 grammes per ounce.

[199] F. Zehetner, *Die Suspendierung der Goldkonvertibilität des Dollars* (1973), at 5 et seq.

the case. Equity of such a central bank is in no way comparable to the equity of other corporations.[200]

VIII. Notes Backed by Real Estate

1. John Law and the *Banque Générale*

The Scottish merchant, John Law, developed a plan to replace gold and silver with banknotes secured on the potential revenue from land.[201] He convinced the French King of the viability of this plan and obtained the privilege to establish the *Banque Générale Privée* for this purpose on 2 May 1716.[202] More institutions followed between 1716 and 1719. Because of the imbalance between the notes issued and the actual revenues, the plan failed spectacularly. A disastrous inflation, with severe financial losses for the population, was the result.

2. *Assignats* of the French Revolutionary Government

Despite the Banque Générale disaster, a similar attempt was made by the French revolutionary government half a century later. After 1789, it issued notes backed by the expropriated land of the Catholic Church,[203] which had been nationalized and constituted as part of the public wealth (*domaine nationale*). The notes (*assignats*),[204] were technically construed as a certification of a mortgage (*hypothèque*) on the *domaines nationaux*. They had to be used as receivables for paying taxes or for the purchase of national property. Considerable legal and commercial pressure developed to encourage their use as tender. In effect, they functioned as a paper currency (see Figures 23.5 and 23.6).[205]

Unsurprisingly,[206] the number of *assignats* printed increased rapidly and got completely out of proportion to the value of the assets used as collateral. In February 1796, *assignats* were finally cancelled and exchanged at one thirtieth, and later at one hundredth, of their face value into a new paper money (*mandats territoriaux*) (see Figure 23.7).

The new notes also suffered a rapid loss in value and were soon estimated at 3 per cent of their face value. Eventually, in February 1797, they were rated at a market price of one fortieth of their face value.[207] On 21 May 1797, all *assignats* and *mandates* were declared void.

[200] Siekmann, above n 124, at 35 et seq., fns 113–5.

[201] See J. Law, *Money and Trade Considered: With a Proposal for Supplying the Nation with Money* (1750) [1705], available at https://archive.org/stream/moneytradeconsid00lawj#page/n5/mode/2up. For an in-depth treatment, see A. E. Murphy, *John Law: Economic Theorist and Policy-Maker* (1997).

[202] From 1 January 1719, '*Banque royale*'.

[203] The *Assemblée nationale* authorized in March 1790 the printing of 400 million *livres* of paper *assignats* in denominations of 200, 300, and 1,000 *livres*: see H. A. S. Trask, 'Inflation and the French Revolution: The Story of a Monetary Catastrophe', Mises Institute (28 April 2004), available at http://mises.org/daily/1504.

[204] Literal translation: (money) order.

[205] They are also considered to be similar in character to English exchequer bills (above n 32) or American bills of credit, allegedly because they bore 3% interest: Trask, above n 203.

[206] Among others, the former minister of finance, Jean-Jacques Necker, who had disclosed the unsound fiscal policy of the *ancien régime* in the wake of the revolution in his 'Compte rendu au roi' (1791), opposed the measure for economic reasons. He argued that, almost inevitably, the new currency would depreciate with additional issue. Another bubble comparable to the Mississippi bubble under John Law (1717–20) with its detrimental effects would re-emerge: Trask, above n 203.

[207] A. Bazot, *Histoire des assignats* (1862).

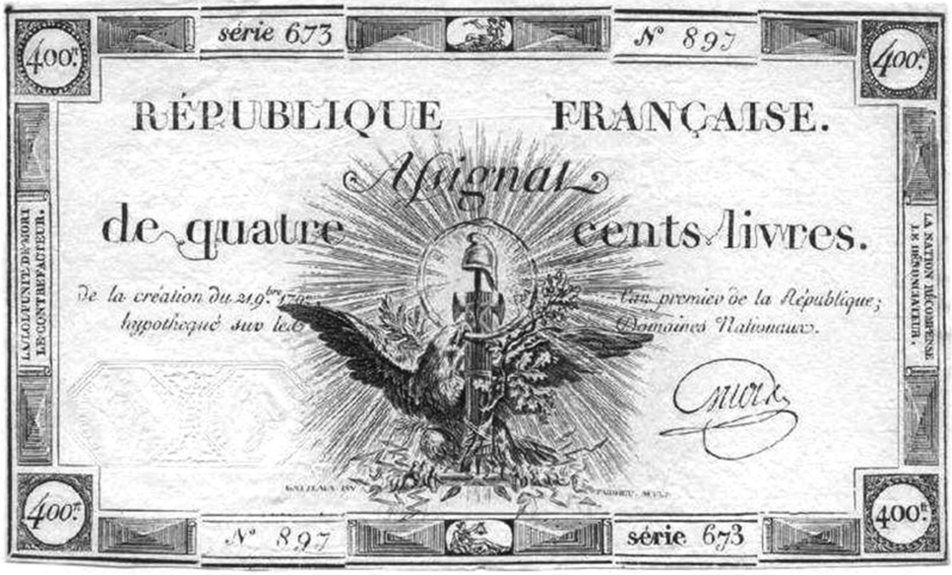

Figure 23.5 *Assignat* of the French revolutionary government.

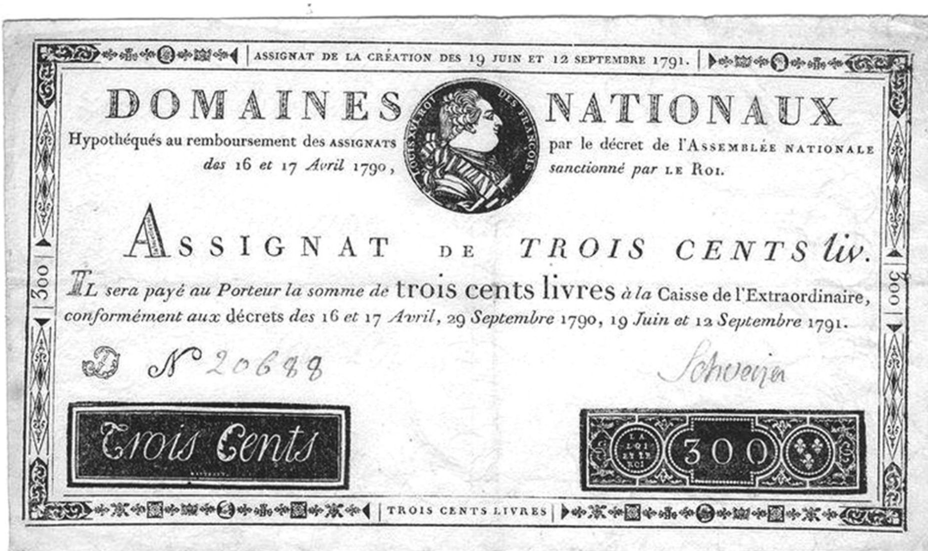

Figure 23.6 *Assignat* of the French revolutionary government.

3. Notes of the German Rentenbank

At the beginning of the twentieth century, the idea of a banknote backed by a collateral of real estate was revived in Germany. The situation was again one of severe distress, but this time the idea of issuing notes backed by real estate (as a collateral) was not the cause

Figure 23.7 *Mandat Territorial.*

of the hyperinflation but an instrument attempting to halt it. The German central bank, Reichsbank, issued *Reichsmark* notes in denominations which increased almost daily, so that by the end, in the autumn of 1923, they were being issued in units of trillions. (See Figures 23.8, 23.9, 23.10, and 23.11 for samples of the exponentially increasing denominations.)

Figure 23.8 German *Reichsmark* note.

The notes became virtually useless and could no longer fulfil the functions usually attributed to money. To restore the stability of the currency, and to relieve the fiscal burden for the Reich, the *Deutsche Rentenbank* was founded on 16 October 1923. It started to issue new notes (*Rentenbankschein*) on 15 November 1923 (although the printed date was '1 November 1923'). Owing to the lack of gold, or any stable foreign currency, the notes were backed by real estate liens (*Grundschulden*) and bonds of the German economy. They

Figure 23.9 German *Reichsmark* note.

Figure 23.10 German *Reichsmark* note.

worked on the same general principle as the notes of John Law's *Banque Générale* and the *assignats* issued by the revolutionary government of France (see Figure 23.12).[208]

[208] Technically, not mortgages (*Hypotheken*) like the *assignats*, but *Grundschulden*, a distinctively different type of lien on real estate. The difference has been habitually ignored by economists and the media.

Figure 23.11 German *Reichsmark* note.

Figure 23.12 Note of the Deutsche Rentenbank.

However, their volume was strictly limited to the face value of 3,200 million *Rentenmark* with one *Rentenmark* equalling one pre-First World War *Goldmark*. Technically, the *Rentenbank* created *Pfandbriefe* (a special type of mortgage covered bonds) with a coupon of 5 per cent in gold, which served as the basis for the issued notes (*Rentenbankschein*). These notes certified a claim to deliver 'on demand' in exchange for 500 *Rentenmark*, one interest-bearing note of the lien (*Grundschuld*) with the denomination of 500 *Goldmark*. The *Rentenmark* was tethered to the US dollar with a fixed exchange rate of 4.2:1.

Figure 23.13 Note of the Deutsche Rentenbank, 30 January 1937.

Even after the new *Reichsmark* had been created in 1924, reissued by the Reichsbank, the notes remained in circulation. The mortgages they were based on had a maturity date much further in the future. As late as 1939 and 1940, new notes were being issued by the Rentenbank with the imprinted date: ‘30. Januar 1937’ (see Figure 23.13).

Because of the strict limitation of the volume of notes that could be issued, the *Rentenmark* served its purpose and, unlike the *assignats*, remained a stable and respected currency.

IX. Appendix: Consolidated Balance Sheet of the *Eurosystem*

Assets (EUR millions)	Balance	Difference compared with last week due to i) transactions ii) quarter-end adjustments	
1 Gold and gold receivables	**435,316**	**0**	**–3,376**
2 Claims on non-euro area residents denominated in foreign currency	**254,369**	**–590**	**3,374**
2.1 Receivables from the IMF	87,121	374	283
2.2 Balances with banks and security investments, external loans and other external assets	167,248	–964	3,092
3 Claims on euro area residents denominated in foreign currency	**31,563**	**910**	**647**
4 Claims on non-euro area residents denominated in euro	**22,101**	**–848**	**–50**
4.1 Balances with banks, security investments and loans	22,101	–848	–50
4.2 Claims arising from the credit facility under ERM II	0	0	0
5 Lending to euro area credit institutions related to monetary policy operations denominated in euro	**903,619**	**–2,625**	**0**
5.1 Main refinancing operations	123,239	3,865	0
5.2 Longer-term refinancing operations	778,872	–7,785	0
5.3 Fine-tuning reverse operations	0	0	0
5.4 Structural reverse operations	0	0	0
5.5 Marginal lending facility	1,507	1,295	0
5.6 Credits related to margin calls	0	0	0
6 Other claims on euro area credit institutions denominated in euro	**88,538**	**8,509**	**1**
7 Securities of euro area residents denominated in euro	**618,064**	**10,971**	**729**
7.1 Securities held for monetary policy purposes	269,340	–318	567
7.2 Other securities	348,724	11,290	163
8 General government debt denominated in euro	**29,894**	**0**	**–17**
9 Other assets	**264,663**	**–18,435**	**6,225**
Total assets	**2,648,126**	**–2,107**	**7,533**

Totals/sub-totals may not add up, due to rounding

Liabilities (EUR millions)	Balance	Difference compared with last week due to i) transactions ii) quarter-end adjustments	
1 Banknotes in circulation	**896,357**	**11,822**	**0**
2 Liabilities to euro area credit institutions related to monetary policy operations denominated in euro	**669,859**	**–14,969**	**0**
2.1 Current accounts (covering the minimum reserve system)	319,275	–32,398	0
2.2 Deposit facility	144,648	17,893	0
2.3 Fixed-term deposits	205,500	0	0
2.4 Fine-tuning reverse operations	0	0	0
2.5 Deposits related to margin call	437	–463	0
3 Other liabilities on euro area credit institutions denominated in euro	**6,532**	**626**	**0**
4 Debt certificates issued	**0**	**0**	**0**
5 Liabilities to other euro area residents denominated in euro	**120,596**	**6,421**	**0**
5.1 General government	96,251	4,385	0
5.2 Other liabilites	24,346	2,037	0
6 Liabilities to non-euro area residents denominated in euro	**157,652**	**–4,364**	**15**
7 Liabilities to euro area residents denominated in foreign currency	**4,082**	**1,213**	**95**
8 Liabilities to non-euro area residents denominated in foreign currency	**5,270**	**–1,062**	**153**
8.1 Deposits, balances and other liabilities	5,270	–1,062	153
8.2 Liabilities arising from the credit facility under ERM II	0	0	0
9 Counterpart of special drawing rights allocated by the IMF	**55,145**	**0**	**193**
10 Other liabilities	**237,078**	**–2,147**	**7,480**
11 Revaluation accounts	**406,639**	**0**	**–740**
12 Capital and reserves	**88,917**	**352**	**337**
Total liabilities	**2,648,126**	**–2,107**	**7,533**

Totals/sub-totals may not add up, due to rounding

II

COMMON LAW AND MIXED LEGAL SYSTEMS

24

Early English Law of Bank Notes

James Steven Rogers

I. Preface

Today 'money' means currency and demand deposits with banking institutions that can be transferred by such devices as checks or electronic funds transfers. In earlier times, the analogues were bank notes and checks. The subject of this chapter is an examination of the origins of English private law of bank notes in the late seventeenth and early eighteenth centuries. Companion Chapter 19 in this volume examines the early history of English law of checks.[1]

II. Bank of England Notes

The most obvious example of early English paper money is the Bank of England note. Within a few years of its establishment in 1694, the Bank of England was issuing bearer notes. Some of these were entirely handwritten,[2] but early in its history the bank decided to issue notes on pre-printed forms, with blanks to be filled in by hand with the name of the original payee, the amount, and the cashier's signature. Holden's book on the history of negotiable instruments prints several examples from 1699. The earliest reads as follows:

> Promise to Pay to *Mr. John Wright* or Bearer on demand the Summe of *Twenty Seven pounds Ten Shillings*.

[1] I have explored the broader subject of the history of negotiable instruments in general in J. S. Rogers, *The Early History of the Law of Bills and Notes: A Study of the Origins of Anglo-American Commercial Law* (1995). Standard sources on the history of the law of bills of exchange include J. M. Holden, *The History of Negotiable Instruments in English Law* (1955); W. S. Holdsworth, *A History of English Law*, 16 vols (1922–66), vol. 7, at 113–77. For an account of analogous devices in other early legal systems, see B. Geva, *The Payment Order of Antiquity and the Middle Ages* (2011).

The law of bills of exchange was fairly well developed and settled by the end of the seventeenth century. That body of law, however, dealt with problems very different from those posed by the system of payments through banking institutions that developed in the eighteenth and nineteenth centuries. In essence, the law of bills of exchange dealt with the problems created by the practice of using bills as payment media in a world in which people did not have ready access to banking institutions for making payment. At that time, there were no bank notes and no checks. People had liquid balances due from various non-financial entities. They made payment by bills that transferred those balances. The phenomenon to be examined in this chapter is how the English courts treated the evolution of a world in which payments were made through specialized banking institutions.

[2] A handwritten note dated 18 June 1697 is reproduced in Holden, above n 1, at 90 and appendix II.

London the *6* day *of Jan 1699*.
For the Govr and Company of the Bank of England
Joseph Newell.

Another example, from the same month, is made out in a round sum of £200:

> Promise to Pay to *Mr. Wm. Proctor* or Bearer on demand the Summe of *Two hundred pounds*.
> London the *23* day of *Jan 1699*.
> For the Govr and Company of the Bank of England
> Joseph Newell.[3]

So it is clear that, from the time of its formation, the Bank of England was issuing bearer notes and that these notes were circulating as a form of currency.

There are, however, several puzzling things about the early history of Bank of England notes. As is well known, the statutory provisions creating the Bank of England were buried in an 'Act for granting to their Majesties several Rates and Duties upon Tonnage of Ships and Vessels, and upon Beer, Ale, and other Liquors'. The provisions of the statute on the Bank are surprisingly sparse. The Act provides that persons who subscribe £1,200,000 are to be incorporated as a 'Body Corporate and Politick, by the Name of "The Governor and Company of the Bank of England"', that the £1,200,000 so raised was to be lent to the Crown, and that the Crown was to pay the bank £100,000 per year interest on the loan. There is general language authorizing the corporation to own and sell land, to sue and be sued, and to 'to do and execute all and singular other Matters and Things by the Name aforesaid, that to them shall or may appertain to do'. The corporation is explicitly prohibited from 'buying or selling of any Goods, Wares, or Merchandizes whatsoever'. There is only one section giving a specific affirmative grant of power:

> Provided, That nothing herein contained shall any ways be construed to hinder the said Corporation from dealing in Bills of Exchange, or in buying or selling Bullion, Gold, or Silver, or in selling any Goods, Wares, or Merchandize whatsoever, which shall really and *bona fide* be left or deposited with the said Corporation for Money lent and advanced thereon, and which shall not be redeemed at the Time agreed on, or within three Months after, or from selling such Goods as shall or may be the Produce of Lands purchased by the said Corporation.[4]

The statute is curiously silent on various key points that to a modern reader seem of obvious import in legislation creating a bank that was to issue currency. Most obviously, there is the absence of any explicit provisions concerning bank notes, such as authorization for their issuance, authorization for issuance without the common seal of the corporation, or provisions concerning the rights of holders of such notes or the mechanism of transfer of the notes.

The 1694 Bank of England statute does provide that the bank was authorized to issue, under the seal of the corporation, 'bills obligatory', in an amount up to the original £1,200,000 capitalization of the bank, and that such sealed bills obligatory could be transferred by indorsement.[5] The bank did issue such sealed bills, and they were used in

[3] Ibid., at 90–1 and appendices III and IV (italicized words are handwritten). For other examples, see R. D. Richards, 'The Evolution of Paper Money in England', (1927) 41 *Quarterly Journal of Economics* 361, at 399; A. Fearvearyear, *The Pound Sterling: A History of English Money*, rev. E. Morgan (2nd edn, 1963), at 128–9.

[4] (1694) 5 & 6 W. & M., c 20 s 28.

[5] Ibid., s 29:

> Provided always, and be it enacted by the Authority aforesaid, That all and every Bill or Bills obligatory and of Credit under the Seal of the said Corporation made or given to any Person or Persons, shall and may, by Indorsement thereon under the Hand of such Person or Persons, be assignable and assigned to any Person or Persons who shall voluntarily accept the same, and so by such Assignee, *toties quoties*, by Indorsement thereupon; and that such Assignment and Assignments, so to be made, shall absolutely

connection with the original loan to the government.[6] These sealed bills, however, do not seem to be what we would now think of as bank notes. In the late seventeenth century, a corporate seal was still a significant thing, and issuing a sealed document was a significant and cumbersome event. The original by-laws of the bank provide that the corporate seal was to 'be carefully kept under three Locks', the keys to which were to be kept by separate officers; that the seal was not to be affixed to any document without a formal order of the court of directors of the bank; and that the seal was only to be placed on any document in the presence of the three principal officers of the bank.[7]

Rather, as John Clapham explained in his 1945 history of the bank, the Bank of England note is to be traced to different sources. Clapham explains that as soon as the bank was organized,

> The Directors had put forward three 'methods in keeping running Cash'; by 'Notes payable to Bearer, to be endorsed', by 'Books or Sheets of Paper, wherein their Account to be entered', or by 'Notes to person to be accomptable'. The third method is a kind of deposit receipt, as is shown by an August decision that only 'accomptable notes' be given for foreign or inland bills of exchange until 'the mony be actually received'. The second method anticipated the modern pass-book: it blended with the third under a rule by which people who drew notes (cheques) should have receipts for their deposits 'and ye particulars of the Bills drawn are to be entered on ye side'. It is the first method which produced those bearer notes 'without which the Bank could hardly have carried on business'; and the third from which the cheque developed, for the holder of an 'accomptable note' could create 'drawn notes' against it, for himself or others.[8]

It seems somewhat remarkable that nothing in the statute creating the bank even alluded to these methods of doing business. Indeed, some have suggested that the Bank of England's act of issuing bearer notes was a ruse by which that bank evaded the limitation in its statute on the extent to which it could issue the more formal sealed bills obligatory. Clapham's history of the Bank of England quotes an anonymous broadsheet lamenting the bank's use of this device:

> [The Bank] was limited by Act of Parliament not to give out Bills under the Common Seal for above £1,200,000; and if they did every Proprietor was to be obliged . . . to make it good, so that they give out Bank Bills with interest but for £1,200,000. But they give the Cashier's notes for all

> vest and transfer the Right and Property in and unto such Bill or Bills obligatory and of Credit, and the Monies due upon the same; and that the Assignee or Assignees shall or may sue for, and maintain an Action thereupon in his own Name.

Beutel asserted, incorrectly, that this section 'seems to have been the first authoritative statement of full negotiability' in that the Act 'provided that notes issued by the Bank were negotiable by indorsement so as to cut off all rights of ownership'. F. Beutel, 'The Development of Negotiable Instruments in Early English Law', (1938) 51 *Harvard Law Review* 813, at 842.

6 Richards, above n 3, at 398.

7 *Rules, Orders, and By-laws for the Good Government of the Corporation of the Governor and Company of the Bank of England* (1697), at 10.

8 J. Clapham, *The Bank of England: A History* (1945), vol. 1, at 21. See also R. D. Richards, *The Early History of Banking in England* (1958), at 153–4; W. M. Acres, *The Bank of England from Within* (1931), at 57–9.

The notes quoted above, copies of which appear in Holden, do include a printed vignette showing the figure of Britannia seated upon a pile of money. That symbol had been adopted by the Corporation of the Bank of England as its seal. A. D. Mackenzie, *The Bank of England Note* (1953), at 5–6. It does not, however, seem that these common bank notes would have been regarded as 'sealed' in the technical legal sense of that term. As late as 1717, someone prosecuted for felony for having erased a receipt for payment of part of an 'accountable note' argued—unsuccessfully—that the note was not actually authorized because it did not bear the actual seal of the Corporation. *Rex v. Bigg* (1717) 3 P. Wms 419, 24 ER 1127, s.c. 1 Str. 18, 93 ER 357. In later years, it was taken for granted that the Bank of England had the power to issue notes not under seal. See, e.g., *East London Water Works Co. v. Bailey* (1827) 4 Bing. 283, 130 ER 776:

> The same principle of necessity [allowing corporations to act without a formal seal] applies to corporations created for purposes of trade, such as the Bank of England. The very object of that institution requires that it should have the power of issuing bills of exchange and promissory notes.

> sums (ad infinitum) which neither charge the Fund nor the Proprietors, which seems to be a Credit beyond the intention of the Act . . . and never practiced before by any Corporation, and almost a Fraud on the Subject.[9]

There is, however, a more benign explanation. It is true that the 1694 Act explicitly prohibits the bank from incurring debt beyond £1,200,000. It is also true that, to use modern accounting terminology, the bank quickly amassed debits beyond that amount. A 'balance sheet' for the bank in 1696 shows debits of over two million pounds. Included within that amount are £893,800 of sealed bills and £764,196 of 'notes for Running Cash'.[10] It is, however, far from clear that contemporaneous opinion would universally have regarded the bank's liability on running cash notes as a 'debt'. In later years, it became a commonplace that the Bank of England was a 'bank of issue' rather than a 'bank of deposit', but it seems far less clear that that distinction would have been meaningful at the time. The bank might well have said that the running cash notes, or other forms of 'bank notes', were not 'debts' within the intendment of the statutory restriction, but were simply receipts for money that had been deposited with the bank.

In any event, other statues seem to recognize, albeit obliquely, that the bank had issued notes other than the £1,200,000 of sealed bills explicitly authorized in the original Act. For example, a 1696 statute concerning the bank makes counterfeiting of Bank of England notes a felony, and refers to a variety of forms of such instruments:

> That the forging or counterfeiting the Common Seal of the said Corporation of the Governor and Company, or of any sealed Bank Bill, made or given out in the Name of the said Governor and Company, for the Payment of any Sum of Money, *or of any Bank Note of any Sort whatsoever*, signed for the said Governor and Company of the Bank of England . . . shall be . . . Felony without Benefit of Clergy.[11]

Thus, while it may be an exaggeration to suppose that the bank's issuance of various forms of bank notes was an evasion of the statutory debt restriction, it remains somewhat curious that there seems to have been no explicit statutory authority for the issuance of unsealed bank notes, nor any explicit statutory provision concerning the means of transfer of such notes or the rights of transferees.

This lacuna is particularly odd when compared to other statutes of that era dealing with other forms of paper currency. For example, in 1696 Parliament passed a statute to, inter alia, create a land bank. The bank was explicitly authorized to issue bearer notes, and the statute expressly provided that the bearer of such notes could bring an action on them.[12] Another section of the same Act provided that the exchequer itself could issue bills and expressly dealt with transfer of these exchequer bills. Specifically, the Act provided that the Auditor of the Exchequer shall issue 'indented Bills of Credit to be signed by him the said Auditor and to be sealed with such publick Seale as shall be appointed for that purpose'. The bills were to be issued in denominations of £10, £20, £30, £50, or £100. The statute provided that the bills 'shall and may passe in payment from any Person or Persons to any

[9] Clapham, above n 8, vol. 1, at 22.

[10] Ibid., vol. 1, at 44; Acres, above n 8, at 76–7.

[11] (1696) 8 & 9 William III, c 20 s 36 (emphasis added). A 1768 statute on counterfeiting Bank of England notes refers to 'any Promissory Note, Inland Bill, or Bill of Exchange . . . containing the Words, Bank of England, or Bank Post Bill'. (1768) 13 George III, c 74.

[12] (1696) 7 & 8 William III, c 31 s 34 ('Provided that all or any Bills to be given out by the said Corporation under their Common Seale payable to any certaine Person or the Bearer shall intitle the Bearer thereof . . . to any Action of Debt against the said Corporation for the Recovery of the Moneys due thereon.') Nothing came of the scheme, however, because subscribers could not be attracted to invest in the venture. Richards, above n 8, at 128–9; Clapham, above n 8, vol. 1, at 34.

other person or persons that shall be willing to accept or take the same and not otherwise'.[13] Examples of such exchequer bills show that they were entirely printed and made payable simply to bearer.[14] Apparently, however, the bills were commonly transferred by indorsement, for Clapham and others who have examined early exchequer bills report that the bills contained many indorsements.[15]

Moreover, there is no explicit treatment of the bearer clause in any of the early legislation on the Bank of England. The precise legal effect of a clause specifying that an instrument was to be paid 'to bearer' remained unsettled until the later part of the eighteenth century.[16] Yet the word 'bearer' does not even appear in any of the early statutes concerning the Bank of England. The first statutory mention of bearer Bank of England notes appears to be in the 1797 Act intended to remove any doubt that the Bank of England had the power to issue promissory notes payable to bearer for sums less than five pounds.[17]

The bank's practice concerning early bearer notes is also a bit difficult to understand. Exchequer bills from the same era were entirely printed and promised payment simply to 'the Bearer'.[18] By contrast, the earliest examples of Bank of England notes, quoted earlier, had a blank space in which the handwritten name of the original payee appears, that is the note was payable, for example, 'to *Mr. John Wright* or Bearer'. The function of the handwritten name is somewhat puzzling. In the earliest notes, the handwritten name may well have been that of the actual original customer. Practice, however, soon became more formulaic. Within a decade of the foundation of the bank, the handwritten name on Bank of England notes was not that of any actual customer, but merely of another officer of the bank—a practice that continued throughout the eighteenth century.[19]

III. Goldsmiths' Notes

It is commonly said that banking in England began with the goldsmiths in the middle of the seventeenth century. Although there are substantial difficulties in defining what one means by 'banking', it does seem to be true that the development of goldsmiths from artisans into financial firms did involve the activity that has, at some times, commonly been regarded as the essence of banking—the issuance of circulating notes.

As to the chronology of the development of goldsmith bankers, there is evidence that goldsmiths may have been accepting deposits even in the early seventeenth century. The records of Hoare's Bank include a receipt for a deposit of three pounds five shillings of current coin dated 1 December 1633.[20] By the 1670s and 1680s, the practice of leaving one's cash with goldsmiths seems to have become quite general. Macaulay noted that Sir Dudley North reacted with surprise to the changed financial arrangements of London when he

[13] (1696) 7 & 8 William III, c 31 s 68. The statute also dealt explicitly with the effect of transfer of exchequer bills on the underlying debt, providing that 'the voluntary Acceptance thereof shall be deemed to be good Payment as if the Persons receiving the same for Debt Rent or other Cause whatsoever were paid in the lawfull Coins of this Kingdome'. (1696) 7 & 8 William III, c 31 s 70.

[14] See examples printed in Clapham, above n 8, vol. 1, at 38.

[15] Richards, above n 8, at 141–43; Clapham, above n 8, vol. 1, at 39; Holden above n 1, at 97 ('Some of the bills . . . bear so many indorsements that it would be difficult to find space to add any others').

[16] The significant case is *Grant v. Vaughan* (1764) 3 Burr. 1516, 97 ER 957, 1 Black W. 485, 96 ER 281, discussed in Rogers, above n 1, 177.

[17] (1797) 37 George III c 28. Presumably that statute was thought necessary to make clear that Bank of England notes were not covered by the various 'restraining acts' that had prohibited the issuance of small denomination circulating notes. (1775) 15 George III, c 51; (1776) 17 George III, c 30.

[18] See examples printed in Clapham, above n 8, vol. 1, at 38.

[19] Acres, above n 8, at 16–19.

[20] H. P. R. Hoare, *Hoare's Bank: A Record 1673–1932* (1932), at 3; Richards, above n 8, at 35, 239.

returned to England in 1680 after an absence of some two decades. 'He found that he could not go on Change without being followed around the piazza by goldsmiths, who, with low bows, begged to have the honor of serving him. He lost his temper when his friends asked where he kept his cash. "Where should I keep it", he asked, "but in my own house?"'[21]

The deposit of funds with the goldsmiths might have been evidenced in various ways. Those who maintained 'running cash' accounts could simply write a brief letter to the goldsmith, directing the goldsmith to pay money to another, just as in an earlier era one might have written such a letter to one's steward directing that money be paid out of one's strongbox. By the end of the seventeenth century, these 'drawn notes', though still handwritten, were developed into a fairly standardized form, akin to modern checks, directing the banker to pay a given sum to the designated person or order or bearer.[22]

The alternative practice of present significance is that the deposit of funds might be represented by some form of written receipt. In some cases, or perhaps in the early stages of the development of goldsmith banking arrangements, that document might have been nothing more than a receipt. The depositor might make withdrawals by returning the receipt, and the amount of the withdrawal and corresponding amount of the remaining deposit would be noted on the receipt.[23] In a different form, the goldsmith might give the depositor one or more written notes that were intended as a more definitive reification of the goldsmith's obligation, that is, the goldsmith would pay the sum only upon surrender of the actual original writing. An example, entirely handwritten, dated 26 November 1684 reads as follows:[24]

I promise to pay unto the Rt Honble Ye Lord North & grey or bearer ninety pounds at demand.
For Mr. Francis Child & myself
Jno Rogers

In a later form, part of the instrument was pre-printed, with only the amount and name of the original depositor written by hand:[25]

London, Sept 5, 1729
No. 366
I promise to pay *His grace the Duke of Bedford* or bearer on demand Forty Pounds
£ 40. 0. 0. For Fra Child Esq
20. 0. 0. J [rest of signature missing]

The difference between these various methods of conducting business probably explains the result in a case that has given rise to some controversy among legal historians, *Horton v. Coggs* (1689).[26] The declaration alleged that there was a custom in London that if any goldsmith or other merchant made a note or bill promising to pay a sum of money to a certain person or bearer, and if that person assigned and delivered the note to another person, then the goldsmith was liable to the person to whom the note had been delivered. The declaration then alleged that John Coggs, a goldsmith, had signed a note for £55

[21] T. B. Macaulay, *The History of England from the Ascension of James II* (1848), vol. 4, at 541–2.
[22] Feavearyear, above n 3, 109–10; Richards, above n 8, at 50–2. The evolution of the law concerning checks is discussed in Chapter 19 of this volume.
[23] Richards, above n 8, at 40; Feavearyear, above n 3, at 107; J. B. Martin, *'The Grasshopper' in Lombard Street* (1892), at 127; *Hoare's Bank*, above n 20, at 4–5.
[24] Richards, above n 8, at 41. Holden prints a reproduction of this instrument in an appendix.
[25] Ibid.
[26] (1689) 3 Lev. 296, 83 ER 697; 3 Lev. 299, 83 ER 698.

payable to William Barlow or bearer, that Barlow had delivered the note to Edward Horton, and that Coggs had refused to pay. The plaintiff won a verdict at trial, but the verdict was set aside by the Court of Common Pleas. The report indicates that the court accepted the defendant's lawyer's contention 'that this custom to pay to the bearer was too general, for perhaps the goldsmith, before notice by the bearer, had paid it to Barlow himself, which at the bar was said to be the truth of the case'. Several points should be noted. First, the fact that the declaration recited a custom supporting the plaintiff's case, and that the defendant argued that 'this custom . . . was too general', is unlikely to have had any particular jurisprudential significance. The last decades of the seventeenth century were the time that the English courts were clarifying that the notion of 'custom of merchants', which had played a role in the development of the law of bills of exchange in the early seventeenth century, was to be regarded merely as an assertion about the content of the substantive law of England on matters concerning bills of exchange.[27] That is, a contention that the custom recited in the declaration in *Horton v. Coggs* (1689) was 'too general' was equivalent to an assertion that the plaintiff's argument should be rejected as a matter of law. Second, although the report refers to the issue as whether the action could be brought by the bearer of the instrument, the case is probably best understood by thinking about the nature of the instrument, rather than the language used in the instrument.

It seems highly unlikely that the goldsmith's note involved in *Horton v. Coggs* (1689) was anything similar to a modern bank note, made payable to bearer, and intended to circulate from party to party. For one thing, notice that the amount of the instrument was not a round sum, but the otherwise peculiar amount of £55. Also, if the instrument had been something akin to a modern bank note, it is hard to understand why the goldsmith would have paid the amount to the original party William Barlow. Here we are speaking not of details of legal procedure but of simple business practice. If a bank has issued a bearer note intended to circulate, it is inconceivable that the bank would pay the amount to the person to whom it had originally issued it without requiring surrender of the note. Imagine going to the Bank of England and asking for payment of £10 on the basis of a contention that you once held a Bank of England note for £10. If you do not surrender the note, the bank is not going to pay you.

Suppose, instead, that we assume that the instrument involved in *Horton v. Coggs* (1689) was a piece of paper recording the fact that William Barlow had deposited a certain sum of money, and, perhaps, that certain amounts of that original deposit had previously been paid to him. In other words, suppose that the paper was something in the nature of a modern savings account passbook. If that were the case, then both the facts recited in the opinion and the result in the case make perfect sense. No bank would pay the amount of a passbook savings account to someone other than the original depositor without careful inquiry, nor would one expect that a bank would refuse to pay the amount of a savings deposit to the original depositor merely because the depositor could not find the passbook. There is also reason to suppose that the line between deposit receipts and circulating notes was not clear. Note, for example, that the 1729 partially printed Child note, quoted above, was for the amount of forty pounds, but that a handwritten notation of twenty pounds appears below the notation of forty pounds. It seems possible that this notation was made to indicate that the goldsmith had paid to the customer twenty of the original forty pounds.

[27] Rogers, above n 1, at 125–50.

IV. The Promissory Notes Cases

One of the more puzzling aspects of the history of the law concerning early English monetary instruments is the story of Chief Justice Holt's decisions in several cases concerning promissory notes at the beginning of the eighteenth century and the statute that was enacted to overturn the result in those cases.[28] There is no question that in the cases Chief Justice Holt was upset about something. In *Clerke v. Martin* (1702), Holt complained that the attempts to sue on notes in the form of actions on the custom of merchants 'amounted to the setting up a new sort of specialty, unknown to the common law, and invented in Lombard Street, which attempted in these matters of bills of exchange to give laws to Westminster Hall',[29] and in *Buller v. Crips* (1703), he remarked that 'the notes in question are only an invention of the goldsmiths in Lombard Street, who had a mind to make a law to bind all those that did deal with them'.[30] The hard part is figuring out what Holt was upset about and why anyone would have cared enough about the problem to go to all the trouble of getting a statute enacted to overturn the cases.

As a starting place, one must be clear on the actual issue involved in these cases. To use modern terminology, the dispute was a matter of civil procedure, not substantive law. During the seventeenth century, a special form of pleading had developed to enforce the obligations of parties to bills of exchange. In the early form, the complaint would begin with an allegation that there was a certain 'custom of merchants' that if a person had signed a bill of exchange, he was obligated to pay the amount thereof. The complaint would then allege the facts of the specific dispute, corresponding to the custom set out before. By the end of the seventeenth century, the detailed allegation of the particular custom had become unnecessary, so that it was sufficient to allege simply that the defendant had signed the bill of exchange and, under the custom of merchants, that made the defendant liable. I have elsewhere discussed the evolution of this pleading device and its jurisprudential significance.[31] The main point is that the device of pleading on the custom of merchants provided a way that liability could be based merely on the execution of the bill of exchange, without regard to how the ordinary English law would have treated any potential obligations that arose out of the transaction in which the bill was used. Suppose, for example, that an agent in one location borrowed to finance a transaction that the agent was entering into for the account of his principal, with the understanding that the principal would repay the loan. Suppose, however, that the principal failed to do so. Would the agent be personally liable? As a matter of ordinary obligation law, there might be hard questions about whether an agent would be personally liable for a debt contracted for the benefit of the principal. Suppose, however, that the transaction was implemented via a bill of exchange. The agent would have taken up money and drawn a bill of exchange on the principal. Suppose that the principal—the drawee of the bill of exchange—failed to pay the bill. Viewed through the lens of the law of bills of exchange, as developed through the device of pleading on the custom of merchants, it was clear that the agent, as drawer of the bill, was obligated to pay it if the drawee failed to do so.

Most of the discussion of *Clerke v. Martin* (1702) and *Buller v. Crips* (1703) that one finds in works on legal history, or in nineteenth and twentieth century works on negotiable

[28] For the conventional treatment of the promissory notes cases and subsequent statute, see, e.g., Holden, above n 1, at 73–84; Holdsworth, above n 1, vol. 7, at 170–7; T. A. Street, *The Foundations of Legal Liability*, 3 vols (1906), vol. 2, at 383–6. I have presented an alternative account in Rogers, above n 1, at 177–86. For an assessment of the traditional and alternative analyses, see Geva, above n 1, at 533–41.

[29] *Clerke v. Martin* (1702) 2 Ld. Raym. 757, 92 ER 6.

[30] *Buller v. Crips* (1703) 6 Mod. 29, 87 ER 793.

[31] Rogers, above n 1, at 125–50.

instruments law, is based on a misunderstanding of the actual issue involved in the cases. The cases are often loosely described as holding that promissory notes were not 'negotiable'. That raises a significant problem of anachronistic misunderstanding. In modern law the term 'negotiable' is commonly used to designate the package of principles associated with the holder in due course concept. Today, all forms of contractual rights are assignable. Under ordinary contract law, however, an assignee receives only the rights of the assignor. By contrast, an assignee of a 'negotiable instrument' can qualify as a 'holder in due course' who takes the instrument free from claims and defences that could have been raised against the original obligee. So, when modern lawyers read that in *Clerke v. Martin* (1702) and *Buller v. Crips* (1703) Chief Justice Holt held that promissory notes were not 'negotiable', they are likely to think about disputes in the twentieth century about the application of the holder in due course doctrine in various settings, such as consumer credit transactions.

Chief Justice Holt's decisions had nothing to do with 'negotiability' in that sense. The first of them, *Clerke v. Martin* (1702), did not even involve a transfer of a note. The action was brought by the original payee of a note against the original maker. The only question was whether the suit could be maintained in the form of an action on the custom of merchants in the fashion of actions on bills of exchange. In the second case, *Buller v. Crips* (1703), the note had been transferred, but the issue was essentially the same as in *Clerke v. Martin* (1702). The defendant gave a note for the price of wine that he purchased from the payee, and the payee indorsed the note to the plaintiff. The plaintiff declared on the custom of merchants as in actions on bills, but the court ruled against that procedure. The plaintiff's lawyer tried to distinguish the case from *Clerke v. Martin* (1702) on the grounds that it was an action by an indorsee rather than the original payee, but Holt was of the opinion that the same principles controlled, noting that 'to allow such a note to carry any lien with it were to turn a piece of paper, which is in law but evidence of a parol contract, into a specialty'.[32]

The issue in *Clerke v. Martin* (1702) and *Buller v. Crips* (1703) was not whether promissory notes were 'negotiable' in the modern sense, nor even whether notes were assignable in the more limited sense that someone other than the original payee might sue. In *Buller v. Crips* (1703), Holt stated that the indorsement of a note was sufficient evidence of assignment to permit the indorsee to bring an action on the underlying obligation in the name of the original payee, and an indorsee who did so could

> convert the money, when recovered, to his own use; for the indorsement amounts at least to an agreement that the indorsee should sue for the money in the name of the indorser, and receive it to his own use; and besides, it is a good authority to the original drawer to pay the money to the indorsee.[33]

Certainly, the issue was not whether the obligation evidenced by a promissory note was enforceable. Rather the issue was precisely what sort of legal procedure should be used to enforce the obligation evidenced by a promissory note.

I have elsewhere suggested that Chief Justice Holt's concern in these cases may have been that the procedural innovation that had developed for bills of exchange might not be appropriate for all writings evidencing indebtedness.[34] The common law had always included a general body of law governing monetary obligations. Monetary obligations had long been enforceable in actions of debt, and by the end of the sixteenth century, the action of assumpsit had been expanded to cover most forms of debt obligations. In an

[32] *Buller v. Crips* (1703) 6 Mod., at 30, 87 ER, at 793.
[33] Ibid., 6 Mod. at 30, 87 ER at 794. [34] Rogers, above n 1, at 177–86.

ordinary action of *indebitatus assumpsit*, the creditor would have to prove the facts that gave rise to the debt. By contrast, in an action on the custom of merchants, the plaintiff could obtain judgment merely by proving that the instrument had been signed by the defendant. A defendant who disputed the obligation would have to prove the grounds of the defence. Holt may well have been concerned that unless some way could be found to define the limits of the law of bills, a creditor might attempt to bring an action on the custom of merchants in any case where one could find some written evidence of the debt. The lawyer's natural sense of caution about radical change must have been aroused by the prospect that all of the law concerning the enforcement of monetary obligations in debt and assumpsit—a body of law that had been carefully developed over the past several centuries—might be swept aside as an unanticipated consequence of the development of the law of bills. Moreover, there were legitimate concerns about the fairness of this development to debtors. Since the law had long distinguished very sharply between formal bonds and parol promises, debtors might well have assumed that giving a simple unsealed writing as evidence of a monetary debt had relatively little practical significance. It is virtually impossible to execute a sealed bond unintentionally, and quite unlikely that one would sign a bill of exchange without realizing what it was. It is, however, quite possible to sign a writing without realizing that it might later be construed as a note. Distinguishing between promissory notes and bills of exchange may not have been the perfect solution to the problem of drawing the line between the general law of monetary obligations and the special commercial law of bills of exchange, but it may have seemed better than no solution at all.

For present purposes, the question is what impact Holt's promissory notes cases had on the development of English law of paper monetary instruments. The answer may be that the cases had essentially nothing to do with that issue. Perhaps because of Holt's comment about the notes being an 'invention of the goldsmiths in Lombard Street', it is sometimes suggested the cases show that Holt held a reactionary and unthinking objection to the use of goldsmiths' notes as circulating media of exchange or to the notion that legal obligations should be adapted to the needs of practices such as the circulation of goldsmiths' notes.[35] The first problem with that view is that it is far from clear that the cases actually involved goldsmiths' notes. Both cases involved notes payable to a specified person *or order*, yet the ordinary form of a circulating goldsmith's note seems to have been a note payable to a certain person *or bearer*. The report of *Clerke v. Martin* (1702) does not indicate anything about the note or the transaction in which it was issued. There was an established firm of goldsmiths in London run by a family of the last name Martin,[36] but the report of *Clerke v. Martin* (1702) does not indicate anything about the note or the transaction in which it was issued. In the other case, *Buller v. Crips* (1703), we can be fairly certain that the instrument in question was not a goldsmith's note, for the report says that the 'note was in this form: "I promise to pay John Smith, or order, the sum of one hundred pounds, on account of wine had from him."' No doubt goldsmiths, like other persons, drink wine, but it seems unlikely that a goldsmith would be drinking £100 worth of wine, or paying for the wine by issuing notes.[37]

The notion that Holt was expressing some reactionary objection to the practice of circulation of goldsmiths' notes is also difficult to square with his treatment of other cases

[35] See J. F. Dolan, 'Standby Letters of Credit and Fraud (Is the Standby Only Another Invention of the Goldsmiths in Lombard Street?)', (1985) 7 *Cardozo Law Review* 1, at 26–32.

[36] Martin, above n 23, at 21–48.

[37] The present value of £100 in 1703 is probably in the range of £10,000–£15,000.

involving goldsmiths' notes. Holt presided over the court that established some of the fundamental legal principles of bills and notes. Indeed, in another case concerning goldsmiths' notes, he remarked 'that goldsmiths bills were governed by the same laws and customs as other bills of exchange'.[38]

V. The Statute of Anne

Whatever may have prompted Holt's decisions, they obviously were not well received. Parliament overturned them with the Statute of 3 & 4 Anne, c 9 (1705) which provided that:

> [all] notes in writing . . . made and signed by any person or persons . . . whereby such person or persons . . . promise to pay to any other person or persons . . . or their order, or unto bearer, any sum of money mentioned in such note shall be assignable or endorsable over, in the same manner as inland bills of exchange . . . according to the custom of merchants; and that the person or persons to whom such money is or shall be by such note made payable, shall and may maintain an action for the same, in the same manner as he, she, or they, might do upon any inland bill of exchange, made or drawn according to the custom of merchants.

Regrettably, there seems to be no surviving evidence that would shed light on such questions as who advocated or why anyone thought that the statute was needed. The Journals of the House of Commons and Lords for the period when the statute was under consideration show only laconic entries reporting that the bill was read, and some seemingly immaterial amendments. The Commons Journal for 25 January 1705 notes that 'the Report from the Committee to whom the bill, for giving the like Remedy, upon Notes, promising the Payment of Money, as is now used upon Bills of Exchange, was committed, be now received'.[39] The Journal, however, gives no details about that report. Librarians at the principal libraries in England have generously assisted me in efforts to find this report, but without any success.[40] Perhaps the reference to a 'report' in the Commons Journal meant an oral presentation rather than a written submission, or perhaps there once was a written report but no copy survives in any obvious location. There is also an intriguing entry in the Lords Journal for 8 February 1705 ordering that 'the Lord Chief Justice of the Queen's Bench do then attend' the next reading of the bill,[41] but the journal gives no indication of whether Chief Justice Holt did so or what he said.

It is commonly said that the Statute of Anne was the product of objection by goldsmiths to the approach taken in Holt's decisions. That seems dubious. It is hard to see why goldsmiths would have thought it worth spending political capital on getting Parliament to act. The issue in *Clerke v. Martin* (1702) and *Buller v. Crips* (1703) seems like a very

[38] *Hill v. Lewis* (1694) 1 Salk. 132, 91 ER 124, s.c. Holt KB 116, 90 ER 962, Skin. 410, 90 ER 182, query s.c. *Tassell v. Lewis* (1695) 1 Ld. Raym. 743, 91 ER 1397.

[39] 14 *House of Commons Journal* 496 (25 January 1705).

[40] I wish to express great gratitude to those who have looked for the phantom report, including William Noblett at the University of Cambridge, Hannah Chandler at the University of Oxford, Simon Gough at the Parliamentary Archives, Nigel Taylor at the National Archives, David Beasley at the Company of Goldsmiths Library, and Jonathan Harrison at the Goldsmiths-Kress Library of the University of London. Perhaps any copies were destroyed in the 1834 fire at the Houses of Parliament. That would be particularly ironic in that the fire is said to have started in a storeroom of tallies—an early means of recording debts.

[41] 17 *House of Lords Journal* 653 (8 February 1705). Holden reports that '[a]n examination of the manuscript minutes preserved by the House of Lords throws no light upon what Holt said when he attended.' Holden, above n 1, at 83, fn 5. Various authors have suggested that Holt may have played a role in the drafting of the Act. See J. Campbell, *Lives of the Chief Justices of England* (1849), vol. 2, at 137; Holdsworth, above n 1, vol. 8, at 173, fn 3; Holden, above n 1, at 83–4. None of these authors, however, provides any support for the assertion that Holt was involved. Any surmises about his involvement must be regarded as pure speculation.

technical point of 'lawyer's law'. It was a procedural question about the form of the lawsuit. Could one 'declare on the custom of merchants' or must one sue on the underlying debt and offer the note as evidence of the debt? One can understand lawyers caring about that issue, but it is hard to see why practical business people of any era would care about such a thing. The supposition that the goldsmiths were the political force behind the statute is particularly puzzling. Let us assume that there was some significant advantage to being able to bring an action on a promissory note in the form of an action on the custom of merchants rather than in an ordinary *indebitatus assumpsit*. Why would goldsmiths, as issuers of notes, want to push for a statute to allow actions on the custom? I cannot think of any other example in recorded history of an organizing group expending political capital to obtain passage of a statute that would make it easier for other people to sue them.

It is no easier to see why users of goldsmiths' notes would have wanted Parliament to enact the statute. Suppose that a goldsmith had issued a note and that the note had been passed from person to person. One issue, discussed below, is whether someone who passed the note to another might be liable if the note was not paid. Holt's decisions would seem to have had no impact on that sort of action. If—as seems to have been the usual case—the goldsmith's note had been in bearer form, then even under modern negotiable instruments law, no action could be brought on the instrument against a prior holder. If the goldsmith's note had been in order form, and if it had been transferred by indorsement, then even Chief Justice Holt would presumably have allowed an action on the custom of merchants against the indorser, on the theory that the payee's indorsement is equivalent to drawing a bill of exchange on the maker payable to the indorsee.[42] So the only issue affected by Holt's decisions would be an action by the holder against the goldsmith who had issued the note. It is easy to see why a holder would want to be paid by the goldsmith, but it is hard to see why legal rules would have anything to do with that. If the goldsmith was solvent and in business, the goldsmith would simply pay the note. Goldsmiths who refused to pay their notes would not stay in business for a day after word of their refusal to pay their notes got around. Suppose instead that the goldsmith had become insolvent and gone out of business. Why would anyone care about fine points of legal procedure that might arise if one actually brought a lawsuit to get blood from a stone?

When one looks to the language of the statute itself, one's sense of confusion is only compounded. The Act is very poorly drafted. It begins with a preamble reciting three problems that had arisen in the case law: first, that it had been held that 'Notes in Writing' promising payment to 'any other Person or his Order' were not 'assignable or indorsible over within the Custom of Merchants to any other Person'; second, that the payee of any such note could not bring 'an Action by the Custom of Merchants' against the original maker; and third, that a person to whom any such note had been assigned or indorsed could not bring an action on the custom of merchants 'against the Person who first drew' the note.

It is not entirely clear what was meant by the first point, for there is no mention of what sort of action may have raised the question whether a promissory note was assignable. Moreover, in *Buller v. Crips* (1703) itself, Chief Justice Holt had suggested that the usual rules of the law of bills of exchange would apply to an action against a person who did indorse a promissory note. The second and third points are more readily understood as references to *Clerke v. Martin* (1702) and *Buller v. Crips* (1703). The preamble concludes by

[42] In *Buller* (1703) Holt is reported to have said that 'if the indorsee had brought this action against the indorser it might peradventure lie; for the indorsement may be said to be tantamount to the drawing of a new bill for so much as the note is for upon the person that gave the note'. 6 Mod., at 29–30, 87 ER, at 794.

reciting that it would assist trade and commerce if 'such Notes shall have the same Effect as Inland Bills of Exchange and shall be negotiated in like manner'.

Turning from the preamble to the operative language, the statute provides that:

(i) all 'Notes in Writing' signed 'by any person',
(ii) whereby that person promises to pay money 'to any other Person . . . or their Order or unto Bearer'
(iii) 'shall be taken and construed to be by virtue thereof due and payable to any such Person . . . to whom the same is made payable'
(iv) and any 'such Note payable to any Person . . . his her or their Order shall be assignable or indorsible over in the same Manner as Inland Bills of Exchange are or may be according to the Custom of Merchants'.

The remarkable thing about the operative language is that it does not deal explicitly with the issue that presumably prompted the statute. Nothing in the operative language says that an action on the custom of merchants may be brought on a promissory note. It says that notes shall be construed as payable to the payee, but does not expressly state what that means. It states that notes shall be 'assignable or indorsible' in the same manner as inland bills of exchange, but, unlike the last part of the preamble, it does not state explicitly that notes 'shall have the same effect as' inland bills. There is no explicit language in the statute about the form of an action on the notes, yet that had been the whole point of the dispute in *Clerke v. Martin* (1702) and *Buller v. Crips* (1703). Lawyers in the early eighteenth century seem to have assumed that the statute overturned the result in *Clerke v. Martin* (1702) and *Buller v. Crips* (1703), but the common form of pleading on promissory notes after the statute was a bit different from the efforts rejected in those cases. Rather than basing the action on the custom of merchants, the typical form of pleading in an action on a note after the Statute of Anne alleged the making of the note and then simply stated that 'by Reason thereof, and also by Force of the Statute in such Case lately made and provided' the defendant was liable.[43]

Another puzzling thing about the statute is that it is unclear whether it applies to notes payable to bearer, notes payable to order, or both. The preamble refers to 'Notes in Writing' promising payment to 'any other Person or his Order'. In the operative portion, the language numbered as clause (ii) above refers to notes payable 'to any other Person . . . or their Order or unto Bearer' while the language numbered as clause (iv) above refers to notes payable 'to any Person . . . his her or their Order'. A half a century after the statute was passed, parties were still disputing whether it did or did not apply to notes payable to bearer.[44]

It is quite possible that a simple quirk of history accounts for the extensive discussion in the legal literature of Chief Justice Holt's promissory notes cases and the Statute of Anne. The fullest treatment of these matters is the lengthy note that William Cranch added to his report of the 1803 decision of the United States Supreme Court in *Mandeville v. Riddle*.[45] The issue in that case was whether the law of the state of Virginia permitted an action to be brought by the holder of a promissory note against a remote indorser. Under English law,

[43] W. Bohun, *Declarations and Pleadings* (1733), at 23–34 (giving examples with dates from 1714 to 1717); J. Lilly, *Modern Entries* (2nd edn, 1741), at 29, 41–4, 54–5, 73 (giving examples with dates from 1708 to 1718). Of these examples, only one also recites a custom of merchants, Lilly, at 48. By contrast, pleading in actions on bills of exchange still routinely referred to the custom of merchants. Bohun, at 44, 53–4; Lilly, at 44, 90–91.

[44] *Grant v. Vaughan* (1764) 3 Burr. 1516, 97 ER 957, 1 Black. W. 485, 96 ER 281. Though the parties disputed whether the statute applied to instruments payable to bearer, the judges seem to have thought that it did.

[45] *Mandeville v. Riddle* (1803) 5 U.S. (1 Cranch) 290.

that would have been an easy question. Whatever the law may have been at the time of Holt's decisions, the Statute of Anne certainly authorized such actions. But, in the United States, the issue was not so simple. The question whether a parliamentary Act, such as the Statute of Anne, was part of the common law of the American states was a complicated matter.[46] Many states had specifically enacted a detailed version of the Statute of Anne, but Virginia had not done so. Thus in Virginia it still mattered whether Holt had got the common law right in the promissory notes cases. If Holt was wrong—that is, if the English common law had permitted actions on notes in the same fashion as actions on bills of exchange—then that would be the rule in Virginia. If Holt was right—that is, if the Statute of Anne was needed to change the common law—then the action could not be maintained in Virginia. In a brief opinion by Chief Justice Marshall, the United States Supreme Court ruled that Virginia law would not permit an action at law by a holder against a remote indorser.[47] That prompted William Cranch, the reporter of decisions of the United States Supreme Court, to produce a nearly-one-hundred-page dissertation—appended to his report of the *Mandeville* (1803) case—in which he developed an elaborate theory about the origins of the law of bills and notes. Cranch's essay was designed to show that Holt had got it wrong in the promissory notes cases.[48] Cranch's work was a principal source for later writers on the history of the law of bills and notes, such as Holdsworth and Holden.[49] Thus, as a result of an odd twist concerning the relationship between English and American law, Holt's decisions in the promissory notes cases remained a matter of keen interest to the legal profession long after the issue might otherwise have been forgotten.

Finally, one must consider the distinct possibility that the Statute of Anne simply made no sense. That somewhat distressing suggestion draws support from the sections of the Act dealing with inland bills of exchange. The full title of the statute was 'An Act for giving like Remedy upon Promissory Notes, as is now used upon Bills of Exchange, and for the better Payment of Inland Bills of Exchange'. The second half of the statute deals with inland bills rather than notes. The Act recited that certain difficulties had arisen as a result of an earlier statute on inland bills. That statute, passed in 1698, was titled 'an Act for the better Payment of Inland Bills of Exchange'.[50] The preamble of the 1698 Act recited that 'great damages . . . do frequently happen . . . by reason of delays of payment and other neglects on inland bills of exchange'. The operative language of the 1698 Act provided that if payment of an inland bill of exchange was refused, a protest could be made by a notary public. If that was done, then the person obligated on the bill would be liable for 'all Costs, Damages, and Interest'. A 'protest' was a formal notification of non-payment, prepared by a notary public, and commonly used in connection with foreign bills of exchange. Most accounts of the 1698 Act assume that it was prompted by concerns about whether the protest device was available for inland as well as foreign bills.[51]

There is, however, another possibility. An entry in the House of Commons Journal concerning the 1698 Act indicates that a petition was presented by merchants from the city of Exon reciting that trade depends upon inland bills of exchange, but 'by reason of many Defects in the Law therein, and particularly because many Bills have no day expressed in

[46] L. M. Friedman, *A History of American Law* (1973), at 96–8.

[47] In a later decision the court ruled that the holder could recover in a suit in equity, as opposed to an action at law. *Mandeville v. Riddle* (1809) 9 U.S. (5 Cranch) 322.

[48] *Mandeville v. Riddle* (1803) 5 U.S., at 367–460. Cranch's essay was reprinted, with deletions, under the title 'Promissory Notes Before and After Lord Holt' in the highly influential three-volume set *Select Essays in Anglo-American Legal History* compiled by the Association of American Law Schools and published in 1909.

[49] Holdsworth, above n 1, vol. 7, at 170–7; Holden, above n 1, at 27–9.

[50] 9 & 10 W. & M., c 17 (1698).

[51] See, e.g., Holden, above n 1, at 54–5.

them [for payment]', the petitioners prayed 'that some remedy may be provided against the said inconveniences'.[52] That suggests that the problem may not have concerned the protest device, but that bills did not always state a date for payment. That surmise is somewhat furthered by the fact that, read carefully, the Act seems also to state that all inland bills 'shall be drawn payable at a certain Number of Days, Weeks, or Months after Date thereof'. Of course, if the problem was undated bills, it is not clear how the 1698 Act could have solved the problem, since it provided no penalty for a failure to state a date for payment.

In any event, the part of the 1704 Act concerning inland bills began by reciting that while the 1698 Act provided for protest for non-payment of accepted bills, it did not deal with refusal to accept. To remedy that defect, the 1704 Act provided that if the person on whom an inland bill was drawn refused to accept it, the person to whom the bill was payable could have the bill protested for non-acceptance. The Act then provided (i) that no acceptance would charge any person unless the acceptance was in writing; (ii) that if a bill were not accepted, the drawer would not be liable for costs or interest unless a formal protest was made; and (iii) that if an accepted bill were not paid, the drawer would not be liable for costs or interest unless a formal protest was made.[53] The Act concluded by providing '[t]hat nothing herein contained shall extend to discharge any Remedy, That any Person may have against the Drawer, Acceptor or Indorser of such Bill'.

The provisions of the 1704 Act concerning protest of inland bills proved quite problematic. Within a year after the statute was enacted, the argument was made that the drawer of an inland bill would not be liable if the formal device of protest was not employed. That contention was rejected in *Brough v. Parkings* (1704),[54] where Chief Justice Holt observed that the statute required protest only as a condition to recovery of interest and costs, so that the drawer remained liable for the amount of the bill even without protest. Thirty years later, in *Lumley v. Palmer* (1735),[55] it was argued that the 1704 Act precluded an action on a parol acceptance, that is, an acceptance not evidenced by writing on the bill itself. Although it was well settled at the time that a parol acceptance of a foreign bill was effective,[56] the 1704 Act said that 'no Acceptance of any such Inland Bill of Exchange shall be sufficient to charge any Person whatsoever, unless the same be underwritten or indorsed in Writing thereupon'. Chief Justice Hardwicke noted that at trial he was of the opinion that an action could be brought on a parol acceptance, but 'he had saved the point, as it depended upon the penning of two acts, both very dark'. He ruled that the provision seemingly requiring a written acceptance could be read as limited to disputes over costs and interest, as opposed to the principal amount of the bill. He drew comfort in that conclusion from the final clause of the 1704 Act that preserved any remedy that persons had on inland bills prior to enactment of the statute. Even the limited effect that *Brough v. Parkings* (1704) had given to the statute—denying interest although allowing recovery of the principal amount of the bill—was short-lived. In *Windle v. Andrews* (1819), it was expressly ruled that protest was not required to allow the holder to recover interest.[57]

To summarize, the 1698 Act may have been passed for reasons having nothing to do with protest. Whatever may have prompted the 1698 Act, it is hard to see what reason there was

[52] 12 *House of Commons Journal* 117 (18 February 1698).

[53] The provisions requiring protest applied only to bills for twenty pounds or more.

[54] *Brough v. Parkings* (1704) 2 Ld. Raym. 992, 92 ER 161, s.c. sub nom. *Brough v. Perkins* 6 Mod. 80, 87 ER 837, s.c. sub nom. *Brough v. Parkins* 1 Salk. 131, 91 ER 123.

[55] *Lumley v. Palmer* (1735) Cas. t. H. 74, 95 ER 46; 2 Str. 1000, 93 ER 994; 7 Mod. 216, 87 ER 1199; Ridg. t. H. 72, 27 ER 761.

[56] Rogers, above n 1, at 195–201.

[57] *Windle v. Andrews* (1819) 2 B. & A. 698, 106 ER 519.

for the elaborate provisions of the 1704 Act concerning inland bills. In any event, those provisions of the 1704 Act were simply ignored by the courts. As the author of an early nineteenth-century treatise put it, the result of these decisions was that, with respect to inland bills, the statute 'is of no use in practice'.[58] Given that one half of the statute—the part dealing with inland bills—made no sense, it is at least plausible that the part dealing with promissory notes was equally pointless.

VI. Transfer of Bank Notes as Payment

The puzzlement that one feels about why the Statute of Anne was enacted is only increased if one considers another issue concerning the use of bank notes or goldsmiths' notes as a form of payment. Suppose that one person needed to make payment to another, whether for a debt contracted in the past or for goods or services purchased at the time of the payment. Suppose that the payment was made by transferring a bank note or goldsmith's note. Suppose that the issuer of the note became insolvent, so that the person who was to receive payment was unable to collect the amount of the note. Was the underlying debt discharged by transfer of the note, or did the person who was obligated to pay remain liable? If the issuer of the note was extremely sound—such as the Bank of England—the prospect of insolvency might be so remote that the question would only be a matter of theoretical interest. If, however, the issuer of the note was a private goldsmith, the problem would be very real.

One can imagine various approaches that the law might take to the issue. The rule might be that the transfer is a final settlement so that the underlying debt is discharged by delivery of the goldsmith's note. Or, the rule might be that the underlying debt is satisfied only if the note was actually paid, so that the creditor could still proceed against the debtor on the underlying debt if the goldsmith became insolvent. Or, the rule might be that the result depends on the specific understanding of the parties or other features of the transaction. It is, however, difficult to see how one could have a common practice of transfer of debt instruments in payment of routine transactions without some rule on this matter or, at least, without some dispute on the point.[59]

Because goldsmiths' notes were typically issued in bearer form, such cases posed somewhat different issues from cases where a bill or note payable to the order of a certain person was transferred by indorsement as a means of payment. With respect to order instruments, the person making payment would have indorsed the bill or note and thereby incurred liability on it.[60] By contrast an action against a person who made payment by

[58] J. Chitty, Jr, *A Practical Treatise on Bills of Exchange, Promissory Notes and Bankers Checks* (1834), at 102.

[59] This is one reason to be sceptical of the claims sometimes encountered in the literature that, as early as medieval times, merchants, and others in England routinely made payment by transfer of debt instruments. Beutel, for example, concluded on the basis of scant evidence that the mercantile courts in England recognized and applied a fully developed law of negotiable instruments, including complete recognition of the rights of holders of bearer paper, as early as the late thirteenth century. Beutel, above n 5. In fact, there are virtually no instances of such disputes in any of the records of the early English fair and town courts that have as yet appeared in published form. In the seven published volumes of the Calendars of the London Mayor's Court Rolls, the three volumes of Cases on the Law Merchant published by the Selden Society, and the two volumes of Admiralty Court records published by the Selden Society, there seems to be only one instance of a dispute of this sort, *Pontadour v. Serlond* (1367) 3 CLMCR 75, and even that one entry does not squarely pose the issue. In exchange for assignment of a number of purportedly valid debts, Pontadour had given a general acquittance of Serlond's obligation to Pontadour. Pontadour alleged that many of the assigned debts were bogus, and hence Serlond had fraudulently obtained the acquittance. The effect of the transfers on the original debt seems to rest on the acquittance that the transferee had given the transferor, so that the dispute became a fairly simple issue of deceit.

[60] A great deal of the complexity of the law of bills and notes is attributable to the plight of a person who paid by indorsing a bill or note that was ultimately dishonoured. It is hardly surprising that persons called upon to pay as

delivery of a bearer note would have to be based on a different theory. First, one might have said that a person who transferred a bearer note impliedly warranted that it was sound, so that a person who received a note that was later dishonoured could sue for breach of warranty. The cases, however, uniformly rejected that approach. In a late-seventeenth-century case, it was noted that 'if a bill or a note be payable to one 'or bearer', and he negotiate the bill, and deliver it for ready money paid to him, without any indorsement on the bill, this is a plain buying of the bill'.[61] As Judge Kenyon put it in a late-eighteenth-century case, '[i]t is extremely clear that, if the holder of a bill of exchange send it to market without indorsing his name upon it, neither morality or the laws of this country will compel him to refund the money, for which he has sold it, if he did not know at the time that it was not a good bill'.[62]

Persons who had received goldsmiths' notes or bank notes that turned out to be uncollectable had somewhat more success with the argument that the person who made payment by transferring the note was still liable on the underlying obligation. The classic treatment of whether the transfer of an instrument discharges the underlying debt is found in Chief Justice Holt's decision in *Ward v. Evans* (1703).[63] A merchant named Fellows, who kept his cash with the Lombard Street goldsmith, Sir Stephen Evans, instructed his servant to go to the goldsmith's shop with Ward's servant and make a payment to Ward. Evans made the payment by delivery to Ward's servant of a note issued by another goldsmith, Wallis, for sixty pounds. Evans gave Ward's servant the Wallis note at about noon, at which time Wallis was still solvent. Wallis continued paying his obligations on demand all that day, but by the time that Ward's servant brought the note to Wallis for payment the next morning, Wallis had gone bankrupt and stopped paying his notes.[64]

Chief Justice Holt flatly rejected the contention that a transfer of a goldsmith's note could, in all cases, be treated as payment. As he put it:

> I am of opinion, and always was (notwithstanding the noise and cry, that it is the use of Lombard Street, as if the contrary opinion would blow up Lombard Street) that the acceptance of such a note is not actual payment. I agree . . . that the taking a note for goods sold is a payment, because it was part of the original contract; but paper is no payment where there is a precedent debt. For when such a note is given in payment, it is always intended to be taken under this condition, to be payment if the money be paid thereon in convenient time. This note was demanded within convenient time, but if the party who takes the note, keep it by him for several days, without demanding it, and the person who ought to pay it becomes insolvent, he that received it must

indorsers bills or notes that passed through their hands long before would seek any basis for resisting recovery. Suppose that the holder of a dishonoured bill or note failed to take sufficiently prompt action, either to enforce the instrument against the party or parties primarily liable, or to pursue the indorser. The indorser might well contend that the holder's lack of diligence gave the indorser a defence. That circumstance led to elaborate rules about the diligence required of holders of bills and notes. See Rogers, above n 1, at 202–10.

[61] *Bank of England v. Newman* (1699) 12 Mod. 241, 88 ER 1290.

[62] *Fenn v. Harrison* (1790) 3 TR 757, at 760, 100 ER 842, at 844.

[63] *Ward v. Evans* (1703) 2 Ld. Raym. 928, 92 ER 120.

[64] Although *Ward v. Evans* came to be regarded as a leading case on the question of whether a person can discharge an underlying obligation to another by delivery of a bank note or other instrument, it is interesting to note that in the case itself, Ward did not sue his original debtor, Fellows. Rather, Ward brought the action against Fellows' banker, Sir Stephen Evans. Though Evans disputed the propriety of this form of action, the court ruled against him on this point, on the theory that when Fellows directed Evans to make the payment to Ward, Evans became obligated to Ward for that amount. In modern terms, we might think of the transaction as if Evans had opened a temporary bank account for Ward, debited Fellows' account and credited that amount to Ward's temporary account, and then allowed Ward to close the account by withdrawing the full amount in the form of the Wallis note. Thus, the issue in the case was whether delivery of a note discharged an underlying debt, but the debt in question was that of the goldsmith Evans, rather than Fellows' original debt to Ward.

> bear the loss; because he prevented the other person from receiving the money, by detaining the note in his custody.[65]

Various aspects of the rule announced in *Ward v. Evans* (1703) proved problematic in subsequent cases.[66] Inasmuch as the rules differed depending on whether an instrument was taken for a precedent debt or a contemporaneous debt, the courts confronted difficulties in drawing the line between those two categories. Moreover, although the general rule was that taking an instrument for a precedent debt does not automatically discharge the debt, there were many cases dealing with the question whether the person who receives the note loses rights on the underlying transaction by delay in attempting to collect the note. For present purposes, however, the interesting point is whether different rules should apply to bank notes and other instruments. Chief Justice Holt emphatically rejected any such suggestion, with his caustic remarks about 'the noise and cry, that it is the use of Lombard Street, as if the contrary opinion would blow up Lombard Street'.[67]

The remarkable thing about the issue of whether taking a goldsmith's note was absolute or only conditional payment was that there seems to have been no reaction to Holt's decision in *Ward v. Evans*. Aside from his caustic comment about speculation that the result he reached would 'blow up Lombard Street', there is no indication that lawyers or business people devoted much attention to the issue. The contrast with the reaction to *Buller v. Crips* and *Clerke v. Martin* is striking. Shortly after those decisions were rendered, Parliament was moved to enact a statute providing that lawsuits on promissory notes could be framed in essentially the same way as actions on bills of exchange. Yet, as was noted above, it is hard to see why practical business people, let alone goldsmith bankers, would have cared about the minutia of legal procedure involved in those cases. By contrast, the issue in *Ward v. Evans* (1703) would seem to have been a matter of genuine business concern. Imagine a late-sixteenth- or early-seventeenth-century goldsmith trying to persuade a prospective customer to do business. The goldsmith might explain the convenience of leaving cash with him and making payment by transferring goldsmiths' notes rather than by paying out coin. Suppose that the prospective customer is nearly persuaded, but then asks, 'If I make a payment by transferring one of your goldsmiths' notes, can I be sure that I have really paid the debt?' Under the rule announced in *Ward v. Evans* (1703), the goldsmith would have to say, 'No, even though you have paid the debt with one of my goldsmith's notes, you might have to pay again if I become insolvent'. That is hardly a compelling sales pitch. Think of how much easier the goldsmith's sales job would have been if English law had followed the approach of saying that once a creditor had taken a goldsmith's note for a debt, the debt was paid.

It would have been entirely understandable if the nascent goldsmith banking community had run to Parliament seeking enactment of a statute to overturn the result in *Ward v. Evans* (1703). And it is easy to see early-eighteenth-century members of Parliament making arguments about the need for such legislation to encourage the development of an important branch of commerce. After all, the preamble to the Statute of Anne recites that the Act was being adopted 'to the Intent to encourage Trade and Commerce which will be much advanced' if the statute were adopted. Yet what we actually find on the conditional

[65] *Ward v. Evans* (1703) 2 Ld. Raym., at 930, 92 ER, at 121.

[66] See Rogers, above n 1, at 202–10.

[67] Subsequent decisions in England never wavered from the principal that bank notes should be treated under the same rules as other bills or notes. In the United States, by contrast, there was significant support for the notion that bank notes should be treated differently. I have discussed the approaches taken in American decisions in J. S. Rogers, 'The New Old Law of Electronic Money', (2005) 58 *Southern Methodist University Law Review* 1253, at 1294–1300.

payment issue involved in *Ward v. Evans* (1703) is a resounding silence. No statute was passed, nor is there any indication that anyone contemplated seeking a statute. So the technical pleading issue involved in *Buller v. Crips* (1703) and *Clerke v. Martin* (1702) produced a significant adverse reaction, resulting in Parliament's action in adopting the Statute of Anne. By contrast, the issue in *Ward v. Evans* (1703)—which struck at the heart of what one imagines must have been a key element of the goldsmiths' efforts to market the services that they were developing—produced no legislative reaction. As Mark Twain is reputed to have once said, 'The more you explain it, the more I don't understand it'.[68]

VII. Conclusion

Early English law concerning bank notes provides a cautionary note on the general issue of the relationship between law and business practice. In many works on commercial law published in the late nineteenth and early twentieth centuries one finds a rather self-congratulatory depiction of the importance of law.[69] The legal principles associated with the modern concept of negotiability are assumed to be a response to a need that merchants have felt since time immemorial. The struggle that the merchants faced was to persuade courts and lawyers to recognize these principles. According to the traditional—and almost entirely wrong[70]—account, merchants first applied these rules in their own mercantile courts and, only after long struggle, succeeded in persuading the regular English courts to adopt these principles. The story of Chief Justice Holt's decisions in the promissory notes cases and their subsequent reversal by Parliament is commonly held up as the pre-eminent illustration of the harm that law can cause if it is not sufficiently responsive to the needs of commerce. As one early-twentieth-century commentator put it, 'An Act of Parliament was passed in 1704 to declare promissory notes as transferrable as bills of exchange, and Lord Holt was left to comfort himself with the reflection that he had held up the course of trade for fifteen years'.[71]

The examination of early English law concerning bank notes undertaken in this chapter suggests a very different conclusion. Law seems to have played remarkably little role in the development of commercial practice concerning payment by transfer of bank notes. As has been noted, the statute creating the Bank of England said nothing about the power of the bank to issue circulating notes nor about the effect of payment by transfer of such notes. We have also seen that early bank notes and goldsmiths' notes seem to have been commonly issued in bearer form as early as the late seventeenth century, even though the precise legal effect of the bearer clause remained in doubt until late in the eighteenth century. Furthermore, it is hard to see why Holt's decisions in the promissory notes cases produced a reaction from Parliament, since the cases themselves dealt only with a highly technical point of civil procedure. That phenomenon is particularly puzzling given that Holt's decisions on the conditional payment issue produced no parliamentary reaction, even though those decisions might well have raised significant practical problems for early bankers. In short the system of payment of debts by transfer of bank notes seems to have developed and flourished quite independently of the development of legal principles concerning that system.

[68] Attributed to Twain by Justice Jackson, *SEC v. Chenery* (1947) 332 U.S. 194, at 214.

[69] For examples, see J. S. Rogers, 'The Myth of Negotiability', (1990) 31 *Boston College Law Review* 265, at 268–72.

[70] See Rogers, above n 1.

[71] C. H. S. Fifoot, 'The Development of the Law of Negotiable Instruments and of the Law of Trusts', (1938) 54 *Journal of the Institute of Bankers* 433, at 442.

A more plausible view of the relationship between law and commercial practice was advanced by the economic historian, M. M. Postan in an article published in 1930.[72] Postan's principal point was that most treatments of early English law on assignment of debts overstate the effect of legal rules on mercantile practice. Postan noted that as long as the debtor was willing to pay the debt to the transferee, the attitude of the lawyers and judges toward assignments was essentially irrelevant. If the transaction went awry, merchants might seek to enforce the transfer by whatever legal mechanism might be available, and if they feared that problems might be encountered they might go to some pains to anticipate the legal hurdles. Nonetheless, since mercantile dealings must always rest more on mutual faith and confidence than on the availability of legal remedies for breach of faith, the obstacles to legal enforcement of debt transfers need not have had a major influence on actual mercantile practice.

> The transferability of financial instruments depended on the financial and economic circumstances of the transaction, and above all on the reputation of the drawer. A bill, a bond, a debenture, call it what we may, would circulate freely among merchants if their drawer were generally known as a trustworthy and reliable debtor likely to honor his obligations. Diplomatic construction, or legal formulae, were, for purposes of transfer, of secondary importance.[73]

The subjects examined in this paper show the need for a more realistic view of the role of law in economic development. Much of the writing on the history of commercial law that one finds—particularly in works on commercial law—is based on a somewhat schizophrenic assessment of the role of law. On the one hand, it is commonly assumed that law often operates as an impediment to the development of commercial practice. That sense seems to underlie the common story that in the Middle Ages and early modern period merchants shunned the ordinary court system, preferring to have their disputes adjudicated by specialized tribunals controlled by the merchants themselves. On this view the appropriate role of law is largely to get out of the way, by deferring to mercantile practice and custom. As recent historical work has shown, it is, in fact, wildly implausible to suppose that law either can, or ever has, simply adopted commercial practice as the source of legal rules.[74] The flip side of this bipolar view of the relationship between law and commerce is the notion that, when lawyers get it right, law is the essential engine of commercial development. Thus, if one sees that a new commercial institution has developed and flourished, then it must have been the case that the legal system provided an adequate

[72] M. M. Postan, 'Private Financial Instruments in Medieval England', (1930) 23 *Vierteljahrschrift fur Sozial- und Wirtschaftsgesichte* 26.

[73] Ibid., at 51, Postan contended that:

> English exporters and importers, all merchants of substance, paid their debts [by debt transfers] almost as often as in coin. ... Bonds were transferred in satisfaction of debts and accepted in payment for goods. ... Many ... examples [can] be cited, for the contemporary records are full of them; and in light of this evidence there cannot be two opinions as to the extent to which the assignment by the transfer of obligations was practised (ibid, at 41–2).

That conclusion is, however, open to some doubt. Even if it is true that early English merchants sometimes transferred debt instruments as a medium of payment, there is still room to question how significant the practice was in their mercantile activities. As anyone who has ever spent some time in a bankruptcy court can testify, creditors will be willing to accept transfers of almost any form of right or property when the likelihood of payment in customary media looks grim. As was noted above, the common conclusion that early English merchants commonly transferred debt instruments as a form of payment is hard to square with the absence of any record of legal disputes about whether that transfer should be considered a final payment if the debt instrument was ultimately dishonoured.

[74] See E. Kadens, 'The Myth of the Customary Law Merchant', (2012) 90 *Texas Law Review* 1153; J. Edwards and S. Ogilvie, 'What Lessons for Economic Development Can We Draw From the Champagne Fairs?', (2012) 49 *Explorations in Economic History* 131.

foundation for the commercial development. The story of the early history of bank notes presented herein suggests that that need not be the case. The system of payment by transfer of bank notes seems to have developed and thrived in the late seventeenth and early eighteenth centuries in England even though some of the most basic legal questions presented by that system remained unresolved until long thereafter. Perhaps, then, the main lesson is the need for a bit more modesty on the part of lawyers.

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Banknotes and their Vindication in Eighteenth-Century Scotland

Kenneth G. C. Reid

I. The Rise of Paper Money

1. The 'Old' Bank and the 'New'

Money in the form of coin, wrote the Scottish judge and jurist, Viscount Stair, is 'bulkish and heavy, uneasy to be transported'.[*, 1] In Scotland, it was also in seriously short supply. At the time of the Union with England in 1707, the quantity in circulation may not have exceeded one million pounds sterling in value, much of it in the coinage of other countries,[2] and a shortage of coins remained a persistent problem throughout the eighteenth century.[3] Long before the end of that century, however, the place of coin would largely be taken by paper money, at least in high denomination transactions.[4]

The origins of paper money in Scotland lie in the establishment of the Bank of Scotland in 1695, a year after its English counterpart.[5] As with the Bank of England,[6] the founding statute[7] made no mention of the issuing of banknotes.[8] The Bank's activities, however, were to comprise 'the Trade of Lending and Borrowing Money upon Interest, and Negotiating Bills of Exchange', and it was in the cause of 'Lending' that banknotes first began to be issued. Unlike, therefore, the banks of continental Europe, notes were issued by way of loans rather than against deposits; and partly for that reason, the value of these notes soon exceeded the sum of any metallic money immediately available in Edinburgh. The first

* The author is grateful to Professor Niall Whitty for first interesting him in this topic, and for generously sharing his knowledge and his insights.

1 J. Dalrymple, Viscount Stair, *The Institutions of the Law of Scotland*, ed. D. M. Walker (2nd edn, 1693, repr. 1981) 1.14pr. Stair advocated the use of bills of exchange instead.

2 The estimate is by A. Smith, *An Inquiry into the Nature and Causes of The Wealth of Nations* [1776], ed. J. B. Wight (2007), at 190. See also R. Saville, *Bank of Scotland: A History 1696–1995* (1996), at 16.

3 S. G. Checkland, *Scottish Banking: A History, 1695–1973* (1975), at 75.

4 For the advantages of notes over coin, see ibid., at 31.

5 See, generally, C. A. Malcolm, *The Bank of Scotland 1695–1945* (1945), ch II; Saville, above n 2, at chs 1–5; A. Cameron, *Bank of Scotland 1695–1995: A Very Singular Institution* (1995) chs 2–4.

6 For which see Chapter 24 in this volume.

7 Act 1695 c 88: see T. Thomson and C. Innes (eds), *Acts of the Parliament of Scotland* (1814–75), vol. 9, 494. The Act is also reproduced in Saville, above n 2, at 819–25 and in Cameron, above n 5, at 254–7.

8 Although there is a glancing reference to 'Bills or Tickets drawn upon, or granted by, or to, and in favours of this Bank'.

banknotes were issued on 1 April 1696, and by July of that year the Bank had liabilities in notes of five times its holdings in coins.[9] The results, in the early years, were perhaps unsurprising: notes came to be worth less than their face value and, beginning in 1704–5, there were periods where payment had to be suspended and note holders offered interest instead of coin.[10] Nonetheless, by the time that the statutory monopoly given to the Bank of Scotland expired, in 1716,[11] paper money was firmly established within Scotland as an equivalent of coin.

The ending of the monopoly did not lead to an immediate challenge to the position of the Bank of Scotland. But in 1727, and in the teeth of the Bank's opposition, a second public bank, the Royal Bank of Scotland, was established by Royal Charter and began to issue notes. Almost at once the 'New' Bank set out to break the 'Old' by accumulating its notes and making substantial and unpredictable demands for payment.[12] Recognizing its vulnerability—for it held only a few thousand pounds in reserve to meet notes in circulation to the value of £80,000—the Old Bank called up as many of its loans as possible. It was to no avail. When, on the day of the Old Bank's annual general meeting on 27 March 1728, the New Bank presented £900 in notes, payment was suspended and not fully resumed for a year. Litigation between the banks followed.[13] Yet the Old Bank survived and, as the New Bank issued more notes of its own, it became vulnerable in turn, leading to a suspension of hostilities. Relations, however, were to remain strained for many years until an emerging challenge from private banks in the third quarter of the century made co-operation seem desirable or even essential.

2. Banknotes: Form and Appearance

At first, only high denomination notes were issued, but in 1704 the Bank of Scotland introduced £1 notes followed, in 1760, by 10 *s.* notes.[14] The early notes were simple in design, closer in appearance to a cheque than a modern banknote, and indeed the notes were bound into something resembling cheque-books from which they were cut out by knife, leaving a stub behind on which the details of the issue could be inscribed.[15] A paper mill was established at Gifford near Edinburgh, and the plates from which the notes were printed were engraved in a flowing cursive script, with blanks for the date, the number of the note, and its first bearer. After printing, each note was signed by the bank's Secretary, Treasurer, and Book-keeper. The notes issued by the Royal Bank after its foundation in 1727 were in similar form.[16] The life of a banknote was usually less than a year by which time its condition required it to be replaced.

[9] Saville, above n 2, at 28. [10] Ibid., at 31.

[11] The 1695 Act had provided that 'for the space of twenty one years after the date hereof . . . it shall not be Leasom to any other persons to enter into, and set up a distinct Company of Bank within this Kingdom, besides these Persons allanarly, in whose Favours this Act is granted'.

[12] On the 'bank wars', see N. Munro, *The History of the Royal Bank 1727–1927* (1928), at 55–61; Checkland, above n 3, at 60–2; Saville, above n 2, at 98 et seq. A contemporary account written from the standpoint of the Bank of Scotland is R. Holland, *An Historical Account of the Establishment, Progress and State of the Bank of Scotland; And of the several Attempts that have been made against it, and the several Interruptions and Inconveniences which the Company has encountered* (1728).

[13] Most notably *Royal Bank v. Bank of Scotland* (1728) Mor. 875; (1729) 1 Paton App. Cas. 14.

[14] Checkland, above n 3, at 108.

[15] See, generally, Saville, above n 2, at 25–6; Cameron, above n 5, at 22.

[16] Munro, above n 12, at 62–4; Checkland, above n 3, at 67.

A typical banknote was in the following terms:

> *Edinburgh*
> *The Governors and* COMPANY *of the* Bank *of* SCOTLAND constituted by Act of Parliament do hereby oblige themselves to pay to   or the Bearer Twenty Pounds Sterling on Demand.
> By order of the Court of Directors.[17]

The number would be added by hand to the left of 'Edinburgh' and the date to right; the name of the first bearer appeared in the gap in the second line. Finally, the note required to be signed.

3. The Assessments of Hume and Smith

The rise of paper money attracted extensive comment from two of the leading thinkers of the Scottish Enlightenment, David Hume and Adam Smith. On the whole, Hume was lukewarm or even hostile to the development, writing in 1752 of 'those institutions of banks, funds, and paper credit, with which we are in this kingdom infatuated' and warning of the tendency of paper money to drive out silver and gold.[18] 'By our wise politics', he observed sarcastically, 'we are as careful to stuff the nation with this fine commodity of bank-bills and chequer-notes, as if we were afraid of being over-burthen'd with the precious metals'.[19]

Smith's assessment was altogether more positive. Money, though needed to circulate goods, was 'a dead stock in itself, supplying no convenience of life'.[20] If paper could be substituted for coin for the purposes of internal circulation, the latter would be liberated to buy goods from abroad, to the overall enrichment of the country. In lectures given at Glasgow University in 1766 he explained the point by an extended example:

> It is easy to shew that the erection of banks is of advantage to the commerce of a country. Suppose as above that the whole stock of Scotland amounted to 20 millions, and that 2 millions are employed in the circulation of it, the other 18 are in commodities. If then the banks in Scotland issued out notes to the value of 2 millions, and reserved among them 300,000£ to answer immediate demands, there would be one million seven hundered thousand pounds circulating in cash, and 2 millions of paper money besides. The natural circulation however is 2 million, and the channel will receive no more. What is over will be sent abroad to bring home materials for food, cloaths, and lodging. That this has a tendency to enrich a nation may be seen at first sight, for whatever commodities are imported, just so much is added to the opulence of the country.[21]

Like Hume, Smith thought that paper might drain the country of gold and silver. 'But', he continued, 'if we consider attentively we will find that this is no real hurt to a country. The opulence of a nation does not consist in the quantity of coin but in the abundance of the commodities which are necessary for life, and whatever tends to increase these tends so far to increase the riches of a country'.[22]

17 See Saville, above n 2, at 316 (plate); Cameron, above n 5, at 39, 96.

18 D. Hume, *Political Discourses* (2nd edn, 1752), at 89–90.

19 Ibid., at 91. For a discussion of Hume's views, see A. E. Murphy, *The Genesis of Macroeconomics: New Ideas from Sir William Petty to Henry Thornton* (2009), at 108–12.

20 A. Smith, *Lectures on Jurisprudence*, eds R. L. Meek, D. D. Raphael, and P. G. Stein (1978), at 503.

21 Ibid., at 503–4. Later, Smith came to qualify this view by distinguishing between productive and unproductive expenditure. Only the former (e.g., expenditure on machinery and tools, as opposed to luxury goods) was beneficial to the economy. See Murphy, above n 19, at 171–6, esp. 175–6.

22 Smith, above n 20, at 504.

4. The Position at Mid-Century

As mid-century approached, therefore, paper money had become established in Scotland in practice as well as being broadly accepted in economic theory. It was a familiar and significant means of payment, in many cases replacing coin. Yet the legal status of paper money remained largely undetermined: as so often, practice was running ahead of the law.[23] That, however, was just about to change. For even as Edinburgh was recovering from the indignity of being occupied by the Highland troops of Bonnie Prince Charlie in 1745—an occupation which induced both banks to destroy large quantities of their notes rather than have them fall into the hands of the rebels[24]—an opportunity finally arose to test some of the key issues. The resulting litigation, *Crawfurd v. The Royal Bank*[25] was the most important banking case of the century, and a crucial test for the viability of the new form of money.

II. Paper Money and the Law: The Case of the Stolen £20 Note

1. Mr Crawfurd's Claim

On 30 July 1748, Hew Crawfurd, a lawyer in Edinburgh,[26] sent two Bank of Scotland £20 notes by post to William Lang, a merchant in Glasgow.[27] The letter failed to arrive.[28] Crawfurd's missing notes were easily identifiable because, with the prudence characteristic of his profession and nation, he had kept a record of their numbers and signed his name on the back. Crawfurd notified the Bank of Scotland of the missing notes, 'desiring that if any of them appeared for payment the same might be stopped till he should be apprised thereof'.[29] He also advertised in various newspapers, describing the sum, the numbers, and other particulars. Of one of the notes nothing further is known. The other, however, turned up a few months later in the office of the Royal Bank.[30] Probably it had been stolen and passed through several hands before being presented to the Royal Bank for payment, although the circumstances of its loss and rediscovery were never properly established. At first, the Royal Bank was unaware of the note's provenance, but when tellers from the two

[23] The position in England was much the same: see Chapter 24 in this volume.

[24] Checkland, above n 3, at 73; Saville, above n 2, at 123.

[25] *Crawfurd v. The Royal Bank* (1749) Mor. 875. See Section II.3 of this chapter for an account of the various reports of this case.

[26] Crawfurd, described variously as a 'Writer to the Signet' and 'Clerk to the Signet', may be the Hew Crawford of Jordanhill, brief biographical details of whom are given in *Register of the Society of Writers to Her Majesty's Signet* (1983), at 72. This Crawford became Sheriff-Depute of Renfrewshire and 'Writer to the Prince of Wales', dying on 21 February 1756. There is a persistent uncertainty in the sources mentioned in nn 54–8 below as to the spelling of Crawfurd's name. Lord Kames, whose client Crawfurd was, gives the name as 'Hew Crawfurd' and this is followed in *Morison's Dictionary*. In *Lord Strichen's Report*, however, he is 'Hugh Crawford' and this usage is followed by Lord Elchies. Finally, Lord Kilkerran gives the name as 'Hew Craufurd'. In this chapter, the author follows the usage of *Morison's Dictionary*, the standard source today for the case, but without any particular confidence that it is correct.

[27] The fullest account of the facts of *Crawfurd v. The Royal Bank* appears in the *Record of the Minutes 1742–62* of the Court of Directors of the Bank of Scotland (Lloyds Banking Group Archives, Edinburgh, GB1830 BOS1/2/1/3), 5 January 1749 (hereafter *BoS Minutes*). The author is grateful to Lloyds Banking Group Archives for permission to quote from the *BoS Minutes*.

[28] If case law from the period is any guide, this was not an isolated occurrence: see *Elder v. Scott* 21 June 1799 F.C.; *Swinton v. Beveridge* 21 June 1799 F.C., (1799) Mor. 10, 105. Indeed, for a time, the Royal Bank sought to minimize the risks inseparable from posting by issuing special 'post' bills of exchange, payable by endorsement after an interval of six days from the date of issue: see Munro, above n 12, at 119–20.

[29] *BoS Minutes*, above n 27, 5 January 1749.

[30] This was banknote number 144/28725.

banks met for a routine exchange of notes, in December 1748, the note was identified and Crawfurd informed.

Although Crawfurd's signature had been scored through, and a number altered, there could be no doubt that this was one of the notes which Crawfurd had entrusted to the post. Who owned the note now, however, was a great deal less clear. When it became apparent that the note would not simply be released to him, Crawfurd asked the Bank of Scotland to raise an action of multiplepoinding, the normal procedure, then as now, for adjudicating competing claims to money or other property. And when the Bank refused—because, as the minutes of the Court of Directors recorded, it thought itself bound to pay its notes to the bearer[31]—Crawfurd raised the action himself in the Court of Session in the name of the Bank.

2. The Banks' Response

Crawfurd's claim was greeted by both banks with dismay, even alarm. And although relations between them had remained poor since the hostilities of thirty years before,[32] the prospect of litigation on so sensitive a subject achieved what even the recent Jacobite Rebellion had failed to manage:[33] consultation and joint action at Board level.[34] The initiative came from the Old Bank. At the first meeting of that bank's General Court of Directors for 1749,[35] held on 5 January, Crawfurd's claim was the main item of business. The Minutes record the outcome:

> The Directors having conversed over and considered the affair are of Opinion that it is no less the interest and concern of this Company than of the Royal Bank that such a Decision may be given by the Lords with regard to these notes as may not injure the credit of either Company or be a barr to the circulation of their notes And that in this question there ought to be a mutual understanding betwext the two Companys And therefore they appointed the Deputy Governor Mr Peter Wedderburn, Mr Robert Pringle, and Mr John Mackenzie as a Committee with the Secretary to meet with such of the Directors of Royal Bank as their Court shall think proper to name and to commune together and concert what measures may be thought proper to be taken in the above affair and to report the result of the Conference to the next Ordinary Court of Directors for their approbation.[36]

Thereafter matters proceeded quickly. At a meeting of its Board of Directors held the following day, the New Bank accepted the invitation and appointed its own team of three directors.[37] The meeting took place shortly afterwards, and each group of directors was able to report back to its Board on 13 January.[38] The result was a commitment to joint action: Crawfurd's claim would be defended by both banks, the lawyers appointed for each would

[31] *BoS Minutes*, above n 27, 5 January 1749.

[32] For which see Section I.1 of this chapter.

[33] For the absence of co-operation even in the perilous conditions of 1745, see Checkland, above n 3, at 75.

[34] A search of the *Index to Minutes 1696–1757* of the Bank of Scotland's Court of Directors (Lloyds Banking Group Archives, Edinburgh, GB1830 BOS1/2/23/1) suggests that there was no contact at board level between the time of the bank wars in 1727–8 (when the possibility of merger was being considered) and the *Crawfurd* litigation in 1749.

[35] Meetings of the Court of Directors could be either 'general' or 'ordinary', the difference being that the Bank's extraordinary directors did not attend the latter.

[36] *BoS Minutes*, above n 27, 5 January 1749.

[37] *Board of Directors Minutes of the Royal Bank of Scotland* (The Royal Bank of Scotland Group Archives, Edinburgh, RB/5/12), 6 January 1749 (hereafter *RBS Minutes*). The author is grateful to The Royal Bank of Scotland Group Archives for permission to make use of the *RBS Minutes* for the purposes of this chapter.

[38] *BoS Minutes*, above n 27, 13 January 1749; *RBS Minutes*, above n 37, 13 January 1749.

work together, and the cost would be shared equally. In the meantime, the Old Bank would pay up on the note, but on the basis of the New Bank's cashier 'giving a receipt of the money upon the back of the note which should oblige the Royal Bank to refund the same in case of a decision in Mr Crawfurds favours'.[39]

The banks' concern is easily understood. If holders of banknotes were vulnerable to infirmities of title of which they knew nothing, then this would indeed be 'a barr to the circulation' of notes and hence a threat to the whole idea of paper money. And even if that position could be resisted—even if *bona fide* holders took an unblemished title—there was the further difficulty of assessing the holder's state of knowledge. Crawfurd had marked the banknotes and advertised his loss. Must a holder be taken to know this and to realize its significance? 'If', the banks reasoned, 'the writing upon notes and advertising the numbers in the Publick Prints should be found sufficient to interpel people from receiving such notes in payment it would be a mean of putting an intire stop to the circulation of notes and of opening a door for frauds by malicious and designing persons.'[40]

The board minutes give no indication of whether the banks expected to win the litigation. Possibly they did,[41] although the provision made for repayment of the £20 by the Royal Bank in the event of Crawfurd prevailing shows that that outcome too was within their contemplation. But whatever view the banks held on the subject, they were at any rate anxious to maximize their chances.

3. Procedure and Sources

The oral argument in the case was heard by Lord Strichen, probably early in February of 1749. Both sides were profligate in their use of counsel. Crawfurd was represented by two future Lords President of the Court of Session, Robert Craigie of Glendoick,[42] and Robert Dundas of Arniston (Dean of the Faculty of Advocates and son of the current Lord President),[43] and as if that were not enough, by Henry Home—the future Lord Kames, a leading figure of the Scottish Enlightenment and mentor to David Hume and Adam Smith[44]—and Alexander Lockhart (the future Lord Covington). The banks in turn retained Peter Wedderburn (the future Lord Chesterhall), Robert Pringle (the future Lord Edgefield), and James Erskine;[45] Wedderburn and Pringle were both directors of the Bank of Scotland and had taken part in January's meeting with the Royal Bank directors.

Glimpses of the participants' style and reputation are provided by a contemporary observer, John Ramsay of Ochertyre.[46] Of Craigie it is said that 'though he dealt little in flowers of rhetoric or in addresses to the passions, his pleading gave equal satisfaction to the

[39] *BoS Minutes*, above n 27, 13 January 1749. [40] Ibid.

[41] One reason for a degree of optimism might have been the close links between the Banks and the Court of Session: see Section II.6 of this chapter.

[42] Lord President 1754–60; see J. W. Cairns, 'Craigie, Robert, of Glendoick (bap. 1688, d. 1760)', *Oxford Dictionary of National Biography* (2004). It is possible, however, that Craigie acted for William Lang, the intended recipient of the banknote and, it seems, one of those claiming from the Bank of Scotland. The brief account of Craigie's argument given in *Lord Strichen's Report* to the Full Court (discussed below) is unclear but could certainly be read in this way.

[43] Lord President 1760–87; see J. A. Hamilton, 'Dundas, Robert, of Arniston (1713–87)', rev. M. Fry, *Oxford Dictionary of National Biography* (2004).

[44] See, e.g., I. S. Ross, *Lord Kames and the Scotland of His Day* (1972); A. Rahmatian, *Lord Kames: Legal and Social Theorist* (2015).

[45] Two advocates active at this time by the name of James Erskine are listed in Sir Francis J. Grant, *The Faculty of Advocates 1532–1943* (1944) and it is unclear which acted in *Crawfurd*. One was admitted as an advocate in 1734 and the other (the future Lord Barjarg) in 1743.

[46] J. Ramsay, *Scotland and Scotsmen in the Eighteenth Century* (1888, repr. 1996), vol. 1.

Bench and to his employers'.[47] By contrast, the 'impassioned strain' of Dundas' speeches 'gave additional force to his arguments'.[48] Home, 'if less graceful and pathetic in his pleadings than some of his brethren . . . commanded respect and interest by the force and ingenuity of his arguments, which had a cast of originality'. Often he 'maintained propositions which were at best problematical, as if they had been self-evident axioms'.[49] Lockhart, the final member of Crawfurd's team, 'not only spoke with more fire than most of his brother advocates, but frequently accompanied his perorations with tears, and that sometimes in cases where there seemed little room for the pathetic'; 'what he knew was always expressed by him with such felicity, that he was thought to know more than perhaps he really did'.[50] Of the banks' counsel, only Wedderburn attracted Ramsay's eye. 'His parts', it is said, 'were rather solid than bright, and his elocution was more correct than animated. His *forte* lay in judgment and penetration, not in flights of fancy or sallies of wit.'[51]

Despite the multiplicity of counsel, and of talent, it was Home who seems to have borne the brunt of the argument for Crawfurd; and Wedderburn and Erskine for the banks. In the event, no decision was reached by Lord Strichen; instead, and presumably in deference to the importance of the issues, the case was 'reported' to the judges of the Court of Session for a decision *en banc*.[52] That decision was given on Friday 24 February, three days after Lord Strichen's written Report.[53]

The first published report of the case was the half-page account given by David Falconer, the official reporter for the Faculty of Advocates, in 1753.[54] A decade or so later, in 1766, Lord Kames, one of Crawfurd's counsel, published a longer version in his collection of *Remarkable Decisions of the Court of Session*, but only his own arguments are set out in full, and the legal (as opposed to policy) argument which prevailed is passed over in silence.[55] Both reports were later included in Morison's *Dictionary of Decisions*,[56] the standard source today for pre-1800 case law. Finally, some brief thoughts on the case by two of the judges, Lords Kilkerran and Elchies, were published respectively in 1775 and 1813;[57] at a time when judges gave little in the way of reasons for decisions, these are of particular value as showing the views of two prominent members of the court. For a full understanding of the decision, however, it is necessary to have regard to unpublished material. Lord Strichen's Report to the Full Court runs to eleven printed pages and gives a detailed account of the oral argument.[58] Presumably this was based on the summary made by a clerk in attendance

[47] Ibid., at 111. [48] Ibid., at 330. [49] Ibid., at 183–4.
[50] Ibid., at 132–3. [51] Ibid., at 140.
[52] In 1749, Robert Dundas, Lord Arniston, had recently taken up office as Lord President, and Charles Erskine, Lord Tinwald, as Lord Justice-Clerk. The other judges, in order of seniority, were Lords Dun, Milton, Minto, Drummore, Monzie, Haining, Strichen, Elchies, and Murkle, the Earl of Leven, and Lords Kilkerran and Shewalton. See G. Brunton and D. Haig, *An Historical Account of the Senators of the College of Justice of Scotland from its Institution in 1532* (1849), at 485–514. In addition, there were two 'extraordinary' Lords, the Duke of Argyll and the Marquis of Tweeddale. These were non-lawyers, appointed under a procedure which was discontinued in 1723, and who sat only occasionally.
[53] For the procedure of the Court of Session in this period, see D. R. Parratt, *The Development and Use of Written Pleadings in Scots Civil Procedure* (2006), ch 1. Useful material can also be found in N. Phillipson, *The Scottish Whigs and the Reform of the Court of Session 1785–1830* (1990), ch 2.
[54] D. Falconer, *The Decisions of the Court of Session from 1st November 1748*, vol. 2 (1753), at 67.
[55] Lord Kames, *Remarkable Decisions of the Court of Session, 1730–52*, vol. 2 (1766), at 200.
[56] W. M. Morison, *The Decisions of the Court of Session from Its Institution until the Separation of the Court into two Divisions in the year 1808, digested under proper heads, in the form of a Dictionary* (1801–8), at 875–7.
[57] J. Fergusson of Kilkerran, *Decisions of the Court of Session from the year 1738 to the year 1752 collected and digested into the form of a dictionary* (1775), at 479–80; P. Grant of Elchies, *Decisions of the Court of Session from the year 1733 to the year 1754, collected and digested in the form of a Dictionary* (1813), vol. 2, at 43–4.
[58] Lord Strichen, Reporter, *Minutes, the Governor and Directors of the Bank of Scotland against the Governors and Directors of the Royal Bank and others* (21 February 1749) (hereafter *Lord Strichen's Report*).

at the hearing,[59] which may explain the occasional gaps in logic and exposition. At least six copies are known to exist.[60] In addition, it was normal for advocates to produce detailed, often prolix, written pleadings, including 'Informations' written after the Report in a last-minute attempt to influence the Full Court. If this was done in the present case, however, none has been traced despite an extensive search.[61] The account which follows, therefore, is based largely on *Lord Strichen's Report*.

4. Preliminary Matters

In arguing the case, two preliminary points required to be disposed of.[62] First, were banknotes properly to be treated as corporeal moveable property[63] rather than as an (incorporeal) right to payment from the Bank of Scotland? And if they were, then secondly, were they to be regarded as the equivalent of metallic coin and so subject to the same (special) rules?

On the first point, the difficulty lay in the fusion of debt and entitlement. More than just evidence of the bank's obligation to pay, a banknote was the very basis of determining entitlement to payment. A banknote, in other words, invited consideration of two different kinds of right. There was, first of all, the right to be paid by the bank, but there was also the right to the physical note itself; and it was the second right, by and large, which determined entitlement to the first—a fact which distinguished banknotes from other obligations to pay. Since the banks were keen to avoid the ordinary rules of vindication, they were keen to show that banknotes could not properly be regarded as corporeal property. For the Royal Bank, James Erskine argued:

> That the Note in question be considered not so much as a Piece of Money, but as an Obligation to pay Money. In that Light likewise by the *Roman* Law, it could not have been vindicated or fall under the Doctrine concerning the *vitium reale* which takes Place only as to the *res corporales* to which the *nomina & obligationes* are always opposed, being of a different Nature, and not falling under this Doctrine, and so cannot be claimed as a Horse or a Cow *a quocunque*, and therefore must be regulated by the terms of the Obligation itself, which is payable to the Bearer, and must be accordingly paid when presented, without regard to any Claims that third Parties may have.[64]

If this argument caused the court to hesitate, this has not been captured in any of the accounts of the litigation. The case was adjudicated, and largely argued, on the basis that banknotes were *res corporales*.[65] And that point having been won, counsel for Crawfurd, in

[59] Parratt, above n 53, at 19, 2.

[60] Professor Niall Whitty traced the copies held in the collections of Session Papers by Kames and by Falconer in the Advocates Library in Edinburgh. The author has since found further copies in Kilkerran's Session Papers, vol. 15, no. 50, in Elchies' Session Papers (both in the Advocates Library), vol. 581, at 2 of the Indexed Session Papers held in the Signet Library in Edinburgh, and in Lloyds Banking Group Archives, Edinburgh (NRAS945/20/1/1). The author is grateful to Rosemary Paterson for her assistance in finding the copies in the Advocates Library. Both Kilkerran's and Elchies' copies have handwritten but (to the author at least) indecipherable notes on the first page.

[61] The court process appears not to be held by the National Records of Scotland. The decree is minuted in the *Minute Book of Session commencing 15 January 1749 and ending 10 January 1750* (National Records of Scotland, CS16/1/81), at 94, but is not marked as having been extracted. No other written pleadings are included in the sets of Session Papers listed in the preceding note.

[62] They are not, however, so presented in the arguments as recorded in *Lord Strichen's Report*. On the contrary, no doubt partly because of the system of pleading then in use, there was a tendency to shift from one point to another and then back again.

[63] Or, in the terminology of English law, chattels.

[64] *Lord Strichen's Report*, above n 58, at 4–5.

[65] That remains the modern law: see L. D. Crerar, 'Banking, Money and Commercial Paper', in *The Laws of Scotland: Stair Memorial Encyclopaedia* (Reissue, 2000), para. 143; C. Proctor, *Mann on the Legal Aspect of Money* (7th edn, 2012), paras 1.45 and 1.46.

turn, do not seem to have put up serious resistance to the Royal Bank's claim that banknotes 'are in Effect an Addition to the Species or current Money of the Nation' and are subject to the same rules as coins.[66] What these rules might be, of course, was another matter.

With these points settled, there was a shift of focus in the argument. In theory, the litigation was a multiplepoinding in which the question to be determined was the 'incorporeal' one of to whom should the Bank of Scotland pay—to the Royal Bank, to Crawfurd, to William Lang (as the intended recipient of the banknote), or to more than one of those?[67] But on the basis that the person entitled to payment was, and perhaps was only,[68] the person entitled to the banknote, much more prominence was given to the 'corporeal' question of 'whether the New-bank or Mr Crawford has the best Right to the Bank-note'.[69] The case, in short, became one about vindication of money.

5. Vindication of Money

Although the fact of theft was not clearly established in *Crawfurd v. The Royal Bank*, the case was argued and decided on the basis that the £20 note had indeed been stolen and was a *res furtiva*.[70] That being so, the general rule was not in doubt: stolen goods could be vindicated by the person from whom they were taken, for no title could pass even to a *bona fide* acquirer without the owner's consent. The principle was the familiar one of *nemo plus iuris ad alienum transferre potest, quam ipse haberet*.[71] On behalf of Crawfurd, Home thus had a straightforward argument to make:

> [T]he bare Possession of a Bank-note without the Consent of the Proprietor, will no more transfer the Property than the bare Possession of a Table or a Chair. Possession indeed presumed the Consent of the former Proprietor. But then this, like all other Presumptions, must yield to Matter of Fact; and therefore if the Person who vindicates, proves his Property *&* *quomodo desiit possidere*, so as to take off the Presumption arising from Possession, he must prevail.[72]

It was true, Home conceded, that stolen coin could often not be reclaimed, but this was due to a deficiency of proof and not of law.[73] If all coins looked the same, then victims of theft could not identify what had been taken.[74] But in the present case, the banknote had been numbered and signed. It was indisputably the same note that Crawfurd had put into the post. It should be returned to him.

The response for the banks was necessarily inventive. According to the Royal Bank's counsel, James Erskine, in a key passage,[75] Roman lawyers viewed money:

[66] *Lord Strichen's Report*, above n 58, at 10 (Wedderburn). See also ibid., at 3 (Erskine).

[67] Ibid., at 1 (Craigie). Thus there were various references in argument to the 'double distress' of the Bank having to pay twice, a view advocated by counsel for Crawfurd (ibid., at 2) but naturally rejected by counsel for the Banks (ibid., at 1).

[68] But while this issue was argued, it does not seem to have been determined.

[69] *Lord Strichen's Report*, above n 58, at 7 (Home).

[70] Kilkerran, above n 57, at 479–80; Elchies, above n 57, at 43–4.

[71] D. 50.17.54.

[72] *Lord Strichen's Report*, above n 58, at 8.

[73] Ibid.: 'quod non deficit jus sed probatio'.

[74] In the English law of the time this was being expressed as the idea that money has no earmark. See D. Fox, *Property Rights in Money* (2008), paras 7.17 et seq. and 8.10 et seq.

[75] This follows on immediately from an account, based on D. 18.1.1pr (which is quoted), of how in the course of history barter gave way to sale, with one commodity being exchanged, not for some other commodity (*merx*) but for an official medium of exchange (*pretium*) or, in other words, for money.

not as a *corpus*, but a *quantitas quae usu consumebatur*, by which Means they effectually withdrew it from being liable to the *rei vindicatio*, or affectable by the *vitium reale*, which was held to accompany all *res furtivae*; and upon this Principle it was, that *pecunia furtiva mutuo data, pro re vendita numerata, creditori soluta, bona fide accipientis fiebant*,[76] because in all these Cases, they held them to be consumed . . .[77]

The use of Latin suggests an impeccable Roman pedigree, but no Roman source was cited,[78] and indeed the principal *Digest* text discussed elsewhere in argument (though not by Erskine) is directly opposed.[79] We must return to this important text, by Iavolenus, in due course.[80]

A more serious criticism is that, Roman law or not, the bank's argument is lacking in logic and coherence. It comprises the following steps. (1) Money is a fungible, which, like other fungibles, is consumed by use. (2) Money is used, and so consumed, by spending. (3) Therefore a *bona fide* recipient acquires ownership even of stolen money.

We may allow the first two steps of this argument without hesitation, at least from what would have been the familiar perspective of loan for consumption (*mutuum*). For when money is lent, the borrower is free to spend it, and the lender's entitlement is to repayment of money to the same value, and not of the original coins and notes. But two things should be noted at once. First, unlike with other fungibles, the 'consumption' of money is metaphorical and not literal. If corn is eaten, it ceases to exist; if money is spent, there is simply a change in possession and hence no (physical) obstacle to vindication in the hands of the third party recipient. Secondly, in *mutuum* it is not the consumption which brings about the change of ownership but the earlier delivery (*traditio*) by lender to borrower; far from being the cause of change of ownership, therefore, consumption is its consequence.[81] Thus a theory which, in the context of stolen money, says that ownership is acquired by consumption has a certain amount of work to do. That, as we will see, was the theory of Johannes Voet.[82] It might also have been the theory of the bank but for the existence of step (3).

Step (3) of the bank's argument is not easy to connect up with the steps which precede it.[83] For if money really is consumed by spending (step (2)), there can be no reason for requiring good faith in the recipient (step (3)). Such a requirement seems to imply that, if the recipient is in bad faith, the original owner is free to vindicate. But how can this be so? If spending amounts to consumption, there is nothing (on this theory) left to vindicate. Or if, in a more nuanced version of the argument, spending is taken to destroy, not the thing itself, but the owner's relationship to it, that owner has no basis for recovery of the thing against even a *male fide* recipient. Despite the way in which it is presented, therefore, the legally significant step in the bank's argument is not the consumption (step (2)) but the acquisition (step (3)). That is why good faith is required of the person acquiring and not[84]

[76] Stolen money given in the context of a *mutuum* (loan for consumption), counted out [or quantified] [as the price] for the object sold, or paid to the creditor, will [have] become [the property] of one who receives it in good faith.
The author is grateful to his colleague, Dr Paul du Plessis, for this translation of a passage which stretched his schoolboy Latin.

[77] *Lord Strichen's Report*, above n 58, at 4.

[78] Or has been traced: the passage does not appear in the *Corpus Iuris Civilis*.

[79] D. 46.3.78.

[80] See Section III.1 of this chapter and generally Chapter 6 in this volume.

[81] Stair, above n 1, 1.11.1, 1.11.2; John Erskine, *An Institute of the Law of Scotland* (1773), 3.1.18.

[82] Voet's solution was to connect consumption by spending to the 'consumption' which he claimed to take place when money was mixed: see Section III.1 of this chapter.

[83] In fairness to James Erskine, it should be borne in mind that we are reading, not his words, but the argument attributed to him by the clerk and Lord Strichen.

[84] As it was for Voet.

of the person consuming. In other words, this is a rule of *bona fide* acquisition masquerading, perhaps for reasons of civilian plausibility, as one of consumption by use. We will see another example of this disguise later on.[85] The truth is that the first two steps could be left out entirely: all that matters for the bank is that the recipient is in good faith.[86]

6. The Result, and the Reasons

When Henry Home—by now Lord Kames—came to report *Crawfurd v. The Royal Bank*, he gave the result of the case in much the same words as, two decades before and as defeated counsel, he had scrawled on his own copy of *Lord Strichen's Report*. The Judges, he wrote, were unanimous 'that money is not subject to any *vitium reale*; and that it cannot be vindicated from the *bona fide* possessor, however clear the proof [of] the theft may be'. Accordingly, 'Mr Crawfurd had no claim to the note in question'.[87] Thus was established the rule of *bona fide* acquisition of money in Scotland. The decision also relieved the banks of the concern, raised once more during the litigation, that newspaper advertisement might 'amount to a sufficient Interpellation to all the World' as to deprive the recipient of good faith.[88]

In reaching its view the court must be taken to have followed, at least to some extent, the doctrinal argument presented for the Royal Bank by James Erskine and outlined above.[89] But it is hard to believe that the real arguments did not lie elsewhere.[90] Policy issues, as might be expected, were highly prominent in *Lord Strichen's Report*. Trade, it was argued for the banks, rested on the free circulation of money, and free circulation rested in turn on the reliability of notes and coins. If Crawfurd was able to vindicate the banknote, no merchant could risk taking money in payment 'without being informed of the whole History of it from the Time that it first issued out of the Bank or the Mint till it came to his Hand, which is so apparently absurd, that it seems hardly to merit a Consideration'.[91] And as banknotes would thus be rendered 'absolutely useless', this would 'in a great Measure deprive the Nation of the Benefit of the Banks, which could hardly subsist without the Circulation of their Notes'.[92] It was in vain for Home to object that, just as people continue to buy goods despite the (slight) risk that they might be stolen and subject to vindication, so they would continue to accept money if the risks were the same.[93] If money could be vindicated, counsel for the Bank of Scotland concluded, 'no Man could be sure, that one Shilling in his pocket was his own, and both Banks might shut their doors'.[94]

[85] See Section III.2 of this chapter.

[86] Doubtless it would be possible to devise an argument which found a place for all three steps. Thus for example it might be said that, while consumption prevents a vindicatory claim (because, in a legal sense, the thing no longer exists), it does not prevent an enrichment claim, and that only the recipient's good faith excludes the latter. But in its argument the Bank was concerned only with vindication.

[87] *Crawfurd v. The Royal Bank* (1749) Mor. 875, at 876.

[88] *Lord Strichen's Report*, above n 58, at 10 (Wedderburn). It might be different, Wedderburn accepted (ibid., at 11), 'if the Note had been presented by a suspicious Person'. See also ibid. at 6 (Erskine).

[89] Some traces of that argument indeed survive in Crerar, above n 65, para. 144.

[90] As Erskine argued for the Royal Bank (*Lord Strichen's Report*, above n 58, at 5), a rule of *bona fide* acquisition 'is agreeable to the Practice of all trading Nations at this Day, who *possibly without having much Regard to the Subtilties*, have embraced it for this very good Reason, that the contrary would at once put a Stop to all Trade' (emphasis added).

[91] *Lord Strichen's Report*, above n 58, at 5 (Erskine). This anticipates modern economic analysis based on transaction and information costs, for which see, e.g., Fox, above n 74, paras 2.11–2.20.

[92] *Lord Strichen's Report*, above n 58, at 6 (Erskine).

[93] Ibid., at 9. One difficulty with this argument, as counsel for the Banks noted, is the probable (and certainly practical) absence of a warranty of title in the case of banknotes: see ibid., at 6 (Erskine) and 10 (Wedderburn).

[94] Ibid., at 11 (Wedderburn).

Although expressed in an exaggerated and emotive way, these arguments must have seemed of considerable force in a society where paper money had become so prevalent. And certainly, when they came to record the decision, neither Lord Elchies nor Lord Kilkerran had anything to say about its merely doctrinal foundation. '[W]e thought', wrote the former, that 'it would destroy all banking, if the objection *res furtiva* could affect Bank notes', meaning, added the latter, that 'there could be no such thing as a public bank.'[95] To Scottish judges in 1749 such an outcome seemed both credible and unthinkable.[96]

There was also another reason why the court might have been inclined to decide for the banks or at any rate be receptive to their plight.[97] The advocates engaged for the Bank of Scotland (Peter Wedderburn and Robert Pringle) were, as already mentioned, directors of that bank.[98] But so also were two members of the court, Lords Murkle and Shewalton, the former having been present, with the two advocates, at the crucial directors' meeting on 5 January 1749 when the case was extensively discussed and a decision made to open negotiations with the Royal Bank.[99] And while it was no longer true, as had at one time been the case, that half the directors of the Royal Bank were Court of Session judges,[100] one member of the current court, Lord Milton, had been among the bank's founders and remained Deputy Governor,[101] while two of his colleagues, Lord Monzie and the Lord Justice-Clerk, Lord Tinwald, were also directors.[102] All are recorded as sitting as members of the court on the day[103] when the case was decided.[104] Even by the standards of the narrow society, clustered round the Castle Rock, of mid-eighteenth-century Edinburgh, this was a remarkable coincidence of interests.[105]

III. Doctrinal Development: Iavolenus, Voet, and Stair

1. Iavolenus and Voet

Little in the way of authority was cited in *Crawfurd v. The Royal Bank*. The omission, however, is easily explained. With one important exception, discussed below,[106] there was

[95] Elchies, above n 57, at vol. 2, at 44; Kilkerran, above n 57, at 480.

[96] The modern view is also that the rule is based on policy: see *M & I Instrument Engineers Ltd. v. Varsada*, 1991 SLT 106, at 109 ('It appears that where it has been held that money has not been subject to vindication following receipt bona fide by a third party the justification is that to hold otherwise would be an impediment to commerce').

[97] See also Saville, above n 2, at 104 for an assessment of the effect of the close connections between the Court of Session and Bank of Scotland on an earlier litigation.

[98] See Section II.3 of this chapter.

[99] Directors were appointed on a year-by-year basis. For a list of the directors appointed for 1748–9, see *BoS Minutes*, above n 27, 25 March 1748. The two advocates were ordinary directors and the two judges extraordinary directors.

[100] Checkland, above n 3, at 62.

[101] See M. Fry, 'Fletcher, Andrew, Lord Milton (1691/2–1766)', *Oxford Dictionary of National Biography* (2004).

[102] The author is indebted to Sophia Volker of The Royal Bank of Scotland Group Archives for providing him with a list of directors. Both judges were extraordinary directors.

[103] Friday 24 February 1749.

[104] *Books of Sederunt* (National Records of Scotland, CS1/13), entry for 24 February 1749. A list of judges of the Court of Session in 1749 was given at n 52 above, and all were recorded as sitting on 24 February other than the Earl of Leven and the two Extraordinary Lords (Duke of Argyll and Marquis of Tweeddale). The *Minute Book* mentioned in n 61 discloses that there was other Inner House business on that day and in theory it is possible that those judges who were directors recused themselves in respect of the *Crawfurd* case, or that Crawfurd was able to decline their jurisdiction. But there is no evidence to support this, and the rule seems to have been that the directorship of a public company was no ground for declinature: see *Blair v. Sampson*, 26 January 1814 F.C. (reported, out of sequence, in the volume for 1814–15, at 501).

[105] For the solicitation of judges in this period on behalf of oneself, one's relatives, and of institutions, see J. Finlay, *The Community of the College of Justice: Edinburgh and the Court of Session, 1687–1808* (2012), at 96–8.

[106] Stair, above n 1, 2.1.34, discussed in Section III.2 of this chapter.

no relevant Scottish authority, whether in relation to banknotes or to bills of exchange;[107] and while the position in England was more promising,[108] this was not a period, or especially a topic, in which reference to English law was likely. In the absence of native authority the parties had recourse to Roman law, and to that indispensable stand-by of eighteenth-century pleaders in Scotland, the *Commentarius ad Pandectas* of Johannes Voet.[109]

As Home was quick to point out, Roman law seemed firmly on the side of Crawfurd.[110] That much was plain from the opening of D. 46.3.78, a text of Iavolenus:

> Should another's coins be paid, without the knowledge or volition of their owner, they remain the property of him to whom they belonged; should they have been mixed, it is written in the books of Gaius [Cassius Longinus] that should the blending be such that they cannot be identified, they become the property of the recipient so that their [former] owner acquires an action for theft against the man who gave them.[111]

Admittedly, the text allowed for an exception where money had been mixed and could no longer be identified. The result was then ownership in the recipient by commixtion—a result, it may be noted, which was contrary both to the Scots law of commixtion (which creates common property),[112] and to the normal rule in Roman law (which, in cases of unintentional mixing, protected the original title and allowed *vindicatio pro parte*).[113] But as Crawfurd's £20 note could be identified, by number and signature, there could be no question of the exception applying.

For the Bank of Scotland, Wedderburn countered with a passage from Voet[114] which built, not on Iavolenus' opening rule, but on the exception for mixing:

> This power of vindicating stolen property from a third party possessing in good faith fails nevertheless when stolen money has been paid by a thief to a creditor of his who receives it in good faith, or has been counted out by way of price for a thing sold, and has been either used up or mixed with other money; for cash is regarded as used up by the latter process: D. 46.3.78; moreover cash of another which has been used up in good faith by a creditor can neither be vindicated nor claimed in a personal action.[115]

[107] The first work on the law of bills of exchange long predated the litigation in *Crawfurd*. This was *A Methodical Treatise concerning Bills of Exchange* (1703; 2nd edn, 1718) by William Forbes. But, unlike the position in England (see *Anon* (1699) 3 Salk. 71, 91 ER 618), *bona fide* acquirers received no protection, thus allowing Home to argue (*Lord Strichen's Report*, above n 58, at 8) that banknotes should be treated likewise. For an assessment of Forbes' work, see J. S. Rogers, *The Early History of the Law of Bills and Notes* (1995), at 160–3.

[108] As David Fox has shown, protection for *bona fide* recipients of banknotes (or bills of exchange) was being developed for half a century or more prior to the landmark decision in *Miller v. Race* (1758) 1 Burr. 452, 97 ER 398. See D. Fox, '*Bona fide* Purchase and the Currency of Money' (1996) 55 *Cambridge Law Journal* 547, esp. at 558 et seq.

[109] J. Voet, *Commentarius ad Pandectas* (1698–1704). Thus Ramsay, above n 46, vol. 1., at 182, wrote of Home (Lord Kames): 'If, in his later years, he spoke with little reverence of the Dutch civilians, whose works were to be found in every lawyer's library, there can be little doubt that at his outset, and in his prime, he was exceedingly indebted to these heavy inelegant writers for hints which stood him in excellent stead.' On this occasion, however, it was not Home but his opponents who had recourse to Voet.

[110] *Lord Strichen's Report*, above n 58, at 8.

[111] Si alieni nummi inscio vel inuito domino soluti sunt, manent eius cuius fuerunt: si mixti essent, ita ut discerni non possent, eius fieri qui accepit in libris Gaii scriptum est, ita ut actio domino eo, qui dedisset, furti competeret.
The translation is from *The Digest of Justinian*, ed. A. Watson (1985).

[112] See, e.g., D. L. Carey Miller, with D. Irvine, *Corporeal Moveables in Scots Law* (2nd edn, 2005), paras 5.01 et seq.

[113] Inst. 2.1.28.

[114] Voet, above n 109, 6.1.8.

[115] Fallit tamen haec rerum furtivarum a tertio bonae fidei possessore vindicandarum potestas, quoties pecunia furtiva per furem creditori ejus bona fide accipienti soluta, vel pro re vendita pretii vice

The underlying argument appears to be the following.[116] (1) According to Iavolenus, stolen money cannot be vindicated when it is has been mixed. (2) Mixing is a form of consumption. (3) Iavolenus' rule is about consumption and not (merely) about mixing. (4) Spending is a form of consumption. (5) Therefore when stolen money is spent it cannot be vindicated.[117] The doctrinal key is step (2) in which mixing (*commixtio nummorum*) is classified as a type of consumption (*consumptio nummorum*), an idea which can be traced back at least as far as the Glossators.[118] Once this is accepted—and Iavolenus' rule generalized to include all cases of consumption (step (3))—everything else falls neatly into place. It will be noticed that Voet drops the requirement that the money be unidentifiable; on the other hand, he requires good faith of the person carrying out the act of consumption.

Given the evident usefulness of Voet's text it may seem surprising that the banks' counsel made so little use of it. Wedderburn mentions it only in passing, while Erskine, in developing his argument about consumption and acquisition, ignores it altogether, citing instead the immediately previous paragraph in respect of a different point.[119] The explanation is probably that, from the banks' perspective at least, Voet put good faith in the wrong place. Voet proposed a rule of *bona fide* consumption, the banks one of *bona fide* acquisition. The difference was of considerable practical importance. If consumption had to be carried out in good faith, consumption by the thief did not count; and that in turn meant that the person acquiring from the thief in good faith could not acquire a good title without a fresh act of consumption. So if Bill stole Anne's money and used it to pay Carol, who took in good faith, Carol was initially in no better position than the thief, Bill. Unless or until she mixed the money with her own or spent it in turn, she remained vulnerable to a vindication by Anne.[120] The first *bona fide* acquirer was thus not protected under Voet's system.[121] There was also a second difficulty which, if anything, was more serious. If an acquirer's title depended, not on his own good faith but on the good faith of the person from whom he acquired—of the person who had consumed by spending[122]—then his title was secure only

> numerata fuit, & vel consumta vel alteri pecuniae mixta; cum ita consumti videantur nummi. l. si alieni 78. ff de solution [D. 46.3.78]. consumti autem bona fide per creditorem nummi alieni neque vindicari possint neque condici.

The translation is from P. Gane, *The Selective Voet: being the Commentary on the Pandects* (1955–8).

116 For the view that this had also been Roman law, see M. Kaser, *Roman Private Law*, trans. R. Dannenbring (1965), at 112 and, much more fully, M. Kaser, 'Das Geld im römischen Sachenrecht', (1961) 29 *Tijdschrift voor Rechtsgeschiedenis* 169, at 193 et seq. The issues are helpfully discussed in P. J. Thomas and A. Borraine, 'Ownership of Money and the *Actio Pauliana*', (1994) 57 *Tydskrif vir Hedendaagse Romeins-Hollandse Reg* 678, at 680–1.

117 Voet does not go so far as to say that the recipient of the money becomes owner, possibly because the passage occurs in the context of defences to vindication. The doubt on the point has remained in modern South African law, despite the adoption in other respects (see *Woodhead Plant & Co. v. Gunn* (1894) 11 S.C. 4) of a rule of *bona fide* acquisition. See C. G. van der Merwe, 'Things', in W. A. Joubert et al. (eds), *The Law of South Africa*, vol. 27 (1st reissue, 2002), para. 395; P. J. Badenhorst, J. M. Pienaar, and H. Mostert, *Silberberg and Schoeman's The Law of Property* (5th edn, 2006), at 260. For the view that ownership is acquired, see F. R. Malan, 'Share Certificates, Money, and Negotiability', (1977) 94 *South African Law Journal* 245, at 249.

118 See Chapter 6 in this volume.

119 Voet, above n 109, 6.1.7, to the effect that a pledge received by a money lender in good faith is valid even if the goods were not owned by the pledger: see *Lord Strichen's Report*, above n 58, at 5. This was used by Erskine to demonstrate how far 'Foreign Nations, and particularly the *Dutch*, carry the Favour of Commerce'.

120 This is because, according to Voet, a person must *both* receive in good faith *and also* mix or spend. A person who merely receives in good faith does not satisfy the dual requirement. See also, on this point, *Woodhead Plant & Co. v. Gunn* (1894) 11 S.C. 4, at 8.

121 A further oddity is that the primary beneficiary of Carol's good faith is not Carol herself but the person to whom she pays the money.

122 Or, if the money had changed hands more than once since the theft, of one at least of those who had spent the money.

if he both knew who that person was and knew, and if necessary could prove, that that person was in good faith. This necessitated the type of inquiry into 'the whole History' of the banknote which the banks were particularly anxious to avoid.[123]

2. Iavolenus and Stair

Counsel would hardly have relied on Voet if a comparable discussion had been found by a Scottish writer. In fact, such a discussion existed, and in the most obvious of places. At the time that *Crawfurd* was pled in 1749, the only comprehensive account of private law in print was Viscount Stair's *Institutions of the Law of Scotland*;[124] and Stair, like Voet several decades later,[125] offered his own treatment of Iavolenus' text. It is surprising that none of the seven advocates instructed in the case should have uncovered the relevant passage. In their defence, however, it should be said that Stair's treatment occurs not, as might have been expected, in the context of restitution but rather in his account of original acquisition, where it appears at the end of a lengthy section which begins, unpromisingly, with the topic of accession of fruits. More significantly, the index entry for 'money' does not disclose the passage;[126] if it had, the course of the litigation in *Crawfurd* might have been rather different.

The passage by Stair is as follows:

> [I]n fungibles and all such things as are not discernible from others of that kind, possession is generally esteemed to constitute property, which is most evident in current money, which if it be not sealed, and during its remaining so, is otherwise undiscernible, it doth so far become the property of the possessor, that it passeth to all singular successors without any question of the knowledge, fraud, or other fault of the author; without which commerce could not be secured, if money, which is the common mean of it, did not pass currently without all question, whose it had been, or how it ceased to be his; *l. si alien. 78 ff. de solutionibus* [D. 46.3.78]; and though that law is in the case of commixtion of money with another's money, who was not owner of it, whereby it is esteemed as consumption of money commixed, yet that ground doth necessarily reach all money, as soon as it passeth to any singular successor by commerce, for thereby it is consumed in the same way.[127]

Although more elaborate than Voet, Stair's treatment is very much along the same lines, making the same connection between consumption by mixing (the subject of Iavolenus' text), and consumption by spending. Crucially, however, there is no requirement that the person spending be in good faith: on the contrary, the 'author' is envisaged as being quite possibly tainted by 'knowledge, fraud, or other fault'. Whether the person receiving the money must be ignorant of the sins of his author is less clear, although the reference to acquiring 'by commerce' can probably be read in this light. It is the spending, however, and not the recipient's corresponding acquisition, which is singled out as important, although Stair allows the spender a pre-existing right, arising simply from possession, to the extent needed to pass title to the recipient.[128] As compared with Voet, Stair's rule is an eminently

[123] *Lord Strichen's Report*, above n 58, at 5 (Erskine).
[124] No new edition, however, had appeared since Stair's own second edition of 1693.
[125] The passage quoted below appears in the first edition of the *Institutions* (12.34) which, though published in 1681, was largely written in the 1660s. See J. D. Ford, *Law and Opinion in Scotland during the Seventeenth Century* (2007), at 68–73.
[126] Although it discloses three others. The index in question is for the second edition of 1693.
[127] Stair, above n 1, 2.1.34.
[128] The nature of this right is not explained. A possible model may have been *mutuum*, where the borrower becomes owner of money before spending it; but in Stair's theory the possessor's right was something less than ownership.

practical one, allowing money to 'pass currently without all question'. That being so, it becomes easier to forgive the doctrinal sleight of hand by which—as with Erskine's argument for the Royal Bank in *Crawfurd*, considered above[129]—a rule of *bona fide* acquisition is presented under cover of a rule of consumption by spending. Unlike with Erskine's later argument, the deception is at least justified by its linkage with a *Digest* text.

If Stair's text had been discovered in the *Crawfurd* case it would have saved the banks' counsel a great deal of trouble. Yet in one respect the text would not have helped. For like Iavolenus (and unlike Voet), Stair requires that the money be 'not discernible from others of that kind'; money which can be identified can be vindicated despite the good faith of the acquirer. If Stair's passage had been found by the counsel in *Crawfurd*, and followed, it would have been Crawfurd and not the Royal Bank who would have been entitled to the £20 note. Stair, of course, was writing in the context of metallic money which was indistinguishable unless 'sealed', by which Stair seems to mean collected in bags or other sealed containers. It is unknowable whether he would have maintained his position following the introduction, some thirty years later, of (distinguishable) paper money.

IV. Aftermath

In his *Institute of the Laws of Scotland*, written shortly after the decision in *Crawfurd*, Andrew McDouall (more usually known by his later judicial title of Lord Bankton)[130] cited both *Crawfurd* and Voet, and aware of the tension between them, attempted a reconciliation by stating the rule given in *Crawfurd* (of *bona fide* acquisition) but adding, rather unhelpfully, that it applied 'especially' where the requirements for Voet's rule (of *bona fide* consumption) were satisfied:

> It is remarkable, that tho' money given in payment had been stolen, yet the party who receives it, *bona fide*, for valuable consideration, is not liable to restore the same to the owner; especially if it had been consumed by the receiver, or mixed with his other money, so as it could not be known. The case is the same as to bank-notes; this is admitted for the benefit of commerce, which could not be supported without the absolute currency of money and bank-notes; and, as this is the law in other countries, so it is received with us.[131]

If later writers in Scotland were aware of the difficulty they were prepared to overlook it, expressing the rule as one of straightforward *bona fide* acquisition.[132] By that time, however, the English courts too had adopted a rule of *bona fide* acquisition in *Miller v. Race*,[133] decided a decade after *Crawfurd* and, as one might expect, without any reference to it. Although the doctrinal route taken by Lord Mansfield in *Miller* was quite different from that in *Crawfurd*—a previously established rule of evidence (that money, having no earmark, is unidentifiable) being replaced by a substantive rule preventing recovery[134]—the policy reasons were the same and, if anything, more prominent. By the end of the century *Crawfurd* and *Miller* were being cited side-by-side in Scotland as authorities for a single rule,[135] and the last surviving difference between the jurisdictions—that in Scotland

[129] See Section II.5 of this chapter. [130] McDouall was raised to the Bench in 1755.

[131] A. McDouall (Lord Bankton), *An Institute of the Laws of Scotland in Civil Rights* (1751), 1.24.14; compare 1.8.34.

[132] See, e.g., Erskine, above n 81, 3.5.6; W. Glen, *A Treatise on the Law of Bills of Exchange, Promissory Notes, and Letters of Credit in Scotland* (1807), at 218; J. S. More, *Notes to Stair's Institutions of the Law of Scotland*, (1832), vol. 1, at xlviii–xlix. See also *Swinton v. Beveridge* (1799) Mor. 10105; *Lambton v. Marshall* (1799) Mor. App. 'Bills of Exchange' No. 8; *Scott and Company v. The Kilmarnock Banking Company* 27 February 1812 F.C.

[133] (1758) 1 Burr. 452, 97 ER 398.

[134] Fox, above n 74, para 8.18. [135] *Swinton v. Beveridge* (1799) Mor. 10105.

the recipient was presumed to have given value unless the contrary was shown[136]—was removed by statute in 1856.[137] With the passing of the Bills of Exchange Act in 1882 the cases, too, came to be superseded by a single statutory provision applying a rule of *bona fide* acquisition to the whole United Kingdom.[138]

How then are we to assess *Crawfurd v. The Royal Bank*? Looked at from the twenty-first century, the result seems obvious and inevitable. It is unlikely that it seemed so to contemporaries. The alarm of the banks was real, the legal issues difficult and strongly contested, and the concerns of the court in relation to commerce palpable. The quarter century after *Crawfurd* was to see an unprecedented expansion in paper money, with private banks competing with the two public banks, and notes issued in ever smaller denominations.[139] Surveying the Scottish economy in *The Wealth of Nations* in 1776, Adam Smith found that 'the business of the country is almost entirely carried on by means of paper'.[140] For this the law, and the lawyers, could take at least a small part of the credit.

[136] G. Ross, *Leading Cases in the Commercial Law of England and Scotland* (1853), vol. 1, at 205, 229. Both *Miller v. Race* and *Crawfurd v. The Royal Bank* are given in full.

[137] Mercantile Law Amendment (Scotland) Act 1856 (19 & 20 Vict c 60), s. 15.

[138] Bills of Exchange Act 1882 (45 & 46 Vict c 61), s. 38(2), applied to promissory notes by s. 89(1). 'Holder in due course' is defined in s. 29.

[139] Checkland, above n 3, at 104–6.

[140] Smith, above n 2, at 189–90.

III

CIVIL LAW

26

Multiple Currency Clauses and Currency Reform

The Austrian Coupon Cases

Rastko Vrbaski

I. Introduction

This chapter presents a case study of the so-called Austrian Coupon Cases, a series of actions brought by German and French bondholders against Austrian railway companies which issued bonds on the international capital markets. The cases were decided by the courts of the then German Empire and Austria-Hungary in the 1870s and early 1880s. Arthur Nussbaum described the cases as 'undoubtedly the most famous in the legal monetary history of the central European countries', and they are still referred to as precedents for certain legal concepts, most importantly the concept of *lex monetae.*[1] The purpose of this case study is not to determine whether the decisions of the German and Austrian courts were correct according to the applicable law of their time. Nor is it to extract from these decisions lessons or arguments that might still be valid, or could be applied in similar cases. Instead, this case study will first analyse the reasoning in the six principal decisions rendered by the supreme courts of the German Empire—three rendered by the Imperial Court of Commerce (*Reichsoberhandelsgericht*), and three by its successor the Imperial Court (*Reichsgericht*). It will then compare them with each other, and interpret their arguments in the context of the evolution of private international and monetary law.[2]

[1] Quotation from A. Nussbaum, *Money in the Law National and International* (1950), at 126. See also A. Nussbaum, *Das Geld* (1926), at 158 and 203; F. A. Mann, *Legal Aspect of Money* (1982), at 268; H. Hahn, *Währungsrecht* (1990), at 383; F. Vischer, *Geld- und Währungsrecht* (2010), at 180; C. Proctor, *Mann on the Legal Aspect of Money* (2012), at 368.

[2] The following decisions will mostly be referred to by the name (in English translation) of the Austrian railway company whose bonds were the subject-matter of the lawsuit: Imperial Court of Commerce (*Reichsoberhandelsgericht*), 19 February 1878, ROHG 23, 205 (*Empress Elisabeth (I)*); Imperial Court of Commerce, 28 June 1878, ROHG 24, 168 (*Mortgage-Bonds*); Imperial Court of Commerce, 8 April 1879, ROHG 25, 41 (*South-North German Railways*); Imperial Court (*Reichsgericht*), 12 December 1879, RGZ 1, 23 (*Empress Elisabeth (II)*); Imperial Court, 1 March 1882, RGZ 6, 126 (*Emperor Ferdinand*); Imperial Court, 9 February 1887, RGZ 19, 48 (*Kaschau-Oderberger*). These decisions (except *Emperor Ferdinand* and *Kaschau-Oderberger*) are also published in

The major reason why the Austrian Coupon Cases had to be decided by the highest courts, and then became so well known, was that after the bonds had been issued, but before they became due, the currency system changed significantly, and several currencies in which the bonds and their coupons were originally denominated became extinct. When the bonds were issued in the 1860s, a variety of currencies circulated in the various German states and in Austria. The currencies of Austria and the member states of the German Customs Federation were based on silver, and pegged to each other under the Vienna Convention on Coins (*Wiener Münzvertrag*) of 1857. This organization of currency was reflected in the terms of the railway bonds. The coupon to a bond issued by the Empress Elisabeth Railway, for example, provided for payment in Vienna of five florins of Austrian currency, in Frankfurt of five florins, and fifty *kreuzer* of South-German currency, and in certain other places within the German Customs Federation of three *Vereinsthaler*.[3] The coupon thus constituted what would today probably be described as a multiple currency clause.

The situation first changed after the Prussian-Austrian war of 1866 when Austria left the Vienna Convention of 1857. It changed again after the German unification in 1871, when the newly founded German Empire decided to merge the currencies of the various German territories, including the currencies mentioned above, into a single currency. It was further decided that the new currency, the *mark*, should be based on gold, rather than on silver. In relation to the currencies mentioned above, the new German Legal Tender Act (*Deutsches Münzgesetz*) provided in its Article 14 that debts expressed in those currencies should be converted into the mark at rates determined on the basis of the exchange rate of 1:15.5 (gold to silver).[4] This was the market rate of exchange throughout the nineteenth century before the German Legal Tender Act came into effect.[5] However, possibly as a result of the German policy to demonetize silver, and other contributing factors, silver depreciated heavily against gold to the exchange rate of 1:19, or even lower. The depreciation was therefore by a margin of up to 20 per cent. The Austrian silver currency depreciated against the new gold-based mark by a similar degree.[6] Thus the basic question was how to construe the references in the bonds to the various, now extinct, currencies, and whether the official conversion rate of the German legislation or a subsequent conversion rate should be applied. Depending on how those questions were answered, the Austrian railway companies would have an unexpected additional burden, or international bondholders an unexpected loss, of up to 20 per cent in their respective home currencies.[7]

(1882) 27 *Zeitschrift für Handelsrecht* 512, together with certain other decisions, notably Austrian ones, in similar matters.

[3] See *Empress Elisabeth (I)*, ROHG 23, at 205; in other cases, the pound sterling, which was of course based on gold, and French francs were stipulated, but those cases were not decided by German courts, probably because the currencies did not become extinct and the bonds were paid in accordance with their original terms.

[4] For an overview of the currency reform, see H. Fögen, *Geld und Währungsrecht* (1969), at 48.

[5] See M. Flandreau, 'The French Crime of 1873', (1996) 56 *Journal of Economic History* 862, and the table at 865.

[6] See, for a modern assessment, ibid. and G. Gallarotti, 'The Scramble for Gold in the 1870s', M. Bordo and F. Capie (eds), *Monetary Regimes in Transition* (1994) 15. See G. Thiemeyer, *Internationalismus und Diplomatie* (2009), at 61 for a summary of the modern discussion; for a reflection of the contemporary discussion, see G. Hartmann, *Internationale Geldschulden* (1882), at 3 and K. Helfferich, *Das Geld* (1910).

[7] Many decisions also dealt with other questions, such as securities and corporate law issues (e.g. *Kaschau-Oderberger*, RGZ 19, at 47 with regard to questions of bearer bonds, or corporate succession), but this case study will focus on questions of private international and monetary law, and thus, for example, will largely not differentiate between interest coupons and principal bonds.

II. The Basic Questions: The Proper 'Measure of Value' and the 'Applicable Law'

Naturally, bondholders claimed payment in the German currency according to the official conversion rates under the German Legal Tender Act. The initial line of defence of the Austrian debtors was to deny that they actually owed foreign, non-Austrian, currency. They argued therefore that the multiple currency clause was not to be construed as conferring a choice of currency, to the benefit of the bondholders.[8] In the debtors' view, the bonds should rather be construed as an obligation, the value of which was determined by Austrian currency only, and the purpose of the references to non-Austrian currencies was only to inform the initial buyer of the bond about the exchange rate at the time of the issuance, or to provide for alternative means of payment.

This interpretation was upheld by the Austrian Supreme Court in a case involving interest coupons of the Emperor Francis Joseph Railways.[9] It ruled that only Austrian currency was the 'measure of value' (*Werthmesser*) or 'proper measure' (*eigentliches Mass*) of the debt,[10] and that payment in any other currency might only be claimed according to the exchange rate of that currency to the Austrian currency at the date of maturity. This interpretation rested mainly on a rather technical interpretation of the terms or form of presentation of the bonds: the payment clauses of the bonds were presented as a table in which the different amounts were set parallel to each other. But the ruling rested also on an argument derived from Austrian civil law. The court reasoned that under Austrian law, bonds qualified as loans, and loans should be redeemed in the same kind as they had been granted. As the bonds in questions were issued against payment of Austrian currency, it followed that they should have been redeemed in Austrian currency. The interesting point here is that the interpretation of the terms of the bonds derived explicitly from the perspective of Austrian civil law, but the question of which law, or which statutes, should have been applied was not raised.

The position of the German Imperial Courts differed from that of the Austrian court in that they did not rely on the wording or the design of the bonds, but rather on an analysis of the underlying business interests of the parties. In each decision, it was held that the purpose of the multiple currency clauses was to protect the investors, because without them it would have been impossible for Austria to attract foreign capital.[11] The clauses should thus have been interpreted as an alternative obligation, with each stipulated currency being the money-of-account, and thus entitling investors to have claimed, at their choice, the stipulated amount either of Austrian currency or their home currency. The German courts discussed whether such an alternative obligation was subject to an implied condition that the Vienna Convention of 1857—which had pegged the various currencies to each other at the time when the bonds were issued—should remain in force. If such a condition existed, the alternative obligation would have lapsed as a result of Austria leaving the convention,

[8] See the references in *Empress Elisabeth (I)*, ROHG 23, at 206, para. 2; *South-North German Railways* ROHG 25, at 42, para. 3; *Empress Elisabeth (II)*, RGZ 1, at 24, para. 1; it appears that the issue of alternative obligation became less relevant in the later cases: see the rather more laconic passages in *Emperor Ferdinand*, RGZ 6, at 126, para. 1 and *Kaschau-Oderberger*, RGZ 19, at 49, para. 2.

[9] Decision of 2 April 1878, (1882) 27 *Zeitschrift für Handelsrecht* 558. The case materials were published in full by C. von Haerdtl, *Process der k.k. Franz-Joseph-Bahn* (1878).

[10] (1882) 27 *Zeitschrift für Handelsrecht* 558, at 560.

[11] *Empress Elisabeth (I)*, ROHG 23, at 206, para. 1; *South-North German Railways* ROHG 25, at 47, para. 3; *Emperor Ferdinand*, RGZ 6, at 126, para. 2; *Kaschau-Oderberger*, RGZ 19, at 49, para 2; but the only decision in which the view of the Austrian Supreme Court was explicitly rejected is *Empress Elisabeth (II)*, RGZ 1, at 24, para. 2.

with effect from the end of 1867.[12] But the answer was negative. The stated duration of the convention lasted until 1878, but the bonds fell due much later, and issuers could not have assumed that the convention would outlast the bonds. It followed that the alternative obligation was not contingent on the continuation of the currency peg under the convention. Having thus construed each currency as an independent 'measure of value', the German courts had to face the question of which conversion rate should apply to the currencies that had become extinct. The options were either the conversion rate under the German Legal Tender Act, or a conversion rate based on the exchange rate of gold to silver at the time when the bonds were due or called upon. Technically speaking, the question was whether the German Legal Tender Act applied, and if so, why it should apply if one of the parties was resident outside Germany, or even if the place of payment was outside Germany. It is interesting to see that while both German courts consistently ruled in favour of the application of the German Legal Tender Act, they did so on quite differing grounds. The underlying reasoning given by the courts evolved over time.

III. The Decisions of the Imperial Court of Commerce

1. *Empress Elisabeth (I)* (ROHG 23, 205)

The first decision, rendered in early 1878 by the Imperial Court of Commerce, involved coupons of the Empress Elisabeth Railways, the multiple currency clause of which is described in the introduction above. When dealing with the question of applicable law, the court invoked Savigny as authority, and reached its decision on the basis of the following, rather simple, syllogism. First, an obligation is governed by the law which is in force at the seat of the respective obligation; and, second, the seat of an obligation is deemed to be where, under the terms of the obligation, payment has to be made, regardless of whether the obligation is one of two alternatives or provides for multiple places of payment. It follows that German law should apply (including the conversion rates under the German Legal Tender Act) since the bond in question provided that payment was to be made in Frankfurt.

Three elements of this decision should be highlighted. First, the court did not enter into a discussion of the legal nature of monetary debt, or what precisely constitutes the subject matter of such an obligation. It simply stated that:

> [T]he [issuer] has to pay to the bondholder so much in gold as corresponds to that value of silver which the bondholder was entitled to claim if silver were still admitted for payment.[13]

It went on to say that it was unclear what the legally relevant valuation date and ratio would be when there was a change of one metal for another as the basis of the currency. It found that this point was disputed among legal scholars and could not be deduced by legal reasoning alone.[14] It was therefore the prerogative and the obligation of the legislature to fix the applicable valuation rules as a matter of public policy. The conversion rate of the German Legal Tender Act would thus be applied as the result of this legislative discretion.

[12] For the mechanism by which the Vienna Convention 1857 was resolved, see K. Helfferich, *Folgen des deutsch-österreichischen Münz-Vereins von 1857* (1894), at 27.

[13] *Empress Elisabeth (I)*, ROHG 23, at 207.

[14] The court referred to J. Goldschmidt, *Handbuch des Handelsrechts* (1868), vol. I (valuation as of contraction of the debt); G. Hartmann, *Über den Begriff des Geldes* (1868); C. Knies, *Geld und Kredit* (1931) (both discussing valuation in the case of replacement of one metal for the other; the edition of Knies' treatise to which the court referred was not available to the present author); Goldschmidt later revised his position in a review of the treatise of Knies, see J. Goldschmidt, (1876) 19 *Zeitschrift für das gesamte Handelsrecht* 327 (not referred to by the court).

Second, the court explicitly stated that, since the seat of the obligation was in Frankfurt, German law should apply 'in every respect' (*nach allen Richtungen*) to this particular proceeding. This rule should have applied even with regard to alternative obligations which contained multiple places of payment. The fact that creditors might have opted for other, alternative, places of payment, and thus potentially for different jurisdictions, did not affect the general applicability of German law once a place of payment within Germany became relevant.[15]

And third, the court acknowledged that the parties may have intended to submit to the Act, and that its ruling could have been based on the fact that the parties themselves freely chose German law as the governing law for their obligation. But this aspect was not at all essential to the court's argument. This can be seen from how the court rejected the argument of the respondent railway company that it may have submitted to German law in general, but had certainly not submitted to the conversion rates of German legal tender legislation, or any other German law that was passed after the bonds were issued. The court responded to this argument by saying that the German Legal Tender Act applied irrespective of whether the parties resided in or outside Germany, and irrespective of whether their obligation had been entered into before or after the Act came into force, simply because the Act itself did not draw any distinction on that point. In other words, the court held that the Act applied because it mandatorily provided for that result, and not because the parties opted for it. It is worth emphasizing those three elements because each of them was modified in the subsequent decisions on the matter.

2. Excursus: The *Mortgage-Bonds* Case (ROHG 24, 184)

The first modification occurred when the Imperial Court of Commerce had to reach a decision later in 1878 on a case that did not concern the coupons of an Austrian railway company, but mortgage-backed securities issued by an Austrian bank and payable in Vienna, as well as in places within Germany, in each case in the relevant local currency. The bank had become insolvent, and the court had to decide whether a German bondholder could pursue his claim individually, or whether his claim was subject to certain restrictions under Austrian law.[16]

The court recognized that, in principle, obligations were to be located according to their place of payment. In the case at hand, however, multiple places of payment were provided for, and thus the problem arose whether the restrictions on mortgage-backed securities provided for under Austrian law should only apply if the bondholder claimed payment in Vienna. The court's answer was negative. It held that the place of payment was merely an indication of where the parties intended the obligation to be located, that is, which law they opted for. As regards the mortgage-backed securities, they were structured in a way that ensured equal treatment for each bondholder, and that purpose could not be achieved unless the specific Austrian provisions were applied, wherever payment under the bond may be claimed. It followed that the parties must have opted for Austrian law as the governing law of the bonds. The court therefore dismissed the claim of the German bondholder.

The court's very elaborate reasoning is much abbreviated here, because it is only an *obiter dictum* of the court that is relevant in the present context. The court argued that, by

[15] *Empress Elisabeth (I)*, ROHG 23, at 209.

[16] Joint administration of all bonds by a trustee appointed in Austria to act on behalf of all bondholders, and other restrictions.

applying Austrian law to a bond payable in Germany in the case at hand, it did not depart from, or contradict, its earlier jurisdiction in *Empress Elisabeth (I)*. The reason was that one must distinguish between the law governing the 'substance and totality of an obligation' and the law governing its execution. In the present case, Austrian law was applied because it defined the substance of the obligation, whereas in *Empress Elisabeth (I)* German law was applied because the matter concerned a question of execution, which is governed by the local law at the place of payment. The distinction between the substance and the execution of an obligation was not drawn at all in *Empress Elisabeth (I)*, and the court clearly developed the relevance of that distinction in order to reconcile its current and previous decisions. It thus justified why each decision applied a different legal system, although the place of payment was the same in both cases. Another aspect should be emphasized. In the *Mortgage-Bonds* case, the court dismissed the claim of the bondholder on grounds of Austrian law, and therefore did not have to engage in a discussion of whether and of how the currency of the claim should be converted, or on which grounds the German Legal Tender Act may have been applied. The *Mortgage-Bonds* case was thus not a case in which the law of the substance of the obligation and the law of the execution of the obligation were applied as two separate legal systems, simultaneously governing different aspects of the same obligation. Instead, it dealt with a standard conflict of laws situation, which it resolved in favour of the law of the debtor's domicile.

3. *South-North German Railways* (ROHG 25, 41)

In 1879, the Imperial Court of Commerce had to decide again on the value of coupons issued by an Austrian railway company, this time by the South-North German Railways. Those coupons provided for interest payments of 7.5 Austrian florins, 8.75 South-German florins, or five *Vereinsthaler* per coupon.[17] Investors presented ten coupons in the Prussian city of Breslau and claimed payment of 50 *Vereinsthaler* or 150 marks.

The case is special because when the mark was introduced as a single currency for the entire German Empire, it was provided in Article 15 of the German Legal Tender Act that the *Vereinsthaler*, which had until then been the unified currency of the German customs federation, should remain legal tender for an interim period. During this period, each debt expressed in marks would be redeemable by payment in *Vereinsthaler* at a fixed rate of one *Vereinsthaler* to three marks. But the Austrian currency depreciated against the *Vereinsthaler* just as it had against the mark. The respondent railway company argued that it was prepared to discharge its debt in any currency, including *Vereinsthaler*, provided the amount was recalculated on the basis of the value, at the maturity date, of the silver implied in the original debt, which would have had the effect of reducing the nominal amount of the debt. But the court of first instance endorsed the claim of the bondholders for payment of the originally contracted amount of *Vereinsthaler*. Its reason was that the amount claimed was equal to the amount expressed in the debt instruments, and the currency claimed, the *Vereinsthaler*, continued to be legal tender.

That reasoning was rejected by the Imperial Court of Commerce. It took the view that the *Vereinsthaler*, as the currency that had originally been contracted in 1866, could not be equated with the *Vereinsthaler* that had been given legal tender status by the German legislator in 1873. The reasons were that *Vereinsthaler* were no longer issued and were gradually being withdrawn from circulation, and that silver could no longer be freely coined. This

[17] That is, in each case, 2.5% of the respective principal amount.

represented a substantial change in the legal status of the *Vereinsthaler*. While, before 1873, the *Vereinsthaler* was a mere silver coin, it was now, by virtue of the German Legal Tender Act, an order for gold currency, and thus had a fixed value in terms of gold. Its intrinsic value had changed, and the court concluded that the respondent railway company would be right in refusing a payment of *Vereinsthaler*—were it not for the fact that the railway company was now subject to the German Legal Tender Act despite being a foreign subject.

With this reasoning, the court returned to the line established in *Empress Elisabeth (1)*. The substance of a debt was seen as being measured by a certain quantity of metal that was implied in the original debt. But metals fluctuate in value against each other, which raised the question of which valuation date should be legally relevant when one metal is substituted for another as the basis of a currency system. The court held that this question could not be answered by legal reasoning alone, and that it fell to the discretion of the legislator to determine the relevant time for determining the conversion rate. This follows since the legislation determining the rate was binding on domestic and foreign debtors alike, provided that it was in force in the place of payment.[18]

IV. Contemporary Criticism

The decisions of the Imperial Court of Commerce were rendered while legal authors and practitioners, as well as the general public, were actively discussing the issue. An article by a contemporary Austrian journalist, writing in November 1876 in a journal of the German radical liberals, reflected the character of the discussion. The author wrote about a 'passionate', even 'bitter', polemic and was quick to point out that German courts ruled in favour of the German bondholders, and Austrian courts in favour of the Austrian railway companies. He feared the issue might damage the bilateral relations between Germany and Austria unless an equitable solution was found, which he saw in a dismissal of the bondholders' claims insofar as they were based on the mark.[19]

The criticism by legal authors, Austrian and German alike, was mainly directed against the court's direct application of the German Legal Tender Act. The most detailed critique was written by Ernst Immanuel Bekker in 1881.[20] Bekker argued that the place of payment should not determine the applicable law, because an obligation may have different places of payment, but that it could not as a whole, be subjected to the laws of different jurisdictions.[21] Rather, one should distinguish between different legal aspects of one and the same obligation, and analyse each aspect according to the laws of the jurisdiction relevant to that particular aspect.[22] This led Bekker to criticize the way the court re-established its original rule from the *South-North German Railways* case—namely, that the law found to be applicable should govern 'in every aspect'—instead of pursuing the distinction, made in the *Mortgage-Bonds* case, between the the 'law of the substance' and the 'law of execution'.[23] By doing so, the court imposed the German Legal Tender Act on foreign parties, and thus transformed what was originally a promise to pay a 'certain quantity of silver' into a promise to pay 'certain

[18] An English translation of a part of the decision is given by Nussbaum, *Money in the Law*, above n 1, at 127.

[19] T. Hertzka, 'Die österreichische Zinsenfrage', (1876) 52 *Faucher's Vierteljahresschriften für Volkswirtschaft* 221; see also critical comments by E. I. Bekker, *Über die Couponprozesse* (1881), at 156 on the role of the media.

[20] Bekker, above n 19. [21] Ibid., at 90.

[22] Ibid., at 56 and 90 (but somehow relativized by the statement that this method does not advocate a fragmentation of the obligation).

[23] Ibid., at 40 and 90 referring to *Mortgage-Bonds*, ROHG 24, 168; as to that decision, see Section III.2 of this chapter.

quantities of gold'.[24] But since German courts were institutions of the German Empire, they had no authority to interfere with promises of foreign subjects, even in the context of a currency reform.[25] The main problem was how to settle a debt expressed in terms of silver, when silver was no longer the currency. Bekker's answer was that if the originally stipulated means of settlement had been disqualified, it would have to be replaced by another. The debtor should thus pay the value of the originally promised quantity of silver, because 'the change of currency affects the mode of payment, but not the measure of debt'.[26] This was substantially, of course, the reasoning of the Austrian railway companies, modified only by Bekker's suggestion that issuers should pay an additional fee to indemnify the creditors for receiving payments that were fluctuating rather than fixed in value. The fee, Bekker said, should be arbitrated by a stock exchange authority.

Bekker's arguments, that silver was the 'measure of debt', that the place of payment was an inadequate indicator of the applicable law, and that the German legislator lacked authority over foreign subjects, had already been proposed by various other authors and court decisions, and Bekker's treatise can therefore be read as a summary of the criticism against the Imperial Court of Commerce.[27] Critics took particular issue with the application of German law against, and to the disadvantage of, Austrian subjects. They advocated the application of Austrian law as the law of the domicile of the railway companies. This is where Bekker differed from those critics. Unlike them, Bekker's refusal to apply the German Legal Tender Act did not lead him to apply Austrian law automatically, although the provisions of the Austrian Civil Code would have supported his metallistic concept of debt, and were thus frequently invoked by Austrian authors and courts. Instead, Bekker based his theory on 'general legal principles'.[28] On this particular point, his approach resembled that adopted in 1882 by Gustav Hartmann, the only contemporary legal author who supported the position, if not the method, of the Imperial Court of Commerce.[29] According to Hartmann, the core problem was not to identify the applicable law, or to justify the application of the German Legal Tender Act, as the Imperial Court of Commerce had attempted. The whole concept of localizing an obligation, whether by its place of payment, the residence of its debtor, or any other aspect, was flawed. Instead, the starting point should be the nature of monetary debt. A monetary debt does not relate to, nor is it measured by, a 'chunk of a certain precious metal';[30] instead, it relates

> . . . to such tangible matter as is determined by a given jurisdiction to serve as the ultimate means of debt settlement . . . .Thus, a true monetary debt, denominated in the legal currency of a country, cannot ever relate to any such thing as dead money, or to an extinct currency. Rather, it will always relate to what is living money at the time when the debt is due, and such living money will be determined by the new legal tender legislation of that country, which will link the old currency and the new one.[31]

[24] Bekker, above n 19, at 134. [25] Ibid., at 119 and 136. [26] Ibid., at 112.

[27] Except for his idea regarding an arbitrary indemnification fee; other critics (in chronological order): Appellate Court of Kassel (*Appellationsgericht Kassel*), 12 April 1878, (1882) 27 *Zeitschrift für Handelsrecht* 552, also rejecting (at 556) the idea of an alternative obligation on the grounds that the originally stipulated currencies were pegged to each other under the Vienna Convention 1857 and thus represented one and the same object of obligation; O. Frankl, 'Zur Frage der Goldeinlösung der österreichischen Prioritäten-Coupons', (1880) 12 *Mittheilungen des deutschen Juristenvereins in Prag* 49; Higher Regional Court of Vienna (*Oberlandesgericht Wien*), 9 November 1880, (1882) 27 *Zeitschrift für Handelsrecht* 569, invoking (at 572) Arts 988–9 of the Austrian Civil Code to support its metallistic concept; J. Ofner, *Zur inductiven Methode im Recht* (1881), emphasizing the collective nature of the bond; V. Hasenöhrl, *Das österreichische Obligationenrecht* (1881), at 241–3.

[28] Bekker, above n 19, at 119 and 120. [29] Hartmann, above n 6.

[30] Ibid., at 35. [31] Ibid., at 20 and 32.

Hartmann concluded that legal tender legislation was by definition universal, that is, it was not restricted to the subjects of that particular legislator, and necessarily had to be applied wherever a court, German or foreign, was called to adjudicate claims expressed in that particular currency.[32] The Imperial Court of Commerce may have erred in searching for a 'seat of obligation', but was right in applying the German Legal Tender Act, simply because the debt was expressed in German currency.

V. The Reaction of the Imperial Court to Contemporary Criticism

1. *Empress Elisabeth (II)* (RGZ 1, 23)

In 1879, the Imperial Court succeeded the Imperial Court of Commerce as the supreme court of Germany, after the federal competencies of the Empire were extended to matters of general civil law. As early as 1879, the new court had to decide again on the coupons of the Empress Elisabeth Railways. Like its predecessor, the court decided in favour of the bondholders: the debt of the Austrian railway companies under coupons denominated in now extinct German currencies were to be redenominated according to the German Legal Tender Act.

The decision was fully published in Julius Goldschmidt's *Zeitschrift für Handelsrecht*, but only parts of it were published in the court's official collection of decisions.[33] The court first discussed, from different angles, which currency should serve as the measure of value. The choice was whether the Austrian currency (either solely or principally), or each stipulated currency might independently serve as the measure of value. The question was answered in the latter sense, and the court went on to debate whether the obligation had been entered into under the implied condition that the various currencies would remain pegged to each other under the Vienna Convention of 1857. Again, the answer was in the negative, and the reason given was that the term of the underlying bonds would last until 1911, but the issuer could not have assumed that the Convention would last as long as that. Lastly, the court dealt with a novel argument, on which the lower court had based its decision to dismiss the claims of the bondholders, that payment in one of the now extinct currencies had become impossible, as those currencies had been replaced by the mark. That argument was not discussed in the decisions of the Imperial Court of Commerce. The court dismissed it by invoking Article 336 of the German Commercial Code. Under that provision, debts expressed in currencies which did not circulate at the place of payment could be discharged by tendering national currency according to the value of the debts in terms of the national currency at the date of payment. This corresponds to the rule, known to most modern jurisdictions, that the national currency is the generally recognized money-of-payment within its own jurisdiction. But the court applied this provision in a modified version: it replaced the relevant valuation, which under the Commercial Code was the valuation at the date of payment, with the valuation decreed by the German Legal Tender Act, on the ground that the Act was a subsequent enactment which therefore prevailed over the Code. The grounds on which that legislation was applied in an international context were not discussed.

[32] Ibid., at 41, relating to a scenario in which German courts would have to adjudicate claims expressed in non-German currency and thus to apply non-German legal tender legislation; this view had also been expressed by A. Soetbeer, *Deutsche Münzverfassung* (1874), at 110, to whom Hartmann referred.

[33] The following summary is based on the publication in *Zeitschrift für Handelsrecht*: see n 2 above for references.

This reasoning, including the modified application of Article 336 of the German Commercial Code, was omitted when the decision was later published in the official collection of decisions of the Imperial Court. In lieu of the original reasoning, references to the previous decisions of the Imperial Court of Commerce were inserted to justify the application of the German Legal Tender Act. It appears that the Imperial Court held that the decision was correct as far as the result was concerned, but that it wanted to dissociate itself from the reasoning on which the decision was originally based, thereby possibly contributing to the rise of our modern distinction between money-of-account and money-of-payment.

2. *Emperor Ferdinand* (RGZ 6, 125)

The Imperial Court had to decide on the matter again in 1882 when coupons of the Emperor Ferdinand Railways, which were payable in Germany, were called upon. The court again decided in favour of the bondholders, but this time the line of reasoning substantially differed from that applied in all previous decisions. It clearly reflected the criticisms levelled against the jurisdiction of the court's predecessor. The decision rested on two alternative grounds: the German Legal Tender Act applied because the place of payment lay in Germany, and redenomination followed from 'general legal principles'.

The court first addressed the debtor's argument that, on the basis of 'general legal principles', the exchange rate of silver to gold at the maturity date of the bond should be used to calculate the currency conversion rate, as opposed to the exchange rate at the date of the currency reform.[34] It devoted a considerable part of its decision to demonstrating that the opposite was the case. Even if the parties had not opted for German law, or the German Legal Tender Act did not apply for other reasons, the very same conversion rates should apply. These would be the rates calculated on the basis of the exchange rate of gold to silver at the time of the currency reform.[35] The court reasoned that the subject matter of the bond as a monetary debt was the payment of a specified nominal amount of money. The currency in which the debt was expressed may be based on silver, and thus each currency unit may contain a certain quantity of silver. But it was not the delivery of silver that had been promised, but the payment of legal tender. This was taken to mean whatever may qualify as legal tender at the time in question.[36] Accordingly, if gold had replaced silver as the basis of the currency, the debtor would not owe the amount of gold corresponding to the value of the silver represented in the debt he has contracted. Rather, he owed legal tender, and hence owed as many gold units as constitute the relevant nominal amount required to settle the debt.[37] It followed that the debt was converted into the new currency according to the exchange rate of silver to gold at the date when gold replaced silver as the basis of the currency. This, incidentally, was the same rate as under the German Legal Tender Act. Contrary to its predecessor, the court held that the applicable conversion rate directly followed from the legal nature of a monetary debt. It followed that recourse to the mandatory character of legal tender legislation, to considerations of public policy, or to the parties' election of a jurisdiction to which that Act formally belongs, was unnecessary. This part of the decision was a clear rejection of the metallistic conceptions of money

[34] The debtor's referral to the treatise of Bekker is mentioned in the decision, at 126.

[35] *Emperor Ferdinand*, RGZ 6, at 125 (127–30).

[36] The court dealt with the fact that the bonds explicitly stipulated Austrian 'silver' currency. This did not make silver the object of debt, but was only meant to safeguard the bondholders from Austrian debt monetarization, *Emperor Ferdinand*, RGZ 6, at 130.

[37] Ibid., at 129.

proposed by Bekker and other critics. Hartmann's treatise on the subject was not mentioned. It is unclear whether the court was even aware of that treatise, although the reasoning was obviously very similar to his.[38]

In addition to this nominalist reasoning, the court also analysed the case from a perspective of private international law and discussed whether the German Legal Tender Act may be applied against the respondent railway company as a foreign subject. This issue was of course heavily disputed, but the court's answer was in the affirmative. It mainly rested on the argument that the issuer of the bond impliedly opted for German law when he contracted a place of payment within Germany, because it was the German place of payment and the methods of payment there, including German law, that made the bond attractive to German investors. But the court qualified this choice-of-law argument in several ways. It rejected the notion that the application of a certain law to an obligation generally depends on whether the parties had opted for every specific legal consequence provided by that law. The court added the proviso that, while the legislature would always follow the interests of its own country, the choice of a particular law would only be legally relevant to the extent that the relevant legislature did not pursue a 'purely egotistical interest', or was completely arbitrary. Lastly, it dismissed the argument that the parties could not have opted for the German Legal Tender Act to apply because its application would change the very substance of the obligation as well as the mode of its execution:

> It is questionable whether a conceptual difference exists between those two legal aspects. (The law at the place of execution) cannot be excluded from application on the grounds that it affects the substance of the obligation.[39]

3. *Kaschau-Oderberger* (RGZ 19, 48)

The last of the officially published decisions concerning bonds of Austrian railway companies was rendered by the Imperial Court in 1887 against the Kaschau-Oderberger railway company. As in previous cases, it was held that the bonds should be converted into marks at the official conversion rate of the German Legal Tender Act. But this particular case was different. The terms of the bonds in question provided that payment in non-Austrian currency should be made at such places outside Austria as were to be determined by the board of the issuing company. But the board, possibly in an attempt to escape the German Legal Tender Act, never determined any such place of payment. As a result, the only place of payment under the bond was at the seat of the issuing company in Budapest. The question was whether the bonds should still be converted into the new mark currency, and, if so, how that conversion should be made.[40]

The court adopted the reasoning used in *Emperor Ferdinand*, and held that the issuers promised German money in its capacity as German legal tender. That legal tender might have been based on a certain precious metal when it was first issued, and therefore named after a particular coin. But the legal tender in question was essentially independent from both the coin and the metal on which it was based, and remained identical even if there had been a change in the metal on which the currency was based. The subject of the debt was not a quantity of the precious metal, but the nominal amount of the currency units. The

[38] The court did refer to Hartmann's general treatise on monetary law, which had already been evoked by the Imperial Court of Commerce, see *Empress Elisabeth (I)*, ROHG 23, at 207.

[39] *Emperor Ferdinand*, RGZ 6, at 133; the court referred to Frankl, above n 27.

[40] The case is also particular in that the bonds in question were issued in 1879, i.e. after the German currency reform, in the context of novation of older bonds, but were still denominated in extinct currencies.

court concluded that the bond issuers had therefore submitted themselves to the German Legal Tender Act, provided that the conversion rate under that legislation did not obviously contradict the market rate.[41] The novel element in this reasoning was that it combined two aspects, the nature of a monetary debt and the choice of law, which were treated separately in *Emperor Ferdinand*. It directly incorporated the legislation relating to the relevant currency into the promise to pay money. It was thus irrelevant whether or not that legislation was in force in the territory in which the place of payment was located, not even for indicative purposes.

The court's concept of monetary debt and its reasoning were obviously influenced by Gustav Hartmann. The court explicitly referred to his treatise and used language very similar to his.[42] But the court supported its reasoning by addressing both the conversion of the debt under the German Legal Tender Act and the subsequent depreciation of silver from the point of view of the parties' original economic intentions, and thus introduced an empirical consideration. As regards the conversion, the court argued that the bond issuers promised payment of a certain fixed nominal amount of German legal tender in order to attract capital from German investors by offering them instruments denominated in their home currency and thus, from the investors' perspective, protecting them against currency fluctuations. It is true that a risk of fluctuation did not exist as long as the currencies were pegged under the Vienna Convention of 1857, but this does not mean that the currency peg was an implied condition of the bonds. If the bonds could not have been sold to investors under different terms, it followed that the promise could only be honoured by payment of a certain nominal amount of legal tender. It must not be replaced by any other means of settlement, least of all by the value of a certain quantity of silver plus an indemnification fee, as proposed by Bekker. Conversion under the German Legal Tender Act was thus a necessary element of the parties' (implied) intentions, or else the promise would become unrealizable and possibly trigger an early cancellation right, which would clearly run counter to the intentions of both the issuer and the investors.

The court then discussed whether it made a difference that silver had heavily depreciated since the bonds were issued. Its answer was negative. The court first addressed the question whether the depreciation was caused by the German government's decision to adopt the gold standard, or whether other factors played a part, the implied assumption being that, if the former were the case, this might affect the application of the German Legal Tender Act. But the causes of the depreciation of silver were found to be legally irrelevant as long as the conversion rate of the German Legal Tender Act corresponded to the market rate at the time when the relevant legislation was passed. It was the contract alone that determined whether or not the issuer had to incur burdens that they originally did not foresee in order to honour their obligation. Since this was a question of interpretation, it could not be answered by simply pointing to the additional burden as such. The court therefore again considered the causality of the issue, and concluded that the bonds would not have fulfilled their commercial purpose if the issuers had tried to stipulate terms and clauses that would have the effect of shifting the risk of currency fluctuations to the creditors. The interpretation of the terms must also take into account the fact that the issuer chose to target investors looking for a long-term savings vehicle, rather than venture capitalists, and that only savers would reckon the investments in their home currency. The reasoning closes with the

[41] *Kaschau-Oderberger*, RGZ 19, at 53.

[42] See references to Hartmann, above n 6, at 54, and compare the wording of the decision RGZ 19, at 53 to the wording used in ibid., at 28.

observation that the demonetization of silver, and the future conversion rate, were foreseeable when the bonds were issued.

VI. Conclusion

The decisions of the German Imperial Courts regarding coupons of Austrian railway companies were consistent with each other as far as the results are concerned—each decision upheld the bondholders' claims for payment in converted currency—but the underlying argument was shown to be different. The main differences concern the implied concept of monetary debt, the role of the legislator, and the problem of conflicting jurisdictions. Those differences can be summarized as follows.

The Imperial Court of Commerce did not engage in an explicit discussion of the legal nature of monetary debt, and what legal consequences might or should be drawn from it. But it clearly assumed a metallistic conception: the metal on which a currency is based provides the permanent 'measure of value' of a particular debt. Such a concept was in line with the predominant and traditional view of the time, and is best reflected in *South-North German Railways*. In that decision, the court acknowledged that the intrinsic value of the debt had changed after the *Vereinsthaler* had lost its status as a silver coin and had become an order for gold, and conceded that the claims of the bondholders for payment in converted currency would therefore have to be rejected. It was only because of the mandatory nature of the German Legal Tender Act that the bondholders prevailed in the end. The decision illustrates the role of the legislature under a metallistic conception of debt: the legislature chooses the metal that provides the currency base, and when the currency is reformed, it is also the legislature which determines the relevant valuation date and ratio in the replacement of one metal with another. Those decisions of the legislator are matters of political discretion, or public policy, and as such are mandatory and take precedence over provisions of private law or individual contracts.

It is clear that if such a conception of monetary debt is relied on, it becomes difficult to apply the legal tender legislation of a particular country to a situation where the subjects of another country are involved. The Imperial Court of Commerce addressed that problem as one of conflicting legislative powers, and consequently sought in each case for factors connecting the case to German law. The court's position was somewhat inconsistent as to what should constitute a connecting link: the relevant factors were found to be a contractual place of payment in Germany, or the parties' implied or express choice of German law, or the mandatory nature of the German Legal Tender Act as *jus cogens* of the forum, or all those factors combined. But none of those factors was capable of providing satisfactory results in every case, and the court was thus compelled to modify its conflict of law rules. It initially assumed that wherever German law was found to apply on the ground of a certain connecting link, it shall apply 'in every respect', with the effect therefore of making the German Legal Tender Act applicable. It later introduced a distinction whereby the substance of an obligation and its execution could be governed by different legal systems. That distinction allowed the court to reject certain payment claims by applying Austrian law in the Mortgage Bonds case where, under its previous conflict of law rules, German law would have had to be applied. The distinction was in no way related to the bonds of the Austrian railway companies, and should not be connected with the modern distinction between *lex causae* and *lex monetae*.

The Imperial Court, in contrast, replaced the metallistic conception of money with a strictly nominalist one. Since the subject matter of the monetary promise is a certain number of nominal units of legal tender, as opposed to a defined quantity of precious metal, and since legal tender cannot be defined otherwise than by law, any legal tender legislation, be it domestic or foreign, is necessarily incorporated into such a promise. There is in this concept no need to seek factors which would connect a certain case to a certain jurisdiction. In particular, the place of payment is abandoned as an indicator of which law to apply. Rather, the application of legal tender legislation is an immediate, simple and necessary consequence of the parties having contracted a monetary debt. This line of thought was prepared in *Emperor Ferdinand* and then fully set out in *Kaschau-Oderberger*, where the court decided that debts expressed in former German currency should be converted according to German law, even though the place of payment was in Budapest.

The peculiar feature of the court's idea was that, by incorporating legal tender legislation, as amended from time to time, into the substance of the monetary debt, the debt took on a dynamic element. The effect was that a monetary debt could not be avoided on the grounds that its performance had become impossible due to supervening events, whether they were of a factual nature such as the depreciation of silver, or a legal nature, such as a currency reform. Rather, the debt could continue to exist in perpetuity as originally contracted. The court's argument was that this perpetuity of the debt is in the interest of both the debtor and the creditor: it does not, in cases of supervening events, necessitate or indeed allow an extraordinary extinction of the debt or its acceleration. Neither does it necessitate or allow the substitution of the originally contracted object of the debt by some other object. The court thus does not have to decide the question of what that other object may be, and who should determine it.

At the same time, the court's nominalist, or dynamic, concept allowed it to disconnect issues of monetary policy from those of private law obligations. This becomes apparent from the court's discussion of the causes of the depreciation of silver. Like most contemporaries, the court assumed that the depreciation was caused by the German government's decision to demonetize silver, but it concluded that the actual cause was irrelevant for private law purposes. The German legislator's choice to replace silver with gold as the basis of the currency did not affect the substance of monetary debts. Therefore, neither the demonetization of silver nor its subsequent depreciation could be invoked to challenge such debts. The German monetary sovereign was free to choose on which metal to base the new currency, and did not need to concern himself with how that policy might affect private law obligations, or if it would impair the perpetuity of monetary debts. Nominalism, as applied by the Imperial Court, thus appears as a way to ensure the co-existence of the concept of the perpetuity of a monetary debt and the concept of universally recognized monetary sovereignty.

All this is, however, subject to the proviso that the valuation ratio of silver to gold implied in the German Legal Tender Act 'did not evidently contradict the real valuation ratio of the two metals on the free market'.[43] The court insisted that this was the case, frequently referred to the defendant's concession to this effect, and emphasized that aspect in each part of its reasoning.[44] The obvious reason for this is that legislation can only be assumed to have been incorporated into a private contract to the extent that it provides, in technical form, a ratification of prevailing market conditions, and effectively contains very little political, discretionary elements. As this was actually the case in the litigation before the court, it could dispense with an analysis of whether or not the Austrian railway companies as foreign subjects 'were subject to the German Legal Tender Act as a positive

[43] *Kaschau-Oderberger*, RGZ 19, at 53.

[44] Ibid., at 53 and 55 in the context of 'incorporation'; at 54 in the context of 'perpetual debt'; and at 55 in the context of 'monetary sovereignty'.

legislative act of the German monetary sovereign'.[45] This was a question which the Imperial Court of Commerce, arguing from a different premise, had to answer.

One could say that the court's distinction between a technical and a political legislation was similar to that invoked by the Imperial Court of Commerce between the substance and the execution of an obligation, or even to our modern distinction between *lex causae* and *lex monetae*. But this would mischaracterize the court's reasoning, even aside from the fact that the court itself, as was shown above, doubted 'whether a conceptual difference exists between those two legal aspects'.[46] It is a mischaracterization because, first, the court's application of the technical German legal tender legislation did not rest on any particular factor connecting the case to Germany apart from the fact that the parties, simply by contracting a monetary debt, had necessarily incorporated that legislation into their contract. The approach should thus not be equated with the conflict of laws approach of the Imperial Court of Commerce. And second, the Imperial Court does not discuss anywhere in its decisions to which law—Austrian, Prussian, or German—its conception of monetary debt actually belongs. Nowhere is it discussed which law determines whether the quantum of an obligation to pay money shall, or shall not be measured by a certain quantity of precious metal.[47] This is remarkable, because under contemporary Austrian law it was precisely the quantity of the precious metal contained in a currency unit that served as the measure of monetary debt and thus defined the quantum of the obligation. The Imperial Court was certainly aware of this feature of Austrian law, as can be seen from the Austrian literature it quotes in *Emperor Ferdinand*. It is therefore correct to cite *Emperor Ferdinand* and *Kaschau-Oderberger* as precedents that 'the law of the currency determines how, in case of a currency alteration, sums expressed in the former currency are to be converted into the existing one'.[48] But it would not be a correct historical assessment to characterize those decisions as distinguishing between a law governing the substance of an obligation and a separate law governing the conversion of currency, or to say, as most authors do, that the Imperial Court applied German law in its capacity as the law of currency only, while 'the bonds themselves—and thus the obligations thereby created—were governed by Austrian law'.[49] If the court had had such a distinction in mind, it would have considered the metallistic provisions of Austrian law. But it did not draw any such distinction at all, and did not even apply any conflict of law rules. Rather, it applied its concept of monetary debt as if it were a universally accepted concept of a uniform world law, and conflict of laws rules were reserved to the narrow field of political legislation. Whether the Imperial Court pursued that universalist line of thought in its subsequent jurisdiction, or whether it established a distinction that ultimately led to our contemporary distinction between *lex causae* and *lex monetae*, is an altogether different story.

[45] *Emperor Ferdinand*, RGZ 6, at 129. [46] Ibid., at 134.

[47] The court (*Kaschau-Oderberger*, RGZ 19, at 55) even expressly declared Hungarian law to be irrelevant when discussing whether to assume a frustration of contract.

[48] Mann, above n 1, at 267.

[49] Quotation from Proctor, above n 1, at 368; similarly, see Mann, above n 1, at 269; H. Hahn, *Währungsrecht* (1990), at 384; but see Nussbaum, *Money in the Law*, above n 1, at 126 and 353.

PART V

THE TWENTIETH CENTURY: FIAT MONEY

I

MONETARY ENVIRONMENT

27

Putting the 'System' in the International Monetary System

Michael Bordo and Angela Redish

I. Introduction

The international gold standard of the late nineteenth century has been described as a system of 'spontaneous order',[1] capturing the idea that, while subsequent writers indeed describe the gold standard as an international monetary 'system', its architects at the time were fashioning domestic monetary systems which created a system of fixed exchange rates as almost a by-product. In contrast, during 1944 the architects of the Bretton Woods system were intentional—they were building an international monetary system—and so it is today, albeit with perhaps competing teams of architects vying for the right to design the international monetary order.

In this chapter, we examine the transition from spontaneous order to designed system and then back towards spontaneous order, arguing that it is an evolution with multiple stops and starts, and that the threads that underlie the general tendency through these hesitations are the interplay between monetary and fiscal factors and the evolution of the financial system. This transformation is embedded within deep evolving political fundamentals including the rise of democracy, nationalism, fascism and communism, and two world wars. We begin in the 1850s and describe the emergence of the classical international gold standard by the 1880s. We argue that beneath the appearance of 'spontaneous order' lay a variety of indications that this was not an equilibrium. The international monetary conferences of the mid-nineteenth century were, albeit partially successful, attempts to produce a more ordered international monetary system. After the First World War, more serious international co-ordination efforts were made, and the Bretton Woods Agreement

[1] G. Gallarotti, *The Anatomy of an International Monetary Regime* (1995).

of 1944, built on, but extended dramatically, those initial efforts. However, Bretton Woods had some fatal design flaws and it devolved into the present non-system of managed floating. The present Eurozone is a designed system. The future will tell us if it will survive.

The forces we focus on are fiscal and banking changes, but there were also important political and intellectual changes. It is no coincidence that the chronology of monetary history is driven by warfare—the Franco-Prussian war and the US Civil War were critical to the evolution of their nations' monetary history, as were the World Wars more generally. Large-scale warfare changed fiscal needs, domestic political powers, and of course the balance of international political power. The importance of intellectual views is harder to gauge. The view that 'gold' is money, or that money must necessarily represent a possibly indirect claim on gold, has largely disappeared and was not universal in the nineteenth century, but it was an influential view and the changing weight of that view was a part of the transition between the gold standard and today.

II. Setting the Scene—1850

In 1850, the unit of account in each of the major powers was tied to a fixed weight of one or two precious metals. The backing of the coins was established by laws stating the amount of metal in the coins and the price at which the mint would buy metal. Table 27.1 sets out the metallic content of the coins in the four major western economies.

The UK was on a gold standard. The US and France were on bimetallic standards, and in 1850 the bimetallic standards were roughly in equilibrium, with both gold and silver circulating and being sold to the mint. The majority of the German states were on a silver standard, but also issued gold coins that circulated at market values.

Not only was the unit of account defined as a given weight of metal, but by 1850 there was an established norm that the sovereign should not arbitrarily change these weights. In Britain, the development of an orthodoxy whereby the pound sterling represented an unalterable amount of gold or silver is seen in the success of John Locke in the Locke-Lowndes debate in 1690s.[2] At that time the weight of coins in circulation had been considerably reduced by wear implying that the *de jure* weight of the coins exceeded their *de facto* weight. Lowndes, the mint master, proposed to mint new coins reduced in weight by the average amount of wear. Thus individuals could have brought in their old

Table 27.1. Coins and units of account in effect in 1850

		Base Coin	Value of coin	Metal	Fine weight (grammes) per unit of account
1803	France	1f	1f	silver	4.50/f
		20f	5f	gold	0.29/f
1834	US	$1	$1	silver	24.06/$
		$10	$10	gold	1.505/$
1717	UK	Guinea	£1.1	gold	7.32/£
1838	Germany	Vereinmunze	2 thaler	silver	16.70/th

Sources: US, UK, France—A. Redish, *Bimetallism: An Historical and Economic Analysis* (2000); Germany—C.-L. Holtfrerich, 'The Monetary Unification Process in 19th Century Germany', in M. de Cecco and A. Giovannini (eds), *A European Central Bank? Perspectives on monetary unification after ten years of the EMS* (1989).

[2] See A. E. Feavearyear, *The Pound Sterling* (1931), at 135.

coins and be given new coins of the same legal tender value and specie content, bringing the *de jure* down to the *de facto* weight. This would effectively have depreciated the *de jure* value of the pound sterling. In contrast, Locke argued that the pound sterling represented a fixed weight of metal and that there should be no reduction in the *de jure* weight of a coin of a given value. He proposed unifying the *de jure* and *de facto* weight by bringing the *de facto* weight up to the *de jure* weight. Thus, either the state would have to make up the weight lost to wear, or an individual would receive back coins of less legal tender value than they brought in. Locke won the debate, and the coinage was not depreciated. The silver content of the pound sterling remained unchanged from 1666 until the explicit decision to issue token silver coins in 1816. The gold content of the pound did not change from 1717, when Newton lowered the value of the guinea from £1.075 to £1.05, and remained the same until 1931.

In the US, the metallic content of the dollar had been changed only once (in 1834) from the inception of the standard in 1792, and at least arguably this could be attributed to a need to reflect changes in the relative gold:silver price, rather than a response to fiscal needs. In France, the gold and silver definitions of the unit had remained constant since the creation of the *franc germinal* in 1803.[3] The monetary situation in Germany was more fragmented as many states had their own coinage. By 1838, the Dresden coinage convention signed by the Zollverein states had somewhat reduced the heterogeneity.[4] Each member state chose either the *thaler* (South German states) or the *gulden* (North German states), and the unit of account was determined by the equivalence of both 14 thaler and 24.5 gulden to 1 Cologne *mark* (233.85 grammes) of silver.[5] States also issued gold coins, such as *ducats* and ten-thaler coins, which were primarily commercial coins that traded at market rates, although some states assigned parities at which they were accepted at public treasuries.[6]

In each country, the stock of money included not only coins but also paper money: a circulating IOU, issued by the state, or by a private entity with the permission of the state, that is, a bank. However, central banking was in its infancy. The Bank of England, created in 1694, was a privately owned central bank which, after 1844, had a monopoly over note issue.[7] Notes were required to be redeemed in coin on demand but from 1833 were legal tender outside the Bank of England. The Bank may have been privately owned, but its affairs were completely intertwined with the state—explicitly by its need to renew its Charter, but more directly through (a) the state reliance on the Bank in times of fiscal stress and (b) the Bank's reliance on the state in times of liquidity stress.

In an earlier age, governments and monarchs financed their wars through debasements. The development of the banking system enabled them to do it through depreciation and printing money. Printing money leads to inflation which acts as a tax on the purchasing power of the money holders. The inflation tax revenue is transferred to the government.

[3] For France and the US, see A. Redish, *Bimetallism: An Historical and Economic Analysis* (2000).

[4] H. James, 'Monetary and Fiscal Unification in 19th Century Germany: What Can Kohl Learn from Bismarck?', Princeton University Essays in International Finance No. 202 (1997).

[5] A common coin, the *Vereinsmünze*, was produced, but at over 30 grammes it was too heavy to be commonly used, and states used their traditional coins: see C.-L. Holtfrerich, 'The Monetary Unification Process in 19th Century Germany', in M. de Cecco and A. Giovannini (eds), *A European Central Bank? Perspectives on monetary unification after ten years of the EMS* (1989) 216, at 221.

[6] The Treaty of Vienna of 1857 slightly modified the Dresden Treaty and was signed by Austria as well as the German states. By that treaty, 1 *thaler* (i.e. Prussian) coin became legal tender in all signatories. The treaty limited the issue of gold coins by any signatory to 10-gramme and 5-gramme gold coins that were not required to be legal tender in any state.

[7] Earlier issues of other banks were permitted to remain in circulation. See V. Smith, *The Rationale of Central Banking* (1936, repr. 1990), at 21.

During the Napoleonic Wars, the government suspended the requirement that Bank of England notes be convertible into specie, and then required the Bank to finance the war by purchasing government bonds. This expansionary monetary policy led to a rise in domestic prices and a depreciation of the currency. Indeed, the value of a gold sovereign in paper pounds rose from £1 to £1.4.[8] Yet following the war the government raised taxes. Outstanding government debt declined from its peak of 260 per cent of the gross national product (GNP) in 1819 to 127 per cent thirty years later.[9] Convertibility was restored at the pre-war parity in 1821.

The second facet of state–bank interdependency was seen in 1847. The Bank Charter Act of 1844 required the Bank to hold a fixed ratio of gold to banknotes. In 1847, a liquidity crisis led to a run on the Bank, which paid out gold reducing its reserves below the statutory minimum ratio. To prevent suspension of payments, the Bank requested a 'Treasury letter' from the Chancellor of the Exchequer to allow a temporary suspension of the Act, a boon that was granted.

The Bank of France, similar to the Bank of England, was a privately owned corporation intimately connected with the state. It was created in 1802, in a nation still reeling from the effects of the Revolution and the *assignats*.[10] The experience with the *assignats* limited the capacity of Napoleon to finance his war with paper money, and hence the note issues of the Bank of France remained convertible into specie throughout the war.[11] During the 1848 revolution, there was a temporary suspension of the convertibility of notes known as the *cours forcé*, but by 1850 convertibility had been re-established at the initial parity. The *cours forcé* had a permanent impact in that the government forced the merger of small note-issuing banks with the Bank of France, which thereafter had a monopoly of the note issue.

From the early nineteenth century, German states issued paper money for fiscal reasons—although Holtfrerich asserts that Saxony issued paper money to facilitate commerce.[12] In the 1830s, Saxony and Bavaria both permitted the establishment of private note-issuing banks, and by the mid 1850s there were thirty note-issuing banks in operation across the different German states. The largest was the Prussian Bank—a reorganized version of the Royal Bank of Prussia created in 1765. In 1846, the Royal Bank of Prussia was reorganized and allowed to raise capital from private shareholders and issue notes. Its notes had a virtual monopoly of the circulation of notes in Prussia and by 1856, were also acceptable for government payments.[13]

The United States had twice chartered incipient central banks, the First and Second Banks of the United States, but each time political opposition had defeated attempts to renew their charters, and after 1836 there was no federally chartered bank. The individual states created banks which issued notes under a variety of regulations, in all cases committing to redeem the notes in specie coin.[14] As in the other countries, severe financial crises in 1837, 1839, and 1857 led to general suspensions of convertibility of banknotes (and deposits) into coin.

8 Feavearyear, above n 2, at 194.

9 B. Mitchell, *British Historical Statistics* (1988).

10 This paragraph draws on C. Goodhart, *Evolution of Central Banks* (1988).

11 M. Bordo and E. White, 'A Tale of Two Currencies: British and French Finance During the Napoleonic Wars', (1991) 51(2) *Journal of Economic History* 303.

12 Holtfrerich, above n 5, at 226.

13 R. Tilly, 'Germany, 1815–70', in R. Cameron (ed.), *Banking in the Early Stages of Industrialization* (1966) 151, at 157.

14 J. Legler, R. Sylla, and J. Wallis, 'Banks and State Public Finance in the New Republic, 1790–1860', (1987) 47 *Journal of Economic History* 391, argue that the states earned *seigniorage* revenue either directly by note issue, or indirectly by taxing note issues or reductions in the interest on state debts.

By 1850, then, the principle that the monetary unit should not be arbitrarily redefined was accepted, paper money was widely used and (except in the US) its issue was not independent of the state. Suspension of convertibility and depreciation of the value of paper money had replaced debasement as a mechanism for war finance, but par resumption was the norm.[15] But most countries were on bimetallic standards, and while France and the UK were unified, Germany was a state yet to emerge and there was no national banknote system in the US.

III. First Steps: The Classical Gold Standard

We turn now to the transition from the orderly chaos of 1850 to the more homogeneous gold standard world of 1880. The gold standard had many layers. At one level, the clearest, each country defined its unit of account in terms of a weight of gold, and the result was a set of fixed exchange rates across countries (see Table 27.2). This fixed rate system reflected national decisions, not international agreements, and has consequently been described as 'spontaneous order'.[16] At a second level we can ask whether either the evolution or existence of the gold standard were truly spontaneous, or did they reflect actions of governments taken with an eye to the *realpolitik* of international affairs.

The monetary changes reflected a number of forces that affected all economies. The falling price of gold after the gold discoveries in Australia and California in the late 1840s necessarily meant that the bimetallic equilibrium of 1850 would be challenged, as gold, being the cheaper metal, pushed out silver in accordance with Gresham's law. This drove both international efforts at monetary co-operation—to standardize the bimetallic ratio and the weight and fineness of gold and silver coins—and adoption of the monometallic gold standard. National unification in Germany and Italy, military needs in the US, and successes in Prussia were also critical. The growth of international capital markets used

Table 27.2. Mint parities under the classical gold standard, 1880–

	Germany	France	Britain	US
Coin:	20 marks	20 francs	1 pound	$10
gms fine gold:	7.166	5.806	7.322	15.046
	mark	**franc**	**pound**	**dollar**
1 mark =	1			
1 franc =	0.308	1		
1 pound =	20.43	25.22	1	
1 dollar =	0.238	0.193	0.205	1
	1 mark =	**1 franc =**	**1 pound =**	**1 dollar =**
mark	1			
franc	3.241	1		
pound	0.048	0.40	1	
dollar	4.199	5.183	4.866	1

Sources: US, UK, France: A. Redish, *Bimetallism: An Historical and Economic Analysis* (2000); Germany—C.-L. Holtfrerich, 'The Monetary Unification Process in 19th Century Germany', in M. de Cecco and A. Giovannini (eds), *A European Central Bank? Perspectives on monetary unification after ten years of the EMS* (1989).

15 M. Bordo and F. Kydland, 'The Gold Standard as a Rule: An Essay in Exploration', (1995) 32(4) *Explorations in Economic History* 423.

16 Gallarotti, above n 1.

to finance wars and capital infrastructure expanded the significance of the international monetary system, and the growing role of central banks and substitution of paper money for metal altered the role of states in money provision.

IV. International Interactions and the Shift to Gold

The UK had suspended the free-minting of silver and introduced token silver coins in 1816, thereby making the pound sterling a gold currency. By 1880, France, Germany, and the US had all done the same creating a system of fixed exchange rates across these four currencies.

In the early nineteenth century, the monetary systems of France, Belgium, Switzerland, and Italy were all based on similar coins—a silver coin containing 5 grammes of 90-per cent fine silver and a gold coin containing 6.45 grammes of 90-per cent fine gold. In France, these were the one franc and twenty franc coins, and in all four countries the coinage embodied a ratio of gold to silver of 15.5:1. California gold production in the 1850s drove down the relative price of gold (to 15.2 by 1859), and thus tended to drive silver out of circulation.[17] The resulting scarcity of small-denomination coins led each country to introduce 'token' silver coins—that is, small denomination coins with limited legal tender, with a silver content value less than their face value, and not allowing the free (i.e. unlimited) minting of silver.

The token silver coins were first issued by Switzerland, which minted coins containing 80-per cent fine silver in 1860. Italy began issuing 83.5-per cent fine silver coins in 1862. In 1864 the French also issued fractional coins, with 83.5-per cent fine silver. In all cases, the weight of the silver coins was kept at the traditional levels—pro rata with the silver franc—and the reduction in intrinsic value was accomplished only by a reduction in fineness. In 1865, the Belgians, who issued no token silver coins, but whose silver circulation entirely consisted of the tokens of the others, called a convention to agree on a standardization of the token coinage. The resulting agreement, effective in 1866, created the Latin Monetary Union (LMU): under the agreement each country would emit subsidiary (i.e. less than 1 franc) 83.5-per cent fine silver coins, which would be legal tender in each country up to 50 francs.[18] Each country agreed to limit the issue of tokens to 6 francs per capita, and their public treasuries would accept the coins regardless of origin within the LMU.[19]

The LMU may have been more important in providing a forum for explicit discussion of international monetary co-ordination than for the treaty itself. The treaty standardized the token coinage, but the conference provided a forum for discussing wider monetary co-operation and changes and also adoption of a gold standard across the four countries, a proposal that was rejected. Switzerland, Belgium, and Italy all sent delegates to the conference who advocated for multi-lateral adoption of a gold standard. However, the French representative, possibly influenced by the wishes of the Bank of France, rejected any such switch.

The success of the LMU conference encouraged Emperor Napoleon III to convene an International Monetary Conference in 1867 with the goal of creating a universal coinage. In some ways this was a remarkably ambitious agenda—a common currency amongst major (and many minor) western powers. In other ways it was not such a big step.[20] The

[17] This is an example of Gresham's Law—bad (i.e. overvalued) money drives out good (i.e. undervalued) money. There is an extensive debate over when and why Gresham's Law held. For a survey, see G. Selgin, 'Gresham's Law', in R. Whaples (ed.), *EH.Net Encyclopedia* (9 June 2003).

[18] Note that granting legal tender to another country's full-bodied coins was common.

[19] See Redish, above n 3, ch 6, and S. Reti, *Silver and Gold: The Political Economy of International Monetary Conferences, 1867–1892* (1989) ch 33.

[20] Bagehot, noting the potential benefit of a common unit of account, said: 'Of course all English bankers *can* turn francs into pounds, and some think they *will*; but few ever do.' Cited in C. Kindleberger, *A Financial History of Western Europe* (1984), at 66.

conference concluded by recommending that the 5 franc gold coin become the basis of each country's monetary system, with accompanying 25 franc coins (which would have been worth about US$5) and 15 franc coins worth 10 florins. But the enthusiasm of the delegates was not matched by their principals. In England, the proposed 3.5 per cent reduction in the gold content of the pound, needed so that the pound equalled US$5 or 25 francs, was considered tantamount to fraud.[21] The French thought the proposed 25 franc and 15 franc coins were at odds with their decimalist ideals. But above all, in 1870, the Franco-Prussian war intervened, ending any thoughts of Franco-Prussian co-operation.

The Franco-Prussian war, with its stark Prussian victory, had monetary consequences in addition to ending Franco-Prussian co-operation. The Prussian victory presaged German unification, under the Prussian lead, and consequent monetary unification of Germany. The need for a monetary transition coupled with the wealth transfer imposed on France, enabled the Germans to adopt a gold standard.[22] The resulting increase in demand for gold, and sale of silver, combined with US silver discoveries, led to a fall in the relative price of silver to gold. This, in turn, led the French and the Scandinavians to close their mints to silver to avoid a capital loss on their silver holdings.

The US had financed the Civil War (1861–5) by issuing legal tender irredeemable government notes, 'Greenbacks', and by effectively limiting the banknote issue to a newly created set of national banks that were required to buy federal government bonds to back their notes. In 1879, the *cours forcé* ended, and the Greenbacks were convertible into specie. Furthermore, by the Coinage Act of 1873, gold had become the sole specie that was freely minted and the US was *de facto* on the gold standard.

Thus, by 1880, each nation had adopted a domestic unit of account that was defined as a fixed weight of gold, effectively creating a system of fixed exchange rates (see Table 27.2). The creation of the gold standard did reflect interactions between the leading economies, but not co-ordination—indeed rather negative interactions. During the gold standard era there were a series of international monetary conferences that were called by the United States to propose a return to a bimetallic standard, but these did not lead to any co-ordinated, or domestic, policy initiatives.[23]

V. The Changing Role of Central Banks

In addition to the evolution in coinage practice, the role of central banks had evolved (except in the US) and the role of the state in creating and managing money with it. Although the central banks were privately owned they held a privileged position in the financial system, and in the second half of the nineteenth century the duty to function as a lender of last resort was emerging as one of the costs of that privilege. The archetypical definition of the lender of last resort is Walter Bagehot's in Lombard Street—lend freely

[21] Ibid., at 66.

[22] *Why* Germany adopted gold, as opposed to *how*, is a debated question, and involves both the choice of monometallism over bimetallism and the choice of gold rather than silver. Holtfrerich, above n 5, argues that German policy makers had argued for a gold standard from the early 1860s; Reti, above n 19, argues for the importance of Britain's hegemonic status and prior adoption of gold; Gallarotti, above n 1, argues for the status of gold as a more valuable metal.

[23] The International Monetary Conference in 1867 was the highpoint of state-led monetary co-operation before World War I. The US called a second IMC in 1878 with the explicit goal of engendering international bimetallism—considered to be a stable bimetallic regime since all nations would adopt the same gold:silver ratio—but most delegates only came on the grounds that they would not consider such a scheme, and the conference did not lead to any change in monetary standards. Similar results attended the conferences held in 1881 and 1892.

to solvent but illiquid banks (i.e. on good collateral) at a 'high' interest rate.[24] This will stave off a liquidity crisis, and the emphasis on lending only on good collateral reduces the potential for moral hazard. As illustrated in detail in the recent work of Bignon et al., both the Bank of England and the Bank of France adopted the role of lender of last resort between 1850 and the 1880s.[25]

The question of the extent to which the international financial system was an 'automatic/self-adjusting' system versus a managed system is a familiar chestnut.[26] In the mythical automatic version, the values of units of account were established by independent nations and then trade and finance flowed, driven solely by the actions of private agents. How far and in what form reality diverged from that myth is debated. In 1944—thirty years after the end of the classical gold standard and writing to explain the failure of the interwar gold exchange standard—Nurkse articulated tools that a central bank could use to enhance the workings of the gold standard: use the discount rate to offset gold flows and expand or contract the (paper) monetary stock. In later work, Bloomfield (1959) showed that these tools were not generally used by England or France (and the US had no central bank). This did not mean that central banks were irrelevant.

As noted above, in the mid-nineteenth century, when the Bank of England faced both an internal and external gold drain it asked the Chancellor of the Exchequer to allow the gold reserve to go below the legal limit. By the end of the century, before doing this, the Bank was more likely to look for international allies. During the Baring crisis of 1890, the Bank of England asked the Russian State Bank for a loan of £800,000 in gold, and in 1907 the Bank of France shipped 80 million francs in gold to England.[27] Eichengreen has argued that central bank co-operation, and the credibility of the standard that it brought, ensured that capital flows were stabilizing.[28]

The effectiveness of the informal interaction of central bankers lies in sharp contrast with the ineffective international conferences that governments attended to discuss changing monetary standards.

VI. The First World War and the Post-War Re-establishment of the Gold Standard

The war transformed European economies and polities. From the outbreak of the war, the gold standard was suspended in the European countries and as in earlier wars the monetary system was harnessed as an instrument of the state.[29] In the European countries, to varying

[24] V. Bignon, M. Flandreau, and S. Ugolini, 'Bagehot for Beginners: The Making of Lending of Last Resort Operations in the Mid-19th Century', (2012) 65(2) *Economic History Review* 580, note that Bagehot used the word 'high' rather than the commonly attributed 'penalty' rate. They argue that the goal was to encourage the borrowers to lend amongst themselves before going to the central bank.

[25] See also P.-C. Hautcoeur, A. Riva and E. N. White, 'Floating a "lifeboat": The Banque de France and the Crisis of 1989', (2014) 65 *Journal of Monetary Economics* 104.

[26] Notably, and eloquently, put by J. Keynes, *The Applied Theory of Money* (1931) who argued that the British attributed their success under the international gold standard to their *laissez faire* policies when they should have realized it reflected their hegemony: London 'was so predominant that the Bank of England could almost have claimed to be the conductor of the international orchestra'.

[27] Kindleberger, above n 20, at 281. However M. Flandreau, 'Central Bank Cooperation in Historical Perspective: A Skeptical View', (1987) 50(4) *Economic History Review* 735, and M. Bordo and A. Schwartz, 'Under What Circumstances, Past and Present, Have International Rescues of Countries in Financial Distress Been Successful?', (1999) 18(4) *Journal of International Money and Finance* 683, view central bank co-operation as largely episodic.

[28] See B. Eichengreen, 'Central Bank Cooperation under the Interwar Gold Standard', (1984) 21 *Explorations in Economic History* 64; and B. Eichengreen, *Golden Fetters: The Gold Standard and the Great Depression, 1919–1939* (1992).

[29] See Kindleberger, above n 20, at 291, on Bank of England Lender of Last Resort operations.

extents, money creation was used to finance the war—and even when debt was used, the fact that it was nominal debt changed the incentives for post-war monetary stability: countries with high debts could reduce the real value of that debt by inflation. For contemporaries, the biggest challenge for a restoration of the gold standard was the potential that there would be a major deflation. Deflation would come about in part because resumption at the pre-war parity would necessitate undoing the wartime inflation. Perhaps even more of a concern was that if money demand per unit of GDP had not changed during the war, and (real) GDP of countries on the gold standard was much higher, then the restoration of the gold standard at the pre-war parity would imply a lower price level.[30]

The political environment changed both because of the spread of the franchise and because policymakers had learned from the experience of a 'managed' economy during the War (a lesson to be learned *a fortiori* after the Second World War). The franchise was extended in both Germany and the UK. In the UK, the Representation of the People Act in 1918 allowed women over 30 to vote, and also all men (without property qualifications). It is estimated that the proportion of the population over 20 eligible to vote rose from 29 per cent to 75 per cent. In Germany, with the creation of the Weimar Republic, the franchise was extended to all men and women 20 years of age and over, so that the proportion of the adult population eligible to vote rose from 39 per cent to 98 per cent.[31] As a consequence of the extension of the franchise, it became harder to allow the gold standard adjustment mechanism to work automatically. A balance of payments deficit would lead to gold outflows, declining money supplies, deflation and, in the face of nominal rigidities, falling real income and rising unemployment. With an expansion of the suffrage it became harder to justify this mechanism when the unemployed had the right to vote.

VII. Restoration of Convertibility

The UK, France, and Germany had all suspended convertibility of their currencies during the war, and in all three countries the default expectation of the post-First World War period was a return to the gold standard. But the different experience during the war affected the timing and parity that were under discussion. England had financed half its war expenditures with taxes and was the least fiscally challenged. France and Germany had only financed 13–14 per cent, implying large outstanding monetary liabilities of (nominal) debts. In addition, Germany was saddled with reparations payments. The choice of parity became a question of wealth distribution, how much of the nominal value of the debt should be written down.[32]

Following the war, the instinctive reaction of British politicians and economists was a return to gold at the old parity. The Cunliffe Committee created in 1918 assumed this goal in the interim report,[33] and although the final report acknowledged that monetary systems did not need a gold base, stated: 'We have found nothing in the experience of the War to falsify the lessons of previous experience that the adoption of a currency not convertible at will into gold or other exportable coin is likely in practice to lead to over issue and so to

[30] In terms of the Quantity equation, MV=PY: if output (Y) had risen and the stock of gold (M) and velocity (V) were unchanged, then the price level (P) would have to decline.

[31] In France, universal suffrage of men over 21 was granted in 1848, and women were not given the vote until 1945. In the US, the franchise was determined at the state level, and impediments to the enfranchisement of African-American and poor white voters continued until the 1960s. For the data, see P. Flora with J. Alber et al., *State Economy and Society, 1815–1975* (1983).

[32] Eichengreen, *Golden Fetters*, above n 28.

[33] D. Moggridge, *Return to Gold, 1925: The Formulation of Economic Policy and its Critics* (1969), at 18.

destroy the measure of exportable value and cause a general rise in all prices'.[34] While there were five years of debate, in 1925 convertibility was in fact re-established at the traditional parity.[35]

The return to gold was not expected to be painless as the challenge of a relative (to pre-war conditions) scarcity of gold was foreseen. Central bankers also saw the need to co-ordinate, offering the opportunity to replace the ad-hoc co-operation of the pre-war era with a more formal system. That ambition led to monetary conferences under the auspices of the League of Nations in Brussels in 1920, and in Genoa in 1922, but these were ultimately unsuccessful in large part because of the absence of the United States, the largest gold-holder and international creditor, and because of the unfinished business of war debts and reparations. That said, many countries adopted a gold exchange standard as suggested at the Genoa Conference when they restored gold standard convertibility.

At the conclusion of the war, the Treaty of Versailles stated that reparations would be imposed on Germany, with the amount to be determined later. In January 1921, the Reparations Commission determined that amount, which was reluctantly accepted by Germany in May 1921. The payment of reparations had consequences for all four powers, as the payment of reparations was largely how France intended to repay war debts to England, which provided the funds for the British to repay the US.

Germany's recalcitrance in paying the demanded reparations led the French to occupy the Ruhr valley in January 1923, which in turn led the German miners to go on strike and exacerbated the financial difficulties of both the French and the Germans. The already fiscally challenged German government funded its resistance by borrowing from the *Reichsbank*, essentially printing money, to the point where the mark became worthless (See Figure 27.1).

The consequence of the rising (and expected to rise) inflation rate was a flight from the mark which exacerbated the decline in the purchasing power of Reichsbank notes (i.e. inflation outpaced monetary growth).[36] On 15 October 1923, a monetary reform created the *Rentenmark* with a trillion (10^{12}) old marks per new mark issued by the *Rentenbank*. The law limited the amount of note issue and the amount that could be loaned to the government. There was a dramatic halt to inflation, budget deficits, and monetary growth. More importantly, reparations were suspended and, under the Dawes Plan, made more manageable in amount and aided by a US loan.[37]

Slightly before the outbreak of war in Europe, the US established a central bank. The hostility to a monolithic monetary power that had precluded the survival of earlier institutions also shaped the structure of the new bank. The Federal Reserve System comprised the Board (located in Washington not New York) and the powerful regional Federal Reserve Banks.[38] The US polity opposed a European-style central bank and ended up with a federal system. Federal Reserve Banks were owned by the member banks (national banks and any state banks that chose to opt in) in the district but the dividends on shares

[34] First Interim Report of the Committee on Currency and Foreign Exchange After the War. Cmnd 9182 (1918), cited in A. Redish, *Bimetallism: An Historical and Economic Analysis* (1993).

[35] The decision to return to gold at the old parity is one of the most notorious policy decisions of the twentieth century, in part because of Keynes' polemical critique, *The Economic Consequences of Mr Churchill.* The pre-war parity overvalued the exchange rate by more than 10% (the precise number is debated) and led to a prolonged slump for the British Economy. See Moggridge, above n 33.

[36] See Chapter 30 of this volume.

[37] The Rentenmark was backed by land: Kindleberger, above n 20, at 326. After the monetary system was stabilized, in April 1924, the Rentenbank was replaced by a new *Reichsbank*.

[38] Prior to 1935 the Regional Feds all had Governors, denoting high status in central bank circles; in 1935 they were demoted to Presidents and the members of the Federal Reserve Board were given the title of Governor.

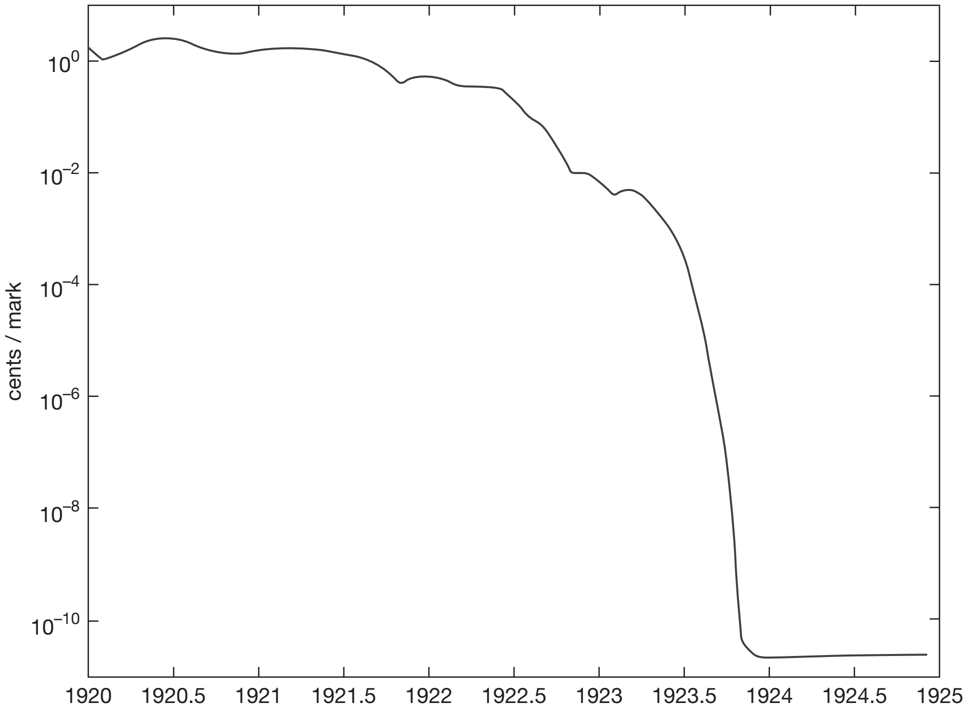

Figure 27.1 Exchange rate in New York on Berlin.
Source: François Velde.

were limited. Member banks were expected (and after 1917 required) to hold their cash reserves at their regional Federal Reserve Bank. The Federal Reserve system was intended to eliminate the frequent banking panics that characterized the National Banking system and to operate quasi-automatically.[39] The Federal Reserve would use its tools to iron out the seasonal fluctuations in short-term interest rates that aggravated financial instability. Also each Reserve Bank would re-discount eligible self-liquidating commercial paper with its member banks, and thereby automatically stabilize the business cycle and prevent financial crises. The Board in Washington would co-ordinate the discount rate policies set by the Reserve Banks.

The US did not enter the First World War until 1917, and Federal Reserve note convertibility was not suspended (but a gold export embargo was imposed from April 1917 to April 1919). But the needs of war finance did challenge the new institutions and the lines between private bank and central bank was clearly decided in favour of the public role, for example the Federal Reserve was allowed to conduct open market operations and discount government securities so that by the end of the war government securities dominated the Fed's portfolio. All the belligerents' balance sheets became exposed to credit risk and their independence was greatly compromised.

The return to the gold standard, at any parity, similarly had distributional consequences, since the gold standard equilibrium required prioritizing external adjustment over internal;

[39] H. Rockoff and G. Walton, *History of the American Economy* (11th edn, 2010), at 414.

indeed, the smooth functioning of the gold standard relied on credible commitment to such prioritization.

The restoration of gold convertibility began when Britain returned to gold at the pre-War parity of US$4.86 in April 1925, followed by the Commonwealth countries and many others in succeeding years. The restored gold standard was a gold exchange standard under which central banks would hold their international reserves in the form of foreign exchange (in dollars or sterling) and gold. The typical gold reserve ratio was 35 per cent. The US and the UK as reserve centre countries would hold all of their international reserves in gold. Most countries also prohibited their citizens from holding gold coins and they held their gold reserves in bullion. These measures were instituted in response to a perceived gold shortage.[40] By 1928, the gold standard was in place in all four countries, but it was short-lived.

The gold exchange standard was posited as having three fatal flaws: the adjustment problem in which surplus countries like France and the US were unwilling to allow their money supplies to expand with rising gold reserves, and deficit countries like Britain were forced to deflate; the liquidity problem that there was insufficient gold to finance the growth of world trade leading to deflationary pressure; and the confidence problem that Britain had insufficient gold reserves to back the holding of sterling reserves by the rest of the world and eventually there would be a run on sterling forcing Britain to leave the gold standard. This was aggravated by efforts from France to undermine Britain's position as an international reserve country by converting its sterling holdings into gold.[41]

The gold exchange standard collapsed following the onset of the Great Depression in 1929. A series of banking crises across the continent of Europe led to speculative attacks on the reserves of central European countries and then Britain in 1931. In the face of deflation and depression central banks converted their foreign exchange reserves into gold.[42]

VIII. Breakdown of the Gold (Exchange) Standard

In hindsight, Britain's departure from the gold standard in October 1931 was a game-changer—as evidence that the pre-World War gold standard was indeed humpty dumpty and 'couldn't be put back together', and that the nominal anchor would from then on be man-made.[43] This is misleading in many ways: the nominal anchor was always man-made, or at least state-made, and the break which was indeed the beginning of the end of the gold standard was perceived at the time as one of the temporary suspensions of convertibility that were an understood feature of the regime.

We return below to the big picture analysis but first describe the management of the new regime and how states managed their internal and external monetary roles.

The basic chronology is as follows: in May 1931, the failure of *Credit Anstalt* in Vienna led to a banking crisis; a rescue attempt by the Bank of International Settlements and several central banks failed, leading to a currency crisis. When Austria responded by imposing capital controls and freezing foreign deposits, the crisis spread to Germany, in July 1931, in the form of a banking crisis and a speculative attack on the mark. Germany imposed capital controls in the face of a loss of foreign reserves. Germany's decision put

40 League of Nations, *Interim Report of the Gold Delegation of the Financial Committee* (1930).

41 Eichengreen, *Golden Fetters*, above n 28, and M. Bordo, 'The Bretton Woods International Monetary System: An Historical Overview', in M. Bordo and B. Eichengreen (eds), *A Retrospective on the Bretton Woods System* (1993) 3.

42 B. Bernanke, *Essays on the Great Depression* (2000).

43 See Chapter 32 of this volume.

pressure on the reserves of the Bank of England because of the exposure of British investment banks to Germany and Austria. The British Government faced high unemployment rates and a budget deficit, and rather than impose 'austerity' chose to suspend the gold standard. This led, in turn, to pressure on the US, but the US held large gold reserves and the Fed raised its discount rate by an unprecedented amount to withstand the immediate shock. But the real appreciation of the dollar (relative to the pound) and higher interest rates worsened the domestic economy, weakened the solvency of the banks, and worsened an ongoing banking panic. Eighteen months later, in April 1933, after a serious banking panic and a run on the dollar, the US suspended gold convertibility.

The same story played out in France. With large gold reserves—and an initially undervalued exchange rate—France could withstand the immediate shock of others leaving the gold standard. The serious political difficulties of resuming the gold standard in 1926 also deterred the government from exposing itself to a return to an inconvertible currency. In 1933 there was a gold bloc, of France, Belgium, Netherlands, and Switzerland, but by 1936 France was alone and in political chaos.

While the abandonment of the gold standard opened the door to the possibility of a system of floating exchange rates, no one went through it. The pound floated from October/September of 1931 to the spring of 1932; the dollar floated from April 1933 to January 1934. The mark maintained its gold parity, but only through the imposition of rigorous foreign exchange controls.

The collapse of the gold standard as the device for co-ordinating exchange rates led to a rash of multilateral and bilateral initiatives. The World Monetary and Financial Conference in 1933 was a continuation of the series of conferences around the Reparations question, but Roosevelt's decision to unilaterally rule out a return to the previous gold parity precluded any hope of co-operation. In response Britain arranged with the Commonwealth countries to create the sterling bloc.

By 1934, the pound and US dollar had stabilized and the US returned to a managed gold standard at a new devalued gold parity of $35 per ounce. Both countries benefitted from the now overvaluation of the franc. When it became clear in 1936 that the French would suspend convertibility, the US and UK, fearful of a large devaluation of the franc, worked with the French government for a co-ordinated arrangement. The resultant, tri-partite agreement, in which each country would co-ordinate intervention in their exchange rate with the franc to prevent a disorderly devaluation, was not a formal international agreement but rather three national statements, but they were co-ordinated statements and it may have been the first managed international financial system.

IX. Bretton Woods and the Move towards a Managed International Monetary System

The perceived problems of the interwar system which were viewed as contributing to the breakdown of the international economic order leading to World War II led the allies (Britain and the US) to plan for a new international monetary regime.[44,45] The new regime was intended to overcome the flaws of the gold standard, which had placed a straitjacket on stabilization policy and was an engine for transmitting depression and deflation globally, and floating exchange rates which were perceived as leading to excessive volatility and the collapse of the franc in the 1920s.

[44] See further Chapter 28 of this volume.

[45] See Bordo, above n 41 and the other chapters in Bordo and Eichengreen (eds), above n 41.

The Bretton Woods Agreement, worked out at Bretton Woods, New Hampshire, in July 1944, represented a compromise between the British plan of John Maynard Keynes, and the American plan drafted by Harry Dexter White. The Keynes Plan posited an international central bank to provide a new global currency called 'bancor' which would provide global liquidity and help deficit countries like the UK get back on their feet after the war. The White Plan posited a pegged exchange rate system anchored on gold, an international credit union and protections for surplus countries like the US.

The compromise that became the Bretton Woods Articles of Agreement created an adjustable peg system in which members parities were defined in terms of dollars, and the dollar was defined in terms of gold at $35 per ounce. The dollar was perceived as the key international currency (with sterling having a secondary role). Each member could adjust its peg when faced with a fundamental disequilibrium—caused for example by a productivity shock. Members were encouraged to impose capital controls and to use domestic monetary and fiscal policy to maintain internal balance (full employment). The International Monetary Fund was established as an international credit union to which each member subscribed an initial quota in gold or dollars. It was to be used to provide temporary credit to members undergoing a current account deficit.

It took until the end of 1958 for the European countries (Japan in 1962) to declare current account convertibility to allow the Bretton Woods System (BWS) to fully function. The system functioned quite well until the mid-1960s, delivering an expansion of trade, rapid real growth, and low inflation, but began to unravel after 1965.[46] Like the gold exchange standard in the 1920s, it was plagued by three fatal flaws. Firstly, there was the adjustment problem where the deficit countries (e.g. the UK) bore the brunt of adjustment and, in the face of nominal rigidities, faced falling real income and rising unemployment. Consequent expansionary stabilization policy would then lead to a currency crisis and a rescue by the International Monetary Fund (IMF) and G10. Secondly, the liquidity problem, in which (like in the 1920s) there was a perceived gold shortage, was made up by the use of the dollar as the principal source of global liquidity. The US as the key international reserve provider would run persistent balance of payments deficits to provide the dollars to the more rapidly growing countries of continental Europe and Japan. Finally, as outstanding dollar holdings increased relative to the US monetary gold stock, so did the likelihood of a run on the dollar, creating a confidence problem as in the interwar years. The resulting dilemma meant that the US had to either follow contractionary monetary policy leading to global deflation or else there needed to be created a new reserve asset. This dilemma, first articulated by economist Robert Triffin in 1960 and subsequently dubbed the 'Triffin dilemma', dominated international discussion throughout the 1960s, in the end leading to the creation of the special drawing rights (SDR) (paper gold) in 1970.

Other stresses on the BWS system were: the decline in the role of sterling as an international reserve currency and the periodic sterling crises (1959, 1963, 1966, and 1967) ended by ever more massive rescues until the final devaluation in 1967 and the ignominious exit of sterling; the spoiler role played by France in a repeat of its behaviour in the 1920s (this time, the French resented the hegemonic role of the US in the International Monetary System and from 1963 to 1968—when France itself had a massive crisis—tried to undermine the dollar. The US began following an inflationary policy in 1965 to finance the Vietnam War and the Great Society. This fostered global inflation and put increasing pressure on the surplus countries of Europe and Japan who joined the French in resisting

[46] For the evidence, see Bordo, above n 41.

the US hegemony); and the growth of the international financial markets which increasingly were able to overcome capital controls, raising the likelihood of currency crises.

The Bretton Woods system collapsed in a series of crises from 1968 to 1971. The US instituted a panoply of controls and techniques to stem the loss of gold—beginning with the Gold Pool in 1961, the Interest Equalization Tax in 1963, the Federal Reserve Swap network, Roosa bonds, and threats to withdraw US troops from Germany—but, to no avail. In the face of rising inflation, the British and French began converting their dollar holdings into gold in 1971, leading President Nixon to close the gold window on August 15.

In the next two years, continuous high level negotiations between the Americans and the other advanced country players led to an attempt to restore the par value system with the Smithsonian agreement of December 1971 in which the US devalued the dollar and Germany and Japan revalued their currencies. The reconstituted system only lasted a few months. A series of currency crises ended, in the spring of 1973, with the major countries abandoning their Bretton Woods pegs and the world shifted permanently to a managed floating exchange rate regime under which the fundamentals of growth and inflation determined the equilibrium exchange rate and central banks intervened to smooth perceived volatility.

X. Sequel: From the Managed Float to the Euro

The major advanced countries learned to operate in the non-system of floating exchange rates just as they had learned to operate under the classical gold standard. It took the Great Inflation of the 1970s to instil the lesson of the importance of adhering to stable and predictable monetary rules. The 1970s was characterized both by high and variable inflation and volatile exchange rate movements. There were ongoing attempts to co-ordinate monetary, fiscal, and exchange rate policies, at annual summit meetings between the G7 and at two major conferences (the Plaza in 1986 and the Louvre in 1988), to try to reverse a strong and then a weak dollar. The evidence is mixed on whether these arrangements were successful.[47]

One major attempt to construct a Bretton Woods-like managed system was the development of the European Monetary Union (EMU). The idea for European integration emerged after World War II leading to the creation of the European Economic Community (EEC) in 1957. It was strongly believed that economic integration would permanently end the problem of European wars. One key component of the European Common Market was the Common Agricultural Policy (CAP), which instituted a series of price controls, subsidies, and transfers amongst the members of the EEC. The CAP that was instituted based on the Bretton Woods parities of the EEC member states was challenged by the move to floating. This problem plus a strong preference by France for fixed exchange rates led to several attempts by the Europeans to reconstitute a Bretton Woods-like system (with widened bands and periodic realignments amongst the EEC members) in the 'Snake and the Tunnel System' of the 1970s and the European Monetary System in the 1980s.[48]

Neither of these systems avoided periodic crises as had occurred under Bretton Woods, reflecting a fundamental misalignment between the hard currency policies of Germany (also the Netherlands and Austria) and the softer policies followed by Belgium, Italy, and

[47] See Y. Funabashi, *Managing the Dollar: From the Plaza to the Louvre* (1990); M. Bordo, O. Humpage, and A. Schwartz, *Strained Relations: US Foreign Exchange Market Operations and Monetary Policy in the Twentieth Century* (2015).

[48] See H. James, *Making the European Monetary Union* (2012).

France. The Maastricht Treaty of 1992 was designed to eliminate the currency crisis problem by instituting the permanently fixed exchange rates of a monetary union. Ignoring the lessons of history that successful monetary unions were closely linked to a fiscal union, and a political union,[49] the framers of Maastricht believed that the members would maintain fiscal discipline and that the monetary union would endogenously lead to greater real integration and convergence of productivity differentials.

The plan seemed to work in the environment of rapid global growth in the 2000s. Subsequently, following the financial crisis of 2007–8 and the great recession, serious growth differentials and fiscal strains among the members have emerged. A series of sovereign debt crises and banking crises is leading to the realization that the lessons from the history of successful monetary unions may be correct after all and that a fiscal union with tight constraints on the members' fiscal balance will be required to make the EMU project successful. To do this will require that the members of the eurozone give up considerable political sovereignty. The future will reveal if this will really happen.

XI. Conclusion

This chapter has described the evolution of the International Monetary System from the 'spontaneous order' driven specie standard of the early nineteenth century to the slightly more managed gold standard, to the even more managed interwar gold exchange standard, and to the man-made Bretton Woods system and its successors in Europe. Bretton Woods collapsed in the early 1970s and has been succeeded by the Managed Floating non-system. Although there have been periodic attempts at policy co-ordination, the present float has evolved to look a lot like the gold standard. The key to the gold standard's success was the credible adherence to the convertibility of national currencies to gold. The key to the success of managed floating is the credible adherence by central banks to a credible low inflation target or rule.

The European Monetary Union has several of the elements of the man-made Bretton Woods system: the failure of the adjustment mechanism between Germany and the peripheral countries; the lack of liquidity in the periphery; and the threat to confidence in the euro from the high costs of Germany bailing out the defaulting periphery. Its current crisis has considerable resonance with earlier attempts to create an artificial international monetary system. It will be interesting to see how long the eurozone system will survive.

49 See M. Bordo and L. Jonung, *Lessons for the EMU from the History of Monetary Unions* (2000); M. Bordo, L. Jonung, and A. Markiewicz, 'A Fiscal Union for the Euro: Some Lessons from History', NBER Working Paper No. 17380 (September 2011); M. Bordo and H. James, 'The Great Depression Analogy', NBER Working Paper No. 15584 (2009).

28

The Bretton Woods System

Design and Operation

Peter Kugler

I. Introduction

The system of Bretton Woods was the first full attempt to establish an international monetary order with fixed exchange rates based on the international co-operation of central banks and governments. In July 1944, the institution of the International Monetary Fund (IMF) was created at the Bretton Woods conference, where forty-five participating countries negotiated an agreement of twenty articles to establish a new exchange rate and international payments policy. This system was designed after the disastrous economic developments of the 1930s, which were perceived as resulting from monetary problems attributed to flexible exchange rates and functional restrictions on international payments caused by bilateral foreign trade clearing systems and multiple exchange rates for different kinds of transactions. It aimed at re-establishing the exchange rate stability under free currency convertibility (at least for current transactions), as under the gold standard (1880–1914) but without the rigid adjustment pressure of the latter system leading to deflationary pressure in trade balance deficit countries.

As mentioned above, fixed exchange rates existed before the Bretton Woods period, in particular during the classical gold standard.[1] In this system, fixed exchange rates were the consequence of the decision of countries to establish a legally fixed link between their currencies and gold, as well as to allow the free international movement of money and gold. Under these conditions, fixed equilibrium exchange rates, corresponding to the relative gold content of two currencies, resulted as the consequence of private arbitrage operations, without central bank intervention or an international monetary institution being necessary. Indeed, some gold standard countries like the United States and Switzerland had no central bank until 1913 and 1907, respectively. Moreover, Western countries followed the British move to gold in 1816 and introduced the gold standard unilaterally in various years after 1873. However, we should mention two facts: first, the demonetization of silver in major

[1] For an elaborated discussion of the transition to the international gold standard, the reader is referred to Chapter 27 in this volume, which provides in addition an overview of the development of the international monetary system over the last 150 years.

silver standard countries such as Germany pressurized other countries to move to the gold standard in order to prevent an inflationary silver inflow and keep their exchange rates stable against other major currencies; second, there were French attempts to introduce a common currency (International Monetary Conference (IMC) 1867) as well as later US attempts to create a bimetallic international monetary system (IMC 1878, 1881, and 1882). However, all these conferences ended without success, and there was no international obligation to adopt the gold standard. Thus, the introduction and establishment of fixed exchange rates tied to the gold standard were motivated, on the one hand, by governments wishing to integrate their countries within international goods and capital markets and, on the other hand, by private arbitrageurs seeking to seize the opportunities that this system offered. No international monetary treaty existed prior to the Bretton Woods Agreement. The gold standard broke down with the First World War when governments suspended gold convertibility in favour of monetary war financing. The fundamental changes which had taken place in the political system (in particular, the extension of the franchise) increased the incentives of governments to follow an autonomous monetary policy based on domestic economic conditions, and did not permit a sustainable reintroduction of the gold standard during the interwar period.

In contrast to their pre-war autonomy, member countries under the Bretton Woods Agreement formally committed themselves to numerous restrictions in the treatment of their currencies and international payments, thereby surrendering *de jure* their monetary sovereignty. This unprecedented abandonment of monetary sovereignty is singular, and it appears surprising that countries were willing to join an agreement that was designed, more or less, unilaterally by the United States. Of course, economic incentives such as access to the resources of the International Monetary Fund and US support for reconstruction and development after the war played a role in motivating the decision to join the agreement, but there was a high price to be paid, at least *de jure*. From this perspective, it is surprising that the system operated for twenty-five years, given that the emergency conditions existing after the war had disappeared within ten years. However, the Bretton Woods system appears very short-lived, given its economic performance: namely high growth and relatively low inflation in most industrialized countries. Macroeconomic performance was much better in this period than in the interwar years and the post-1973 period of flexible exchange rates.[2] In fact, we note that the macroeconomic performance of this period is similar to that of the classical international gold standard, but with a higher inflation and growth rate.

This chapter addresses these seemingly contradictory characteristics of the Bretton Woods system. The main finding of this discussion can be summarized as follows. The Bretton Woods system survived for more than twenty-five years, because its rules were not rigorously enforced by the sanctions that the Articles of Agreement required. Even twenty years after the system was initiated, only a minority of the members fulfilled all the obligations of the agreement. Nevertheless, this system's fundamental economic flaw—namely, that it linked the US dollar to gold without tolerating temporary deflations—led to its collapse in 1971. The non-US members of the Bretton Woods system were not willing to accept the progressive substitution of gold for US dollars as an international reserve asset and a convergence towards a dollar standard. The economic recovery of Western European countries as well as Japan, together with the money financing of the Vietnam War by the

[2] M. Bordo, 'The Bretton Woods International Monetary System: A Historical Overview', in M. Bordo and B. Eichengreen (eds), *A Retrospective on the Bretton Woods System: Lessons for International Monetary Reforms* (1993) 3.

US Government, no longer allowed the United States and its currency to play the dominating international role it had held immediately after the Second World War. Even a flexible handling of the agreement's requirements could not sustain the system, given the economic and political incentives of its major members.

This chapter is organized as follows. Section II briefly outlines fixed exchange rates before Bretton Woods, which were simply the spontaneous consequence of two countries adopting the same metallic standard. In Section III, the design of the Bretton Woods system is discussed, and its most important characteristics are highlighted. Section IV briefly sketches the development of the Bretton Woods system on its way to collapse in 1971. Section V provides a summary and some conclusions.

II. Fixed Exchange Rates before Bretton Woods

The emergence of a fixed or a flexible exchange rate before the Bretton Woods system was the consequence of every country selecting its preferred internal monetary standard. When countries selected the same metallic standard (say silver or gold) with full convertibility and allowed the free international movement of money, the monetary metal private arbitrage operation resulted in an equilibrium exchange rate corresponding to the relative metallic content of the currencies being exchanged. Of course, the equilibrium exchange rate changed when one of the countries reduced the metallic content of its currency (known as 'rebasements' or 'debasements').

For instance, consider the case of the US dollar ($) and the British pound (£) during the classical gold standard. The gold content of these two currencies was 1.5 and 7.3 grammes respectively, and the corresponding equilibrium exchange rate was therefore $4.86:£1. Now assume the exchange rate was $5:£1. With £1 we can buy $5, convert them into 7.5 grammes of gold in the United States and convert this in England into 7.5/7.3 = £1.029, that is, we would make an arbitrage profit of nearly 3 per cent. Under such circumstances, there would be dollar purchases, and the exchange rate of the dollar would decrease until this arbitrage profit became zero. The market exchange rate is, however, not exactly equal to this equilibrium rate, as these arbitrage transactions are costly since they include the cost of information gathering, transport costs, insurance costs, and transaction fees. Moreover, such transactions may be prohibited by governments from time to time, and the risk associated with illegal arbitrage operations contributes to transaction costs. Depending on the size of these costs, we gain a bandwidth for the market exchange rate around the equilibrium value.

Transaction costs were rather high in the late medieval and early modern period, and correspondingly, we expect to find strong deviation from parity exchange rates in premodern times. Bernholz and Kugler report estimates of this bandwidth as being in the range of 6–7 per cent in the fifteenth and sixteenth centuries.[3] During the seventeenth and eighteenth centuries, these transaction costs fell to a level varying between 2 and 3 per cent, respectively, for exchange rate transactions between major financial markets.[4] The information and transport revolution in the nineteenth century as well as a liberal attitude of governments with respect to gold exports and imports led to further strong reductions in

[3] See P. Bernholz and P. Kugler, 'Financial Market Integration in Early Modern Spain: Results from a Threshold Error Correction Model', (2011) 110 *Economics Letters* 93; and P. Kugler, 'Financial Market Integration in Late Medieval Europe: Results from a Threshold Error Correction Model for the Rhinegulden and Basle Pound, 1365–1429', (2011) 147 *Swiss Journal of Economics and Statistics* 337.

[4] P. Kugler, 'The Changing Pattern between the Foreign Exchange Markets in Amsterdam and London 1600–1912' (unpublished manuscript, University of Basel, February 2013).

transaction costs during the classical gold standard. For instance, Canjels et al. report only small deviations from the gold parity in the range of 0.15–0.40 per cent for the dollar:pound market which were allowed by arbitrage operations.[5] Thus, the classical gold standard was characterized by very narrow exchange rate fluctuations around the gold parity without any central bank intervention. However, we should mention that there was some collaboration between the two most important central banks, namely the Bank of England and the *Banque de France* in order to smooth the functioning of the gold standard.

Arbitrage is more complicated for the silver–gold case. If the exchange rate of the Dutch (silver) *guilder* against the (gold) pound was higher than the silver–gold ratio, we could buy guilder for pounds, convert them into silver, sell the silver to buy gold, which we subsequently convert into pounds, and thereby make an arbitrage gain. Thus, in the long run, the exchange rate was flexible but followed the relative price developments of silver and gold. If one or both currencies had an inconvertible paper standard (fiat money), the exchange rate was fully flexible and developed according to the volume of fiat money issued in the two countries.

In order to illustrate these relationships, we will briefly consider the historical development of the pound/guilder exchange rate from 1600 to 1912. The historical development of this exchange rate over more than three centuries is interesting for two reasons. First, during the seventeenth century, the Netherlands (Dutch Republic) became the economically most advanced country and most dominant trade nation, with Amsterdam as the leading financial centre. The country had a high saving rate and an advanced financial system was developed. Moreover, sound government finance provided a stable currency (1 Flemish pound = 6 guilders) and low interest rates. During the eighteenth century, Britain followed the development in the Dutch Republic and became the economically most advanced country, with London as the leading financial centre and the pound as leading currency in the nineteenth century. Therefore, the exchange rate between the pound and the guilder assumed a function of major historical importance. Secondly, the two currencies experienced different monetary standards. The guilder was based on a silver standard from 1600 to 1839, followed by a brief bimetallistic period (with a de facto silver standard) and finally switched over to a gold standard in 1875. The pound was based on a bimetallic standard from 1600 to 1797, on an inconvertible paper standard from 1797 to 1816, and subsequently on the gold standard which was kept until 1914.[6]

Figure 28.1 displays two series, namely the London and Amsterdam market price of the guilder and the pound, respectively.[7] Of course, in a frictionless world, these two series would be equal; however, the difference we observe is brought about by transaction costs. The same monetary standard (gold) existed most recently in the period 1875–1914, where

[5] E. Canjels, G. Prakash-Canjels, and A. M. Taylor, 'Measuring Market Integration: Foreign Exchange Arbitrage and the Gold Standard, 1879–1913', (2004) 86(4) *The Review of Economics and Statistics* 868.

[6] M. A. Denzel, *Handbook of World Exchange Rates, 1590–1914* (2010), at 3–4, 57–9. Silver remained the relevant monetary metal for bills of exchange and the convertibility of bank notes of the Bank of England, even when gold coins crowded out silver coins in domestic circulation and Britain moved de facto to a domestic gold standard during the eighteenth century.

[7] Based on bills of exchange between Amsterdam and London drawn in both directions, Denzel (ibid., at xxii–xlix and 3–101) provides exchange rate data for Amsterdam and London. The data are averages of monthly observations which were, however, not always available for all twelve months, in particular before the nineteenth century. An econometric analysis provided by P. Kugler, 'The Changing Pattern between the Foreign Exchange Markets in Amsterdam and London 1600–1912' (unpublished manuscript, University of Basel, February 2013), shows that these two exchange rates could deviate by approximately 2.5% until this gap was closed by arbitrage operations in the seventeenth and eighteenth centuries. This bandwidth of oscillation was strongly reduced in the nineteenth century when it became considerably smaller—namely, reaching approximately 0.4%. Before the nineteenth century, larger deviations led to an adjustment of the London market, whereas thereafter the gap of the two exchange rates was closed by changes in the Amsterdam market.

Figure 28.1 Pound sterling/Dutch guilder exchange rate in Amsterdam and London 1600–1912.

Guilder: silver (1600–1838), bimetallic (1839–75), gold (1875–1914)
Pound sterling: bimetallic (1600–1797), paper (1797–1819), gold (1819–1914)
Source: M. A. Denzel, *Handbook of World Exchange Rates, 1590–1914* (2010).

we note very low exchange rate volatility after the information and transport revolution in the second half of the nineteenth century. During the period immediately before (1816–74), when the guilder was based on a silver or bimetallic standard and the pound on a gold standard, we see more flexibility in the exchange rate and, in particular, we observe very high volatility in the period of the pound's inconvertibility during the Napoleonic Wars (1797–1816). During most of the seventeenth and eighteenth centuries (before the French Revolution), we note a remarkable long-run stability in the exchange rate. Indeed, the silver content of the guilder was 10.4 grammes and that of the pound, 111 grammes,[8] which implies a silver parity exchange rate of 0.094 pounds:1 guilder, which is close to the mean of the exchange rate until the end of the eighteenth century. In the seventeenth century, we note some strong deviations from parity caused by difficult political conditions (civil war in England and three Dutch–English wars, the Nine Years' War) with temporary restrictions on the free movement of silver.

In Figure 28.2, the London pound sterling:guilder exchange rate and the corresponding silver:gold parity rate is displayed for the period 1820–72. The parity rate is calculated by dividing the silver content of the guilder (9.61 grammes, 1816–38; 9.45 grammes, 1839–74) by the silver market value of the 7.3 grammes of gold contained in the pound sterling. In order to gain the silver value of the pound, we multiplied 7.3 by the London market price ratio of gold to silver, which is displayed for the period 1687–1873 in Figure 28.3. This graph suggests a rather high correlation between the market and parity exchange rate. Indeed, the simple correlation coefficient between the two series is 0.86.

[8] Denzel, above n 6, at 3–4, 57–9.

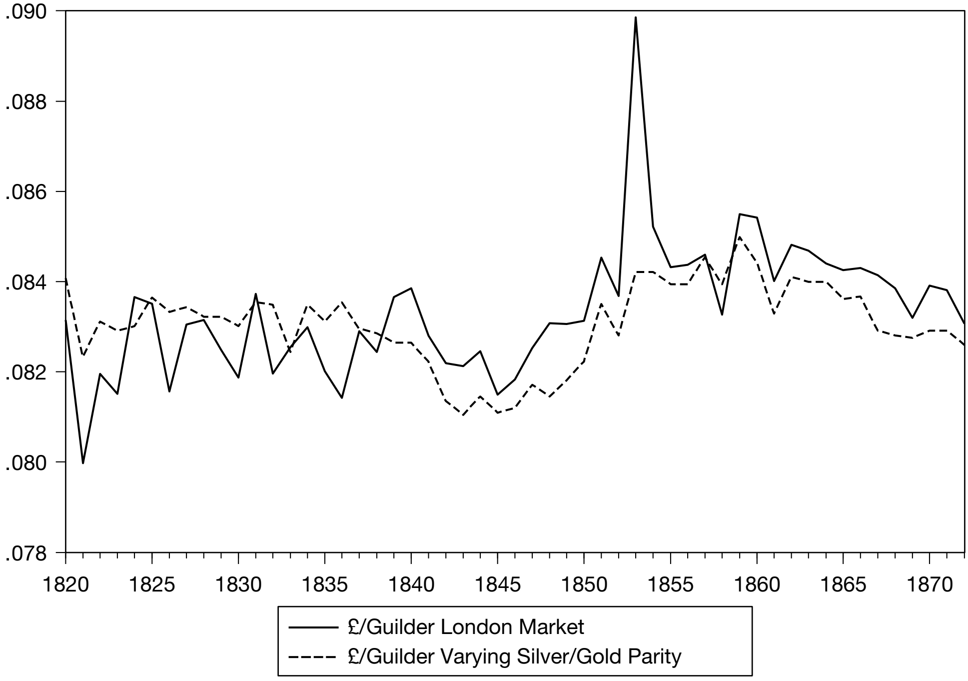

Figure 28.2 Log pound sterling/Dutch guilder exchange rate in London, and the varying silver/gold parity, 1820–1872.

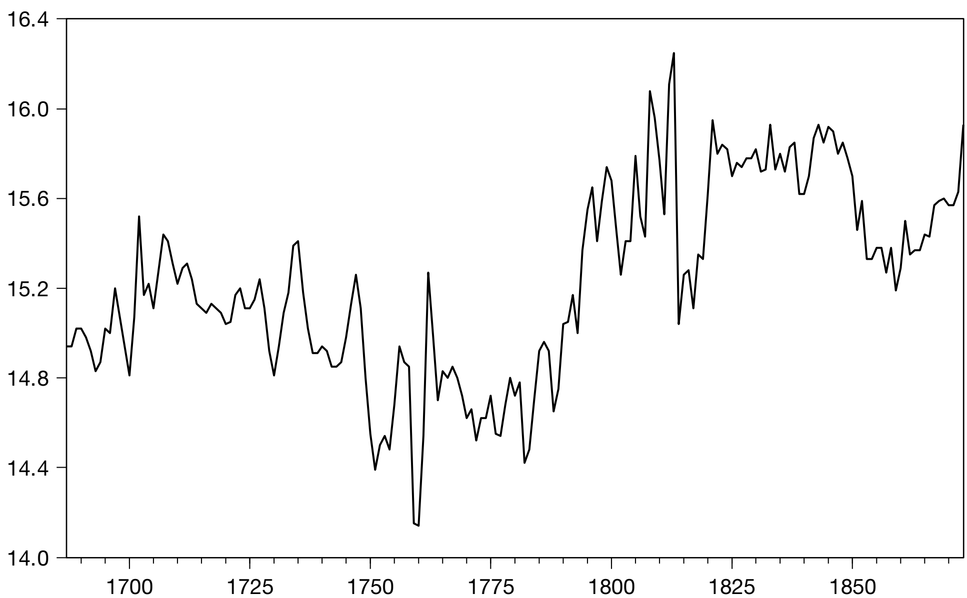

Figure 28.3 Gold/silver market price ratio, 1687–1873.

Source: L. H. Officer and S. H. Williamson, 'The Price of Gold, 1257–Present', MeasuringWorth.com (2013), available at http://www.measuringworth.com/gold/.

Table 28.1 Deviations from parity pound/guilder exchange rate, 1600–1912, in per cent

Period pound/guilder standard	Mean	Standard deviation	Min	Max	Bandwidth*	Adjustment speed**
1600–1785 silver/silver	0.32	3.57	−12.2	18.1	2.80	28
1816–1874 gold/silver	0.38	1.44	−2.91	6.50	0.84	66
1875–1912 gold/gold	−0.17	0.19	−0.93	0.082	0.25	92

* Estimated threshold of a Threshold Autoregressive Model: for deviations within this bandwidth, there are no arbitrage operations.
** Per cent of deviation corrected annually by exchange rate adjustments outside the bandwidth.

Table 28.1 collects a couple of statistical and econometric results with respect to the deviation from parity for the silver standard (1600–1785) and gold standard (1876–1912), as well as the silver:gold interlude (1817–74). We use the exchange rate data from the leading market, namely Amsterdam (1600–1785) and London (1817–1912), respectively. In addition, descriptive statistics providing values for the mean, standard deviation, minimum, and maximum, some results from a so-called Threshold Auto-Regressive Model, are reported.[9] This model allows us to estimate how much the exchange rate can deviate from parity without triggering a correction by arbitrage operations. Moreover, it provides information on the speed of adjustment in the form of a so-called 'error correction coefficient' which tells us to what extent the deviation is corrected within a year.

All these statistics indicate a strong tendency towards narrower bounds around the parity exchange rate. In the seventeenth and eighteenth centuries, we have deviations of 2.8 per cent from parity until arbitrage operations are triggered, which lead to a rather slow adjustment of 28 per cent within one year. In the gold standard period, this bandwidth is tightened to only 0.25 per cent, where a near full adjustment is achieved within one year. The intermediate period from 1817 to 1874 is within these two extremes, with a deviation bandwidth of 0.84 per cent and two-thirds of the adjustments achieved within one year. Even more impressive are the observed ranges. In the seventeenth and eighteenth century, we have values ranging from −12 per cent to 18 per cent, whereas in the gold standard period these figures range from −0.9 per cent to 0.08 per cent. Note that in the first and second periods, we have a slight average premium on the guilder (mean = 0.32/0.38 per cent), whereas in the gold standard, we have a slight average discount on the guilder (mean = −0.17 per cent).

III. The Design of the Bretton Woods System

The Bretton Woods system aimed at establishing a new international monetary system in order to avoid the perceived and real monetary problems[10] of the interwar period, in particular the problems that arose during the Great Depression. These problems included: (a) destabilizing speculation and competitive devaluations; (b) the subordination of monetary policy to the requirements of the external balance; (c) creditor/debtor asymmetry and

[9] The details of these estimation results are found in P. Kugler, 'The Changing Regime of the Pound/Guilder Exchange Rate 1600–1912'. (unpublished manuscript, University of Basel, June 2013).

[10] In 1936, after the breakdown of the interwar gold exchange standard, France, Great Britain, and the United States signed a short-lived tripartite agreement (later joined by Belgium, the Netherlands, and Switzerland) which was intended to provide fixed exchange rates based on central bank co-operation. This attempt may be considered the predecessor of the Bretton Woods system, although it was somewhat informal and lacked the institutional backing of the later system.

deflation risks; and (d) a bilateral trade clearing system and multiple exchange rates for different international transactions.[11] The design of the system was based on a 'flexible' link relating currencies to gold, which provided fixed exchange rates and enabled convertibility for current account transactions[12] in a multilateral payments system. Transitory external imbalances would be smoothed out by the provision of international liquidity and capital flow controls. Finally, exchange rates were intended to be adjustable when fundamental imbalances occurred under international co-ordination.

For a detailed description of the origin, design and functioning of the system, the reader is referred to the three volumes edited by Horsefield which contain contributions written before the collapse of the Bretton Woods system, as well as a retrospective appraisal of the system edited by Bordo and Eichengreen (1993).[13] In this section, we provide only a short account of the system's most important features from the perspective of our context.

The Bretton Woods agreement is a compromise between two plans that were formulated in 1943 by the British economist John Maynard Keynes and Harry Dexter White—the chief international economist at the US Treasury. The 'British' plan stipulated that a supranational institution, the International Clearing Union (ICU), be set up to provide a new international money (Bancor, fixed in gold, fixed parities of national currencies) and generous overdraft facilities (initially totalling $25–30 billion, but adjustable to foreign trade growth) of national central banks. Debtors with the ICU would have to pay interest on the granted overdraft in favour of the creditors, and the overdraft could be made conditional on specific policy measures (e.g. parity change, capital controls). The US plan stipulated that the United Nation Stabilization Fund ($5 billion) be financed by currency and gold owned by member central banks which would allow exchange rates to remain fixed in the presence of temporary imbalances. Parity changes would be allowed in the presence of fundamental disequilibrium (on approval of 75 per cent of members, if the changes were larger than 10 per cent); in addition to capital controls, exchange controls were accepted for scarce currencies.

The Bretton Woods system incorporated elements of both plans with a strong bias in favour of the White plan, which is not surprising given the worldwide economic dominance of the United States in 1944. The Twenty Articles of Agreement are reproduced by Horsefield,[14] and they are summarized in Appendix A to this chapter. In the following discussion, we will highlight the most important characteristics of the international monetary system created by the Bretton Woods conference.

On the one hand, Bretton Woods imposed a large number of restrictive obligations on its members with respect to their currencies and their international payments transactions. According to Article III, they had to pay their quota (25 per cent in gold) to the IMF. Article IV obliged them to keep their exchange rate (and the price of gold) within a 1 per cent bandwidth around the par values. A member might be forced to introduce capital controls when faced with sustained capital outflows (Article VI). Article VIII, finally, forbade

[11] Some of the perceived shortcomings of the interwar gold exchange standard were mistaken. In particular, B. Eichengreen, 'Did Speculation Destabilize the French Franc in the 1920s?', (1982) 19 *Explorations in Economic History* 71, and B. Eichengreen and J. Sachs, 'Exchange Rates and Economic Recovery in the 1930s', (1985) 65 *Journal of Economic History* 925 found no empirical evidence of destabilizing speculations and beggar-thy-neighbour competitive devaluations, respectively.

[12] Current transactions are associated with exports and imports of goods and services (including interest, dividend payments, and remittances).

[13] J. K. Horsefield, *The International Monetary Fund 1945–1965*, 3 vols (1969). Volume 1 is entitled *Chronicle*; volume 2, *Analysis*; and volume III, *Documents*.

[14] Ibid., vol. 3, at 185–214.

restrictions on current payments and multiple currency practices without consent of the IMF. Moreover, it made exchange contracts which violated exchange controls consistent with the agreement unenforceable in any member country.

On the other hand, most members had little power to influence the decisions of the IMF. The paragraphs of Article XII on the rules on voting rights led to large countries (in particular the United States) having a dominant influence on IMF decisions. Moreover, Article XVIII allowed the IMF to decide on all questions of interpretation without according any right to appeal. This is particularly important, as many aspects of IMF policy were not fixed in the Agreements and were decided later by the Fund. These conditions were not favourable to most member countries, even if it was easy to withdraw from the Fund formally: according to Article XV, a member country simply had to submit a letter to the IMF, and the withdrawal would become effective upon the Fund's receipt of the notice.

The large differences in voting power between members is illustrated by noting that according to Schedule A of the Bretton Woods Agreement,[15] the United States and the United Kingdom had a quota of 2,750 and 1,300 of a total of 8,800 million US dollars, implying 27,750 and 13,250 votes, respectively. Australia's quota, for instance, was 200 million, resulting in 2,250 votes. This dominance was increased by the fact that the Soviet Union, which was present at the conference and had a planned quota of 1,200, did not sign the agreement, resulting in the United States and the United Kingdom gaining a combined 53 per cent share in the aggregate sum of the total voting power of all members.

The incompleteness of the Articles for the operation of the IMF is demonstrated by two important examples. The first concerns the regulations concerning drawing rights on IMF resources as specified in Article V. Besides the requirement of a cap on the annual rate of change (25 per cent) and the total amount (200 per cent of the respective quota) of the IMF's holdings of the drawer's currency, there were no restrictions on the access to the resources of the IMF for a member satisfying its requirements. This vacuum led to the establishment of additional rules. In February 1952 it was declared that 25 per cent of the quota could be drawn on unconditionally (gold tranche), whereas drawing rights in excess of 25 per cent were subject to negotiation. This led to the introduction of stand-by arrangements and a credit tranche policy which proscribed the conditions on drawings rights (policy measures recommended by the IMF) for drawings above the 25 per cent cap.[16] The second example concerns the determination of par values. According to Article IV, these could be changed if a member faced a 'fundamental disequilibrium'. However, the Article was silent on an operational meaning of this term, and the IMF had to establish criteria for making decisions on par values. The same applies to the margins around par for forward exchange transactions which remained at 'what the IMF deems reasonable' or cross rates when only the dollar exchange rate is kept within a 1 per cent bandwidth.[17]

Why was this system able to function more or less effectively for twenty-five years with such strong requirements and yet such a simple exit procedure?[18] There are several reasons for this. First, there was the incentive to use the Fund's resources to finance a balance of payment deficit. The economics of the incentive to co-operate with, instead of deviate from, the agreed obligations, as implied by non-co-operative game theory, is analysed by

[15] Ibid., vol. 3, at 210.

[16] J. Gold, 'The Use of the Fund's Resources', in Horsefield, above n 13, vol. 2, at 522–39.

[17] M. G. de Vries, 'Setting Par Values', in Horsefield, above n 13, vol. 2, at 51–89.

[18] With the exception of the USSR, all forty-five countries signed the agreement and only three withdrew (Czechoslovakia, Cuba, and Poland), as the IMF denied them access to its resources. Indonesia withdrew and was later readmitted: Horsefield, above n 13, vol. 2, at 514.

Dominguez.[19] Second, voting power became more balanced as the number of members increased from forty-four at the fund's inception in 1944, to 104 in 1966. Despite the general quota increases in 1959, the US share decreased from 36 per cent to 25 per cent.[20] Besides the strong quantitative increase in membership, this reflects the admission of former WWII enemy countries such as Germany, Italy, and Japan, which were not represented at the Bretton Woods conference. Correspondingly, the number of Executive Directors increased from twelve to twenty in 1966. Third, some additional reasons are discussed by Joseph Gold in his concisely summarized contribution on the constitutional development of the IMF in Part V of Horsefield.[21] The IMF became very tolerant with respect to the obligations of its members. There were devaluations against the rules, in particular the 30 per cent devaluation of the pound in 1949, which was quickly approved ex-post by the IMF, and instances of floating exchange rates (Canada from 1950–1961 being the most well-known example). Indeed, in 1966, only twenty-seven of the 104 members fulfilled the obligations of Article VIII.[22] Article XIV, which aimed at a transition period of five years, was extensively used in order to legalize all kind of violations from multiple currency practice to floating exchange rates.[23] Sanctions denying access to the IMF resources were rarely imposed, a notable exception being France in 1948 in response to unauthorized multiple currency practices.[24] Fourth, IMF decisions by the Executive Board were mostly reached by negotiations and consensus, thus partly neutralizing the asymmetry in voting power.

Finally, the Articles of Agreement had effects on court decisions concerning public and private institutions or persons. These aspects are summarized and illustrated in a series of contributions by Gold.[25] Most of these cases are related to the par values of exchange rates, and the price of gold as regulated in Article IV, as well as to the international recognition of exchange controls under Article VIII.

First let us briefly consider the implications of Article IV. In many countries, courts will only award claims denominated in a foreign currency in their domestic currency.[26] This immediately raises the question of the 'right' exchange rate, which was decided very differently before Bretton Woods (official rates, free-market rates, and gold parities). Article IV requires that exchange rates should not deviate by more than one per cent from parity, thereby restricting the scope of discretion of the courts. As many countries did not fulfil the conditions of Article IV, availing themselves of Article XIV's transitional arrangements, these exchange restrictions were not effective for many members. However, Article VIII was more legally compelling, with its obligation that members mutually recognize each other's exchange rate controls. Its rulings simply meant that any foreign exchange contract which violated the exchange controls of one member country could not be enforced in the domestic courts of any other member country. Thus, it was no longer possible for countries to rely on public policy *ordre public* arguments in order to override

[19] K. M. Dominguez, 'The Role of International Organizations in the Bretton Woods System', in M. Bordo and B. Eichengreen (eds), *A Retrospective on the Bretton Woods System: Lessons for International Monetary Reforms* (1993) 357.

[20] Horsefield, above n 13, vol. 2, at 378–80, table 14.

[21] Ibid., vol. 2, at 513–605.

[22] Ibid., vol. 2, at 292, table 8.

[23] Gold, above n 16, at 547–64.

[24] Ibid., at 582–94.

[25] See, e.g., J. Gold, 'The Fund Agreements in the Courts', (1951) 1(1) *IMF Staff Papers* 315; J. Gold, 'The Fund Agreements in the Courts: III', (1953) 3(2) *IMF Staff Papers* 290; J. Gold, 'The Fund Agreements in the Courts: IV', (1958) 6(3) *IMF Staff Papers* 461; J. Gold, 'The Fund Agreements in the Courts: VIII', (1964) 11(3) *IMF Staff Papers* 457; J. Gold, 'The Fund Agreements in the Courts: IX', (1967) 14(2) *IMF Staff Papers* 369, all available at http://www.palgrave-journals.com/imfsp/archive/index.html.

[26] Gold, 'Fund Agreements' (1951), above n 25, at 316.

foreign exchange controls, a strategy often used before Bretton Woods. This issue triggered an interesting discussion on the legal implications of Article VIII.[27]

IV. The Development of the Bretton Woods System

Why was the Bretton Woods system so short-lived despite its very good macroeconomic performance, breaking down after only thirteen years in full operation (1958–1971)?[28]

First of all, we should note that good macroeconomic performance during the Bretton Woods period depended on many other circumstances. Instead of enforcing war debts and reparation payments as was done after the First World War, the United States fostered the recovery of Europe through the Marshall Plan. In addition, the very low levels of production in the industrialized countries that were strongly involved in the Second World War allowed a strong 'catch up' effect, such as we see today in high growth emerging economies. By contrast, the bad performance of industrialized countries in the post-1973 period is to some extent the result of problems that piled up during the Bretton Woods era.

From an economic perspective, the first fundamental problem of Bretton Woods was its attempt to 'square the circle' by aiming to achieve fixed but adjustable exchange rates. In order to see this, we should remember the well-known 'impossible trinity' of international monetary economics: the impossibility of fixed exchange rates, the autonomy of monetary (and to some extent fiscal) policy, and freedom of capital movements. Contrary to the international gold standard of 1880–1914, which clearly renounced monetary policy autonomy, Bretton Woods was ambiguous about the option chosen and did not anchor expectations. Placing restrictions on the free movement of capital was seen as an instrument against transitory imbalances, whereas the adjustment of exchange rates was considered as a remedy for fundamental imbalances. Capital controls, however, may be very inefficient and are difficult to enforce with current account convertibility (leads and lags in payments and inaccurate declarations of transactions promote short-run capital imports and exports). Moreover, devaluation in response to fundamental problems provides speculators with one-way bet opportunities. This problem clearly showed up in the foreign exchange crises of the 1960s, resulting in devaluations and revaluations (for instance, the devaluation of the pound and the French *franc* in 1967–8, and the revaluation of the German *mark* in 1961–8).

The second fundamental problem is that the Bretton Woods system turned into a gold-dollar standard, contrary to the intention of its architects. This development was caused by the initial conditions of the system after the Second World War. The United States was the world's largest creditor, and also possessed two-thirds of the world's gold reserves, with a current account surplus, deep financial markets, and a convertible currency. Most other countries were debtors with depleted gold reserves, current account deficits, repressed financial markets, and exchange controls. Thus the United States was the only country which fulfilled Article IV, by pegging the price of gold at 35 dollars and pegging all other currencies to the dollar with a 1 per cent margin.[29] Moreover, members drew from the fund in US dollars, which was the only major convertible currency until 1960: 87 per cent of the

[27] Gold, 'Fund Agreements: III' (1953), above n 25, at 303–8.

[28] An excellent, concise and yet comprehensive account of the development of the Bretton Woods' monetary system is provided by Bordo, above n 2, at 37–80; for more details, see the IMF volumes edited by Horsefield, above n 13 and G. M. de Vries, *The International Monetary Fund 1966–1971*, 2 vols (1976) (vol. 1: *Documents*, vol. 2: *Narrative*).

[29] This does not really fulfil the requirements of Article IV, as this allowed the exchange rates between two currencies (other than the dollar) to deviate by a maximum of 2% from parity if the dollar exchange rate was at the upper bound for one currency and at the lower bound for the other.

total money drawn from IMF resources from 1946–60 (3,683.5 million in total) were in the form of US dollar purchases.[30] Therefore, the deposits of the IMF at the central banks of most member countries were not used for financing balance of payments deficits as intended. This composition of drawings on the IMF changed in the 1960s: the dollar share was reduced to 43 per cent, and the German *mark* share increased to 16 per cent for the years 1961–5, but the leading role of the US dollar as the reserve currency was not really challenged.

Moreover, par exchange rate values for European currencies were fixed mostly at their pre-war level in 1946, which was clearly overvalued after the war. Given these structural problems, the IMF resources, which were scaled for temporary balance of payments problems, were too small to facilitate a quick transition to convertibility. Instead, the United States and Canadian loans to the United Kingdom (1945: $3.75 and $1.2 billion) and the Marshall Plan (1948–51, $13 billion) provided the funds for recovery and current account surpluses in Western Europe, which were also supported by the 1949 devaluations of European currencies. The Marshall Plan and private US long-term capital exports provided the dollar reserves which allowed convertibility to be introduced in 1958 and provided a short-run solution to the 'liquidity problem'.

All these developments from 1946 to 1960 led to the establishment of the US dollar as the only relevant reserve currency. The Bretton Woods system thus emerged, against the intention of its architects, as a gold-dollar standard. The United States became the 'bank' of the system with long-term foreign assets and short-term liabilities, and the corresponding potential liquidity problem.

Figure 28.4 shows the development of international reserves.[31] Gold is disaggregated into US monetary gold stock and that of the rest of the world. Non-gold foreign exchange reserves are disaggregated into dollar reserves and the other reserves (pounds sterling and other currencies, reserve positions with IMF, and special drawing rights (1970–1)). We see that gold was the main international reserve asset in the 1940s, and most of it belonged to the United States. Non-gold reserves were mainly in pounds sterling, while the dollar played only a minor role in this respect. We see a steady growth in dollar reserves (liabilities of the United States to foreign monetary authorities) which accelerated tremendously in 1968. The monetary gold stock shows only a minor increase (given the high level of post-war economic growth), and a substantial redistribution took place from the United States to the rest of the world. In 1964, the US gold reserves became smaller than the US total (official) foreign liabilities. This development made the 'confidence problem', first noted by Triffin,[32] obvious, as the convertibility of official foreign dollar holdings into gold became questionable.

The confidence problem can also be illustrated with the development of the London gold price as displayed in Figure 28.5. The first essential short-run deviation from the official $35 occurred in late 1960 after the election of John F. Kennedy as US president. In reaction to these problems, the G10 gold pool was formed to keep the gold price at $35, but nevertheless some central banks (in particular the *Banque de France*) substituted dollar reserves with gold. Heavy gold losses sustained by the pool at the beginning of 1968 led to a two-tier system (a free market price for private transactions, and $35 for official transactions). In 1968, the United States removed the 25 per cent gold cover for banknotes, which communicated an important signal that the gold convertibility of the dollar was no longer compatible

[30] Horsefield, above n 13, vol. 2 at 449, table 18.
[31] The data source is ibid., vol. 3, at 416–17, Appendix table 2, and International Financial Statistics of the IMF.
[32] R. Triffin, *Gold and the Dollar Crisis* (1960).

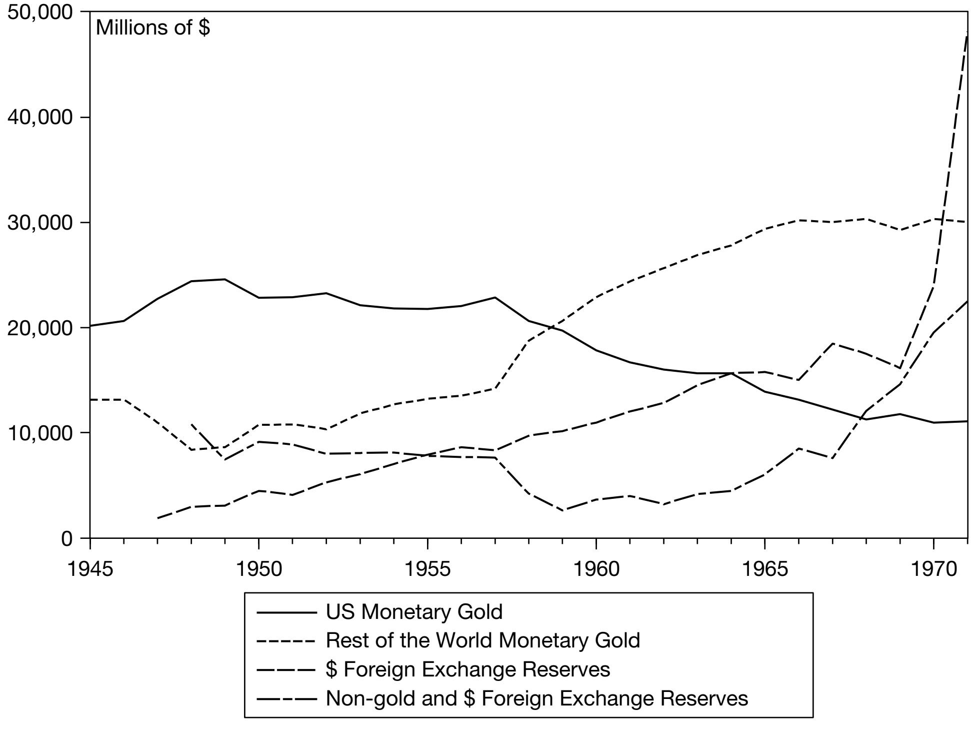

Figure 28.4 World international monetary reserves during the Bretton Woods period.

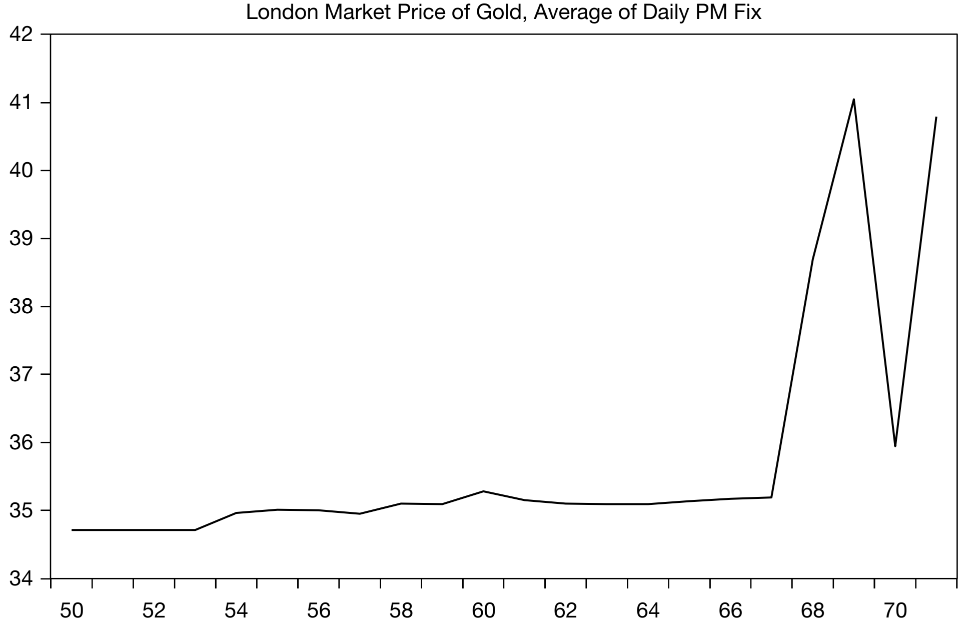

Figure 28.5 London market price of gold, 1950–71.

with the United States' increasingly expansionary monetary and fiscal policy. These developments led to the US inflation rate increasing beyond the low values it had maintained in the 1950s and early 1960s. This trend was transmitted to other countries, of which a few, such as Germany, had nurtured a policy of low inflation. Under these circumstances, and given the conflicts arising from the absence of a policy on how to distribute equitable amounts of international liquidity between surplus and deficit countries with different inflation preferences, the IMF created special drawing rights (SDRs) as an inferior international reserve asset (with restricted use for financing balance of payments deficits).[33]

The 'adjustment problem' of deficit and surplus countries proved to be asymmetric, and the many attempts to keep the parity were in the end unsuccessful, despite IMF and G10 loans (General Agreement to Borrow, 1961), import surcharges, tight capital controls, and discrimination of foreign deposits. Relatively high inflation and low productivity in the United Kingdom produced current account deficits and capital outflows resulting in repeated pound crises, which finally led to a 14.3 per cent devaluation in 1967. Relatively low inflation and high productivity in Germany produced current account surpluses and capital inflows which finally resulted in revaluations of the German mark in 1961 (5 per cent) and 1969 (8.15 per cent). Other deficit countries, such as France, and surplus countries, such as the Netherlands, had similar experiences to those of the United Kingdom and Germany, respectively.

Given these developments, the collapse of the Bretton Woods system finally became unavoidable. European countries were not willing to accept a dollar standard and were themselves divided by their different economic developments and inflation preferences, which were fuelled by the 'Phillips illusion' of a persistent trade-off between inflation and unemployment. In August 1969, President Nixon closed the gold window and the dollar could no longer be converted at $35 per ounce in official transactions.

Was the collapse of the Bretton Woods system inevitable? The Bretton Woods system is similar to a bimetallic system, where two monetary metals, usually gold and silver, are legally fixed in a static relationship (e.g. 1 to 16, as was the case in the United States from 1834–61 with a silver dollar of 24 grammes and a gold dollar of 1.5 grammes). In the Bretton Woods system, we have gold and dollars instead of gold and silver with a fixed ratio characterized by the fixed $35 price for one ounce of gold.

In general, a bimetallic system is more flexible than a monometallic standard and should lead to a lower degree of price-level variability in a world without transaction costs.[34] Indeed, Friedman argues that the metallic monetary system could have survived into the twentieth century if bimetallism had not been abandoned by the two large bimetallic countries, France and the United States, in favour of the gold standard in the 1870s.[35]

The problem with the bimetallic standard is that large changes in the relative volume of the two metals by discoveries of large deposits, as happened in the Californian gold rush in 1848, lead to pressure on relative prices of the two metals. When the relative market price deviates from the legal ratio, then the legally overvalued metal will be used more and more as money, and, consequently, may completely crowd out the other metal as money[36]

[33] The creation of SDRs led to the amendment of the Articles of Agreement of July 1969, which are reproduced by De Vries, above n 28, vol. 2, at 97–142.

[34] Formal models of bimetallic systems go back to Walras in the nineteenth century. Modern treatments are provided by J. Niehans, *The Theory of Money* (1978), at 153–8, and F. R. Velde and W. E. Weber, 'A Model of Bimetallism', (2000) 108(6) *Journal of Political Economy* 1210. For the historical development of bimetallism, the reader is referred to A. Redish, *Bimetallism: An Economic and Historical Analysis* (2000).

[35] M. Friedman, 'Bimetallism Revisited', (1900) 4(4) *Journal of Economic Perspectives* 85.

[36] This happened twice in the United States, when silver crowded gold out in the early nineteenth century with a legal ratio of 1:15, and gold crowded silver out after the Californian gold rush with a legal ratio of 1:16 (changed

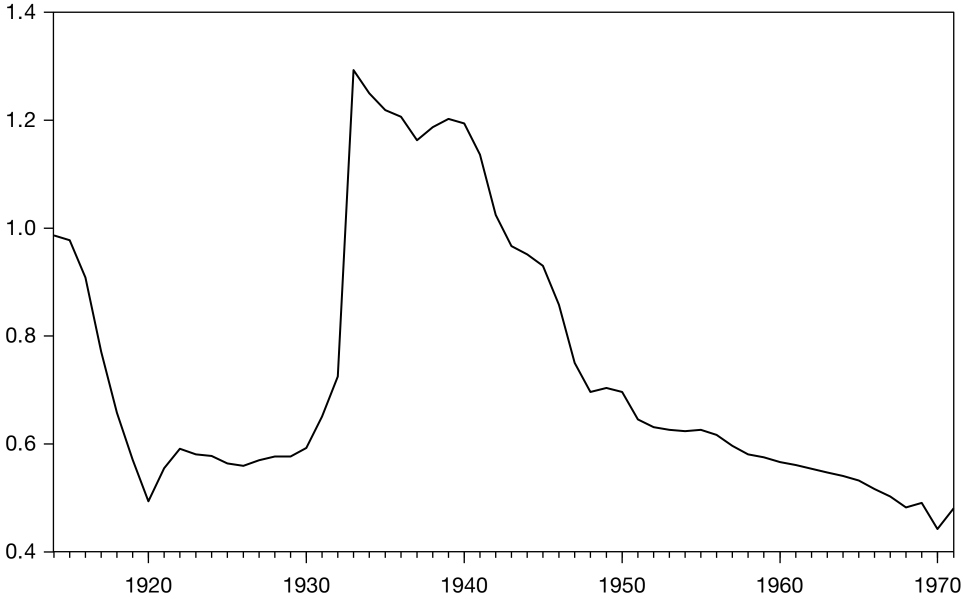

Figure 28.6 The real dollar price of gold, 1914–71.

Source: Official gold price, US CPI is from Federal Reserve Economic Data, available at http://research.stlouisfed.org/fred2/.

(Gresham's law, 'bad money drives out good money'). The Bretton Woods system is different from a bimetallic system as only gold has a non-monetary use, which is not true of the dollar. However, gold, used as money, may be crowded out if its relative price falls and it becomes more attractive for non-monetary purposes, and gold production becomes less profitable. Figure 28.6 plots the 'real' dollar-gold price (the gold price divided by the consumer price index) from 1914 to 1975. During the inflationary periods (First and Second World Wars and Bretton Woods), we see a strong fall in the real gold price, whereas it increases during deflations (the Great Depression, even after the increase in the nominal gold price from $20.67 to $35 in 1933). This led to a real dollar gold price, which in 1965 reached less than half of its 1912 value. Therefore, it is not surprising that the system was characterized by the dollar being substituted for gold, which ultimately would have led to a dollar standard. Thus, the fundamental flaw in the system was its fixed link to gold without readiness to accept temporary deflations, which had been taboo ever since the disastrous deflation of the Great Depression. The only way to avoid this problem is to introduce a revaluation of gold in terms of the system's *numeraire* currency; this, however, makes the system strongly discretionary and exacerbates the problem of time inconsistency.

The substitution of the dollar for gold as the international reserve currency is illustrated in Figure 28.7, which displays the development of the gold and the dollar share in international reserves from 1948 to 1971. At the beginning of this period, gold was

in 1834). In France, however, bimetallism could be maintained with a legal ratio of 1:15.5: see M. Flandreau, 'Water Seeks a Level: Modeling Bimetallic Exchange Rates and the Bimetallic Band', (2002) 34 *Journal of Money, Credit and Banking* 519 and M. Flandreau, *The Glitter of Gold; France, Bimetallism and the Emergence of the International Gold Standard, 1848–1873* (2004). The stable bimetallic system in France is mainly explained by its very large share in the world stock of silver and gold, which, in turn, was caused by the predominance of coins as a means of payment.

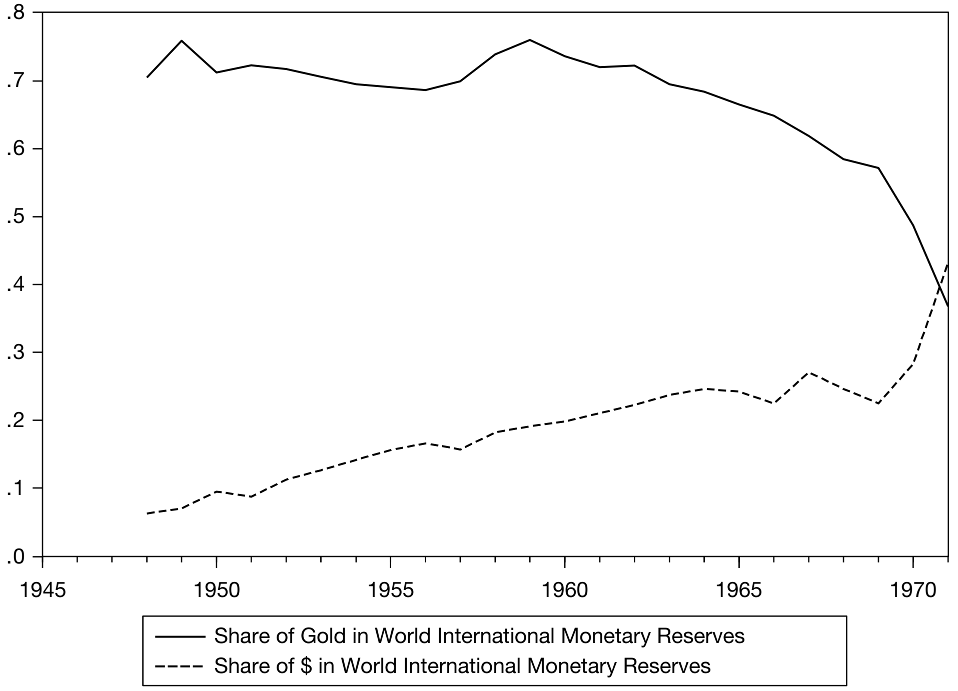

Figure 28.7 Composition of International Reserves 1948–71.

dominant in international reserves (approx. 75 per cent), while the dollar's share was extremely small (approx. 5 per cent). The dollar's share steadily increased to 25 per cent and then jumped to 40 per cent in 1970, while gold's share reflected an inverse path, falling to a value below 40 per cent in 1971.

The data allow us to test the existence of a relationship between the two series. Indeed, the development of the dollar's share is strongly negatively correlated with the real dollar-gold price displayed in Figure 28.6, and yields a correlation coefficient of −0.89. This correlation is not spurious. It derives from the fact that the framework allows for auto correlation of the dollar's share. In Appendix B of this chapter, the results of a simple Vector-Autoregressive Model is presented which show that the dollar's share is influenced by the real gold price lagged by one year, even if we control for the previous year's level of the dollar's share.

V. Summary and Conclusion

The system designed at the conference at Bretton Woods in July 1944 was the first full attempt to establish an international monetary order with fixed exchange rates based on an international treaty. The institution of the International Monetary Fund was created and its members were obligated to fix their exchange rates and refrain from imposing any restrictions on current international transactions. Transitory balance of payments deficits were intended to be financed by the resources of the IMF, which were funded by its members, whereas fundamental imbalances could be redressed by exchange rate adjustments in co-operation with the IMF. This system was designed in response to the disastrous economic developments of the 1930s in order to counteract its causes, perceived as monetary problems resulting from flexible exchange rates and restrictions on international payments, which were associated with bilateral foreign trade clearing systems and multiple exchange rates for different kinds of transactions. It aimed at re-establishing exchange rate stability under free currency convertibility (at least for current transactions) as under the gold standard (1880–1914) without bearing the rigid adjustment pressure of the latter system, which leads to deflationary pressure in countries which have trade balance deficits.

The agreement presents a number of interesting features from an institutional and legal perspective. On the one hand, Bretton Woods imposed numerous obligations on its members with respect to their currencies and their handling of international payments. According to Article III, they were obliged to pay an individual quota to the IMF (25 per cent of this amount in gold). Article IV obliged them to keep their spot exchange rate (and the price of gold) within a 1 per cent bandwidth around par values. Members could be forced to introduce capital controls when facing sustained capital outflows (Article VI). Article VIII finally forbade restrictions on current payments and multiple currency practices without the consent of the IMF. Moreover, it made exchange contracts which violate exchange controls consistent with the Agreement unenforceable in any member country. On the other hand, most members had insufficient influence to affect the decisions of the IMF. The paragraphs of Article XII on the rules on voting rights caused large countries (in particular the United States) to have a dominant influence on IMF decisions. Moreover, Article XVIII allowed the IMF to decide on all questions of interpretation without any possibility of appeal. This was particularly important, as many aspects of IMF policy were not fixed in the Agreement and were decided later by the Fund and it was easy to withdraw from membership according to Article XV upon the Fund's receipt of the notice.

Why was this system able to function more or less adequately for at least twenty-five years, given its rigorous obligations and the ease with which members could make a formal exit?[37] There are several reasons for this. First, there was the incentive to use the resources of the Fund to finance balance of payments deficits. Second, the voting power became more balanced when the number of members increased from forty-four at the Fund's inception in 1944 to 104 in 1966. Third, in order to prevent major withdrawals, the IMF was very pragmatic and tolerant with respect to the obligations of its members. At the end of 1965, only twenty-nine of 104 members fulfilled de facto the *de jure* obligations of Article IV. Article XIV, which aimed at a transitional period of five years, was extensively used in order to legalize all kinds of violations which ranged from multiple currency practices to floating exchange rates. Sanctions (denying access to the IMF's resources) were rarely imposed. Fourth, IMF decisions from the Executive Board were mostly reached through negotiation and consensus, which partly neutralized the asymmetry in voting power.

Fixed exchange rates existed before the Bretton Woods period, when countries established a legally fixed link between their currencies and an accepted monetary metal such as gold or silver, and also allowed the free international movement of money and the monetary metal. Under these conditions, fixed equilibrium exchange rates corresponding to the relative metallic content of two currencies were the consequence of private arbitrage operations, without central bank intervention or an international monetary institution

[37] With the exception of the USSR, all forty-five countries signed the agreement, and only three countries withdrew (Czechoslovakia, Cuba, and Poland), as the IMF denied them access to its resources. Indonesia withdrew and was readmitted: Horsefield, above n 13, vol. 2, at 514.

being necessary. Under such a regime, exchange rate deviations from their parity values existed, because the private arbitrage operations were subject to transaction costs which were rather high prior to the information and transport revolution of the nineteenth century. The costs were at a level of 2 per cent and 3 per cent, respectively, in the seventeenth and eighteenth centuries, and below 0.5 per cent in the second half of the nineteenth century. Moreover, western countries followed the British move to the gold standard in 1816, and introduced the gold standard unilaterally in various years after 1873. For these two reasons, the period from 1880 to 1914 was a period with globally fixed exchange rates with very narrow fluctuations around the gold parities. The establishment of the fixed exchange rates of the gold standard was based on the incentives that it gave to governments and private arbitrageurs, respectively.

Governments kept a fixed link to gold and allowed the free movement of international money and gold in order to profit from the earnings to be gained through the integration of international goods and capital markets which fixed exchange rates promoted. At this point in history, no international treaty similar to the Bretton Woods Agreement existed. Under the gold standard regime, countries had to comply with strong restrictions imposed on their monetary and fiscal policies, which was politically feasible at the time owing to the restricted franchise of democratic states. The extension of the franchise after the First World War did not allow the reintroduction of such a system.

The Bretton Woods system had tried to soften the restriction of a fixed exchange rate system by relying on the IMF to finance temporary imbalances and control capital, as well as allow exchange rate adjustments at the cost of fundamental imbalances. This approach turned out to be unfeasible: on the one hand, capital controls could be very inefficient, being difficult to enforce with current account convertibility; on the other hand, devaluation in response to fundamental problems provided a one-way bet for speculators. A further fundamental problem is that the Bretton Woods system turned into a gold-dollar standard, contrary to the intention of its architects. This development was caused by the initial conditions of the system after the Second World War. The United States was the world's largest creditor, which, in addition, possessed two-thirds of the world's gold reserves, a current account surplus, deep financial markets, and a convertible currency. Most other countries were debtors with depleted gold reserves, current account deficits, repressed financial markets, and exchange controls. Thus, the United States was the only country which fulfilled Article IV by pegging the price of gold at $35, and pegging all other currencies to the dollar. The decreasing real dollar price of gold led to a substitution of dollar for gold, which would have ultimately led to a dollar standard. Thus, the fundamental flaw in the system was its fixed link to gold without readiness to accept temporary deflations, which had been taboo ever since the disastrous deflation of the Great Depression. The only way to avoid this problem was a revaluation of gold in terms of the system's *numeraire* currency; this, however, makes the system strongly discretionary and exacerbates the problem of time inconsistency. It was not tenable to subscribe to a dollar standard when the corresponding US monetary policy was becoming more and more inflationary with the monetary financing of the Vietnam War in the late 1960s. The system's member countries, in particular the countries of Europe, could not accept these developments. The Bretton Woods system was no longer sustainable. This shows again the utmost importance of the political circumstances. The Bretton Woods system reflected the political and economic dominance of the United States after the Second World War. With the fiscal problems of the United States and the growing economic success of Western European countries and Japan, the Bretton Woods system was no longer sustainable.

Appendix A

The content of the twenty articles of the agreement on the International Monetary Fund[38] can be summarized as follows:

1. Article I states the purpose of the IMF as summarized at the beginning of section III above.
2. Article II states that the participants of the Bretton Woods Conference who accepted the agreement are original members, and allows the admission of new members according to the prescription of the IMF.
3. Article III: The IMF is funded by country members in the proportion of 25 per cent gold and 75 per cent national currency according to quotas depending on size of economy and foreign trade which may be changed with a four-fifth voting power majority, but not without the consent of the member concerned. At Bretton Woods a total of 8.8 billion dollars was initially fixed.
4. Article IV: The par value of a currency has to be expressed in gold or US dollars, and all current transactions should not deviate by more than 1 per cent from par, and there is a corresponding upper (lower) bound for the central bank's buying (selling) prices of gold. Parity changes are possible with fundamental payment disequilibrium on approval of the IMF if they are larger than 10 per cent (compared to the initial value). Uniform change of all currencies in terms of gold requires a majority of total voting power (veto of members with a quota > 10 per cent). Note that the par value holds for spot market transactions, while the margins for forward exchange market transactions were not fixed and are left to what the IMF considers reasonable.
5. Article V: A member will be entitled to buy another member's currency if the IMF's holdings of the buyer's currency do not grow more than 25 per cent at an annual rate and remain less than 200 per cent of the member's quota. This entitlement is conditional on fulfilment of the member's obligations under the Agreement. Repurchase of the member's own currency is requested, and a fee is levied ranging from 0 to 4 per cent depending on the size and duration of the purchase or drawing.
6. Article VI: The Fund's resources are not to be used to finance sustained capital outflows in general, where capital controls have to be exercised instead. If a member's holdings from the Fund are below 75 per cent of its quota, this restriction will not be applied.
7. Article VII: The IMF could allow its members to introduce restrictions in current transactions with a currency declared 'scarce', i.e. the demand for a member's currency threatens the ability of the Fund to supply it.
8. Article VIII: Members are requested to refrain from discriminatory multiple exchange rate systems and restrictions on current payments and have to furnish information requested by the IMF. However, exchange contracts which violate capital controls approved by the IMF will be unenforceable in the territories of all members.
9. Article IX: Status, immunities of the IMF as an international organization.
10. Article X: Relations with other international organizations.
11. Article XI: Relations with non-members in contravention of the provisions of the Agreement are not allowed.
12. Article XII: The Fund has a Board of Governors (BoG), Executive Directors and a Managing Director. In the BoG every member is represented by a governor, and at least 12 Executive Directors, who elect the Managing Director, represent large countries and groups of smaller countries. Controversial decisions are made by voting, where voting power depends on the quota, and its use, of a country or country group. Every member has 250 votes and one additional vote for each 0.1 million $US-quota; net sales of own currency increases voting power by one vote for 0.4 million $US; net purchases of other currencies reduce it correspondingly.
13. Article XIII: The principal office of the IMF is located in the country with the largest quota. Gold is deposited to 50 per cent in the country with the principal office; the rest is distributed among deposits with the four next largest quota countries. The 75 per cent currency share is deposited with an account of the IMF held at the member's central bank.
14. Article XIV: In the post-war transitional period, members are allowed to exercise exchange rate restrictions in violation of the Agreement, which should, however, expire five years after the start of the IMF's operations in 1946.
15. Article XV: Any member may withdraw at any time by transmitting a corresponding notice to the Fund. Members who persistently violate their obligations may be required to withdraw from the Fund.
16. Article XVI: Emergency provisions for the operations of the IMF (suspension, liquidation).
17. Article XVII: Amendments are possible when they are supported by 60 per cent of all members with an aggregate voting power of 80 per cent.

[38] Reproduced in Horsefield, above n 13, vol. 3, at 185–214.

18. Article XVIII: Any questions of interpretation of the provisions arising between members and the Fund are decided by the Executive Directors and may be submitted on demand to the board of governors, that decision being final.
19. Article XIX: Explanation of terms such as 'monetary reserves' and 'current payments'.
20. Article XX: The final provisions require that countries with 65 per cent of the quotas sign the agreement before it enters into force. The adjustment of members' laws in accordance with the Agreement is explicitly required.

Appendix B

Let y_t and x_t denote the time series of the share of dollar-denominated international reserves and the logarithmic real dollar-gold price. A Vector Autoregressive Model relates the current series to the lagged values of both series and thereby allows for autocorrelation and allows both variables to be endogenous. The data for the period 1948–1971 provides us with the following estimates (standard errors in parentheses):

$$
\begin{aligned}
&y_t = -0.121 + 0.152 y_{t-1} - 0.526 x_{t-1} \\
&(0.038)(0.275)(0.146) \\
&x_t = -0.069 + 0.252 y_{t-1} - 0.822 x_{t-1} \\
&(0.047)(0.339)(0.179)
\end{aligned}
$$

These estimates tell us that the dollar share is strongly and highly statistically significantly (t-value –3.60) negatively related to the lagged log real gold price: a 1 per cent decrease in the real gold price leads approximately to a 0.5 per cent point increase in the share of dollar reserves. The real gold price does not react to the dollar share; it is only statistically related to its own past value.

29

From the State Theory of Money to Modern Money

An Alternative to Economic Orthodoxy

L. Randall Wray

I. Introduction

In this chapter, I will examine the intellectual history of an alternative to the orthodox approach to money and credit.[1] Charles Goodhart has usefully distinguished between what he called the orthodox 'metallist' and the heterodox 'chartalist' approaches. The first focuses on money as a medium of exchange, which in the past derived its value through a link to precious metal. This is not meant to imply that orthodoxy excludes other functions of money, or to claim that modern orthodox economists would want to return to a gold standard. Rather, the focus on money's metallic origins as a cost-minimizing medium of exchange frames thinking about the nature of money.

Many orthodox policy prescriptions follow fairly directly from this vision, in particular the view that money's value is linked to its scarcity. The advantage of the gold standard was precisely the imposed scarcity, while the problem with fiat money is that it can be 'dropped by helicopters' as in Friedman's famous analogy. Hence, in the absence of linkage between money and gold, we must find another way to constrain its quantity so that the money supply just matches the demand at a stable price.

The second approach is much more consistent with the legal view of money adopted by many of the authors in this volume. It could be said that 'money is a creature of law', with emphasis on the link between money and contracts; for example, whatever is defined as legal money can be delivered to settle contracts.[2] Legal tender laws normally require that the state's own currency be accepted. Hence, the second, chartalist, approach highlights the important role played by 'authorities' in the origins and evolution of money. In the chartalist approach, the state, or any other authority able to impose an obligation, imposes a liability in the form of a generalized, social or legal, unit of account (a form of money)

[1] I thank participants of the workshop held at Cambridge University, and especially Geoff Ingham who provided insightful comments on an earlier draft of this paper.

[2] Geoff Ingham reminds me that this is especially true of those who follow F. W. Mann, *The Legal Aspect of Money* [1938] (1982).

used for measuring the obligation. This does not require the pre-existence of markets, and indeed, almost certainly predates them. Once the authorities can levy such obligations, they can decide what fulfils the obligation by denominating the things that can be delivered, in other words, by pricing them. This resolves the conundrum faced by methodological individualists and emphasizes the social nature of money and markets—which did not spring from the minds of individual utility maximizers to replace barter, but rather were socially created.

This chapter will not address the orthodox, metallist, approach in detail. Nor will it attempt to demonstrate that the chartalist approach is more consistent with the historical facts as we know them. Lastly, this chapter will not present a rigorous history of thought. Instead, it will focus on only a handful of major figures whose work was important in building a modern version of chartalism, an approach now called modern money theory (MMT). The main contributors to the chartalist tradition were Knapp, Innes, Keynes, Schumpeter, Lerner, and Minsky, and more recently Goodhart and Ingham. Rather than attempt to examine the influences of each of these theorists, this chapter will identify those contributions that shaped the development of MMT.

In recent years, MMT has risen to prominence, especially on the internet, largely for two reasons. First, its understanding of the nature of money leads to interesting policy conclusions. Second, and related to that, MMT provides a description of modern fiscal and policy operations that is quite different from orthodox economics. Indeed, it is this alternative exposition that leads quite directly to a different approach to policy-making. We first examine (in Section II) the early contributions of Knapp, Innes, and Keynes, while including a brief summary of Schumpeter's views on money and credit. We then move on in Section III to the more recent contributions in this tradition, focusing on those of Minsky, Lerner, and Ingham. This chapter will conclude in Section IV with a brief examination of related policy issues.

II. State Money, Credit Money, and Chartalism: The Contributions of Knapp, Innes, Keynes, and Schumpeter

1. Knapp

Georg Friedrich Knapp developed the 'state theory of money', an approach that is directly opposed to the metallist view, according to which the value of money derives from the value of the metal standard adopted, for example gold or silver. More generally, according to Knapp, metallists try to 'deduce' the monetary system 'without the idea of a state'. This, he believes, is 'absurd', for 'the money of a state' is that which is 'accepted at the public pay offices'.[3] Knapp's exposition is quite complex and required the creation of a classificatory scheme with dozens of idiosyncratic terms. We will try to keep our summary simple; to some extent we will have to paraphrase rather than use extensive quotes, for otherwise we would have to define the numerous terms he coined. This section will be the longest and most detailed as Knapp's exposition serves as the basis for the chartalist approach to state money and also to private credit monies.

According to Knapp, debts are expressed in a unit of value, 'the unit in which the amount of the payment is expressed',[4] and discharged with the means of payment, 'a movable thing

[3] G. F. Knapp, *The State Theory of Money* [1924] (1973), at vii–viii; see also C. A. E. Goodhart, *Money, Information and Uncertainty* (1989).

[4] Knapp, above n 3, at 8.

which has the legal property of being the bearer of units of value'.[5] What then determines what things will act as means of payment to discharge debts? Knapp recognized that the means of payment are occasionally changed; sometimes one type of material (say, weighed or coined gold) has been accepted, but 'suddenly' another (say, weighed or coined silver) takes its place. Therefore, while the means of payment may take the form of a definite material, it is not bound to any particular material, for it may be changed.[6] 'A proclamation is made that a piece of such and such a description shall be valid as so many units of value.'[7] 'Validity by proclamation is not bound to any material. It can occur with the most precious, or the basest metals.'[8] The fundamental insight was his recognition that these transitions always require that the state announce a conversion rate, for example so many ounces of gold for so many ounces of silver. Hence, the debts were always nominal and were never actually 'metallic': all debts are converted to the new metal, which proves that all units of account must be nominal.

Knapp described the modern monetary system, where chartal money has developed:

> When we give up our coats in the cloak-room of a theatre, we receive a tin disc of a given size bearing a sign, perhaps a number. There is nothing more on it, but this ticket or mark has legal significance; it is a proof that I am entitled to demand the return of my coat. When we send letters, we affix a stamp or a ticket which proves that we have by payment of postage obtained the right to get the letter carried. The 'ticket' is then a good expression . . . for a movable, shaped object bearing signs, to which legal ordinance gives a use independent of its material. Our means of payment, then, whether coins or warrants, possess the above-named qualities: they are pay-tokens, or tickets used as means of payment. . . . Perhaps the Latin word 'Charta' can bear the sense of ticket or token, and we can form a new but intelligible adjective—'Chartal'. Our means of payment have this token, or Chartal, form. Among civilized peoples in our day, payments can only be made with pay-tickets or Chartal pieces.[9]

Note that like the tin disc issued by the cloakroom, the material used to manufacture the chartal pieces is wholly irrelevant—it can be gold, silver, or common metal; it can be paper and, today, it can be electronic entries on tape or hard-drive.

> It is, therefore, impossible to tell from the pieces themselves whether they are Chartal or not. This is at once evident in the case of warrants. As to coins, we must always refer to the Acts and Statutes, which alone can give information . . . if the pieces gain their validity through proclamation, they are Chartal.[10]

Finally, '[m]oney always signifies a Chartal means of payment. Every means of payment we call money. The definition of money is therefore a Chartal means of payment.'[11] Chartalism is often identified with the proposition that legal tender laws determine that which must be accepted as a means of payment, following Schumpeter's interpretation of Knapp. However, Knapp's analysis went further.

> If we have already declared in the beginning that money is a creation of law, this is not to be interpreted in the narrower sense that it is a creation of jurisprudence, but in the larger sense that it is a creation of the legislative activity of the State, a creation of legislative policy.[12]

And what is the nature of this 'legislative activity' that determines what will be the chartalist money accepted within the jurisdiction of the state?

[5] Ibid., at 7. [6] Ibid., at 8–25. [7] Ibid., at 30. [8] Ibid.
[9] Ibid., at 31–2. [10] Ibid., at 34–5. [11] Ibid., at 34–8. [12] Ibid., at 40.

> What forms part of the monetary system of the State and what does not? We must not make our definition too narrow. The criterion cannot be that the money is issued by the State, for that would exclude kinds of money which are of the highest importance; I refer to bank-notes: they are not issued by the State, but they form a part of its monetary system. Nor can legal tender be taken as the test, for in monetary systems there are very frequently kinds of money which are not legal tender. . . . We keep most closely to the facts if we take as our test, that the money is accepted in payments made to the State's offices. Then all means by which a payment can be made to the State form part of the monetary system. On this basis it is not the issue, but the acceptation, as we call it, which is decisive. State acceptation delimits the monetary system. By the expression 'State-acceptation' is to be understood only the acceptance at State pay offices where the State is the recipient.[13]

It is the decision of the state to accept a 'ticket' or 'pay token' at state pay offices, and not legal tender laws, that creates chartal money.

> In the monetary system of a State there must be one kind of money which is definitive, as opposed to provisional (convertible) money. . . . Money is definitive if, when payment is made in it, the business is completely concluded. . . . . The payer is no longer under an obligation, the recipient has no further rights either against the payer or against the State, if the State has issued the money.[14]

It is not simply a 'legal tender' law that makes state notes acceptable in private transactions, but it is the fact that the state first decides what it will use or accept as money in its own transactions, and that this must then be acceptable as means of settlement of private debts. 'The laws do not decide what shall be valuta money,[15] they merely express a pious hope, for they are powerless against their creator, the state.'[16]

Knapp extended his analysis to include bank money: 'The bank makes notes and offers them in payment to its customers. Issuing notes is not a special business . . . but a special way in which the bank endeavours to make its payments. . . . It tries to pay in its own notes instead of in money issued by the state, because then with a comparatively small capital it can make greater profits than it otherwise could.'[17] Acceptability of banknotes in private transactions is not, as was commonly believed, based on the bank promise to convert these to specie. In other words, bank money did not derive its value from the gold reserves or specie into which it promised redemption. Whether banknotes are convertible is irrelevant: '[a]n inconvertible bank-note, then, is not a nullity, but has this in common with the convertible bank-note, that it is a till-warrant of the bank.'[18] What is important is that the note 'is a private till-warrant available for payments to the bank . . . but clearly the customers of the bank can use it for payments between themselves, as they are sure it will be taken at the bank. These customers and the bank form, so to speak, a private pay community; the public pay community is the state.'[19]

Knapp argues that banknotes do not derive their value from the reserves, whether gold or government fiat money, held for conversion, but rather from their use in the 'private pay community' and 'public pay community'; this, in turn, is a function of 'acceptation' at the bank and public pay offices. Within the 'private pay community' (or 'giro'), bank money is the primary money used in payments; however, payments in the 'public pay community' require state money. This can include bank money, but note that generally delivery of bank

[13] Ibid., at 95. [14] Ibid., at 102–5.

[15] Knapp defines definitive money as that which the state will accept at pay offices, while valuta money is a component of definitive money, namely that which the state will provide in its own payments.

[16] Knapp, above n 3, at 111. [17] Ibid., at 131. [18] Ibid., at 134. [19] Ibid.

money to the state is not final, or definitive, because the state will present it to banks for 'redemption' (for *valuta* reserves). Bank money, when used in the public pay community is not 'definitive' unless the state also uses it in its own purchases.

How can banknotes become state money? 'Bank-notes are not automatically money of the state, but they become so as soon as the state announces that it will receive them in epicentric payments [ie, payments to the state].'[20] If the state accepts notes in payment, then banknotes become 'accessory', and the business of the bank is enhanced, 'for now everybody is glad to take its bank-notes since all inhabitants of the state have occasion to make epicentric payments (e.g. for taxes)'.[21] The banknotes then become valuta money if the state takes the next step and makes 'apocentric payments [i.e., payments by the state] in bank-notes'.[22] However, states often required that banks make their notes convertible to state-issued money: 'one of the measures by means of which the state assures a superior position to the money which it issues itself',[23] and thus maintained banknotes in the role of accessory money, rather than allowing them to become valuta money. If the state accepts banknotes in payment, but does not make payments in these banknotes, then the notes will be redeemed—leading to a drain of 'reserves'; indeed, governments and central banks used redemption or threat of redemption to 'discipline' banks.

In times of distress, however, governments would pass laws ending convertibility of its chartal money to metal, announce that the state would henceforth make payments in banknotes, and thereby declare that the banknotes were valuta money.[24] Sometimes this applied to one bank only, which would become the central bank. Through the action of the state, then, paper money can become valuta money. 'At first bank-notes and Treasury notes are employed only as accessory money. . . . The mournful hour arrives when the state has to announce that it can no longer pay in the money that was till then valuta [say, coined gold] and that those warrants themselves are now valuta.'[25]

At this point, we have a chartalist, non-convertible, paper money, often called 'fiat money', as do modern developed countries. Of course, this radical development came nearly three-quarters of a century after Knapp's book was first published (1905), when we finally abandoned Bretton Woods. However, Knapp had recognized that the money of a state does not derive its value from metal, and indeed, that no metal is needed domestically. He did argue, on the other hand, that in the international sphere, '[t]o dispense with specie money altogether would only be possible for very large federations of states [and, therefore, is] probably impracticable. On account of foreign trade specie money is still necessary.'[26] Within a state, however, specie is not necessary, for 'state money may be recognised by the fact that it is accepted in payment by the state'; as Keynes said (see Section IV.2 below), the state not only enforces the dictionary (legal tender laws) but writes it (decides what is to be accepted as money).[27]

We might, then, see the development of the gold standard as a solution to the problem of what to use for international, stateless money. The problem is that tying a domestic

20 Ibid., at 135. 21 Ibid., at 137. 22 Ibid., at 138.

23 Ibid., at 140. 24 Ibid., at 143.

25 Ibid., at 196. This often comes after the bank has purchased government debt and issued notes that promised conversion; in times of war or other distress, the government would 'encourage' banks to issue far more notes (to 'finance' government spending) than they could conceivably convert. Thus suspension of convertibility served the interests of government as well as the bank.

26 Ibid., at xv.

27 Of course, the type of monetary system envisioned by Knapp is similar to the one adopted shortly thereafter by the US: a 'gold standard' without domestic convertibility, but with a specie reserve to satisfy international purposes. Knapp did not foresee the time when metals could be dropped altogether in favour of foreign currency reserves and flexible exchange rates.

currency to gold created problems in terms of internal monetary stability, even as it resolved the problem of the need for international money. As it happened, neither the gold standard nor the Bretton Woods standard was sustainable, because internal instability generates external instability.

Most paper money (today, mostly deposits) is privately issued and derives its demand not from a promise of redeemability but rather from state acceptance at pay offices. Knapp goes further, for he argues that the state eventually realizes, usually during a crisis, that it can also make payments in that which it promises to accept. Once freed from domestic convertibility based on a metallic standard, the state's domestic spending would not be constrained by the quantity of the metal available. Abandonment of the metallic standard internationally would eliminate metallic constraints on countries. The state thus moved to a paper money system domestically, making its apocentric payments in central bank notes and accepting epicentric payments in private bank notes (today, deposits) that would have to be redeemed (today, cleared) for the valuta central bank notes (today, reserves). Precious metals were then used only for international purposes until the US finally abandoned the gold standard altogether in the early 1970s.

This chapter will not address further the international currency regimes. Such discussion necessarily takes us beyond state money, because a government cannot generally use its sovereign power to impose liabilities on foreign nations. We next turn to Innes.

2. Innes

A. Mitchell Innes suggested that we can locate the origins of credit and debt relations in the elaborate system of tribal *wergild* designed to prevent blood feuds.[28] *Wergild* fines were paid by transgressors directly to victims and their families, and were established and levied by public assemblies. A long list of fines for each possible transgression was developed, and a designated 'rememberer' would be responsible for passing it down to the next generation. Note that each fine was levied in terms of a particular good that was both useful to the victim and, more or less, easily obtained by the perpetrator.

Innes believed that money evolves not from a pre-money market system but rather from the 'penal system' based on the ancient practice of *wergild*.[29] Hence, he highlights the important role played by the 'authorities' in the origins and evolution of money. More specifically, the state, or any other authority able to impose an obligation, imposes a liability in the form of a generalized, social unit of account, or money, used for measuring the obligation. This does not require the pre-existence of markets, and indeed, almost certainly

[28] See A. M. Innes, 'What is Money?', (May 1913) *Banking Law Journal* 377, at 389; A. M. Innes, 'The Credit Theory of Money', (December–January 1914) *Banking Law Journal* 151; A. M. Innes, *Martyrdom in Our Times: Two Essays on Prisons and Punishment* (1932). See also G. Ingham, 'The Nature of Money', (2004) 5(2) *Economic Sociology: European electronic newsletter* 18; G. Ingham, *The Nature of Money* (2004); G. Ingham, 'O Sacred Hunger of Pernicious Gold! What Bands of Faith can Impious Lucre Hold?', (2013) 54(1) *European Journal of Sociology* 127; P. Grierson, *The Origins of Money* (1977); P. Grierson, *Dark Age Numismatics* (1979); and C. A. E. Goodhart, 'Two Concepts of Money: Implications for the Analysis of Optimal Currency Areas', (1998) 14 *European Journal of Political Economy* 407.

[29] Ingham, *The Nature of Money*, above n 28; L. R. Wray, *Understanding Modern Money* (1998). As the great numismatist Philip Grierson put it:

> The conditions under which these laws were put together would appear to satisfy much better than the market mechanism, the prerequisites for the establishment of a monetary system. The tariffs for damages were established in public assemblies. . . . Since what is laid down consists of evaluations of injuries, not evaluation of commodities, the conceptual difficulty for appraising unrelated objects is avoided.

Grierson, *The Origins of Money*, above n 28, at 20–1, quoted in G. Ingham, 'Revisiting the Credit Theory of Money and Trust', in J. Pixley (ed.), *New Perspectives on Emotions in Finance* (2013) 121, at 124.

predates them. Once the authorities can levy such obligations, they can name what fulfils this obligation by denominating those things that can be delivered, in other words, by pricing them. This emphasizes the social nature of money and markets, which were socially created.[30]

The state chooses the unit, names the thing accepted in payment of obligations to itself, and eventually issues the money-thing it accepts. The material from which the money-thing issued by the state is produced is not important, whether it is gold, base metal, paper, or now even digitized numbers at the central bank. No matter what it is made of, the state must announce its nominal value, that is to say, the value at which the money-thing is accepted as meeting obligations to the state, and accept it in payments made to the state.

What is most interesting about Innes' contributions is that he integrated the state theory of money with a credit theory of money. Along similar lines, Schumpeter made a famous distinction between the 'monetary theory of credit' and the 'credit theory of money'. The first theory sees private 'credit money' as only a temporary substitute for 'real money'—possibly a 'natural' money that is free of social relations. The final settlement must take place in real money, which is the ultimate unit of account, store of value, and means of payment. Exchanges might take place based on credit, but credit expansion is strictly constrained by the quantity of real money. Ultimately, only the quantity of real money matters so far as economic activity is concerned. Most modern macroeconomic theory is based on the concept of a deposit multiplier that links the quantity of privately created money, mostly bank deposits, to the quantity of high powered money (HPM). This is the modern equivalent to what Schumpeter called the monetary theory of credit, and Friedman (or Karl Brunner) is its best representative. The real money that is the basis of deposit expansion should be controlled, preferably by a rule that will make the modern fiat money operate more like the metallic money of the hypothesized past.

The credit theory of money, by contrast, emphasizes that credit normally expands to allow economic activity to grow. This new credit creates new claims on HPM even as it leads to new production. However, because there is a clearing system that cancels claims and debits without use of HPM, credit is not merely a temporary substitute for HPM. Schumpeter does not deny the role played by HPM as an ultimate means of a settlement; he simply denies that it is required for most final settlements.

Like Schumpeter, Innes focused on credit and the clearing system, mocking the view that 'in modern days a money-saving device has been introduced called *credit* and that, before this device was known all purchases were paid for in cash, in other words in coins'.[31] Instead, he argued 'careful investigation shows that the precise reverse is true'.[32] Rather than selling in exchange for 'some intermediate commodity called the medium of exchange', a sale is really 'the exchange of a commodity for a credit'. Innes called this the 'primitive law of commerce': 'The constant creation of credits and debts, and their extinction by being cancelled against one another, forms the whole mechanism of commerce.'[33] Innes explains:

> By buying we become debtors and by selling we become creditors, and being all both buyers and sellers we are all debtors and creditors. As a debtor we can compel our creditor to cancel our

[30] See M. Hudson, 'The Archaeology of Money: Debt versus Barter Theories of Money's Origins', in L. R. Wray (ed.), *Credit and State Theories of Money* (2004) 99, for a description of price-setting by authorities in the early granary empires of Mesopotamia; and K. Polanyi, 'Aristotle Discovers the Economy', in K. Polanyi, C. M. Arensberg, and H. W. Pearson (eds), *Trade and Market in the Early Empires* (1957) 64, for the role of authorities in setting up markets and negotiating prices across borders; and Ingham, 'The Nature of Money', above n 28; Ingham, *The Nature of Money*, above n 28 for related summaries.

[31] Innes, 'What is Money?', above n 28, at 389. [32] Ibid. [33] Ibid., at 393.

> obligation to him by handing to him his own acknowledgment of a debt to an equivalent amount which he, in his turn, has incurred.[34]

The market, then, is not viewed as the place where goods are exchanged, but rather as a clearing house for debts and credits. Indeed, Innes rejected the typical analysis of the medieval village fairs, arguing that these were first developed to settle debts, with retail trade later developing as a sideline to the clearing house trade. On this view, debts and credits, and clearing are the general phenomena; trade in goods and services, is subsidiary—one of the ways in which one becomes a debtor or creditor (or clears debts). Innes viewed the creditor–debtor relation as the fundamental social relation lying behind money's veil. There is no 'natural' relation-free money that lies behind the credit money. Indeed, for Innes even HPM is credit money—for reasons discussed in the next section.

The credit approach as advanced by Innes and Schumpeter provides a more useful vision of monetary operations in a capitalist (market) economy than does the orthodox vision of money serving as a lubricating medium of exchange. The monetary production economy as described by Marx, Veblen, and Keynes is dominated by a complex web of financial relations that were characterized by Minsky as 'money now for money later' propositions.[35] Money is not a veil that should be stripped away to observe the essential characteristics of the 'market economy'. Rather, the money-of-account and those credit–debt relations are the key institutional relations of the capitalist economy.

Innes sounds very much like Knapp on the state's money, although there is no direct indication that he was drawing on Knapp's exposition. However, Innes is best on generalizing the credit approach to money to include the state's own currency as a credit money. He insisted that when the state spends, it becomes a debtor, as it issues state money. As he said 'by buying we become debtors'. Hence, even state money is credit money; however, it is a special kind of credit, 'redeemed by taxation'.[36] For the government, a dollar is a promise to 'pay', a promise to 'satisfy', a promise to 'redeem', just as all other money is. Innes argued that even on a gold standard it is not gold that government promises to pay: it is true that all the government paper money is convertible into gold coin, 'but redemption of paper issues in gold coin is not redemption at all, but merely the exchange of one form of obligation for another of an identical nature'.[37]

Whether the government's IOU is printed on paper or on a gold coin, the government is indebted just the same. What, then, is the nature of the government's IOU? Innes identifies the 'very nature of credit throughout the world', which is 'the right of the holder of the credit (the creditor) to hand back to the issuer of the debt (the debtor) the latter's acknowledgment or obligation'.[38] The holder of a coin or certificate has the absolute right to pay any debt due to the government by tendering that coin or certificate, and it is this right and nothing else which gives them their value. It is immaterial whether or not the right is conveyed by statute, or even whether there may be a statute law defining the nature of a coin or certificate otherwise.[39]

Hence, we can integrate the state money and credit money approaches through the recognition of the 'very nature of credit', which is that the issuer must accept its own IOUs. What then, is special about government? The government's credit 'usually ranks in any given city slightly higher than does the money of a banker outside the city, not at all because it represents gold, but merely because the financial operations of the government are so

[34] Ibid., at 393. [35] H. P. Minsky, *Stabilizing an Unstable Economy* (1986), at 228.
[36] Innes, 'The Credit Theory of Money', above n 28, at 168. [37] Ibid., at 165.
[38] Ibid., 161. [39] Ibid.

extensive that government money is required everywhere for the discharge of taxes or other obligations to the government'.[40] The special characteristic of government money, then, is that it is 'redeemable by the mechanism of taxation':[41] '[I]t is the tax which imparts to the obligation its 'value'. . . . A dollar of money is a dollar, not because of the material of which it is made, but because of the dollar of tax which is imposed to redeem it.'[42]

In spite of the attention paid to the gold standard, Innes argues that it was actually in place for only a short period. Typically, the money-thing issued by the authorities was not gold-money nor was there any promise to convert the money-thing to gold. Indeed, as Innes insisted, throughout most of Europe's history, the money-thing issued by the state was the hazelwood tally stick: '[t]his is well seen in medieval England, where the regular method used by the government for paying a creditor was by "raising a tally" on the Customs or on some other revenue getting department, that is to say by giving to the creditor as an acknowledgement of indebtedness a wooden tally.'[43] Other money-things included clay tablets, leather and base metal coins, and paper certificates.[44]

Why would the population accept otherwise 'worthless' sticks, clay, base metal, leather, or paper? Because these were evidence of the state's liabilities that it would accept in payment of taxes and other debts owed to itself. The key power of the state was its ability to impose taxes: '[t]he government by law obliges certain selected persons to become its debtors. . . . This procedure is called levying a tax, and the persons thus forced into the position of debtors to the government must in theory seek out the holders of the tallies or other instrument acknowledging a debt due by the government.'[45] Contrary to orthodox thinking, the desirability of the money-thing issued by the state was not determined by the intrinsic value, even on the gold standard, but by the nominal value set by the state at its own pay offices. Nor was the government's money forced onto the public through legal tender laws. It is certainly true that governments often do adopt legal tender laws, but these are difficult to enforce and hence often ineffective.[46] The power of government to impose a tax and to name what will be accepted in tax payment is sufficient, and trumps legal tender laws.

Once the state has created the unit of account and named what can be delivered to fulfil obligations to the state, it has generated the necessary pre-conditions for development of markets.[47] As Innes argued, credits and debts preceded markets, and indeed, created the need for markets. The primordial debt is the tax obligation, which then creates the incentive for private credits and debts, and then for markets. Indeed, evidence from Babylonia suggests that early authorities set prices for each of the most important products

[40] Ibid., at 154. [41] Ibid., at 15. [42] Ibid., at 152.

[43] Innes, above n 31, at 398; see also T. Maddox, *The History and Antiquities of the Exchequer of the Kings of England in the Two Periods* (2nd edn, 1969).

[44] In any case, coinage was a very late development that seems to have little to do with the search for a handy medium of exchange. See Cook, 'Speculation on the Origins of Coinage', (1958) 7 *Historia* 257; Grierson, *The Origins of Money*, above n 28; Grierson, *Dark Age Numismatics*, above n 28; G. Heinsohn and O. Steiger, 'Private Property, Debts and Interest or: The Origin of Money and the Rise and Fall of Monetary Economics', (1983) 21 *Studi Economici* 3; G. Heinsohn and O. Steiger, 'The Veil of Barter: The Solution to the Task of Obtaining Representations of an Economy in which Money is Essential', in J. A. Kregel (ed.), *Inflation and Income Distribution in Capitalist Crises: Essays in Memory of Sydney Weintraub* (1989); C. M. Kraay, 'Hoards, Small Change and the Origin of Coinage', (1964) 84 *Journal of Hellenic Studies* 76; and Wray, above n 29; Wray (ed.), above n 30.

[45] Innes, above n 31, at 398.

[46] Knapp, above n 3, at 111.

[47] Ingham, 'The Nature of Money', above n 28, at 25. Ingham argues that this only makes sense if markets are seen as multilateral exchange systems organized around price lists denominated in money of account. Markets are to be distinguished from bilateral barter exchange with myriad exchange ratios determined by subjective preferences. Thus, paradoxically, neoclassical economics doesn't possess a theory of markets, but mere exchange.

and services—perhaps those accepted to meet obligations to the authorities. Once prices in money were established, it was a short technical leap to the creation of markets. This stands orthodoxy on its head by reversing the order: first money and prices, then markets and money-things, rather than barter-based markets and relative prices, and then *numeraire* money and nominal prices. The next step was the recognition by government that it could issue currency to purchase the mix it desired, then receive the same money-thing in the tax payments by subjects/citizens. This would further the development of markets, because those with tax liabilities, but without the goods and services government wished to buy, would have to produce for market to obtain the means of paying obligations to the state.

As Innes argues, the fundamental credit principle is that the issuer, whether household, firm, or government, must accept its own liabilities. Today, only the sovereign government can impose liabilities on others. This puts it in a privileged position because it can create a demand for its own liabilities simply by requiring that taxpayers must deliver government liabilities in payment of taxes. It can also enact legal tender laws and legal reserve requirements to try to provide further privilege to treasury and central bank liabilities. Finally, the modern state is, of course, a very large entity, hence an important purchaser of output and source of income, which makes its liabilities ubiquitous. Still, if the state did not impose tax liabilities in its currency and require ultimate payments to itself in the form of its treasury and central bank liabilities, it is difficult to believe that its sheer size and its legal tender laws alone would be sufficient to guarantee its current spot at the top of the money hierarchy.

3. Keynes

While Keynes's *General Theory* presented the theory of aggregate effective demand that is now identified as 'Keynesian theory', his earlier *A Treatise on Money* provided a more detailed treatment of his monetary theory. The first volume of that work presents definitions of money that would be used in his analysis; a brief examination of these provides insight into the view of money adopted by Keynes. Keynes was heavily influenced by both Knapp and Innes and indeed played a role in promoting their work. He reviewed the 1913 article by Innes in the *Economic Journal*, arguing that while further research might call into question some of the claims about the history of money made by him, Innes's understanding of money appeared sound. Apparently this led to a phase Keynes called his 'Babylonian Madness' in which he made an intensive study of ancient monies and metrology, hence his emphasis on money as a measure, or unit of account.[48] This research seems to have heavily influenced his *Treatise* a decade later. Further, Keynes played a role in getting Knapp's book translated into English in 1924. There is some question about whether Keynes could read German, but he could certainly read the translation after 1924. His exposition in the *Treatise* closely follows that of Innes and Knapp.

According to Keynes, the 'money of account' is the 'primary concept' of a theory of money; the money of account 'comes into existence along with Debts, which are contracts for deferred payment, and Price-Lists, which are offers of contracts for sale or purchase'.[49] In turn, '[m]oney itself, namely that by delivery of which debt-contracts and price-contracts are discharged, and in the shape of which a store of General Purchasing Power is held, derives its character from its relationship to the Money-of-Account, since the debts

[48] Ingham, 'Revisiting the Credit Theory', above n 29, at 6.
[49] Keynes, J. M., *A Treatise on Money* [1930], 2 vols (1976), at 3.

and prices must first have been expressed in terms of the latter.'[50] He further clarifies the distinction between money and the money of account: 'the money of account is the description or title and the money is the thing which answers to the description'.[51]

Following Knapp, Keynes argued that the state determines what serves as the money of account as well as dictates what 'thing' will be accepted as money.

> The State, therefore, comes in first of all as the authority of law which enforces the payment of the thing which corresponds to the name or description in the contracts. But it comes in doubly when, in addition, it claims the right to determine and declare what thing corresponds to the name, and to vary its declaration from time to time—when, that is to say, it claims the right to re-edit the dictionary. This right is claimed by all modern states and has been so claimed for some four thousand years at least.[52]

As an aside, the name, modern money theory, comes from this statement. The 'Age of Chartalist or State Money' had been reached when the state 'claimed the right not only to enforce the dictionary but also to write the dictionary'.[53] Let us emphasize that Keynes believed the 'Age of State Money' to have begun 'at least' four thousand years ago; as such, the state theory of money would certainly apply to all the 'modern' economies including those living under the gold standard in the last century—even a gold-based 'commodity' money is state money. We do not know whether money was used in pre-historic times, so its nature might have been different, but the age of modern money began with the rise of authorities at least four thousand years ago.

Privately issued debt, such as that issued by banks, might be accepted in settlement of transactions even if it is not declared by the government to be money; it can circulate 'side by side' with 'state money'.[54] However, the state might 'use its Chartalist prerogative to declare that the [bank] debt itself is an acceptable discharge of a liability'. Bank money then becomes 'Representative Money'.[55] 'At the cost of not conforming entirely with current usage, I propose to include as State-Money not only money which is itself compulsory legal-tender but also money which the State or the central bank undertakes to accept in payments to itself or to exchange for compulsory legal-tender money.'[56] In a footnote to this passage, he goes on: 'Knapp accepts as "Money"—rightly I think—anything which the State undertakes to accept at its pay-offices, whether or not it is declared legal-tender between citizens.'[57] Therefore, like Knapp, Keynes' analysis goes beyond legal tender laws to identify state 'acceptation' as the key to determining what will serve as money.

Finally, state-money may take any of three forms: 'Commodity Money, Fiat Money and Managed Money, the last two being sub-species of Representative Money.'[58] Commodity money is defined as 'actual units of a particular freely obtainable, non-monopolised commodity which happens to have been chosen for the familiar purposes of money', or 'warehouse warrants for actually existing units of the commodity'.[59] Fiat money is representative money 'which is created and issued by the state, but is not convertible by law into anything other than itself, and has no fixed value in terms of an objective standard'.[60] This is distinguished from managed money, which 'is similar to Fiat Money, except that the State undertakes to manage the conditions of its issue in such a way that, by convertibility or otherwise, it shall have a determinant value in terms of an objective standard'.[61]

Managed money is, according to Keynes, the most general form of money, which can 'degenerate into Commodity Money on the one side when the managing authority holds

[50] Ingham, 'Revisiting the Credit Theory', above n 29, at 6. [51] Ibid., at 3–4.
[52] Keynes, above n 49, at 44. [53] Ibid., at 5. [54] Ibid., at 6. [55] Ibid.
[56] Ibid., at 6. [57] Ibid., at 6–7. [58] Ibid., at 7. [59] Ibid. [60] Ibid. [61] Ibid., at 8.

against it a hundred per cent of the objective standard, so that it is in effect a warehouse warrant, and into Fiat Money on the other side when it loses its objective standard'.[62] In other words, a full-bodied, say one ounce, gold coin valued at one currency unit would qualify as commodity money, while a paper note which is convertible to gold against which a fractional gold reserve is held would qualify as managed money—even if the conversion rate is one currency unit per ounce of gold. Thus a gold standard system can operate as either commodity money or as managed money. On the other hand, representative money can take the form of either managed money, that is, a paper note convertible on demand to gold, or even to a foreign currency—for example a currency board system, or fiat money, where there is no promise to convert at a fixed exchange rate to precious metals or foreign exchange. Note that Keynes argued that even a gold standard, whether a commodity money system or a managed money system, operates as a state money system. In either case, the state can always 'rewrite the dictionary', for example by adopting a silver standard and a conversion rate, say one ounce of gold for four ounces of silver. State money can be held by banks, by the central bank, and by the public.

> The state money held by the central bank constitutes its 'reserve' against its deposits. These deposits may be termed central bank money. It is convenient to assume that all the central bank money is held by the member banks—insofar as it may be held by the public, it may be on the same footing as state money or as member bank money, according to circumstances. This central bank money plus the state money held by the member banks makes up the reserves of the member banks, which they, in turn, hold against their deposits. These deposits constitute the member bank money in the hands of the public, and make up, together with the state money, and central bank money if any, held by the public, the aggregate of current money.[63]

Any payments to the state using 'member bank money' will cause member banks to lose 'central bank money' or 'state money held by the member banks', that is, reserves. As Knapp recognized, 'member bank money' is the primary 'thing' answering to the 'description'—money—used in private transactions, or, within the 'private pay community'. When accepted in payment of taxes, it is also used in the 'public pay community', but it is not 'definitive' or valuta money from the perspective of member banks because they must deliver reserves, mainly 'central bank money', whenever taxes are paid using 'member bank money'.

In summary, with the rise of the modern state, the money of account, 'the description', is chosen by the state, which is free to choose that which will qualify as money, 'the thing' that answers to the description. This goes beyond legal tender laws, which establish what can legally discharge contracts, to include that which the state accepts in payment at its 'pay offices'. The state is free to choose a system based on commodity money, fiat money, or managed money. Even if it chooses a strict commodity system, the value of the money does not derive from the commodity accepted as money, '[f]or Chartalism begins when the State designates the objective standard which shall correspond to the money of account'.[64] '[M]oney is the measure of value, but to regard it as having value itself is a relic of the view that the value of money is regulated by the value of the substance of which it is made, and is like confusing a theatre ticket with the performance.'[65] Once it is recognized that the state may 'write the dictionary', it becomes obvious that the nominal value of a commodity, or managed, money cannot be derived from the value of the 'objective standard'; it is then a

[62] Ibid., at 8. [63] Ibid., at 9–10. [64] Ibid., at 11.

[65] J. M. Keynes, *The Collected Writings of John Maynard Keynes*. Vol XI: *Economic Articles and Correspondence, Academic*, ed. D. Moggridge (1983), at 402.

small step to 'fiat money' with no 'objective standard', for in all three cases, the state determines the nominal value of money. This is done when the state establishes what it will accept at public pay offices, as well as the nominal value of the thing accepted.

III. Later Developments of the Approach: the Contributions of Minsky, Lerner, and Ingham

1. Minsky

As discussed above, Keynes recognized that banks can normally increase loans to finance an increase of spending.[66] Before Keynes, Schumpeter had developed a view of dynamic and innovative banks, in which credit expansion was the key to allow entrepreneurs to finance innovation. Indeed, credit was seen as 'essentially the creation of purchasing power [by banks] for the purpose of transferring it to the entrepreneur'.[67]

What is important to note is that if money supply responds to money demand, this means that the 'quantity of money' is not 'exogenous' in the sense of being determined either through monetary policy, such as control by the central bank over bank reserves, or by the quantity of a precious metal reserve, as under a 'commodity money' system or a 'managed money' system.[68] While the state defines money, it does not control the quantity. The state is able to control its initial emission of currency, but this is through fiscal policy rather than through monetary policy. That is, the quantity of currency created is determined by purchases of the state, including goods, services, and assets purchased by the Treasury and the central bank; much of this currency will then be removed from circulation as taxes are paid. The rest ends up in desired hoards, or flows to banks to be accumulated as bank reserves. Monetary policy then drains excess reserves, removing them from member bank accounts, and replacing them with bonds voluntarily purchased. As Boulding had argued, fiscal policy has more to do with the quantity of money issued by the government, while monetary policy has to do with regulation of financial markets, most importantly, with determination of short-term interest rates.[69]

Hyman Minsky presented a view of money that was based on the chartalist approach.[70] His approach emphasized the 'endogeneity' of money, that is, the view that money is created during the normal, and important, processes of a capitalist economy—and is not created and dropped by helicopters, as in Milton Friedman's famous exogenous, helicopter, money story. For the most part, bank money is created as banks 'make loans'. Further, Minsky borrowed from his original dissertation advisor, Schumpeter, the notion of profit-seeking innovations and applied that to his view of banking and money creation.

> Money is unique in that it is created in the act of financing by a bank and is destroyed as the commitments on debt instruments owned by banks are fulfilled. Because money is created and

[66] This is even clearer in his 1937 articles, after publication of *The General Theory*. See J. M. Keynes, *The Collected Writings of John Maynard Keynes*. Vol. 14: *The General Theory and After: Part 2 Defence and Development*, ed. D. Moggridge (1973).

[67] J. A. Schumpeter, *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest and the Business Cycle* (1934), at 107.

[68] Note that most 'money' is credit money; here we are using the term 'money' in its broad sense. For the heterodox view on endogenous money, see B. J. Moore, *Horizontalists and Verticalists: The Macroeconomics of Credit Money* (1988) and L. R. Wray, *Money and Credit in Capitalist Economies: The Endogenous Money Approach* (1990).

[69] K. Boulding, *A Reconstruction of Economics* (1950).

[70] In private conversation, Minsky acknowledged his intellectual debt to the chartalists and especially to Knapp.

> destroyed in the normal course of business, the amount outstanding is responsive to the demand for financing.[71]

A 'loan' is nothing more than an agreement by a bank to make payments 'now' on the basis of a promise of the borrower to 'pay later'.

> Loans represent payments the bank made for business, households, and governments in exchange for their promises to make payments to the bank at some future date.[72]

We won't go into it here, but this view leads to Minsky's financial instability hypothesis: over the course of the cycle, margins of safety on lending decline, making the financial system more fragile and thus vulnerable to a crisis.

All of this lending activity occurs on the balance sheets of banks; the 'money' that is created by a bank is nothing more than a credit to another bank's balance sheet.[73] According to Minsky, there is a pyramid of liabilities, with those of the central bank at the top. Bank liabilities are convertible on demand into central bank liabilities, which are used for interbank clearing, as well as for conversion of bank liabilities to 'cash' held by the public, resulting in a net reserve drain.

> The payments banks make are to other banks, although they simultaneously charge the account of the customer. In the receiving bank, the payments are credited to a depositor's account. . . . For member banks of the Federal Reserve System, the interbank payments lead to deposits shifting from the account of one bank to the account of another at Federal Reserve banks. For non-member banks, another bank—called a correspondent—intervenes, so that the transfers at the Federal Reserve banks are for the accounts of correspondents.[74]

Thus 'payments' among banks occur on the balance sheet of the Fed as banks use 'Fed money' (reserves) to settle net debits from their accounts. 'Whereas the public uses bank deposits as money, banks use Federal Reserve deposits as money. This is the fundamental hierarchical property of our money and banking system.'[75] This is, of course, the same hierarchical arrangement as the one noted by Knapp, in his public and private pay communities, and also by Keynes.

Banks are 'special' in that they have the government back-stopping them. Not only does the central bank provide clearing services (in its own liability, reserves) but it also stands ready to act as lender of last resort as necessary to keep the payments system functioning by providing liquidity on demand. Further, most countries also have the treasury standing behind at least some bank deposits, demand deposits usually, by providing deposit insurance. However, Minsky also insisted that banks do not have a monopoly on 'money creation'; he always said that anyone can create money, the problem is to get it accepted. He used the analogy of a pyramid of liabilities, with the state's IOUs at the top (central bank and treasury), then bank IOUs in the middle, and household and business liabilities at the bottom. The most liquid and acceptable IOUs are at the top, with acceptability declining as we move down the pyramid. Of course, this is a generic ordering

[71] Minsky, above n 35, at 249.

[72] Ibid., at 230. Note the similarity to Innes' view.

> Debts and credits are perpetually trying to get into touch with one another, so that they may be written off against each other, and it is the business of the banker to bring them together . . . There is thus a constant circulation of debts and credits through the medium of the banker who brings them together and clears them as the debts fall due. This is the whole business of banking as it was three thousand years before Christ, and as it is today.

Innes, above n 31, at 402–3.

[73] As the borrower spends the created money, a check drawn on the first bank is deposited with another.

[74] Minsky, above n 35, at 230–1. [75] Ibid., at 231.

that can vary depending on particular circumstances. For example, it is possible that a foreign currency, say the US dollar, is even more acceptable than the national government's currency; and it is conceivable that the IOUs of a non-financial corporation could in some cases be more acceptable than those of banks.

In an argument very similar to Knapp's chartalist view, Minsky explained that people accept bank money in part because they can use it to meet their own commitments to banks. 'Demand deposits have exchange value because a multitude of debtors to banks have outstanding debts that call for the payment of demand deposits to banks. These debtors will work and sell goods or financial instruments to get demand deposits.'[76] In other words, according to Minsky, bank money has (nominal) value precisely because it can be used to retire debts to banks, it is, so to speak, accepted at 'bank pay offices'. The 'borrower' retires his/her promise to the bank by delivering bank liabilities at the future date, and the need for bank liabilities to retire one's own liabilities to banks leads one to accept bank liabilities in payment for goods and services delivered. Rather than focusing on money as a medium of exchange, this focus is on money as a means of payment, to retire liabilities.

This led Minsky back to the Innes/Knapp recognition that taxes give value to the money issued by the government.[77]

> In an economy where government debt is a major asset on the books of the deposit-issuing banks, the fact that taxes need to be paid gives value to the money of the economy . . . [T]he need to pay taxes means that people work and produce in order to get that in which taxes can be paid.[78]

And even though most taxes are paid by drawing down bank deposits, because of the hierarchical arrangement, Keynes and Minsky emphasize that banks can make these payments to government only by using central bank money, that is, by losing reserves.

2. Lerner

Following the primary chartalist theme,[79] Abba Lerner insisted that:

> [W]hatever may have been the history of gold, at the present time, in a normally well-working economy, money is a creature of the state. Its general acceptability, which is its all-important attribute, stands or falls by its acceptability by the state.[80]

Just how does the state demonstrate acceptability? Lerner echoes Innes:

> The modern state can make anything it chooses generally acceptable as money. . . . It is true that a simple declaration that such and such is money will not do, even if backed by the most convincing constitutional evidence of the state's absolute sovereignty. But if the state is willing to accept the proposed money in payment of taxes and other obligations to itself the trick is done.

[76] Ibid., at 231.
[77] This has been recognized by Goodhart, who argues:

> The use of such state-issued fiat currency was supported by several factors. First the state levies taxes and can insist that these be paid in state-issued money. This ensures that such fiat currency will have some value.

Goodhart, above n 3, at 36. Similarly, James Tobin argues that:

> By its willingness to accept a designated asset in settlement of taxes and other obligations, the government makes that asset acceptable to any who have such obligations, and in turn to others who have obligations to them, and so on.

J. Tobin, *Money, Credit, and Capital* (1998), at 27.
[78] Minsky, above n 35, at 231.
[79] However, there is no evidence that Lerner was aware of the work of Innes.
[80] A. Lerner, 'Money as a Creature of the State', (1947) 37(2) *American Economic Review* 312, at 313.

> Everyone who has obligations to the state will be willing to accept the pieces of paper with which he can settle the obligations, and all other people will be willing to accept these pieces of paper because they know that the taxpayers, etc., will accept them in turn.[81]

Like Innes and Keynes, Lerner argues that, even if it has not always been the case, it surely is now true that the state writes the 'description' of money when it denominates the tax liability in a money of account, and defines the 'thing' that 'answers to the description' when it decides what will be accepted at public pay offices. The 'thing' which answers to the 'description' is widely accepted not because of sovereignty alone, not because of legal tender laws, and not because it might have, or have had, gold backing, but because the state has the power to impose and enforce tax liabilities and because it has the right to choose 'that which is necessary to pay taxes'. As Lerner said, '[c]igarette money and foreign money can come into wide use only when the normal money and the economy in general is in a state of chaos.'[82] One might only add that when the state is in crisis and loses legitimacy, and in particular loses its power to impose and enforce tax liabilities, 'normal money' will be in a 'state of chaos', leading, for example, to the use of foreign currencies in private domestic transactions. In most cases, it is state money which is used, and state money is that which the state accepts in payment of taxes.

Perhaps the more significant and contentious point concerns the implication of the state money approach for government budgetary issues. Abba Lerner's 'money as a creature of the state' approach leads logically to his 'functional finance' view of state budgeting.[83] Because the state spends by emitting its own liability, it does not need tax revenue or the proceeds from borrowing in order to spend.

Thus, Lerner's first principle of functional finance is that the state should increase taxes only if the public's income were too high, thereby threatening inflation. His second principle is that the state should borrow, that is sell bonds, only if 'it is desirable that the public should have less money and more government bonds'.[84] We will return to these points in the conclusion when we briefly detail the policy implications of MMT. However, the important point here is that Lerner argued that government finance should be *functional*, that is, formulated with a view to accomplishing the government's goals, including full employment and low inflation. He opposed this to the notion of *sound finance*, which is the view that the government's budget should be set to 'balance' tax revenues against spending. Few supporters of sound finance argue for a continuously balanced national government budget. They accept deficits in recession but typically argue that these should be largely offset by surpluses in expansions. Some allow for deficits as long as these are undertaken for 'investment' type purposes: this would be analogous to a private firm's separation of its current account from its capital account, with its current account in balance but a deficit allowed on its capital account. Lerner insisted that all versions of sound finance are inapplicable to the national government that issues its own currency. Government should never raise taxes to reduce its budget deficit, but rather should increase taxes only if inflation threatens. And, in line with the second principle, government should never sell bonds, what most economists call borrowing, simply because it finds itself with a budget deficit. Rather, bonds should be sold only if there is downward pressure on interest rates, pushing them below the central bank's target rate.

[81] Ibid., at 313. [82] Ibid.

[83] See A. Lerner, 'Functional Finance and the Federal Debt', (1943) 10 *Social Research* 38; Lerner, 'The Burden of the Debt', (1961) 43 *Review of Economics and Statistics* 139; and Lerner, above n 80.

[84] Lerner, above n 83, at 40.

3. Ingham

Geoffrey Ingham has made important contributions bringing a sociologist's interest in the ontology of money to re-examine the nature of money.[85] Like Goodhart,[86] he contrasts the neoclassical commodity money approach with the heterodox state money approach. He has also linked the evolution of credit money to the development of capitalism. This section will briefly outline these two topics.

As Ingham argues, orthodoxy has little interest in the ontology of money, taking a 'money is what money does' stance, focusing on its three or four main functions. He insists, however, that money should not be seen simply as a useful instrument; it has a dual nature. Money does not merely have 'functions', that is to say, beneficial consequences for individuals and the social and economic system. In Mann's terminology, money is not only an 'infrastructural' power; it is also a 'despotic' power.[87] Money expands human society's capacity to get things done, as Keynesian economics emphasizes; but this power can be appropriated by particular interests.[88]

Here he is not merely referring to the obvious fact that holding money gives one economic power, but 'the actual process of the production of money in its different forms is inherently a source of power. For example, modern capitalist money is bank credit-money that is produced on the basis of credit ratings that reinforce and increase existing levels of inequality by imposing differential interest rates . . . money is a weapon in the struggle for economic existence.'[89]

Following Keynes, Ingham claims that an abstract money-of-account is logically anterior to money's forms and functions; it provides all the most important advantages that are attributed to money in general and to a medium of exchange in particular.

> Money of account makes possible prices and debt contracts, which are all that are required for extensive multilateral exchange to take place. Money accounting, with or without an actual 'money stuff', is the means by which modern market exchange is made possible, that is, of producing action at both spatial and temporal distance. In this conception money is abstract, but an abstraction from what?[90]

He goes on to argue that the orthodox answer to that question is doubly paradoxical. Since it adopts a commodity money view, it wants to argue that money's value is determined in the usual neoclassical way: scarce supply meets the demand for money determined by subjective preferences. Yet, because modern orthodoxy recognizes that money does not consist of some scarce commodity with an intrinsic exchange value, the scarcity of supply must be imposed—generally through control by authorities. At the same time, money is supposed to be neutral, aside from some short-term non-neutralities resulting from imperfections, determining only irrelevant nominal prices and not the all-important relative prices that come out of the higgling and haggling of the market. It is for that reason that many rigorous neoclassical models simply leave money out of the analysis altogether.[91]

[85] G. Ingham, 'Babylonian Madness: On the Historical and Sociological Origins of Money', in J. Smithin (ed.), *What Is Money* (2000); G. Ingham, 'The Emergence of Capitalist Credit Money', in Wray (ed.), above n 30, at 173; G. Ingham, *The Nature of Money* (2004).

[86] Goodhart, above n 28.

[87] M. Mann, *The Sources of Social Power* (1986).

[88] Ingham, 'The Nature of Money', above n 28, at 20.

[89] Lerner, above n 80, at 313.

[90] Ingham, 'The Nature of Money', above n 28, at 21–2.

[91] The neoclassical economic assumption that myriad barter exchanges ('higgling and haggling') will produce a commodity with a stable exchange rate with all others—that becomes money—is highly improbable. A hundred commodities could yield 4950 exchange rates. (Ingham, *The Nature of Money*, above n 28, at 25; Ingham,

Again, Ingham follows the heterodox approach, where money's value is always abstract and nominal:

> [T]he strands of the alternative conceptions of money that Schumpeter identified are drawn together in a discussion of money as 'abstract value' and a 'credit', or 'claim'. Attention is drawn to the close relationship of these theories to the state, or 'chartalist' theory of money. Together, they provide the foundations for a non-market theory of money that Keynes referred to as the 'underworld' of monetary analysis. This account aims to make more explicit what I take to be the inherently sociological nature of these 'nominalist', 'credit', and 'state' theories of money.[92]
>
> [B]y a 'sociology of money' I intend more than the self-evident assertion that money is produced socially, is accepted by convention, is underpinned by trust, has definite social and cultural consequences and so on. Rather, I argue that money is itself a social relation; that is to say, money is 'claim' or 'credit' that is constituted by social relations that exist independently of the production and exchange of commodities.[93]
>
> Regardless of any form it might take, money is essentially a provisional 'promise' to pay whose 'moneyness', as an 'institutional fact' . . . is assigned by a description conferred by an abstract money of account. Money is a social relation of credit and debt denominated in a money of account. In the most basic sense, the possessor of money is owed goods. But money also represents a claim or credit against the issuer—monarch, state, bank, and so on. Money has to be 'issued'. And something can only be issued as money, if it is capable of cancelling any debt incurred by the issuer.[94]

He refers to Knapp's argument that a state issues money in payment, promising to accept it in payment of taxes. It must be denominated in an abstract money of account for otherwise it would not be transferable. A debt denominated in a commodity, say pigs, could not circulate. Similarly the bank issues notes which it promises to accept in repayment of loans—and these too must be denominated in an abstract money of account. Power necessarily resides in these credit/debt relations.

Ingham draws on Simmel, pointing to the 'essential characteristic of money as abstract value in terms of itself (money proper answering the description given by money of account). Money is "one of those normative ideas that obey the norms that they themselves represent".'[95] As Simmel put it, '[t]o establish a proportion between two quantities, not by direct comparison but in terms of the fact that each of them relates to a third quantity and that these relations are unequal or equal is one of society's great accomplishments.'[96] Market exchange cannot be based on comparison of bilateral relative prices, but rather needs an external referent, a nominal measure of value. Further, the medium of exchange cannot be a commodity with a relative price but must be measured in the 'socially constructed standardized measure of abstract value'.[97]

> [M]edia of exchange cannot evolve spontaneously through repeated barter exchanges into monetary systems in which debts are expressed in units of abstract value and settled by means of final payment/settlement of debts that represent quantities of the same value.[98]

'Revisiting the Credit Theory', above n 29, at 122) This would literally 'boggle the minds' of our higglers and hagglers who would try to come up with a single commodity in which to price all other commodities.

[92] Ingham, 'The Nature of Money', above n 28, at 24.
[93] Ibid., at 25. [94] Ibid., at 25.
[95] Ingham, 'Revisiting the Credit Theory', above n 29, at 124.
[96] G. Simmel, *The Philosophy of Money* [1907] (1978), at 122, quoted by Ingham, 'Revisiting the Credit Theory', above n 29, at 124.
[97] Ingham, 'Revisiting the Credit Theory', above n 29, at 124. [98] Ibid., at 126.

Ingham suggests that, in order to understand the historical distinctiveness of capitalism, the admittedly confused distinction between money and credit should not be entirely abandoned. According to Ingham, saying that all money is essentially credit is not the same as saying that all credit is money:

> I have argued elsewhere that whilst all money is credit, not all credit is money.[99] In this I have merely followed Simmel's clear well-established and essentially sociological distinction between bilateral and multilateral, or 'private' and 'public', relationships. In a monetary system: 'the pivotal point in the interaction between the two parties recedes from the direct line of contact between them, and moves to the relationship which each of them . . . has with the economic community that accepts money. This is the core of the truth that money is only a claim on society. Money appears so to speak as a bill of exchange from which the drawee is lacking. . . . It has been argued against this . . . that credit creates a liability, whereas metallic money payment liquidates any liability; but this argument overlooks the fact [that] . . . [t]he liquidation of every private obligation by money means that the community now assumes this obligation to the creditor.[100]

In other words, he argues that not all credits are a final means of payment, or settlement. For Ingham, the question hinges not on the *form* of money or credit, as in most discussions within orthodox economic analysis, but on the *social relations of monetary production.* These relations comprise the monetary *space* and the *hierarchy* of credibility and acceptability by which money is constituted. The test of 'moneyness' depends on the satisfaction of both of two conditions. First, the claim or credit is denominated in an abstract money of account. Monetary *space* is a *sovereign* space in which economic transactions, debts, and prices, are denominated in a money of account. Secondly, the degree of moneyness is determined by the position of the claim or credit in the *hierarchy* of acceptability. Money is that which constitutes the means of *final* payment throughout the *entire* space defined by the money of account.

> In monetary systems, it is the obligation of the issuer of money—bank, treasury, etc—to promise to accept that which it has issued as the final settlement of any debt owed to it. Furthermore, it is a condition of monetary systems that offers of goods are priced in the money of account. Thus there are two crucially linked senses in which money is a credit-debt relation: for the issuer and for the holder of money. . . . Monetary relations involve two simultaneous relations: between the contracting agents and between these and the issuer of money. This triangular relation involves impersonal trust which enables transactions between strangers. In modern monetary systems there are several interconnected 'triangles' of impersonal trust which link a hierarchy of intermediaries—credit card issuers, banks, central banks, states.[101]

While it is commonplace to argue that our credit system relies on 'trust', following Simmel, Ingham nicely distinguishes personal trust from impersonal trust which is necessary for markets. Holders of money have a general claim against society's productive capacity.

> Money in the sense of a fixed quantum of abstract value denominated in a unit of account (that is to say, measured by itself) cannot exist as such without the existence of reciprocal actual and potential debts, denominated in the same money of account, waiting to be discharged. In other words, money can only be conceived of as a monetary system—not merely as the most exchangeable commodity. . . . Again, it is a question of the different levels or layers of social

[99] Ingham, *The Nature of Money*, above n 28.
[100] Ibid., at 128, quote from Simmel, above n 93, at 177.
[101] Ingham, 'Revisiting the Credit Theory', above n 29, at 128.

> reality. It is true to say that no particular individual possessor of money is owed goods by any particular individual. But in general if possessors of goods cease to offer them for sale at a money price then the monetary system has in effect ceased to exist as of course frequently occurs when there is a loss of impersonal trust in the issuer of money.[102]

In Ingham's view, a further important consideration is the process by which money is produced. As Innes had observed, members of a giro, created for the settlement of debt, cleared accounts without use of coin as early as Babylonian banking. However, these credit relations did not involve the creation of new money. In contrast, the capitalist monetary system's distinctiveness is that it contains a social mechanism by which privately contracted credit relations are routinely 'monetized' by the linkages among the state and its creditors, the central bank, and the banking system.

> [C]apitalism's distinctive structural characteristic is to be found in its social relations for the production of 'credit-money'. Capitalism is founded on the social mechanism whereby private debts are 'monetized' in the banking system. Here the act of lending creates deposits of money. This did not occur in the so-called banks of the ancient and classical worlds.[103]

Capitalist 'credit money' was the result of the hybridization of the private mercantile credit instruments ('near money' in today's lexicon) with the sovereign's coinage, or public credits: 'a stable and uniform measure of value can only be produced by an authority outside the sphere of exchange, usually, but not necessarily a state'.[104]

In conclusion, Ingham argues, the essential element is the construction of myriad private credit relations into a hierarchy of payments headed by the central or public bank which enables lending to create new deposits of money, that is, the socially valid abstract value that constitutes the means of final payment. Returning to that notion of a hierarchy, or pyramid, of monies with the state at the top, Ingham argues that '[t]here is, as Amato and Fantacci succinctly observe "no liquidity without a lender of last resort, no lender of last resort without an irredeemable consolidated debt, and no irredeemable debt without an immortal state".[105] This nicely ties together credit and state approaches to money to identify what is special about capitalism: '[t]he uniqueness of the capitalist era lies in the successful hybridization of chronically fragile and unstable private mercantile credit networks with public currency based on the increasing security of stable states' metallic standards.'[106]

IV. Conclusions: Policy Implications of the Modern Money Theory

We will conclude by briefly addressing the implications of this alternative approach to money for our understanding of monetary and fiscal policy—both as practised and for the policy space available to a government that issues its own currency.

It is important to note how the state money approach conflicts with the conventional 'government budget constraint' (GBC) notion, according to which state spending must be 'financed' by tax revenues, borrowing, or 'printing money'. In reality, the GBC is nothing but an ex post identity that conflates the state's financial situation with that of a household. The state money approach insists that as long as state liabilities are demanded, they can be supplied by the state (central bank plus treasury), in its spending and lending. There is no

[102] Ibid., at 129. [103] Ingham, 'The Nature of Money', above n 28, at 26.
[104] Ingham, 'O Sacred Hunger', above n 28, at 132.
[105] M. Amato and L. Fantacci, *The End of Finance* (2012), at 236 quoted in Ingham, 'Revisiting the Credit Theory', above n 29, at 23.
[106] Ingham, 'Revisiting the Credit Theory', above n 29, at 139–40.

limited supply of either private or state IOUs—as long as either the state or private entity is willing to issue IOUs, they can be supplied. The problem, as Minsky said, is to get them accepted. In other words, the limit is on the demand side.

One of the factors that determines willingness to accept IOUs is the perception of creditworthiness. Banks and other financial institutions specialize in underwriting—the process of identifying creditworthy borrowers. There is no physical constraint on bank ability to create demand deposits as they make loans, holding the IOUs of borrowers; the main constraint is the ability to locate good borrowers. In addition, banking regulations and supervisors, as well as prudent managers, impose capital constraints and other kinds of quantitative as well as qualitative restraints. Another factor limiting acceptance of IOUs is the perception of liquidity; even if there were little doubt about creditworthiness, the liquidity of debt matters because the holder might need 'cash' before payment comes due. We will not go further into the business of banking.

When it comes to the state's ability to issue IOUs, whether currency, central bank reserves, or treasury securities, what matters again is acceptability on the demand side. As a sovereign power, however, the state can mandate at least some demand for its IOUs by imposing obligations that must be paid in the state's currency. Beyond that, by sitting at the apex of the 'money pyramid', the state's IOUs are demanded for clearing purposes and also for reserves of the most liquid assets.[107] We conclude, again, that the constraint on the state's ability to issue its IOUs comes mostly from the demand side. However, the state can also impose constraints on its issue: it has a budgetary process that necessarily limits its spending, and it can go further by imposing a debt limit, as the US has done. Of course, some want to go further, by imposing a balanced budget requirement, or Maastricht-like debt and deficit ratios. Still others want to make a sovereign currency system operate more like the imagined commodity money system, by requiring conversion on demand to gold or to foreign currency. Note that such constraints are necessarily politically imposed—they do not come about 'naturally' due to a 'commodity nature' of money.

Most economists recognize that there is no natural limit to a sovereign government's ability to spend by issuing currency, something that is often equated to 'printing money to finance spending'. However, it is believed that this is the least preferred method of financing spending. It is said to be safest to use tax revenue; the second best method is to borrow by issuing treasury securities. Both of these impose some market discipline, the first by limiting government spending to its 'income' (largely from tax revenues), and the second by limiting government's deficits to what markets are willing to finance by 'lending' to government. Following Lerner, the state money approach rejects all such arguments. It is best to think of currency creation, tax receipts, and bond sales as different parts of the process of government spending, rather than as optional ways to 'finance' government spending. To put it very briefly, the spending logically comes *first* before government obtains tax revenue or sells bonds. If the government receives in tax payments its own IOUs, it must first supply them before taxes can be paid. And if bond purchasers must use the government's IOUs to pay for the bonds they buy, then government must have spent, or lent, its IOUs before it sold the bonds.

As Lerner argued, the functional purpose of government bond sales is not to borrow reserves, the government's own IOU, but to offer an interest earning alternative to undesired reserves that would otherwise drive the overnight rate, bank rate, or fed funds

[107] See S. Bell, 'Do Taxes and Bonds Finance Government Spending?', (2000) 34 *Journal of Economic Issues* 603; L. R. Wray, *Modern Money Theory: A Primer on Macroeconomics for Sovereign Monetary Systems* (2012); and Wray, above n 29.

rate, towards zero. While it might appear that the bond sales 'finance' the treasury spending, in reality, bond sales are taken after the spending takes place, and are undertaken to mop up the excess reserves that push overnight rates below target. We, thus, return to the second principle of functional finance: bonds should be sold only if the private sector holds more HPM than desired, a situation that is manifested by overnight rates falling below target. Hence, the functional finance approach insists that reserves are non-discretionary; indeed, the second principle of functional finance can be seen as implying that bond sales are undertaken only to drain excess reserves. Thus, bond sales, even by the treasury, are non-discretionary and permit the central bank to hit interest rate targets.

Note that if the central bank (CB) paid interest on excess reserves (as is now done in the US), the treasury would never need to sell bonds because the overnight interest rate could never fall below the rate paid by the CB on excess reserves. Note also that in spite of the widespread belief that government deficits push up interest rates, they actually push the overnight rate towards zero (or towards the rate paid on reserves by the CB) unless the treasury and CB co-ordinate efforts to drain the resulting excess reserves. For proof, for two decades the overnight interest rate in Japan has been kept at zero, in spite of government deficits that reached 8 per cent of GDP, merely by keeping some excess reserves in the banking system. On the other hand, budget surpluses drain reserves, causing a shortage that drives up the overnight rate unless the CB and treasury buy and/or retire government debt. Orthodoxy has got the interest rate effects of government budgets exactly backwards.

In the US, the Fed is, like the Treasury, ultimately a 'creature of Congress', and notwithstanding various claims about the desirability of the independence of the central bank, this is a typical arrangement in most developed nations. Leaving aside the logical impossibility of central bank 'independence' from its treasury, since hitting overnight rate targets requires co-operation between treasury and central bank, the law-making body can direct its central bank to accommodate the treasury's spending as necessary. Indeed, if it did not, treasury checks could 'bounce'. While a 'government budget constraint' holds ex post as an accounting identity, it is not an operational constraint on treasury spending. We will always find, ex post, that an increase of government spending will equal the increase of tax revenue, plus the accumulation of bonds held, plus additions to outstanding high powered money (currency plus reserves) held. In the case where the central bank issues the bonds and the currency (central bank reserves and notes), then the increase of treasury spending will equal tax revenue plus the bonds and high powered money issued by the central bank—with the division between bonds and high powered money determined so as to hit the central bank's overnight interest rate target.

By integrating the state and credit theories of money, we are able to understand the general principle that all issuers of IOUs must 'redeem' them by accepting them in payment. The special principle that applies to the sovereign state is that it can ensure at least some acceptability for its IOUs by imposing taxes and other monetary obligations. As long as the state only promises to 'redeem' its IOUs in payments to itself, that is, does not promise conversion at a fixed rate to precious metal or foreign currency, it can never be forced into involuntary default. This is part of the reason that states are able to stand at the top of the pyramid. The limit on state spending is not arbitrary deficit or debt ratios but rather real resources offered for sale for the state's currency. In other words, the main problem with excessive spending by the state is inflation, not risk of default and insolvency.

30

Hyperinflations of the Early Twentieth Century

François R. Velde

I. Introduction

The First World War was an event of enormous magnitude. As a war, it was unprecedented in its scope, intensity, and destruction. It was also a watershed from the monetary point of view. Until then, a process of monetary standardization and unification had brought nearly the whole world to the gold standard and its relative price stability. That process, which, to nineteenth-century people, seemed to be a part of the march of progress, came to an abrupt halt. The gold standard, which had functioned for decades, collapsed and was replaced in many countries by a decade of paper money. Some countries endured unbelievable levels of inflation. Yet, by 1926, almost all countries had returned to the gold standard, and several years of price stability ensued. The stabilizations were as abrupt as the inflations had been extreme.

This chapter surveys the hyperinflations of the interwar period, beginning with a historical account, and concluding with the standard economic interpretation of this phenomenon.

1. Before the War

The nineteenth century was a period of unprecedented growth and globalization in human history. From 1870 to 1913, world per capita GDP is estimated to have been growing at 1.5 per cent per year, enough to double every forty-five years; in comparison, it had grown 20 per cent from 1500 to 1820.[1] At the turn of the century, the world had also converged to a stable set of monetary systems. By 1900, most countries had settled on the gold standard. In this system, the value of the medium of exchange was strictly tied to a fixed quantity of gold, because the circulating medium consisted of gold coins or of objects (coins of other metal, like silver and bronze; notes issued by a central bank; or liabilities issued by private entities) readily convertible into gold.

The effect of the gold standard on the price level across countries, even across continents, is shown in Figure 30.1. Setting all indices to coincide in 1913 gives a false impression of convergence. The point of the figure is twofold. First, prices were relatively stable over

[1] A. Maddison, *The World Economy: Historical Statistics* (2003).

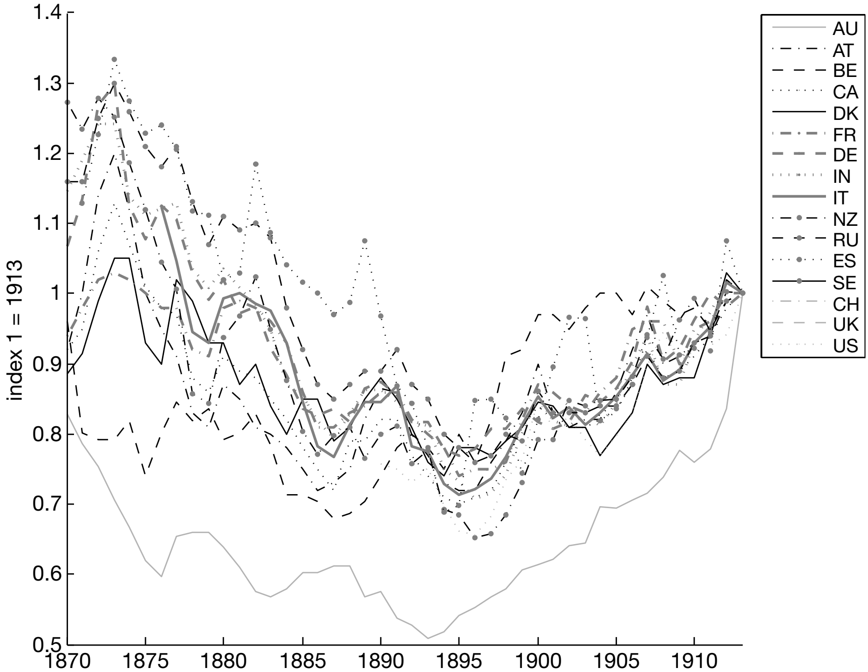

Figure 30.1 Wholesale price indices in various countries, 1870–1913.
Source: B. R. Mitchell, *International Historical Statistics* (2003).

decades, generally not deviating more than 25 per cent above or below their long-run average. Second, all countries shared the same broad movements: a deflation from 1870 to 1896 averaging 1 per cent per year, followed by an inflation from 1896 to 1913, averaging 2 per cent a year. These movements were driven by the demand for gold as the world economy grew, and more countries adopted the gold standard, and by the supply, which had become more abundant after the gold discoveries of Australia and Alaska in 1896.

Not only was there a convergence to a dominant standard, but the number of distinct monetary authorities was shrinking. One reason for this was the long-running process of political unification (Germany and Italy) and empire formation. Another was the formation of monetary unions among sovereign states:[2] most members of the German Bund formed the Dresden currency union; France instigated the Latin Monetary Union in 1865; and the Scandinavian countries formed a union in 1874. These unions dealt with coinage, and typically featured reciprocal legal tender status for currencies across borders and restrictions on monetary authorities' ability to issue certain coins.

To be sure, adherence to the gold standard was relatively recent for most countries, and far from absolute. Britain had used the gold standard the longest. Originally relying on both gold and silver coinage, it had let the silver coinage atrophy over the course of the eighteenth century and let the gold guinea, valued at £1.05, define the gold content of the unit of account.

The eighteenth century had also seen the growth of the Bank of England, founded in 1694, whose notes circulated widely and were convertible on demand in gold coin. In 1797,

[2] F. Capie, 'Monetary Unions in Historical Perspective: What Future for the Euro in the International Financial System', (1998) 9(1) *Open Economies Review* 447.

during the wars against revolutionary and Napoleonic France, the convertibility of these notes was suspended for the duration of the conflict. Significant issue of inconvertible notes had a noticeable effect on price levels, providing an important and early case study for the relation between inflation and paper money. After Napoleon's final defeat, the gold standard was formally adopted and the bank resumed convertibility of its notes at the original pre-war value.

This method of financing wars was deemed successful and provided a template for many countries. During peacetime, the circulating coinage was made of gold and paper notes, typically issued by a privately owned, but government-chartered, bank, with a monopoly. The bank was usually required to keep a minimum gold reserve or partial cover for its notes in circulation, and convert the latter on demand. There were often rules limiting or prohibiting lending to the government, or prescribing the ways in which the circulation could be increased, but those rules, like convertibility, could be suspended during emergencies, with the general expectation of a return to the usual arrangement. Thus the *Banque de France* suspended convertibility in 1848, and again from 1870 to 1872. In the absence of a central bank, paper notes might be issued by the government directly: in the United States, inconvertible 'greenbacks' circulated from 1861 to 1879. This pattern has been characterized as a state-contingent gold standard,[3] that is, a gold standard that was understood to hold under certain circumstances but not others.

Other countries took somewhat different paths towards the same point. The Austro-Hungarian Empire, inheriting a large stock of paper money issued during the Napoleonic wars, repeatedly attempted to restore convertibility, but successive emergencies (in 1848, 1859, and 1866) delayed the process until the 1890s, by which time the Austro-Hungarian Bank had learned to manage its paper currency efficiently, never formally making it convertible but pegging it to foreign currencies in an early case of exchange-rate targeting.[4] The new countries that emerged from the slow decay of the Ottoman Empire (Greece, Serbia, Romania, and Bulgaria) all adopted the coinage and central banking practices of Western Europe. In fact, the Greek *drachma*, the Serbian *dinar*, the Romanian *leu*, and the Bulgarian *lev* were all worth exactly the same amount of gold as the French, Swiss, or Belgian *franc*, or the Italian *lira*, the currencies of the Latin Monetary Union. By 1900, like Austria, Russia had managed to free itself from a long history of inconvertible paper. Around the same time, Britain switched India from the silver standard to a modern variant of the gold standard—the gold exchange standard—making the local currency convertible into pounds in London on demand.

Thus, by 1913, the gold standard had become dominant. There was about US$9 billion in gold coinage worldwide, US$3 billion in silver coinage (for smaller denominations, usually token except in the few countries still on the silver standard: China, French Indochina, and Iran), and US$4 billion in paper money (convertible except in Portugal, Spain, and some Latin American countries).[5]

[3] M. D. Bordo and F. E. Kydland, 'The Gold Standard As a Rule: An Essay in Exploration', (1995) 35(4) *Explorations in Economic History* 423.

[4] M. Flandreau and J. Komlos, *Target Zones in History and Theory: Lessons from an Austro-Hungarian Experiment, 1896–1914* (2003).

[5] US Secretary of the Treasury, *Annual Report of the Director of the Mint for the Fiscal Year Ended June 30, 1914* (Washington, DC: Government Printing Office, 1914).

2. The First World War

The costs of the First World War, aside from the horrendous casualties, presented states with unprecedented fiscal challenges. Table 30.1 shows the magnitudes involved for several belligerents. The costs are measured as the increase in expenditures above pre-war levels; likewise, the share of costs financed by revenues is measured by the increase in revenues above pre-war levels. Debt means long-term debt, either domestic or foreign (inclusive of loans between allies). The annual cost ranged from a third to two-thirds of GDP, and represented five to thirty times the peacetime fiscal revenues. By comparison, the United Kingdom's annual military expenditures represented 10 per cent of GDP during the Napoleonic Wars. Table 30.1 also shows how the war was financed through a mix of taxes, borrowing, and money creation. The mix varied by countries, but all, to some degree, used money creation.

The use of money creation was most limited in Britain, which did not formally suspend the gold standard, but made gold export difficult, if not impossible (as did the United States from 1917 to 1919). Other countries, such as France, Germany, and Russia, immediately suspended convertibility and suspended the clauses in their central banks' charters which restricted lending to the government.

The change wrought in central banks' balance sheets by the war can be seen in Table 30.2, which shows the share taken by claims on the government, as well as advances on government securities (which can be used as an indirect way of lending to the government), out of total assets of central banks. In 1913, it was unusual for central banks to own much government debt; interestingly, in the case of the Bank of England this share was rather large, but reflected that institution's long history of close involvement with government debt. The comparable share in France was large as well, but claims on the government alone accounted for only 16 per cent of the balance sheet. Central banks in the Balkan countries, which were just recovering from their own war, had relatively high shares; the highest was in Portugal which was not on the gold standard at the time. By 1920, the picture had changed completely, even in the neutral countries. Apart from the Netherlands, Denmark, and Spain, the share of government debt was 45 per cent or more in every central bank's balance sheet. By 1925, the proportion fell in most countries, most dramatically in those that experienced a hyperinflation followed by stabilization.

Table 30.1. How much World War I cost and how it was financed.

	Gross annual cost as share of		**Total costs ($bn)**		**Share financed by:**		
	revenues	**GDP**	**gross**	**net**	**taxes**	**debt**	**paper**
Great Britain	9.3	0.52	43.8	35.3	0.20	0.75	0.05
France	5.6	0.51	25.8	24.3	0.02	0.84	0.13
Italy	4.9	0.44	12.4	12.4	0.12	0.74	0.14
Germany	9.7	0.42	38.8	37.8	0.20	0.63	0.17
United States	30.2	0.53	30.8	22.6	0.25	0.67	0.07
Russia	14.4	0.29	24.6	24.6	0.02	0.62	0.36
Austro-Hungary	3.9	0.53	20.6	24.5	0.24	0.45	0.31

Total costs are given gross and net of advances between allies.

Sources: E. L. Bogart, *Direct and Indirect Costs of the Great World War* (1919), at 41–42, 118, 140, 159–160, 255; L. R. Gottlieb, *Financial Status of Belligerents* (1920), at 13–14. GDP data from A. Maddison, *The World Economy: Historical Statistics* (2003), at 26, 28, 32, 48, 85, 92, 98; F. D. Graham: *Exchange, Prices, and Production in Hyper-inflation: Germany, 1920–23* (1930), at 7.

Table 30.2. Share of claims on the government and advances on government securities in the assets of central banks.

	1913	1920	1925
Australia	—	36	38
Austria	—	95	19
Belgium	12	87	83
Bulgaria	47	81	100
Canada	1	5	16
Czechoslovakia	—	84	74
Denmark	2	25	6
Estonia	—	—	8
Finland	1	61	17
France	43	86	87
Germany	21	98	5
Greece	31	75	61
Hungary	—	97	25
Italy	34	72	54
Latvia	—	—	5
Netherlands	6	14	3
Norway	0	0	1
Poland	—	92	11*
Portugal	74	75	89
Romania	31	88	55
Spain*	34	27	15
Sweden	0	0	2
Switzerland	0	51	11
United Kingdom*	38	59	45
United States	—	45	56
Yugoslavia	59	92	78

* Claims on the government only.
Source: League of Nations, *Memorandum on Currency and Central Banks: 1913–1925* (1926), vol. 1, at 92–5.

At the war's end in 1918, the belligerents, and some neutral countries, had to manage a more or less large stock of paper money. They were also confronted, to various degrees, with large stocks of debt, impaired economies, and disagreements about where the burden of future taxes should lie within society. Obviously, these problems were larger for the losers of the war, or their successor states.

By 1929, almost all countries had returned to the gold standard or, more precisely, to a gold exchange standard in which national stocks of money saw their values pegged either to gold or to a gold-based currency, like the US dollar or the British pound sterling. The First World War, from a monetary point of view, might have appeared as a closed parenthesis. The Great Depression in the US and the ensuing worldwide economic crisis shattered the monetary order permanently. The United Kingdom was the first to suspend the gold standard in September 1931; France was the last in 1937. These suspensions, in contrast with those of 1914, were not driven by fiscal emergency.

The near universal return to the gold standard by 1929 obscures the widely different paths taken by the various countries between 1914 and 1929. Figure 30.2, a sort of sequel to Figure 30.1, makes the point. It shows the path of the nominal exchange rates of the European countries against the US dollar from January 1920 to December 1926.[6] In

[6] I chose exchange rates for reasons of data availability, but the picture for wholesale prices is nearly identical.

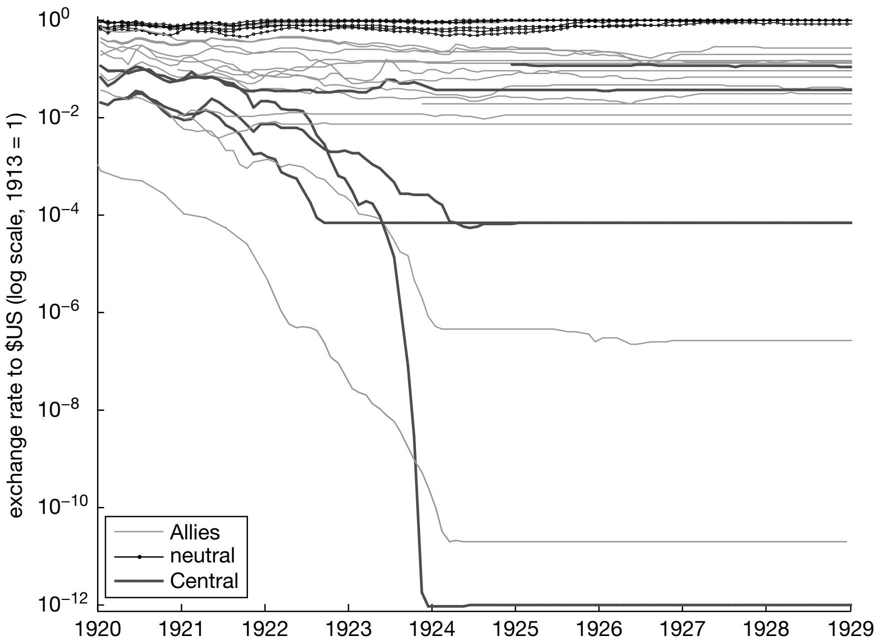

Figure 30.2 Wholesale price indices in various countries, 1920–9.

Source: League of Nations, *Statistical Year-Book* (1919–26) and League of Nations, *Monthly Bulletin* (1921–26).

constructing the graph, I intentionally ignored re-denominations and new currencies (more precisely, whenever a new currency was introduced, the exchange index has been rescaled using the rate at which the old currency was exchanged).

The vertical scale is logarithmic, so that equal vertical distances represent the same percentage changes; it is also necessary because of the vast differences in outcomes. The countries are grouped into three categories according to their status in the First World War: the Allies, the Central Powers, and neutral countries (Poland and the Baltic States are placed in the same group as Russia; as is Belgium). Although the US entered the war in April 1917 on the side of the Allies, it did not leave the gold standard (although it did impose mild gold export controls) and serves as a convenient benchmark. The exchange rates are expressed relative to 1913 parities; in that year, nearly all currencies were on the gold standard (Spain and Portugal being the two exceptions, for which the average rate for 1913 is used as par). By 1926, all currencies were either on the gold standard or pegged to a gold standard currency like the US dollar or the British pound. In between, the paths taken were widely different.

Roughly speaking, most neutral countries and distant belligerents (in America, Asia, and Oceania) suffered relatively little depreciation and were able to return to their pre-war parity. The European Allies suffered a fair amount of depreciation and returned to the gold standard at a significantly lower parity, with the exception of Britain (barely visible at the top of the figure) which returned to the pre-war parity. The countries that fared the worst were those that experienced hyperinflation; of those, Hungary, Austria, and Germany were among the vanquished but Poland and Russia were on the side of the victors. Among the defeated, Bulgaria, Turkey, and Czechoslovakia (counted as a successor state of a loser) did not experience hyperinflation.

Table 30.3 shows the exchange rates, normalized to their 1913 levels, as well as the price levels (cost of living indices, wherever available, otherwise wholesale price indices). For

Table 30.3. Price levels, exchange rates, and the return to gold.

	Price level (1913 = l)		**Return to gold**	
	1871	**1929**	**date**	**par (1913 = 1)**
Argentina	—	1.31	1927	1.00
South Africa	—	1.31	1925	1.00
Netherlands	1.04	1.41	1924	1.00
Egypt	—	1.51	1925	1.00
India	—	1.40	—	—
Dutch East Indies	—	1.48*	1925	1.00
Indochina	—	1.50*	—	—
Canada	0.85	1.53	1926	1.00
Australia	—	1.54	1925	1.00
US	0.79	1.59	1919	1.00
Switzerland	—	1.59	1924	1.00
New Zealand	—	1.61	1925	1.00
UK	1.12	1.62	1925	1.00
China	—	1.64*	—	—
Norway	—	1.67	1928	1.00
Spain	1.00	1.69	—	—
Denmark	0.90	1.69	1926	1.00
Sweden	0.83	1.71	1922	1.00
Ireland	—	1.75	1925	1.00
Japan	—	1.95	1930	1.00
Brazil	0.36	2.23	1926	—
Chile	0.21	2.23	1925	—
Italy	0.87	5.91	1926	0.273
France	0.96	5.94	1926	0.203
Czechoslovakia	—	7.69	1923	0.146
Luxembourg	—	8.71	—	—
Belgium	1.03	9.09	1926	0.145
Finland	—	11.11	1924	0.130
Portugal	0.76	13.13	1929	—
Turkey	—	13.81	—	—
Yugoslavia	—	17.86	1925	0.089
Greece	—	20.00	1927	0.067
Bulgaria	—	33.33	1924**	0.038
Romania	—	42.89	1927	0.031
Estonia	—	58.50	1925**	0.020
Latvia	—	118.00	1924	0.010
Lithuania	—	134.00	1922	0.010
Austria	0.89	11044.84	1922	1.00*E*–04
Hungary	—	21269.53	1924	8.00*E*–05
Poland	—	2.222*E*+06	1926	5.56*E*–07
USSR	—	4.072*E*+09*	1924**	2.00*E*–10
Germany	0.68	1.5146*E*+12	1923	1.00*E*–12

* Wholesale price.
** Date of exchange rate stabilization.
Sources: Prices: B. R. Mitchell, *International Historical Statistics* (2003), and League of Nations, *Memorandum on Currency and Central Banks: 1913–1925* (1926); standards: League of Nations, *Money and Banking* (1934), vol. 1, at 107, League of Nations, *Statistical Year-Book* (1933–4), at 205.

some countries, the price level as of 1870 is shown, to give a sense of the relative stability that prevailed in the four decades prior to the conflict. The date of the return to the gold standard and the parity at which the return took place are shown in the last columns.

The differences among countries displayed in Figure 30.2 can be expressed quantitatively (Table 30.3). At the top, countries that returned to pre-war parity saw their price levels increase between 30 and 95 per cent: this reflects a general rise of around 60 per cent in price levels expressed in gold by 1929. Further down in the table comes a group of countries whose scale of price depreciation ranges from 6 to 140, and whose 1929 gold parity ranges from 20 to 1 per cent of pre-war parity. The tail end of this group includes all of South-Eastern Europe, whether winners (Yugoslavia, Greece, and Romania) or losers (Turkey and Bulgaria), and the three Baltic countries. Even for those countries which did not experience hyperinflation, the extent of devaluation was nearly unprecedented. The bottom of the table contains the five hyperinflations which this chapter will explore.

II. The Five Hyperinflations

This section provides an overview of the five hyperinflations in Austria, Hungary, Germany, Poland, and Russia.[7]

1. Austria

(a) The Austro-Hungarian monarchy

The Austro-Hungarian Empire consisted of a motley collection of territories whose sole reason for being together was that they were ruled by the same family, the *domus Austriaca* (commonly, although inaccurately, known as Habsburgs). The family's traditional position, the elected headship of the German Empire, disappeared with the latter's collapse in 1806, but not before the owner of the 'Austrian hereditary lands' had created for himself a new imperial title, and consequently turned his patrimony into something called the Austrian Empire. The change in the name did not turn the motley collection into a nation. The coincident advance of liberalism and nationalism during the nineteenth century transformed it into a dual constitutional monarchy, the Austro-Hungarian Empire, without addressing its existential question.

The arrangement of 1867 created two countries ruled by the same sovereign but with different cabinets, parliaments, and fiscal systems. Matters common to the two countries, namely foreign affairs and defence, were handled by a common cabinet responsible to the delegations of the two parliaments and financed in part by customs revenues, but mostly by

[7] Classic references include F. D. Graham, *Exchange, Prices, and Production in Hyperinflation: Germany 1920–23* (1930), C. Bresciani-Turroni, *The Economics of Inflation: A Study of Currency Depreciation in Post-war Germany* (1937), and C.-L. Holtfrerich, *The German Inflation 1914–23* (1986) for Germany; J. van Walré de Bordes, *The Austrian Crown, its Depreciation and Stabilization* (1924) and W. T. Layton and C. Rist, *The Economic Situation of Austria: Report presented to the Council of the League of Nations* (1925) for Austria; and Z. S. Katzenellenbaum, *Russian Currency and Banking, 1914–24* (1925) for Russia. P. M. Garber and M. G. Spencer, 'The Dissolution of the Austro-Hungarian Empire: Lessons for Currency Reform', Princeton University, International Finance Section, Department of Economics, Essays in International Finance No. 191 (1994), provide a good presentation of the break-up of the Austro-Hungarian Empire from a monetary point of view (the survey was written at a time when the dissolution of the Soviet Union and of Yugoslavia were raising similar issues). J. P. Young, *European Currency and Finance* (1925) is a precious contemporary collection of statistics and analyses by policymakers from various European countries. Much data can also be found in the publications of the League of Nations: the Monthly Bulletin of Statistics, Statistical Year-Book, and successive Memoranda on Currency and Memoranda on Currency and Central Banks. More recent surveys of hyperinflations include P. L. Siklos, 'Hyperinflations: Their Origins, Development and Termination', (1990), 4(3) *Journal of Economic Surveys* 225, and an extensive study of high inflations throughout the twentieth century by S. Fischer, R. Sahay, and C. A. Végh, 'Modern Hyper- and High Inflations', (2002) 40(3) *Journal of Economic Literature* 837. Four of the five hyperinflations were studied by T. J. Sargent, 'The Ends of Four Big Inflations', in R. E. Hall (ed.), *Inflation* (1983) 41; see also the general overviews in B. Eichengreen, *Golden Fetters: The Gold Standard and the Great Depression, 1919–1939* (1992), chs 4 and 5, and C. H. Feinstein, P. Temin, and G. Toniolo, *The World Economy between the World Wars* (2008), ch 3.

contributions from each state. There was no common debt. There was a common central bank, with a monarchy-wide monopoly on note issue; the bank was privately owned, but part of its profits accrued to the two states. It had to convert its notes into gold on demand and maintain a 40-per cent metal cover for them; it faced limits on note issue and was forbidden from lending to the states.

All of these restrictions were lifted on 4 August 1914, leaving the bank free to provide whatever help the governments required. As far as can be told little of the cost of war was financed by taxation. Government issued loans and borrowed from the bank, but the bank also made loans against the collateral of government bonds at a 75-per cent 'haircut' (i.e., lending 75 per cent of the face value of the collateral) even after the market prices of bonds had fallen below 75 per cent of par: in effect, the bank was monetizing government debt by discounting short-term bonds and lending against long-term bonds.

By the end of the First World War, as defeat loomed, the major ethnic groups all decided to secede. The Czechs and Slovaks were the first on 20 October, leaving Austria and Hungary respectively to form a new country. Hungary dissolved the union with Austria in early November. Within three weeks the Southern Slavs had united with Serbia, the Galicians with Poland, and the Austrians with Germany. In 1919 victor nations also grabbed territories, Italy taking southern Tyrol from Austria and Romania taking Transylvania from Hungary. The break-up was ratified by the treaties of Saint-Germain (September 1919) for Austria and Trianon (June 1920) for Hungary.

As long as the dual monarchy existed, its territories were effectively part of a monetary and customs union. Specialization had developed along the lines of comparative advantage; infrastructure had grown to serve trade flows; and the regions' economies were interdependent for raw materials and export markets. Vienna served as the banking and financial centre for the whole region, but following the break-up, problems mounted quickly. Trade soon broke down as each country tried to keep its raw materials and protect its exports; cross-border trade by rail was hindered by the risk that the other country might seize the rolling stock, forcing costly transfers of goods at hastily chosen and ill-equipped border points. From a fiscal perspective, the problems differed depending on the region: Yugoslavia and Romania had to integrate new regions into their taxation systems, while Hungary, and especially Austria, lost much of their sources of revenues. Finally, from a monetary perspective, some successor states (Austria, Hungary, and Czechoslovakia) had found themselves in early November 1919 as part of a monetary union but not a fiscal union, while others (Yugoslavia, Romania, Italy, and Poland) had inherited a rapidly depreciating currency which they had to integrate into their own monetary system. One of the first orders of business was to split up the currency stock, but this happened in an uncoordinated and protracted manner, leading to considerable movements of currency across borders.

(b) Austria

The rump of Imperial Austria, composed essentially of German-speaking areas, did not see itself as a viable state, and the first act of its representative assembly was to proclaim union with Germany. Austrian hopes for such a union were dashed by the Treaty of Saint-Germain, which established it as an independent state and saddled it with war reparations to be specified at a later date.

The Austrian Republic's population of 6.5 million, of which a third resided in Vienna, fell quite short of Imperial Austria's twenty-nine million. Aside from the reparations, the government faced enormous costs in subsidizing food and providing for war veterans and

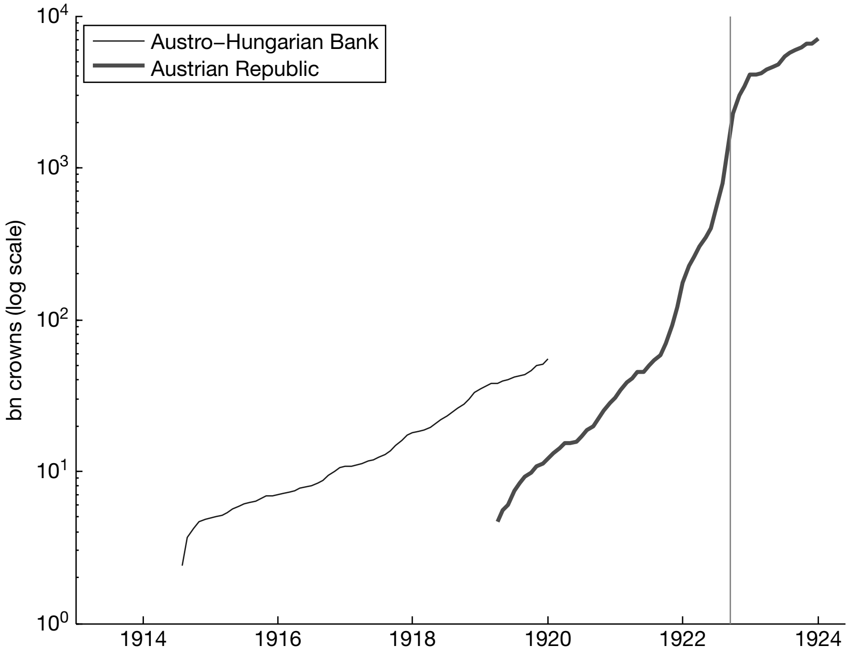

Figure 30.3 Note circulation of the Austro-Hungarian Bank and of the Austrian Republic, July 1914 to December 1923.

The vertical line marks the date when prices stabilized.
Source: J. van Walré de Bordes, *The Austrian Crown, its Depreciation and Stabilization* (1924), at 46–50.

for the many civil servants repatriated from all parts of Imperial Austria. The new Austria also lacked the skills to run a parliamentary democracy and disciplined ministries; the wartime spending habits financed by paper money simply persisted. Collection of revenues was abysmally low in 1919, at sixteen crowns per person in pre-1913 values compared to 100 crowns per person in 1913, presumably reflecting the lack of faith in the existence of the state. Finally, both revenue collection and spending were affected by inflation: revenues because tax obligations in nominal terms depreciated, and spending because planning a budget was difficult when prices were unpredictable.

To check the depreciation of the currency, the government extended the measures of price and foreign-exchange controls that had been instituted during the war. Rents were controlled, making housing essentially free in Vienna, and food prices were subsidized. Foreign exchange was controlled by an agency through which all transactions had to take place, and restrictions were placed on domestic residents' ability to dispose of their domestic balances. The controls were relaxed in 1920 and 1921, but then imposed again in December 1921. In January 1920, the Austro-Hungarian Bank was formally split into an Austrian section and a Hungarian section: at that time the books were found to be in shambles. The Austrian Bank continued to provide the main resource of the government for the next two years.

In 1919 and 1920, several countries made relief loans to Austria, totalling $135 million. In January 1921, Austria requested further loans, and the Reparations Commission recommended a loan of $250 million, but the Supreme Council of the Allied Powers rejected it. In July 1921, the League of Nations approved a plan for a loan to Austria, but the loan could only go forward after each country with a prior lien on the Austrian state's assets accepted to remove it. Those liens secured the earlier relief loans as well as the reparations imposed by the peace treaty. It soon became apparent that securing these approvals would take a

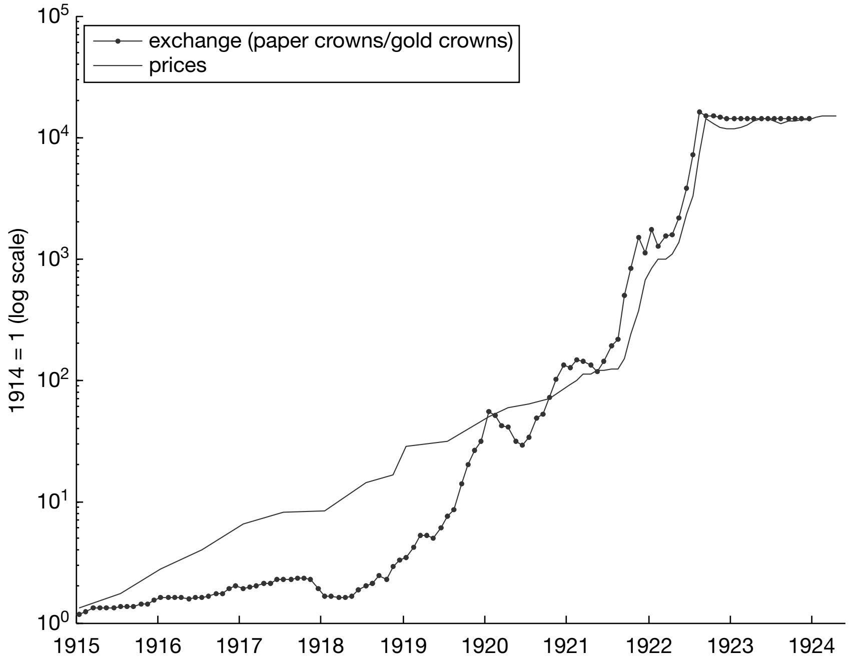

Figure 30.4 Value of the gold crown in Austrian paper crowns (average of each month's last week) and retail prices, July 1914 to December 1923.

Source: J. van Walré de Bordes, *The Austrian Crown, its Depreciation and Stabilization* (1924), at 82–3, 116–39.

long time, and the exchange value of the Austrian crown continued to fall. A British loan in the autumn of 1921 helped to stabilize the exchanges for a few weeks. By August 1922, the situation was so dire that the Austrian resident in London declared that, without a sufficient foreign loan, the government and parliament would declare Austria impossible to govern.

In late August 1922, the League of Nations realized the risks that a failed state in the middle of Europe posed, and serious negotiations began with the Austrian government. The outcome was a set of protocols signed on 4 October, and enacted in Austrian legislation in November and December. The Allies guaranteed the existence of the Austrian state and helped it borrow \$130 million (enough to cover a year's or so expenditures) from foreign lenders by providing loan guarantees. In exchange, the Austrian government undertook to balance its budget and stop borrowing from the bank. The League of Nations also appointed a commissioner who could not interfere directly with Austrian decisions but whose task was to monitor and report to the League.

Stabilization proceeded very fast. The crown had stopped depreciating in early September. That was the time when the negotiations began, but also when the central bank abruptly stopped lending to the private sector, as it had been doing increasingly since mid-1921. The bank continued to lend to the government, and note circulation continued to increase, until November 1922, but without depreciation. In December, the government successfully floated a domestic loan, and in January 1923, a re-organized Austrian National Bank opened. It could only lend to the government against full collateral of gold and foreign bills, had to maintain a reserve ratio against notes and deposits of 20 per cent (rising over time), and was to return to convertibility once the government's debt to it had been lowered sufficiently. In practice, the bank's reserves in foreign exchange vastly exceeded the minimum, and it pegged the crown to the dollar.

Foreign loans were launched starting in February 1923, and by October 1923 the budget was balanced. Expenditures were drastically reduced, civil servants were laid off in large numbers, food subsidies were cut, and much of the economy was liberalized except for rents and foreign exchange. In December 1924, the *schilling* replaced the crown at a rate of 10,000:1.

2. Hungary

While Austria's early years were plagued by doubts about her viability, Hungary suffered other problems. At the end of the war, its territory was more or less intact. It broke the union with Austria in November 1918 and proclaimed a republic, with a conservative aristocrat as the leader. Croatia seceded from Hungary early on, leaving a still substantial state. But by March 1919, a Bolshevik insurrection led by Béla Kun, had taken power. A war broke out between Hungary and both Czechoslovakia and Romania; in August 1919, the Romanian army occupied Budapest and overthrew Kun's regime. It later withdrew, ceding power to a conservative regime led by the Hungarian army chief, Admiral Horthy, but Romania retained large amounts of Hungarian territory. The peace treaty of Trianon in June 1920 ratified the reduction of Hungary's size, with a population of 7.6 million—a third of the 21 million in the 1913 kingdom. Political stability was disturbed again by the former Emperor's attempt to regain his Hungarian crown in 1921.

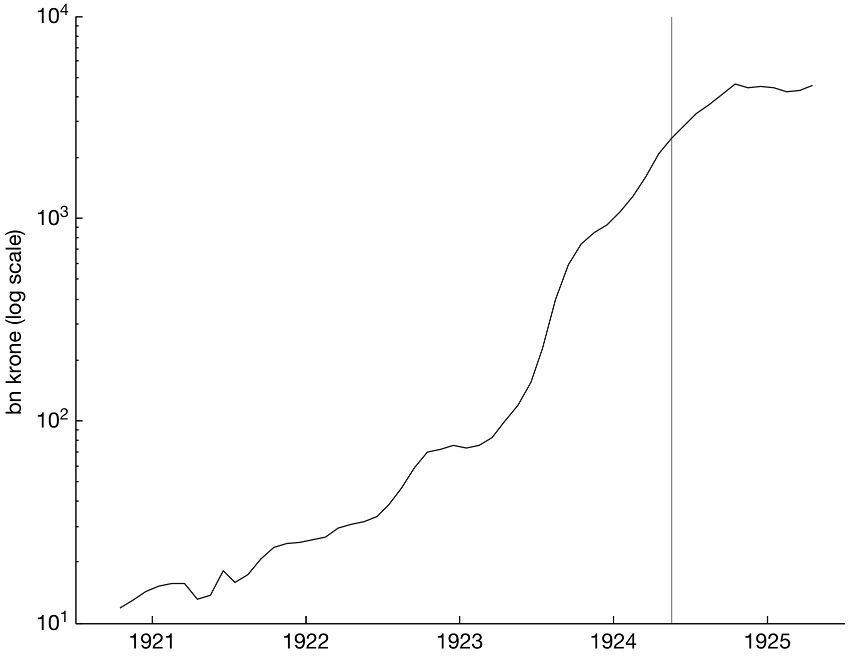

Figure 30.5 Notes in circulation in Hungary, October 1920 to April 1925.

The vertical line marks the date when prices stabilized.

Source: J. P. Young, *European Currency and Finance* (1925), vol. 2, at 321, and League of Nations, *Memorandum on Currency: 1913–1923* (1924).

Figure 30.6 Hungarian prices (retail up to November 1923 and wholesale after) and foreign exchange rate in New York.

Source: J. P. Young, *European Currency and Finance* (1925), vol. 2, at 323.

These upheavals were accompanied by monetary turmoil. The Kun government used printing plates of the Austro-Hungarian Bank to issue small denominations which were indistinguishable from earlier issues, and also issued their own currency which was later redeemed at a quarter of its face value. Hungary was the second to last successor state to stamp the old Austro-Hungarian notes, in March 1920, so that all notes that had not been stamped elsewhere fled to Hungary and increased its stock.

In May 1921, some order was brought to the currency by establishing a government-run Note Institute with limitations on note issue and a prohibition on lending to government. It began operations in August 1921 and retired all currencies outstanding and issued its own notes. The Hungarian crown's value briefly firmed but started falling again. In October 1921, lending to government resumed.

The situation dragged on for several years. Wartime foreign exchange controls were brought back in September 1922, with all foreign exchange transactions to take place through a *Devisenzentrale*, but this only briefly slowed the decline of the foreign exchange rate. The success of the Austrian stabilization led Hungary to seek a similar arrangement in April 1923. Negotiations were slow, however, and began in earnest only in November 1923 after the Reparations Commission agreed in principle to suspend its claims in order to permit a loan. Negotiations concluded in April 1924. The plan was very similar to the Austrian plan: Hungary's territorial integrity was guaranteed by the Allies, liens on Hungarian assets were removed, and a loan of $50 million was granted, secured by specific government revenues. Reparation payments were postponed for two years and subject to an annual cap thereafter. A commissioner monitored the situation on behalf of the League. The Hungarian National Bank was created, very similar to its Austrian counterpart: privately owned but under some government control, it shared its profits between the shareholders and the state, had to maintain a 20-per cent reserve ratio against new issues, and could lend to the government only against full collateral in gold or foreign exchange. Convertibility was postponed until the government's debt to the bank (which included the value of the money stock it took over) was sufficiently reduced. The bank pegged the crown at the same level as the Austrian crown, but against the pound sterling; the peg was changed to the US dollar in April 1925. The government was given two years to balance its budget, although surpluses were achieved by October 1924. In November 1925, a new unit, the *pengő*, replaced the crown at 12,500:1.

3. Germany

It is often forgotten that pre-1918 Germany was a federation, and a rather weak one. The Empire was in charge of defence, foreign affairs, and servicing the federal debt. Its revenues consisted in indirect taxes (customs and duties), which had to be approved by Parliament; the revenues of monopolies, such as the railways and the post office; and a contribution from the member states, which amounted in 1913 to a mere 2.5 per cent of total revenues. In wartime, customs revenues plummeted, and excise taxes were difficult to raise; there were capital levies and taxes on war profits; but most of the war was financed by long-term loans and short-term debt monetized by the central bank, the *Reichsbank*. By the war's end, the long-term debt totalled 100 billion marks, the service of which alone represented twice the revenues of 1913; funding the short-term debt would have nearly doubled the burden.

After the war had ended, military expenditures declined, but other expenditures, mainly social, rose. The deficit persisted, and the short-term debt continued to pile up. The policy of resumption of convertibility at pre-war parity, universally endorsed during the war, became obviously impossible by mid-1919. Other options, such as stabilizing the currency at the existing levels or accepting further depreciation, involved political trade-offs.

Several attempts were made at raising revenues, for example the emergency contribution of December 1919 and the forced loan of June 1922, but they were all some form of capital levy assessed in nominal terms and payable over a period of time—a futile exercise in times of inflation.

The key factor in Germany's public finance was the matter of reparations. Imposing a tax on the defeated is a practice as old as war itself, famously justified by the Gaul chieftain Brennus in 390 BC with the maxim, *vae victis*. France had paid such an indemnity twice in the previous century, in 1814 to the Allies and again in 1871 to Germany, each time in addition to territorial losses. In both cases, France was under occupation when the indemnity was imposed, and its payment was a condition for the departure of the occupant. And in both cases, France repaid within three years; the indemnity amounted to 20 per cent of GDP.[8]

The magnitude of the costs of the First World War, roughly speaking two years' worth of GDP for each participant, made it virtually impossible for the defeated to bear their own costs and those of the victors as well. The armistice had been signed before any allied troops

[8] E. N. White, 'Making the French Pay: The Costs and Consequences of the Napoleonic Reparations', (2001) 5(3) *European Review of Economic History* 337.

entered Germany, which made the payment of reparations, at least in part, conditional on Germany's willingness to pay.

The terms of the armistice foresaw Germany paying for the damage it had inflicted, but the peace Treaty of Versailles, by positing Germany's responsibility for the war, placed a potentially much larger burden. The treaty did not set a reparation amount, although it required an interim payment of 20 billion gold marks; instead, it set a deadline of May 1921 for setting the final amount. The amount, set out in the London ultimatum, was as follows. In addition to the assets seized during the war, and to the payments made in kind since the Armistice, the reparations commission stipulated a tranche of 12 billion gold marks for damages, and a second tranche of 38 billion gold marks for reparations. Britain and France were willing to relent on this second tranche, if the United States were willing to forgive inter-Allied loans; but it soon became apparent that they were not. The two capital sums translated into a charge of 2 billion gold marks on the budget and a share of 25 per cent of exports, or 3 billion marks in total, about 5–6 per cent of GDP for a very long time (part of the annuity represented amortization, but at a slow rate).

As Ritschl notes, these two debts amounted to 100 per cent of 1913 GDP:[9] this was a much higher indemnity than the one imposed on France in 1871, but not necessarily intolerable: it would have only brought Germany's debt to GDP ratio to the same level as those of Britain and France at the time (of course, it would also have lowered the latter). The size of the implied annual payments was nevertheless problematic: Germany could pay only in kind (such as coal and timber) from its own resources, or in gold accumulated through reduced imports and increased exports. Germany's exports were manufactured

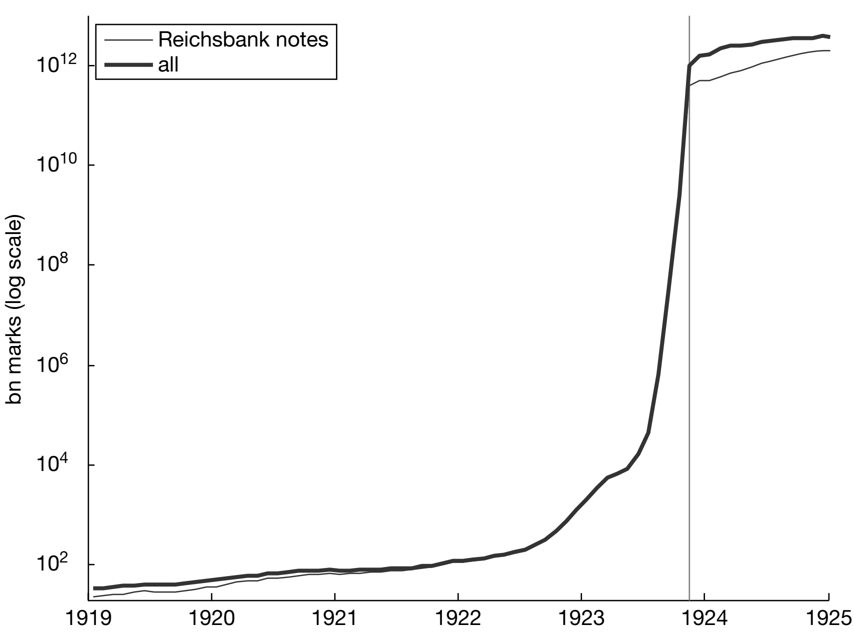

Figure 30.7 Notes in circulation in Germany, January 1919 to April 1925.

The vertical line marks the date when prices stabilized. All notes include *Kassenscheine* until December 1923 and notes of the *Rentenbank* from November 1923.

Sources: League of Nations, *Monthly Bulletin of Statistics* (1919–26), table XII; and J. P. Young, *European Currency and Finance* (1925), vol. 1, at 527–9.

9 A. Ritschl, 'Reparations, Deficits, and Debt Default: the Great Depression in Germany', Centre for Economic Performance Discussion Paper 1149 (2012).

goods and equipment, and it already faced stiff competition from other industrialized countries in those markets. The question as to how would Germany pay, and, specifically, how large a domestic deflation might be required to make German exports sufficiently competitive, became known as the 'transfer problem', debated by John Maynard Keynes and the Swedish economist Bertil Ohlin.

The transfer problem was interesting, but perhaps not the main one. The deeper question was not how Germany would pay, but whether it would want to. The reparations included a third tranche of debt set at 82 billion gold marks, which would have brought Germany's total debt to nearly 300 per cent of its GDP. The importance of this third tranche has been debated. Some see it as largely theoretical (it did not accrue interest, and no due date was set) and designed to placate public opinion in Britain and France. But for others (and particularly the Germans at the time) it meant that any improvement in Germany's economy was liable to be claimed in whole by the Allies, and it removed any incentive for Germany to improve its situation. By contrast, the offer made by Germany in 1921 was in the amount of 50 billion marks plus a *Besserungsschein*, or warrant, whereby the Allies would have shared in, rather than taken, all future improvements of the German economy. That offer was turned down.

Until the London ultimatum, the German government had proceeded on the assumption that reparations would be proportional to past historical experience rather than to the costs of the war. The Weimar constitution broke away from the federal tradition and gave the central government broad powers of direct and indirect taxation. Under the leadership of Matthias Erzberger those powers were used to levy new taxes on wealth and income. By the mid-1920s, the budget was not far from balance, and recourse to inflationary policies slowed. The foreign exchange rate appreciated, due to speculation that Germany's situation would improve soon. However, the finances took a turn for the worse in 1921, after the London ultimatum, as tax payments slowed and enforcement became lax. As Holtfrerich shows, German expenditures under the peace treaty from 1919 to 1922 averaged 5 per cent of GDP, and were therefore substantial.[10] But they were at first meted out of existing stock (gold, property, and capital) and later entirely financed by money creation.

At the Cannes conference in January 1922, the Allies conceded that they might grant a moratorium on the reparations payments, but demanded that Germany balance its budget and stop printing money. A law was passed in May 1922 making the Reichsbank independent of the government; the ordinary budget, exclusive of reparations payments, was in surplus. But the reparations question remained unresolved, with France and Britain refusing to relent unless the United States forgave the inter-Allied debt. Further, Eichengreen argues that Germany fought a war of attrition on two fronts, not only with the Allies over the size of the reparations but also on the domestic front over the distribution of the burden of taxation.[11] Indeed, the wave of communist unrest spreading through Central Europe (including the Spartakist revolt of 1919 in Germany) showed that the demands of the lower classes could not be ignored without a great risk to political and social stability. On the other side, industry and business were adamantly opposed to the reparations and willing to tolerate an inflation that, in 1920 and 1921, probably spared Germany from the worldwide recession that took hold elsewhere.

Germany's dragging its feet on reparations led to increasingly fraught relations with the Allies, culminating in the occupation of the Ruhr by French and Belgian troops in December 1922. The German government encouraged and subsidized a policy of passive

[10] Holtfrerich, above n 7, at 150. [11] Eichengreen, above n 7.

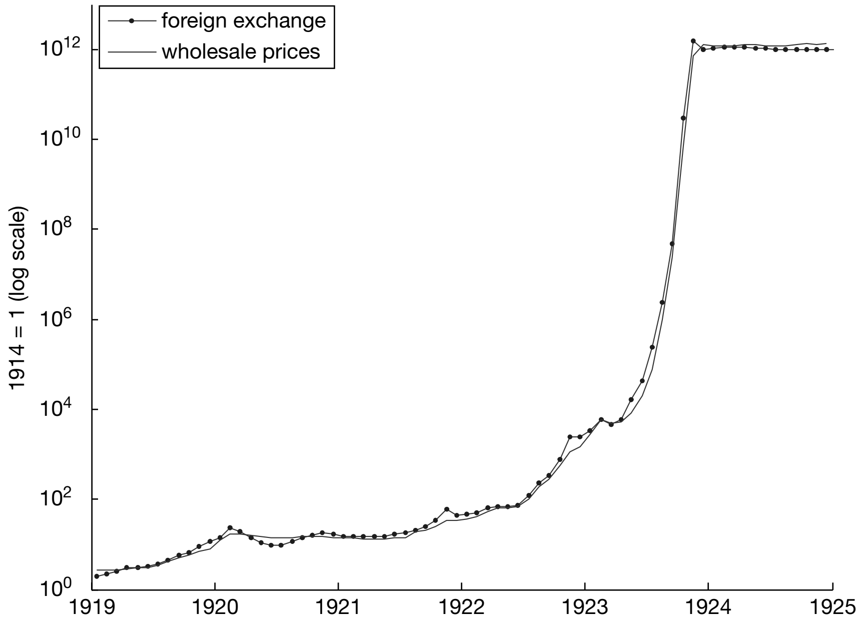

Figure 30.8 German wholesale prices and foreign exchange rate in New York.

Source: J. P. Young, *European Currency and Finance* (1925), vol. 1, at 530–2. Exchange rates are monthly averages except May–December 1923, which are end-of-month quotations from the *Wall Street Journal*.

resistance, and the occupation proved costly for both parties. Since mid-1922, the Reichsbank had been supplying credit to the private sector at rates that were far below what current inflation rates required, effectively making gifts of money to the private sector. Money issuance and prices rose ever faster, until the inflation reached a peak of 32,400 per cent per month (20 per cent per day) in October 1923.

As the demand for the currency collapsed, it became clear that a new currency would soon be needed. Many individuals were holding foreign currency for transactions or bartering; businesses were routinely counting in dollars or gold marks. On 15 October 1923 a plan was published to put an end to the hyperinflation. It consisted in creating another bank, the *Rentenbank*, which would issue a new currency called the *Rentenmark*. The assets backing the bank were, formally, mortgages on the German economy—essentially bonds backed by the promise of future levies by the government on all productive sectors. The Rentenbank was eventually replaced by a reconstituted Reichsbank and the new mark, equal in value to the pre-war mark and to 10^{12} or 1,000,000,000,000 paper marks, was made convertible in December 1924.

On 15 November 1923, the Rentenbank opened its doors, and the government stopped borrowing from the Reichsbank. Taxes were collected in gold marks. Government payrolls were massively reduced in the early months of 1924, and by January 1924 tax receipts largely exceeded ordinary expenditures and continued to do so for the rest of the year.[12] That stabilization occurred weeks, or months, in advance of these concrete actions suggests that the war of attrition at home had run its course, all parties fully convinced of its great cost, and ready to make the necessary compromises.[13]

[12] Young, above n 7, vol. 1, at 422. [13] Eichengreen, above n 7.

The year 1924 also marked a new chapter in the story of reparations. Germany had shown that it was willing to inflict great damage on itself, rather than submit to the burden of reparations imposed in 1921. The Allies saw that there was no way of extracting what they had expected from Germany. Payments were suspended in early 1924, and by August 1924 the Dawes Plan provided for a stabilization loan and a rescheduling of the reparations. It also included a transfer protection clause under which 'transfers of commercial claims on Germany were protected from reparations. Hence, the Reichsbank would have to make foreign exchange available for reparation transfers only after all commercial claims had been satisfied.'[14] This remarkable subordination of the war debt to commercial debt effectively allowed Germany to attract large amounts of foreign capital in the following five years. The reparations payments were easily made, financed by foreign capital. When the Young plan of 1929 removed this clause, Germany became vulnerable to capital outflows, as events soon demonstrated.

4. Poland

Poland's case was obviously different from the three defeated nations we have just surveyed. The Polish Republic came into existence at the time of the armistice in November 1918, and was composed of pieces of Germany, Russia, and Austria. The Russian part of Poland had been under German occupation since 1915, and in 1916 the German authorities created a State Loan Bank (*Darlehenskasse*) in Warsaw to issue a currency pegged to the mark but circulating only in occupied territories. In 1917, the *ruble* was demonetized. When the Polish state emerged, it inherited various currencies: the Polish mark issued by the State Loan Bank which Poland reluctantly took over; Russian rubles of various kinds issued by the tsarist and Provisional governments; and Austrian crowns in Galicia which were stamped belatedly in June 1920 and exchanged for Polish marks at 70:100.

The Bolshevik regime in Russia tried to take advantage of the unsettled conditions after the German army had withdrawn, and invaded Poland. The war with Russia ended with the treaty of Riga in March 1921, which included a payment of 30 million gold rubles by Russia. In September 1921, an attempt was made to stabilize the currency, but Poland's budgetary and economic difficulties continued; a large trade deficit in 1922 only turned into a surplus in 1923 thanks to the acquisition of Upper Silesia from Germany in June 1922.

The situation turned around when Władysław Grabski stepped into office in late December 1923 and obtained plenary powers in economic and financial matters on 11 January 1924. He immediately imposed a one-time property tax, raised other taxes, cut spending, and on 1 February forbade the Treasury to borrow from the bank. The exchange rate was stabilized in the first days of February. The new currency, the *zloty*, replaced the mark at the ratio of 1,800,000:1 in May 1924, stabilized at the value of the gold franc. The Bank of Poland was founded in April 1924 as a privately owned bank; its notes had to be backed by at least 30 per cent gold or foreign currencies. A one-time lump sum payment to

[14] Ritschl, above n 9, at 9.

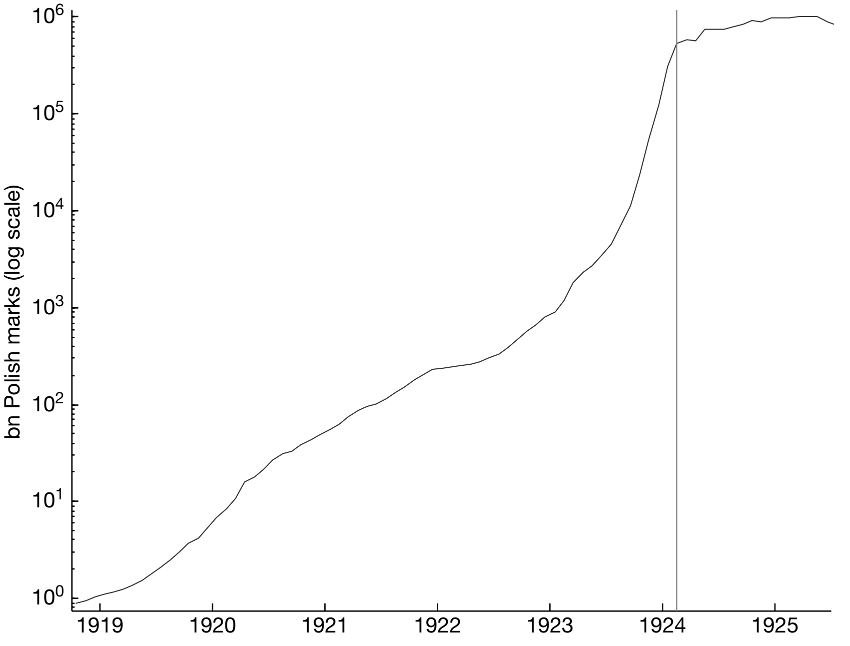

Figure 30.9 Note circulation in Poland, October 1918 to April 1925.

The vertical line marks the date when prices stabilized. From May 1924 figures are in zlotys converted at the rate of 1 zloty to 1,800,000 Polish marks.
Source: J. P. Young, *European Currency and Finance* (1925), vol. 2, at 348; League of Nations, *Monthly Bulletin of Statistics* (1919–26), table XII.

the Treasury of fifty million *zlotys* was required for the privilege of note issue, but no other relations with the Treasury were permitted.

The central bank could not finance the government with money creation, but the government could finance itself with paper. This soon became apparent: by the second half of 1924, the surplus had turned into deficit, and the government began to issue small denomination notes. Retail prices rose 20 per cent in the last quarter of 1924, although they stabilized in 1925. A bad harvest and an adverse trade balance in 1925 complicated matters. In August 1925, the central bank stopped supporting the exchange rate because its reserves were running out. By January 1926, small denominations formed more than half of the money stock. Between July and December 1925, the exchange rate fell from \$0.190 to \$0.108 to the *zloty*; wholesale prices started rising and peaked in May 1926—80 per cent above their 1924 level.

Grabski resigned in November 1925, and the next government began to restore the situation by raising taxes and other revenues in early 1926; the year as a whole would turn a surplus. General Piłsudski took power in a coup in May 1926, and the following year, a full return to convertibility was arranged with the help of a stabilization loan of \$70 million.[15]

[15] R. Dornbusch and S. Fischer, 'Stopping Hyperinflations Past and Present', (1986) 122(1) *Review of World Economics* (*Weltwirtschaftliches Archiv*) 1.

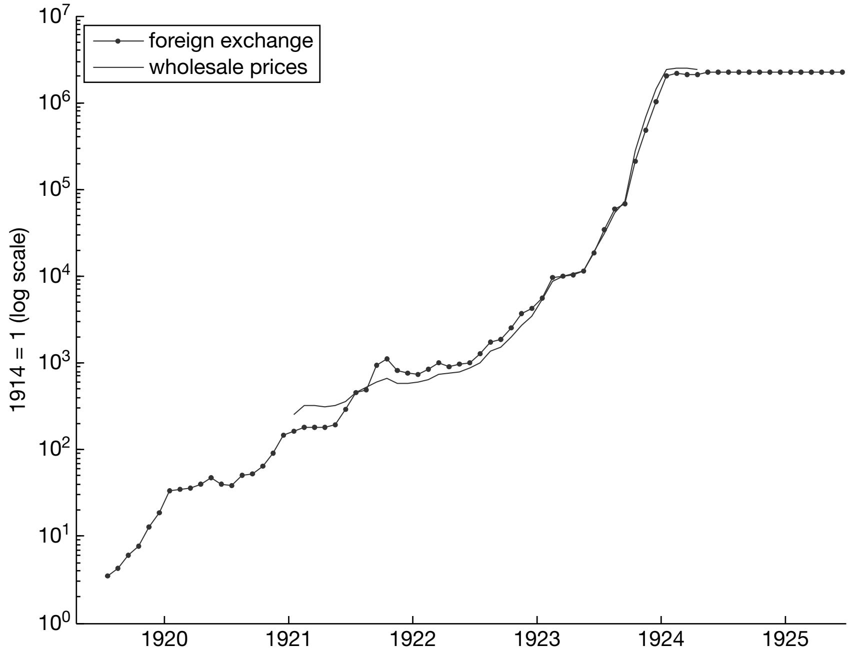

Figure 30.10 Polish wholesale prices and foreign exchange rates, July 1919 to May 1925.
Source: J. P. Young, *European Currency and Finance* (1925), vol. 2, at 349–50.

5. Russia

The Russian experience with hyperinflation differs from the others in a number of aspects. First, Russia withdrew from the First World War with the treaty of Brest-Litovsk in March 1918, long before the other countries. Second, as shown in Table 30.1, Russia used paper money to finance its wartime expenditures to a much larger degree than did other countries. By March 1918, the money supply had grown by a factor of eighteen compared to June 1914 (whereas note circulation was multiplied by 14.4 in Austria-Hungary and by 7.7 in Germany during the war). Third, the October Revolution brought to power a regime that considered money itself to be superfluous and its elimination a desirable goal. Finally, once the new regime had revised its views on the matter, it failed to stabilize the depreciating currency just like its predecessors: no foreign help was involved, and, more strikingly, the old currency continued to hyperinflate, while a new, stable currency was set up alongside. The two currencies co-existed for fifteen months until the so-called *Soviet ruble* was exchanged for the new currency at 50,000,000:1.

The suspension of the gold standard was effected by a law of 9 August 1914 (n.s.). The convertibility of the State Bank's notes was suspended, and the ceiling on the number of unbacked notes was raised. This ceiling was raised four times before the fall of the monarchy, and five times under the Provisional Government. From July 1914 to February 1917, the note circulation increased fivefold, from 1.6 billion rubles to 9.4 billion, and it doubled again during the six months of Kerensky's Provisional Government. These increases were backed entirely by short-term treasury bills, that is, loans to the government.

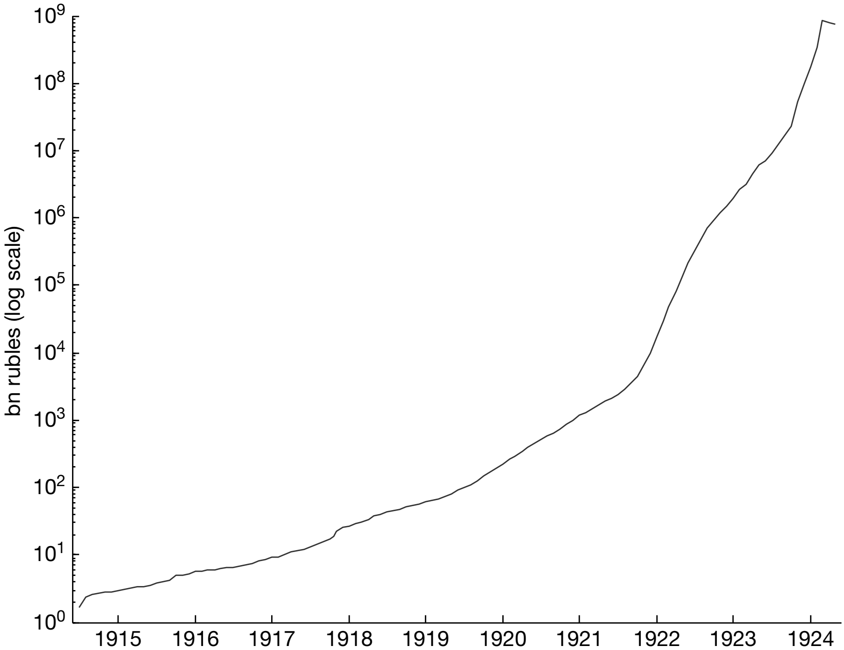

Figure 30.11 Paper currency in circulation in Russia, monthly, July 1914 to May 1924.
Source: Z. S. Katzenellenbaum, *Russian Currency and Banking, 1914–24* (1925), at 56–8.

The Bolsheviks, who came to power in October 1917, were trained as Marxists and had little interest in money. They believed that it would disappear from a socialist society, and actively dismantled all monetary aspects of society. From a practical perspective, however, issuing money they despised was also one of their few resources during the civil war. Therefore, destroying the currency they had inherited served both a financial and an ideological purpose. All banks were nationalized in December 1917 and merged with the State Bank (now People's Bank), which was itself dissolved and absorbed into the state bureaucracy in January 1920. Decrees passed in January 1918 nationalized all holdings of precious metals (without compensation) and placed a limit on the amounts of cash that could be held at home. From 1918 to 1920, the re-organization of economic activity along Marxist lines, instituting unilateral and barter transactions and centralized allocations, considerably reduced the demand for money. Every year in 1917–19, the real value of paper currency fell by a factor of three. Money, renamed 'tokens' or *znaki*, continued to be printed in order to finance the budget deficit, but the money budget was itself dwindling. During the war, new issues of money were at least as large as fiscal revenues. In 1919 and 1920, the real value of money issues was around a third of the 'fiscal' revenues based on confiscation.

In April 1921, Lenin changed tack and introduced the New Economic Policy (NEP), reintroducing a large measure of private enterprise and decentralized transactions. For this, money was needed, if only as a unit of account for the state's own books. But returning to a money-based system of tax collection would take time, and in the meantime issues of paper money continued, being the only resource for the 'monetized' budget. In November 1921, a

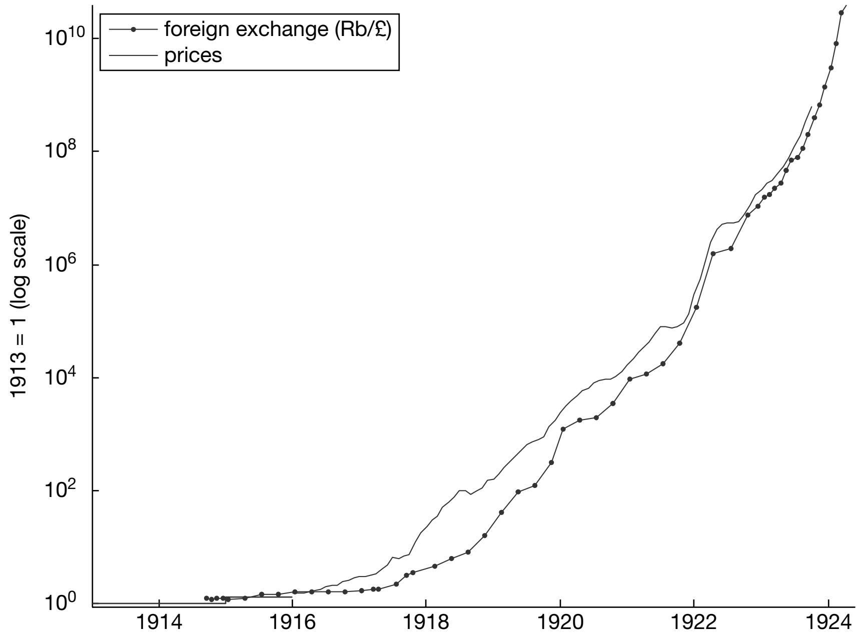

Figure 30.12 Indices of Russian foreign exchange rates and prices, monthly 1913 to May 1924 (annual prices 1913–15).

Source: Z. S. Katzenellenbaum, *Russian Currency and Banking, 1914–24* (1925), at 74–5, 78–9, 83, 90.

State Bank was created, initially as a credit institution, but from October 1922 it was empowered to issue notes denominated in *chervonets* (plural *chervontsy*), from the name of the ten-ruble gold piece under the tsar. The notes, in denominations from one to fifty (roughly equivalent to £1–£50 or $5–$250), had to be backed by a minimum of 25 per cent reserves in gold, platinum, or foreign exchange, and they were planned to be made convertible on demand, although that never happened. The bank could lend to the state, but a 50 per cent gold collateral was required. The first notes were issued in November 1922, while the old Soviet tokens or *sovznaks*, denominated in rubles, continued to be issued and circulated.

The *chervonets* was freely traded in Moscow, and the State Bank was tasked with publishing a daily rate between Soviet rubles and *chervonets*; although it initially lagged behind the market rate from September 1922, it seems to have been close to it. This rate, publicized across Russia by telegraph, was widely used to index payments. The *chervonets* maintained stability except for a dip in May–June 1923.

The Soviet notes, or *sovznaks*, were effectively the small change corresponding to the higher-value *chervonets*. The Soviet government thus combined the large denomination, which provided a nominal anchor and a stable unit of account, with a small denomination that provided a tax base for the inflation tax. This arrangement is oddly reminiscent of medieval systems in which the gold coin remained undebased while the silver coins were repeatedly debased.

The State Bank managed its currencies through interventions on the foreign exchange market. The free currency markets in Moscow and Petrograd gave it the barometer it needed to regulate its issues and time its interventions, buying or selling *chervontsy* as needed. More crucial to the stability of the *chervonets*, however, were two facts: the state's deficit gradually shrank in 1923 and the balance of trade turned positive. The former left

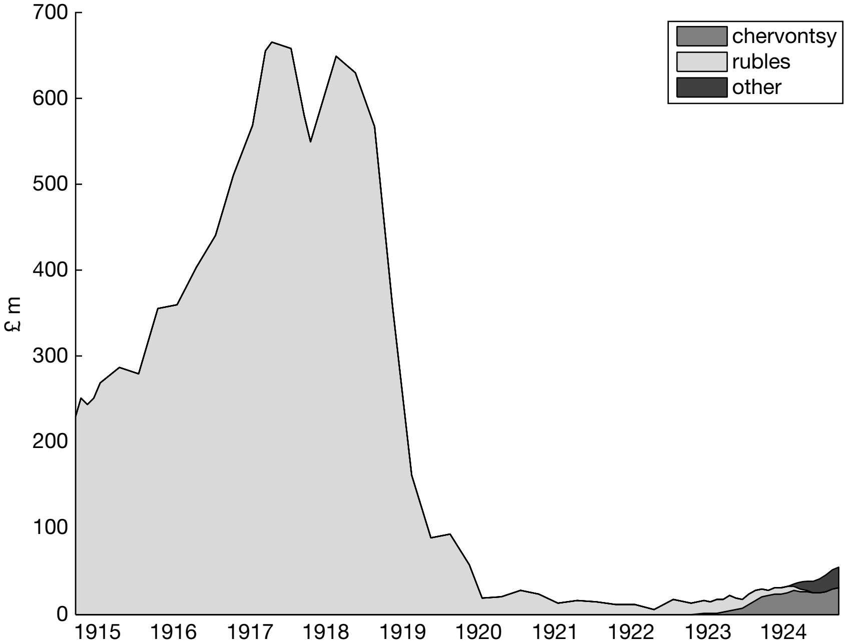

Figure 30.13 Real value of paper circulation in Russia, 1914–24.
Source: Z. S. Katzenellenbaum, *Russian Currency and Banking, 1914–24* (1925), at 56–58, 74–75

the State Bank free of heavy pressure to finance a deficit, while the latter gave the Bank access to gold and foreign exchange reserves it needed to satisfy the 25 per cent cover mandate.

Eventually, the demand for *sovznaks* fell, so that the time came to replace it. The government also realized that there was a one-time gain to be made from issuing a new, credible currency. Given the trade surplus and the nearly balanced budget, the reform was implemented relatively painlessly through a series of reforms in February and March 1924. The Treasury stopped issuing *sovznaks* on 22 February, and instead issued small-denomination notes, denominated in rubles. The old money was converted at the rate of fifty billion Soviet rubles to one new ruble. Two rules were implemented: monthly issues of new rubles were capped to half the monthly issue of *chervontsy*, and the State Bank was obligated to convert one into the other on demand at the rate of ten rubles to one *chervonets*. Later in the year, the Treasury also issued silver and copper coinage. By the end of 1924, the reform was complete; in 1925, the budget was balanced for the first time, and the bank's reserves stood at nearly 50 per cent. Figure 30.13 shows how the *chervonets* overlapped with both the Soviet ruble and the new currency, paper and metal, issued by the Treasury (labelled 'other').

The Soviet Union (consituted in December 1922) never formally returned to the gold standard, and the *chervonets* was not convertible,[16] but, from 1923 to 1926, it was a target zone currency, whose fluctuations within 20 per cent of its parity were actively managed by the State Bank.

[16] V. Barnett, 'As Good as Gold? A Note on the Chervonets', (1994) 46(4) *Europe-Asia Studies* 663.

Figure 30.13 shows that low real per capita money holdings had fallen by 1920 in Russia, a sign of the demonetization resulting not just from hyperinflation but from the abolition of capitalism. The figure also shows the rise of the *chervonets* alongside the ruble's dwindling value, and how the 'other' category (state notes and later coins) replaced the ruble as small currency.

The return to monetary orthodoxy and to market forms of economic organization did not last long. Johnson and Temin explain how a mixture of high money growth to finance loss-making state enterprises and partial price controls (on urban manufactured goods, but not on their prices in the country, nor on agricultural goods) led to massive relative price distortions.[17] Thus, otherwise manageable money growth figures, plausible under a remonetization regime, led to widespread inefficiencies and gave Stalin a reason to shut down the NEP experiment from 1928.

III. The Hyperinflations That Did Not Happen

The hyperinflations of the interwar period, and particularly the German one, tend to be over-determined: there are many more plausible explanations than there are empirical data. This is why it may be useful to consider the cases of a few countries that were completely surrounded geographically by hyperinflations but managed to avoid them. Czechoslovakia bordered all five countries in this survey, while the Baltic countries were between Germany, Poland, and Russia.

1. Czechoslovakia

As mentioned above, the Czechs and the Slovaks were among the first nationalities to break away from the Austro-Hungarian Empire. In fact, a Czech Legion had been fighting with the Allies, and the independence of Czechoslovakia had been recognized by France and Italy in June 1918, by Britain in August, and by the United States in September. In November, the Czech National Council took power in Prague, and Alois Rašín became the first minister of finance. The new country was still locked in a currency union with Austria and Hungary, whose bank (as shown above) continued to issue notes to finance those governments. Czechoslovakia was paying the inflation tax but receiving none of the revenues, and had no control over monetary policy. Gaining representation at the board of the Austro-Hungarian Bank proved useless, and Rašín proceeded to separate the Czechoslovak currency. On 26 February 1919, the borders were suddenly closed for two weeks, during which time all notes within the country were required to be stamped by the government to retain their legal tender value. Half of the notes submitted in amounts above 300 crowns, or about a quarter of the total, were retained in the form of a forced loan; the following year, the receipts for the retained notes were admitted in payment of a one-time tax on wealth. After the stamping operation had ended, the Note Institute was established within the Ministry of Finance. The stamped notes constituted the only unbacked issue of the Institute: further issues had to be backed by gold, foreign exchange, or private debt. Lending to the government was strictly prohibited unless authorized by a special law. The government had run a large deficit in 1919 (revenues constituted 43 per

[17] S. Johnson and P. Temin, 'The Macroeconomics of NEP', (1993) 46(4) *The Economic History Review* 750.

cent of expenditures), but reduced it to near balance in 1920. The capital levy and a tax on the difference between pre-war and post-war wealth succeeded in bringing in the equivalent to two-thirds of annual revenue from 1921 to 1925.[18]

The Czechoslovak economy was well positioned as compared to other successor states. Many of the industries of the Empire were located there, particularly those in textiles, porcelain and glass, and iron and steel. But Czechoslovakia was a small, open economy, vulnerable to fluctuations in world prices. In 1922 and 1923 it was buffeted by a series of adverse shocks, some produced at home but others due to world events.

In 1922, the government, apparently aiming to restore pre-war parity,[19] pursued a contractionary monetary policy, reducing advances and discounts and bringing down the circulation of notes by a quarter in one year. Domestic prices fell sharply by a third. The foreign exchange rate appreciated, at first in line with the fall in domestic prices, but in the second half of 1922 the gold value of the Czechoslovak crown overshot purchasing power parity by a third. Exports became uncompetitive, especially in comparison with neighbouring countries undergoing inflation or hyperinflation. At the same time, a general decline in the world commodities prices (following the deflation and recession of 1920–1 in the United States) drove down the value of Czechoslovak exports such as sugar.

In late 1922, the crown had reached only 16 per cent of its pre-war parity, and the government gave up on its goal of restoring full parity. The exchange rate stabilized at around three cents (compared to 20.3 cents before the war). A National Bank was created in 1926, as a privately owned corporation with note issue monopoly under the oversight of the government, with which it shared profits. The government's debt to the bank, representing the initial fiduciary issue (the stamped notes of 1919), was to be gradually reduced with the government's profits and with fiscal surpluses. The bank was able to make its notes fully convertible in gold in 1929.

2. The Baltic States

The three Baltic states (Estonia, Latvia, and Lithuania) were part of the Russian Empire before the war, and, as such, used the Russian ruble as currency. The three states emerged from the war under slightly different circumstances: as a result of the German offensive in 1915, the stabilized front line ran through modern-day Latvia, with Lithuania to the west and Estonia to the east. In the occupied territories, the Supreme Command of German Forces in the East (*Ober Ost*) established a bank, the *Darlehenskasse Ost*, which issued the *Ostrubel* and later the *Ostmark*, pegged to the German mark; the ruble circulated at one ruble to two marks, roughly the pre-war parity. After the Russian Revolution, German armies pushed further and by February 1918 occupied all of modern-day Latvia and Estonia, increasing the circulation area of the *Ostmark*. On 20 July 1918, the German authorities deprived the ruble of legal tender status, but in Estonia and Latvia a variety of ruble notes (issued by the Tsar's regime, the Kerensky government, the *Duma*, the Bolsheviks, and various Tsarist forces) continued to circulate.

After the war, Lithuania retained the *Ostmark*, which the German government maintained at par with the German mark. When the latter began to drop in value, Lithuania decided to issue its own currency. A law of 9 August 1922 defined the *lita* as the pure gold equivalent of US$0.10; another law of 11 August 1922 created the Bank of Lithuania, which began operations in September of that year. The currency was rushed into use the following

[18] Young, above n 7, vol. 2, at 73. [19] Garber and Spencer, above n 7, at 28.

month, with existing notes exchanged at periodically adjusted rates for the new *lita* notes (200 marks to the *lita* in the month of October), and became the exclusive tender in January 1923. The Bank of Lithuania was created as a stock company, but 80 per cent of the shares were owned by the Treasury, and the Bank's governor, appointed and dismissed by the president, had a right of veto over the board's decisions.

Latvia's provisional government began issuing state notes in March 1919, denominated in Latvian rubles and equivalent to the Ostrubles. The Latvian ruble became sole legal tender in March 1920. The notes were issued to finance government expenditures until 1921, when their total amount stabilized. At the same time, a law of June 1921 allowed for the use of the gold franc as unit of account by private parties as well as by the state. Customs tariffs were indexed on gold, and the budget was brought into balance. From November 1921, the government pegged the Latvian ruble to the gold franc at 50:1, and a few months later made the ruble convertible on demand. In the summer of 1922 a national currency was established, with a monetary law defining the gold content of the *lat* as identical to the pre-war gold franc, and a law establishing the Bank of Latvia was passed.

In Estonia, the government also issued its own notes in 1919, and in April 1919 it briefly attempted to peg the Estonian mark to the Finnish mark. The Bank of Estonia, or *Eesti Pank*, wholly owned by the state, was established in February 1919 with a note issue monopoly, but did not exercise it until early 1921. The government financed its deficits with note issue but gradually reduced deficits from 78 per cent of expenditures in 1918 to 17 per cent in 1921, and a surplus in 1922. The exchange rate stabilized over the course of 1922 and was pegged in late 1924 at 100 Estonian marks per Swedish crown. The two stocks of notes persisted alongside each other until a monetary reform in April 1927.

A new currency, the *kroon*, pegged to the British pound, replaced the mark in January 1928. The bank took over the state's note issuing department, both assets and liabilities. Metallic coinage issued by the Treasury replaced the small mark notes. The bank, which had really functioned as a commercial bank, was transformed into a classic central bank, with a governor and two board members appointed by the President, and six members by the shareholders. It could discount and make advances, but advances on government securities were subject to a 20 per cent haircut relative to market value. It could lend short-term to the government, but no more than one-sixth of estimated revenue, and the loan to be repaid by the beginning of the following fiscal year. To help the bank divest itself of many illiquid loans it had made, particularly mortgages, the League of Nations recommended in 1927 floating a US$5 million loan. The government used the proceeds to purchase those loans and set up a mortgage bank, allowing the *Eesti Pank* to become a classic central bank with a short-term portfolio of assets.

IV. Understanding Hyperinflations

Having provided a historical account of hyperinflations, this section will summarize the main common features of these five episodes and then proceed to a brief overview of economists' understanding of this phenomenon.

1. Common features

In his classic study, Cagan defined hyperinflation as beginning once inflation reached 50 per cent per month, and ending when it fell and stayed below that level

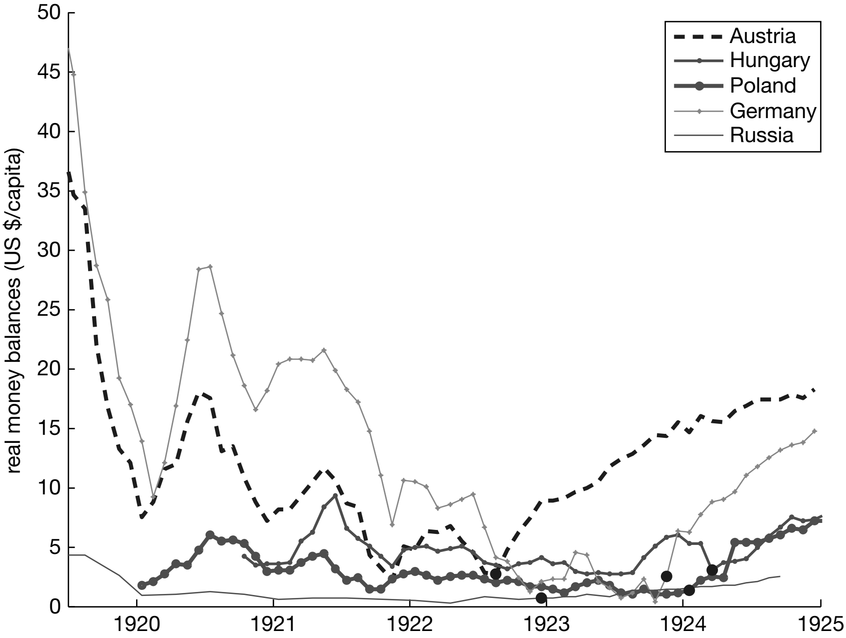

Figure 30.14 Real value of notes per capita in the five hyperinflation countries at current exchange rates, 1919–25.

The circles mark the months in which prices stabilized in each country.

Source: J. van Walré de Bordes, *The Austrian Crown, its Depreciation and Stabilization* (1924), at 46–50, 82–3, 116–39; League of Nations, *Memorandum on Currency: 1913–1923* (1924); League of Nations, *Monthly Bulletin of Statistics* (1919–26), Table XII; J. P. Young, *European Currency and Finance* (1925), vol. 1, at 527–532, vol. 2, at 321, 323, 348–350; and Z. S. Katzenellenbaum, *Russian Currency and Banking, 1914–24* (1925), at 56–58, 74–75, 78–9, 83, 90.

for a year.[20] By that definition hyperinflations do not last long: ten months in the case of Austria, fifteen months in Germany, twelve months in Hungary and Poland, and twenty-six months (the longest) in Russia.

Figure 30.14 shows the real value of notes in circulation in the five hyperinflation countries. The value is expressed in US dollars at current exchange rates and is divided by population to make the figures somewhat comparable. The date of the stabilization of prices is indicated (in the case of Russia, it is December 1922, the introduction of the *chervonets*; as explained above, the *sovznak* continued to depreciate until its retirement in May 1924).

As Figure 30.14 shows, hyperinflation is the tail end of a process of reduction in the real value of wealth held by private agents in the form of notes. During the hyperinflations themselves, this value remains fairly constant, but at an extremely low level. In 1913, the real value of notes was about $40 per capita in Germany, as well as in Austria-Hungary. During the hyperinflation that value was $4 in Austria and in Hungary, and $2 in Germany.

The common characteristic of the five episodes is a V-shaped pattern of the real value of notes over time. The decline in money demand halts when prices are stabilized; money demand then rises fast, to reach about 40 per cent of 1913 levels a year after stabilization.

[20] P. Cagan, 'The Monetary Dynamics of Hyperinflation', in M. Friedman (ed.), *Studies in the Quantity Theory of Money* (1956) 25.

Nominal values have been shown for each of the five episodes. Figures 30.3, 30.5, 30.7, 30.9, and 30.11 chart the rise of the nominal money supply, while Figures 30.4, 30.6, 30.8, 30.10, and 30.12 show the rise in prices and foreign exchange rates. The patterns are similar: the money supply can be seen to continue to rise (although at a much slower pace) well after prices stabilize. This is another way of making the previous remark: currency stabilization means remonetization, a new currency replaces the old one, and money balances increase again. The new currency, however, is vastly different from the old one. The balance sheets of central banks, as summarized in Table 30.2, make this clear. The old currency was backed entirely by government debt, a backing of dubious value given the government's inability or unwillingness to raise the taxes necessary to give value to that debt. The new currency is backed by gold, foreign reserves, and good claims on the private sector. Russia was the exception: the value of the new currency, the *chervonets*, was appropriated by the government, but one that was running a balanced budget.

Table 30.4 summarizes information about deficits before and after stabilizations, with the ratio of revenues (excluding money creation) to expenditures. Deficits were very high, but the swing from deficit to surplus was remarkably rapid in all five cases.

Table 30.5 compares the revenues of the five countries in 1913 and 1925, in dollars per capita and as a percentage of GDP. Taxation went up considerably in Germany, while it fell in Hungary, Austria, and Russia. The last column of the table is striking: revenues as share of GDP were between 2.5 per cent and 4.5 per cent of GDP, which is an order of lesser magnitude than in modern-day Europe. The size of the fiscal adjustment that was required to end

Table 30.4. Revenues as fraction of expenditures.

	1919		1920		1921		1922		1923		1924		1925	
	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2
Austria	0.33	0.37		0.42		0.49	0.60		0.82		0.99		1.09	
Hungary			0.41		0.52		0.76		0.79		0.66	1.01		
Germany					0.37		0.45		0.36		0.12	1.05		
Poland					0.39		0.60		0.38		1.05		1.00	
Russia	0.23		0.13		0.16				0.66		0.80		0.92	

Sources: J. P. Young, *European Currency and Finance* (1925), vol. 1, at 260 and 393, vol. 2, at 183, 221, and 326; L. Pasvolsky, *Economic Nationalism of the Danubian States* (1928), at 102, 127, 299; and Z. S. Katzenellenbaum, *Russian Currency and Banking, 1914–24* (1925), at 69.

Table 30.5. Revenues in 1913 and 1925.

	1913 revenues		1925 revenues	
	$ per capita	% GDP	$ per capita	% GDP
Austria	21.2	14.0	19.3	4.6
Hungary	18.8	15.7	7.4	2.6
Germany	10.3	4.0	18.4	4.2
Poland	—	—	8.2	3.5
Russia	10.6	10.0	7.4	4.5

Sources: 1913 revenues: *The Statesman's Year-Book* (1925); GDP breakdown between Austria and Hungary: M. S. Schulze 'Patterns of Growth and Stagnation in the Late Nineteenth Century Habsburg Economy', (2000) 4(3) *European Review of Economic History* 311, at 316; countries' GDP relative to the US and converted to current dollars using *Historical Statistics of the United States*: A. Maddison, *The World Economy: Historical Statistics* (2003).

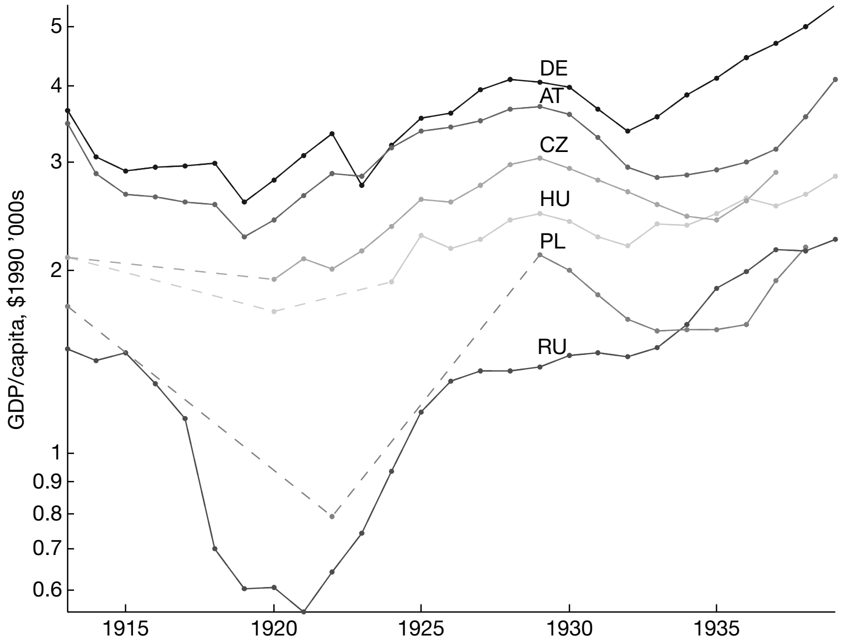

Figure 30.15 GDP per capita in Central European countries (1913–38).

Source: A. Maddison, *The World Economy: Historical Statistics* (2003); Russia: A. Markevich and M. Harrison, 'Great War, Civil War, and Recovery: Russia's National Income, 1913 to 1928', (2011) 71(3) *Journal of Economic History* 672.

hyperinflations was no doubt large by the standards of the time, but amounted to 2 per cent or 3 per cent of GDP in one year. By comparison, Greece's fiscal adjustment between 2009 and 2014 has been of the order of 15 per cent over five years of deep recession.

Stabilization, clearly, was fundamentally a matter of bringing budgets into balance. Stabilization usually preceded budget balance, but not by long; and there were enough attempts at stabilization without budget balance to demonstrate that the former could not occur without the latter. Other ingredients of the stabilization plans may or may not have been essential. The defeated countries (Austria, Hungary, and Germany) received help from the League of Nations; but Poland and Russia stopped hyperinflation, and Czechoslovakia and the Baltic states avoided it, without any such help. Likewise, central bank independence appears to have been neither necessary nor sufficient. The German Reichsbank was granted full independence three months before hyperinflation began. Conversely, Czechoslovakia did not have an independent central bank until 1926, and those of Lithuania and Estonia were government-owned.

It is difficult to find annual estimates of GDP for the periods of hyperinflation: aside from the general disorder that made the collection of statistics a lesser priority and a difficult task, constantly changing prices only made measurements more difficult. Figure 30.15 shows the available estimates, in dollars per capita. The impact of hyperinflation is most visible for Germany: output per capita was 17 per cent lower in 1923 than in 1922. The impact is hardly noticeable for Austria, while Russia's collapse in output is due to a combination of many factors beyond hyperinflation. We do not have data covering the hyperinflation period for Hungary and Poland. Remarkably, the curves are broadly parallel for all countries except Russia: that is, once stabilization had been achieved the various countries grew at similar rates. Thus inflation did not seem to have a long-term impact on economic growth, except to the extent that economic disruptions delayed the recovery from the First World War. The inclusion of Czechoslovakia in the graph underlines this point: by stabilizing early, and in spite of the recession it endured in 1920–1 partly as a result, that country enjoyed a head start of two to three years relative to its neighbours.

Holtfrerich emphasized the redistributive impact of inflation.[21] Inflation is a tax, whose tax base consists in real money balances, and whose rate is the inflation rate. When real money balances remain constant the tax accrues entirely to the government, who issue pieces of paper, produced cost-free, for real goods and services. When real balances fall, the tax is partly dissipated as loss in the value of money. The tax falls heavily on holders of currency, which is why everyone tries to reduce their holdings of money, and ultimately spend enormous amounts of time divesting themselves as quickly as they can of money to purchase durable goods and assets that are not nominal. Nominal assets, however, are obviously reduced in value: generally, then, holders of nominal claims (nominal creditors) lose to nominal debtors, unless the legal system intervenes (as it did partially in Germany after 1923) to redefine nominal claims according to some criterion of fairness.[22]

The impact of hyperinflation would be most visible on measures of wealth, but those are difficult to find. Figure 30.16 illustrates the point with income data. Again, lack of data

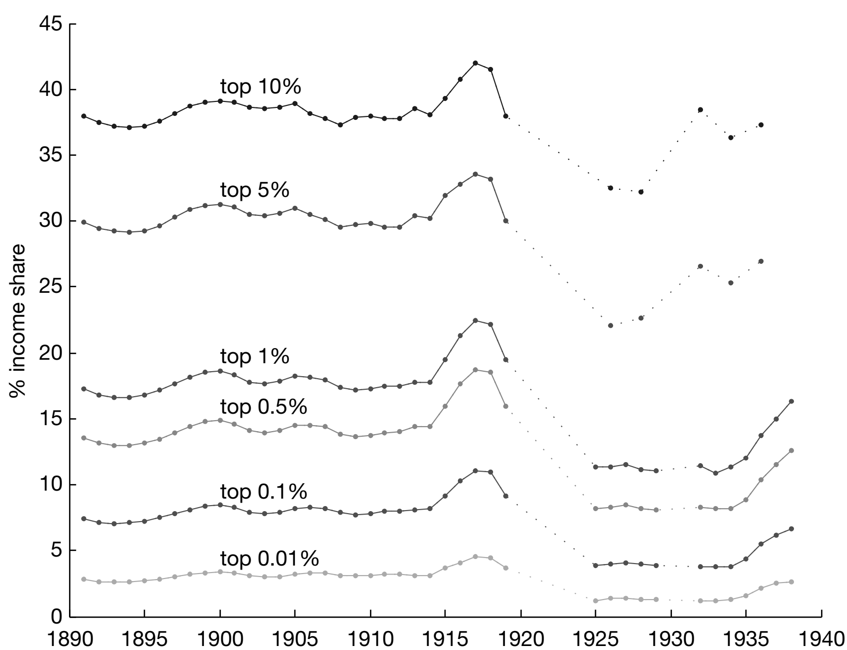

Figure 30.16 Share of income in Germany (1891–1938).

Sources: The World Top Incomes Database, available at http://topincomes.parisschoolofeconomics.eu/; F. Dell, 'Top Incomes in Germany Throughout the Twentieth Century 1891–1998', in A. B. Atkinson and T. Piketty (eds), *Top Incomes over the Twentieth Century: A Contrast Between Continental European and English-Speaking Countries* (2007) 365.

21 Holtfrerich, above n 7.

22 For the legal measures in Germany, see Chapter 33 in this volume.

makes it difficult to isolate the effect of inflation from other disruptions of the immediate post-war era: nevertheless the compression in incomes, and therefore greater equality of incomes, is clearly visible. This impact was much more persistent than the impact on economic growth.

2. The Challenge of Hyperinflations

The speed of depreciation of the currency, or of the rise in prices, struck everyone at the time. Economists were more perplexed by Figure 30.14, for the following reason. Starting (at least) with David Ricardo, it was understood that the value of a currency could be controlled by limiting the supply. This understanding was reached slowly because the traditional monetary system did not limit supply. The gold standard, based on circulating coins, operated under free minting: that is, private agents could at any time convert metal into coin at the mint (for a small or zero fee), and coin into metal by melting or exporting. The quantity was not directly controlled by the monetary authority, but the value was pegged to the value of the metal—absent any change in the metallic content of the coin or unit of account. The 1797–1821 suspension of convertibility of the Bank of England's notes had provided British observers with a good laboratory for understanding price level determination in an unconvertible paper money regime. Ricardo had blamed the rise in prices on the fact that the Bank of England did not sufficiently control the quantity of paper it was issuing.

By the First World War, it was accepted that not only did the fixed supply control the value, it did so proportionately, through the equation of exchange which equates the aggregate amount of money times its velocity to the volume of nominal transactions to be performed. This was called the quantity theory of money: it separated the real side of the economy, in which relative prices of goods and services were determined, from the monetary side, in which the nominal quantity of money determined the value of money, or the general price level. The real value of money balances, to a first approximation, was constant.

Figure 30.14 shows sharply declining real balances. Put in other words, money depreciated faster than could be accounted for by the increase in the quantity of money. For Stanisław Karpiński, president of Bank of Poland, this was the defining characteristic of 'so called hyperinflation . . . a phenomenon noticeable in other countries, namely, the rates for foreign currencies rose at a greater rate than the issue of new notes, steadily lowering the value of the entire circulation, despite streams of new issues continuing to flood the market'.[23]

Hyperinflation so defined was not a completely new phenomenon. In 1790, the French government resolved to redeem the national debt by selling off confiscated church lands and issued a paper currency backed by those proceeds for short-term financing. In 1792, a European war broke out, and the government resorted to large issues of this currency, called the *assignat*. From late 1794 to 1796 the value of the currency plunged to 0.2 per cent of its original value. Further back, the *continental* issued by the Continental Congress of the American colonies during their war of independence against the British ended at 1 per cent

[23] Cited in Young, above n 7, vol. 1, at 247.

of its face value. A few of these colonies had themselves issued paper money that depreciated. Even further back, the copper currencies of Spain, Poland, and Russia in the seventeenth century display rapid falls in value, although for those periods the quantities issued are not known. The case of the *tornesello*, a copper currency issued in Venetian colonies in the fifteenth century, does display this pattern of a depreciation rate greater than the increase in the quantity.[24]

What was new in the interwar hyperinflations was that the phenomenon was observed at close quarters in several countries at a time when measurement of prices and quantities was advanced, and the magnitudes involved were unprecedented. The depreciation of the *assignat* was a factor of 500, the German mark's depreciation was 10^{12}. The value of the German mark had become, in the words of one writer, 'more ridiculous than zero'.[25]

There was, of course, much debate at the time about the possible causes of such extreme depreciation. Followers of the quantity theory continued to stress money printing (and, ultimately, the government deficits that made it necessary) while others focused on foreign exchange markets, where disturbances led to a depreciation of the currency, which made imports more expensive and drove up prices. To a large extent the debate over foreign exchange markets was a distraction, since it amounted to explaining one price by another.

3. Putting the Focus on Expectations

A big step toward reconciling the quantity theory with the experience of hyperinflation was taken by Cagan, who proposed an extension of the quantity theory.[26] He maintained the separation between the nominal and the real economy, but proposed to look at the determination of the price level as resulting from an intersection of supply and demand for real balances. The demand for real balances changes during hyperinflation because demand is a function of other variables. During hyperinflation, some factors that could influence this demand, such as income, could vary, but by far the dominant factor must have been the variation in the return on money (seen as an asset) compared to alternatives, such as bonds, stocks, or durable goods. And this relative return was in turn driven essentially by the expected rate of return on money, that is, the expected rate of inflation.

The problem was to measure these expectations in a reliable way. Cagan's approach can be seen as modelling a form of learning on the part of the agents: they regularly adjust their expectations according to the deviation between their previous expectation and the actual value of inflation. This scheme, called adaptive expectations, can be mathematically represented as a weighted average of past realizations of inflation. If inflation increases, agents increase their expectations, but at a speed that depends on a parameter. Another parameter measures the sensitivity of money demand to the expected rate of inflation. Cagan was able to use data from the interwar hyperinflations, as well as from those that followed the Second World War (Greece, and Hungary which still holds the world record) to estimate these parameters. The short time series (hyperinflations do not last very long) limit the econometric analysis that one can carry out. Cagan nevertheless estimated a fairly slow adjustment process, and broadly plausible sensitivities of money demand. Importantly, the use of expectations of inflation rather than current inflation provided a much tighter fit to the data.

Cagan's key insight was to make money demand depend on expectations. He did so with the means that were available to him, but the exercise foreshadowed an important change

[24] T. J. Sargent and F. V. Velde, *The Big Problem of Small Change* (2002).
[25] Graham, above n 7, at 4. [26] Cagan, above n 20.

in economics that took place a decade later. Economic agents are forward looking, because they make decisions that affect the future, and they live in an uncertain environment, which means that they have to form some expectations about the conditions that will prevail in that future. This problem had long been recognized but economists did not have the tools to provide coherent solutions. When they did, the hyperinflations that Cagan studied were a prime testing ground.

Sargent and Wallace extended Cagan's approach by recognizing that the rate of money creation,[27] which Cagan treated as essentially exogenous or determined outside of the model, was in fact tightly linked to the hyperinflation process itself. The reason why governments printed more and more money was not that they were following some arbitrary rule that told them to: they were printing more money because they needed revenues, and as prices fell further, money was required to raise the same revenues. But once one has recognized that money supply, as well as money demand, is affected by prices, Cagan's regression, which ignored the link with the supply side, is incorrectly formulated. Instead, Sargent and Wallace postulated that the government had to finance a certain, constant level of real spending with money creation. Cagan's adaptive expectation scheme could be rationalized under certain assumptions about the money creation process, but they did not allow proper identification of the parameters that Cagan estimated.

Sargent and Wallace also introduced 'rational expectations', the name given to a hypothesis that specifies how agents form their expectations. It postulates that the agents know the probabilities associated with the uncertain events that they face. The problem is that some of the uncertainty is a result of the agents' own actions. Agents deciding how much real wealth to hold in the form of money do so based on their expectations of future prices; but those future prices will be determined by their own actions in the future (which will be based on further expectations about the future). The rational expectations hypothesis is an elegant and economical way to close this infinite loop: agents' individual beliefs must be consistent with the collective consequence of their actions. They can make mistakes, but not systematic ones.

Sargent (1977) returned to the hyperinflations studied by Cagan.[28] The rational expectations hypothesis allowed Sargent to surmount the simultaneous causation of money and prices. He was able to show that his estimates of the sensitivity of money-demand could be reconciled with the difficulty that Cagan encountered, namely, that the rates of inflation induced by government policy seemed excessive compared to what a government maximizing revenues from inflation would have chosen.

4. Reform and Credibility

The subject of inflation became important again in the 1980s for two reasons. One was that hyperinflation re-appeared, after a long absence, in Latin America and later in the former Soviet Union. The other reason is that the United States, in the late 1970s and early 1980s, experienced an inflation that was mild in comparison, but was thought by many to be costly to defeat.

[27] T. J. Sargent and N. Wallace, 'Rational Expectations and the Dynamics of Hyperinflation', (1973) 14(2) *International Economic Review* 328.

[28] T. J. Sargent, 'The Demand for Money during Hyperinflations under Rational Expectations: I', (1977) 18(1) *International Economic Review* 59.

Sargent (1983) returned to the hyperinflations of the interwar period to show that stopping a hyperinflation was not as costly as one might believe.[29] He studied the cases of Austria, Hungary, Poland, and Germany, emphasizing three key facts. First, the vertiginous ascent of prices was every time stopped very abruptly. Secondly, money supply continued to increase significantly even after prices had stopped rising. In other words, the inflation process was not based purely on the growth of money, but the nature of the money being grown was of crucial importance. A money supply that was backed by credible reforms in the government's budget was very different from a money supply the sole purpose of which was to replace missing government revenues. Thirdly, the stabilizations were not as costly as the estimates of 'sacrifice ratios' (cost in GDP per percentage point inflation reduction) circulating at the time suggested. Although the measures of unemployment in Wicker showed that the stabilizations were far from painless, part of the unemployment came from the reductions in government payrolls required by the budget balance.[30]

The approach taken here sees money as a liability of the government, backed, like all other liabilities, by its ability to raise real revenues through taxation. A government can finance a deficit by current tax revenues, borrowing, or money creation. It has long been understood that borrowing can only mean future tax revenues. The novelty was to recognize that money is, ultimately, no different. What ensures the stability of the value of money is the belief that it will not be increased indefinitely, which is what will happen if tax revenues are insufficient. Tax revenues back the value of money just as they back the value of bonds.

V. Conclusion

Hyperinflations are but the ultimate manifestation of a centuries old phenomenon, the depreciation of a fiduciary currency. Examples abound, possibly as far back as Ptolemaic Egypt and third century Imperial Rome. From 1417 to 1422 the French coinage lost 98 per cent of its value as silver was replaced with copper. The age of copper in the seventeenth century was followed by the age of paper in the eighteenth and nineteenth centuries. The hyperinflations of the interwar period showed that, just as in the 1630s Spanish *vellón* coins fell in value to their intrinsic content, copper, so paper money can fall to the value of its intrinsic content, paper worth zero. The astronomical scale of the German hyperinflation (10^{12}) simply expresses the mathematical truth that one divided by zero is very large. Yet money's value doesn't fall to zero overnight, with infinite speed: it falls over weeks and months, at a definite speed. The beauty of Cagan's model is to show how the demand for money at any point in time depends on that speed, while at the same time this speed equilibrates that demand, and the supply from the printing press.

Fischer et al. (2002) show that inflation has stayed with us throughout the twentieth century, although not in such severe form.[31] Hyperinflations have recurred in clusters: in Latin American countries in the 1970 and 1980s, in the former Soviet Empire in the early 1990s, and in Africa most recently.[32] Large inflations have been much more prevalent and have provided enough evidence that inflation in large amounts is harmful. The

[29] Sargent, above n 7.

[30] E. R. Wicker, 'Terminating Hyperinflation in the Dismembered Habsburg Monarchy', (1986) 76(3) *American Economic Review* 350.

[31] Fischer et al., above n 7.

[32] S. H. Hanke and N. Krus, 'World Hyperinflations', Institute for Applied Economics, Global Health, and the Study of Business Enterprise, The Johns Hopkins University (2012).

hyperinflations were no accidents, and the ultimate cause, fiscal imbalance, was clear to many observers. Ending them could be done remarkably quickly, but only with credible steps to eliminate the cause.

The gold standard, that 'barbarous relic' according to Keynes, died in 1914, although this was not fully recognized until 1931. In its place came fiat currency. It took little time before it was shown how spectacular its failure could be. It took a long time for fiat money to become the 'well managed fiat currency' that Irving Fisher had hoped for.

II

COMMON LAW

31

Responses to Crisis

Refiguring the Monetary and the Fiscal in the Great Depression

Roy Kreitner

I. Introduction

There is no controversy in characterizing the 1930s in the United States, and indeed over much of the globe, as a period of crisis. The economic indicators, particularly for the years of utter collapse from 1929 to early 1933, are nothing short of shocking. But the sense of crisis is tied to more than the fact of hard times. Genuine crisis is also a time when basic categories through which we understand the world are challenged and perhaps reformulated. It is in this sense that the crisis of the 1930s is most salient, and has generated its most lasting effects. In that moment of crisis, understandings of the role of government vis-à-vis the economy, and thus of the theory of money itself, were indeed refigured. Some elements underwent significant change; some continuities took on a new clarity. The intense flurry of activity that characterized the multiple responses to crisis changed the mode of interaction between government and economic activity and, in the process, upended the mode of governance regarding money, or of money as a mode of governance. But amid radical change, the response to crisis clarified an enduring feature of modern money management that had receded from understanding. That enduring feature was the primary, indeed originary power of the state to define the most basic terms in any monetary system, or what we know by shorthand as the unit of account. Years of slumbering monetary politics under the gold standard fed an illusion that money might actually be some external extant object, subject to valuation only by international supply and demand. That illusion was shattered by the responses to crisis, which made it clear that money was no object, but rather a relation of obligation between the government and the governed, the state and its population.

Before embarking on the story of the responses to the crisis, a telegraphic account of the background is in order. An entire monetary and economic history could be framed for a fuller understanding of developments, but I will single out just two elements as essential: first, the severity of the basic economic situation that called for urgent action to ameliorate the disastrous effects of collapse; and second, the common contemporary understanding of monetary policy, in particular with regard to the theory of banking.

An economic downturn began in the US in the summer of 1929 and accelerated after the stock market crash of October that year. Between 1929 and early 1933, industrial production fell by 50 per cent. Unemployment skyrocketed to one quarter of the non-farm labour force. Money income fell by 53 per cent. Net product fell by more than one half. New investment fell from over $16 billion annually to under $1,000. Some nine thousand banks suspended operations, with one third of all banks disappearing, either by failure or by merger.[1] By any measure, the economic situation was catastrophic, and the human misery entailed disastrous.

The more specific monetary background concerns the theories of monetary policy and banking. At the onset of the Depression, all the important industrial economies of Europe and the Americas were gold standard fiduciary systems with central banking.[2] Policy-makers understood that banks create money, and they conceptualized the role of banks as supplying an elastic currency by funding trade. When viewed narrowly, this was the real bills doctrine. But even if the idea was not limited strictly by real bills, the overarching common view saw commercial banking as an economic agency for supplying the needs of trade, but not the needs of investment, which were thought of as more speculative. The theory holds that the resources for actual investment (i.e. investment in production, rather than in the finishing and movement of produced goods) would be mobilized elsewhere, such as in the capital markets or through investment banks, and thus that the commercial banks responsible for the elasticity of the money supply would not be involved.[3] In the banking community, there was near unanimity of support for real bills, despite the reality that made distinctions between commercial and investment banking difficult. Bankers believed that a real bills banking system facilitated changes in the money supply, but that it did so reactively, and that monetary policy per se was a fairly limited endeavour concentrated mostly on setting the interest rate to manage gold flows. Until the depression had reached rather shocking proportions (and in many cases well after that), bankers were mostly resistant to the idea that a monetary authority was responsible in a direct way for the price level—in fact part of the justification of the real bills doctrine was that so long as the banking system was based on real bills, it would not generate inflation. While I will not detail the results of this theoretical disposition, it is important as background because it orients the banking community, and in particular the heads of the Federal Reserve Banks, towards extremely limited responses to what was in great measure a monetary crisis. The Federal Reserve refused to pursue large-scale monetary easing because of this theory of banking, and its refusal drove the administration to alternative paths.[4] Those alternatives, and their blurring of the distinction between the monetary and the fiscal as relevant categories, are the focus of what follows.

The background regarding the Depression highlights the challenges that faced the incoming administration in March 1933 on two intertwined yet conceptually distinct

[1] For statistics, see, generally, M. Friedman and A. Schwartz, *A Monetary History of the United States, 1867–1960* (1963), at 299–305; C. P. Kindleberger, *The World in Depression, 1929–1939* (1973), at 193–4; C. D. Romer 'What Ended the Great Depression?', (1992) 52(4) *Journal of Economic History* 757, at 757–61; and also databases of the Federal Reserve Bank of St. Louis, available at http://research.stlouisfed.org/fred2/graph/?graph_id=85544&category_id=0.

[2] Some countries are actually working on a gold exchange standard, rather than holding significant gold reserves. For the distinction, see Chapter 27 of this volume. Nothing turns on the distinction for my purposes here.

[3] The reality is different, because at least in the US, reserves were pyramided up to reserve city banks and then to New York, where they were funnelled into the call market, making investment in securities (and thus production) a central part of the banking framework. This complication was recognized by banking reformers early in the twentieth century, but it did not change the basic outlook on the fundamental role of banks in the monetary system.

[4] A. H. Meltzer, *A History of the Federal Reserve* (2003).

terrains. The most immediate concern was the financial system, which by the eve of inauguration had ground completely to a halt. Banks were closed by gubernatorial order in almost all states and the entire system of deposit banking (with its concomitant component of money creation) was not on the verge, but rather in the process of collapse.[5] The second concern, larger but less focused, was the collapse of underlying economic activity more generally. Productive activity from construction to agriculture to industry was slowing to a mere trickle, and the resulting unemployment left millions in need. The Roosevelt administration would eventually tackle these issues in tandem, in part because of a belief that the underlying economic problems were intimately tied to the price level, and that the price level in turn was determined (or at least significantly influenced) by the financial system. The extent to which these two areas of crisis response merged will be a theme for the ensuing discussion. I begin in Section II by laying out the changes introduced into banking and finance in the early days of the administration, especially as those create a modified infrastructure for the monetary system. Section III follows with an account of additional administration measures that impacted on monetary policy and the price system through non-banking channels. Finally, Section IV details the devaluation of the dollar and the litigation it spawned over the abrogation of the gold clauses in both private and government bond contracts.

II. Responses in Finance and Banking Structure

Crisis had been accelerating from the beginning of 1933, as depositors withdrew currency from any bank that was willing to pay out deposits, draining nearly $2 billion from the banking system in January and February, including over $600 million in gold either for export or for hoarding.[6] The final three weeks of the Hoover administration witnessed a closing down of nearly all financial activity. The governor of Michigan declared a banking holiday on 14 February, followed by bank holidays or restrictions of withdrawals in Maryland, Indiana, Ohio, Arizona, California, Idaho, Kentucky, Minnesota, Mississippi, Nevada, Oklahoma, Oregon, Tennessee, Texas, Utah, Washington, Wisconsin, Georgia, New Mexico, Iowa, Nebraska, New Jersey, Pennsylvania, Vermont, West Virginia, Colorado, and North Carolina. The worst single day was 3 March, when

> [t]he Federal Reserve Bank of New York at the end of the day had lost over $200,000,000 in gold through wire transfers, gold earmarking, and exports, and $150,000,000 in currency. It was short about $250,000,000 in reserves. The situation at the Federal Reserve Bank of Chicago was critical, and orders from its larger Chicago member banks for about $100,000,000 in gold aggravated the situation.[7]

Finally, on the morning of the inauguration, New York and Illinois fell as well, with the governors announcing a closing of the banks. 'The financial system had collapsed and Hoover's worst fears had come true.'[8] Under these circumstances, it was not difficult to view saving the banking system as the new administration's first priority. [9]

[5] Friedman and Schwartz, above n 1, at 407–19; E. D. Russell, *New Deal Banking Reforms and Keynesian Welfare State Capitalism* (2008), at 57.
[6] A. Nussbaum, *A History of the Dollar* (1957), at 173.
[7] F. G. Awalt, 'Recollections of the Banking Crisis in 1933', (1969) 43(3) *The Business History Review* 347, at 358.
[8] J. S. Olson, *Saving Capitalism: The Reconstruction Finance Corporation and the New Deal, 1933–1940* (1988), at 29.
[9] A. M. Schlesinger, Jr, *The Age of Roosevelt*. Vol. 2: *The Coming of the New Deal* (1958), at 4.

Using the untested authority of the Trading with the Enemy Act of 1917, President Roosevelt declared a nationwide banking holiday on the morning of 6 March, 1933, less than forty-eight hours after the inauguration. As is clear from its name and date of promulgation, the Trading with the Enemy Act was a wartime measure whose use in time of peace was open to debate (to put the point gently). Hoover's advisers, as well as Federal Reserve Board General Counsel Walter Wyatt, had suggested it as a basis for action, but Hoover was reluctant to use the Act without prior approval from the incoming administration, while Roosevelt was reluctant to lend Hoover his legitimacy before assuming control.[10] Therefore, the measure waited until after inauguration, and was subsequently confirmed in the Emergency Banking Relief Act of 1933 (the Emergency Banking Act) adopted by Congress just three days later.

The Emergency Banking Act was a compact but very powerful piece of legislation that laid the basis for a fairly rapid rescue of the banking system. The Act comprised five titles, the first of which was devoted to confirming and expanding the authority of the executive branch to take action under the Trading with the Enemy Act. Section 1 authorized the proclamations (and regulations, rules, and licences) issued by the President or the Secretary of the Treasury since inauguration on 4 March, and section 2 amended the Trading with the Enemy Act to expand authority in two directions: first, it clarified that the President could act not only during time of war, but also 'during any other period of national emergency'. Secondly, and just as important in terms of clarifying authority, it stated that the President could limit or prohibit all 'transfers of credit between or payments by banking institutions' without regard to whether a party to the transaction was defined as an enemy. In other words, the Trading with the Enemy Act was amended to be a general emergency powers provision, at least as far as anything relating to banking or currency might be concerned. Section 3 of Title I amended the Federal Reserve Act and authorized the Secretary of the Treasury to nationalize the gold supply, including gold held by 'any or all individuals, partnerships, associations, and corporations'. This would be the basis both for an executive order restricting dealing in gold and foreign currency beyond the bank holiday (on 10 March), and for the actual nationalization of the gold supply that began less than a month later.

Title II of the Act, itself entitled the Bank Conservation Act, set up the procedures for reorganization of thousands of closed banks (especially banks that had closed in the first wave of the banking crisis in 1930 and 1931). This was an important monetary measure, because while existing reorganization procedures required unanimous consent of the creditors, hundreds of millions of dollars could be tied up in litigation. The details of the measure had been discussed intensively during the final months of the Hoover administration, but Hoover was reluctant to support the measure, in part because he believed it interfered with private property rights.[11] The Bank Conservation Act gave the Comptroller of the Currency power to appoint conservators for closed banks and to require stockholders, depositors, and creditors to abide by a plan of reorganization with less than unanimous consent.[12] Once a bank had succeeded in implementing its reorganization plan, its board of directors would regain control from the conservator appointed by the Comptroller.

Title III of the Emergency Banking Act authorized a programme of capital infusion into the banking system, tackling the capital structure side of the problem rather than the

[10] Olson, above n 8, at 34. [11] Ibid., at 36.

[12] Section 207 of the Act set out the majorities required, normally referring to creditors representing 75% of the liabilities (without counting the creditors that would receive full payment under the plan), and stockholders representing 67% of the capital stock.

liquidity side emphasized in much of the general discussion of the banking crisis. The mechanism for capital infusion had two parts: a blanket authorization (subject to approval by the Comptroller of Currency) for national banks to issue preferred stock;[13] and authorization for the Reconstruction Finance Corporation (RFC) to invest in such preferred stock as well as to accept such stock as collateral and to trade in such stock on the open market. By this mechanism, the government was stepping in to fortify the balance sheets of banks whose assets had deteriorated as a result of the Depression. But in so doing, it was also becoming a part owner in thousands of banks. Up until this point, the RFC's support for the banking system had taken the form of lending rather than investment in equity. The programme did not gain momentum in the first months after the Act's passage, but by early 1934 applications for preferred stock were legion, making it difficult for the RFC to keep up with the pace of requests for capital. By September 1934, just eighteen months after it received initial investment authorization, the RFC held preferred stock in half of the nation's banks; by June 1935 the RFC owned more than a third of the capital in the entire banking system.[14]

Title IV of the Act amended the Federal Reserve Act in several distinct areas. The major provision in this Title (section 401, which amended section 18 of the Federal Reserve Act) eased the issue of Federal Reserve notes, primarily as an emergency measure to assure that banks reopening after the banking holiday would have sufficient cash on hand to satisfy their depositors. It established a temporary procedure by which any Federal Reserve bank could receive circulating notes from the Comptroller of Currency upon deposit of US securities (up to 100 per cent of the amount deposited) or of general banking assets (notes, bills, acceptances up to 90 per cent of the amount deposited). Over $200 million were issued under the provision.[15] A second provision (section 402) amended section 10(b) of the Federal Reserve Act and allowed Federal Reserve banks to lend to their members against their own notes and any acceptable security. A similar temporary provision was included in the first Glass–Steagall Act of 1932, though the new version was slightly less restrictive than that of the year before. Section 403 amended section 13 of the Federal Reserve Act and allowed the Federal Reserve banks 'to make advances to any individual, partnership, or corporation on the promissory notes of such individual, partnership, or corporation secured by direct obligations of the United States'. While little remarked on at the time, the provision allowed Federal Reserve banks to extend discounting services beyond the banking community, in principle by short-term lending to non-bank financial firms or directly to industrial concerns.[16] Title V dealt with appropriations for executing the Act.

The Emergency Banking Act set the stage for a resumption of a functioning financial system, and the bank holiday accompanied by Roosevelt's 'fireside chat' was enough to calm the public regarding basic confidence in the banks. Deposits began to pour back into

[13] The preferred status of the stock meant that its holders would enjoy absolute priority over the holders of common stock. In other words, the full dividend on preferred stock would be paid before any dividend would be paid on common stock and in case of liquidation, all claims of preferred stockholders would be satisfied before any claims of the common stockholders. Preferred stockholders would, however, be subordinate to creditors.

[14] Olson, above n 8, at 80–3. Readers who followed the 2008 financial crisis in the US will be struck by the similarity between the New Deal capital infusion programme and the Capital Purchase Program element of the Troubled Asset Relief Program (TARP).

[15] Friedman and Schwartz, above n 1, at 421–2.

[16] Authority for commercial and industrial loans was extended in legislation primarily geared to expanding the authority of the Reconstruction Finance Corporation, on 19 June 1934. The Federal Reserve's authority for direct lending was amended by the Dodd–Frank Act 2010, and the Federal Reserve can no longer extend credit to non-banks except under 'a program with broad-based eligibility'.

the system, and while not all the banks were reopened, the majority of banks reopened without experiencing new runs. This gave the administration time to prepare additional monetary legislation and executive action, and other legislation, non-monetary in primary focus, which nonetheless had significant impact on monetary affairs. The other major piece of monetary legislation was the Banking Act of 16 June 1933.[17] The Act is most famous for dividing investment from commercial banking and forbidding commercial banks to engage in any form in investment banking functions. The idea behind this measure was not fighting the existing crisis, but preventing the next one: the separation proceeded from the belief that banking was channelling funds towards speculation on the stock market, and that speculation had been a root cause of the crisis.[18] The attempts to combat speculative use of banking facilities had in fact animated many of the original proponents of the Federal Reserve Act. Originally, their focus had been on preventing bank reserves from 'pyramiding' to New York banks, where they would then be invested in the call market and thus support securities speculation.[19] In the twenties, pressure from the banking industry led to the adoption of the McFadden Act of 1927, which eliminated the restrictions on commercial bank entry into investment banking. Glass–Steagall was in this sense another swing of the pendulum, and in a sense signalled an attempt to favour the industrial over the financial sector of the economy.[20]

Importantly, however, the Banking Act of 1933 was not limited to the provision separating commercial from investment banking. Arguably more important was the establishment of the Federal Deposit Insurance Corporation (FDIC). Opposition to deposit insurance had been strong within the banking community, and Roosevelt's administration was not solidly behind it and did not see it as an integral element of the New Deal. However, Congressman Henry Steagall had been advocating deposit insurance since 1930, and this time he was successful in pushing it through. The Act established the FDIC with dual responsibility: insuring the deposits in case of a bank's inability to pay depositors on the one hand, and liquidating or reorganizing banks that had closed because of an inability to pay depositors, on the other. The limit on insurance was established temporarily at $2,500 (in the case of a bank that closed before 30 June 1934), and at $10,000 beginning on 1 July 1934.[21] All banks that were members of the Federal Reserve system were included in the FDIC, and non-system banks could join by paying an initial fee (actually buying stock in the Corporation) and agreeing to pay the premiums. Proponents of the measure believed that it would protect the money supply against public panic, because depositors would be assured of getting their money even if a bank closed, and thus they would not be pushed to making a run on the bank at the first sign of trouble. With the help of the Reconstruction Finance Corporation in funding banks so they could open by the beginning of the programme (both by capital infusion and by loan), by mid-1934, 97 per cent

[17] The act is better known (confusingly enough, given legislation of the same name of the previous year) as the Glass–Steagall Act.

[18] Alan Meltzer details the relationship between stock market speculation and banking that proponents of the bill (especially Carter Glass) blamed for the crisis: Meltzer, above n 4, at 429–32. However, he is dismissive of the idea that separation of commercial and investment banking could be an important ingredient in achieving banking stability.

[19] P. M. Warburg, *The Federal Reserve System and the Banks* (1916).

[20] Russell, above n 5.

[21] The details are a bit more complex. The Banking Act of 1933 actually provided in Section 12B(l) for a sliding scale of insurance scheduled to go into effect in July 1934, whereby deposits up to $10,000 were insured 100%, deposits up to $50,000, 75%, and upwards of $50,000, 50%. But the original plan never went into effect: the temporary insurance of $2,500 was raised to $5,000 in 1934, and later to $10,000, and beyond. Today the insurance cap stands at $250,000.

of all commercial bank deposits were covered by insurance.[22] The FDIC achieved its major objective, in that for decades the number of bank failures dwindled to a trickle, and periodic bank panics that had recurred since early in the nineteenth century disappeared.[23]

The FDIC is in essence a part of the banking structure, and thus of the monetary regime. Insuring deposits takes significant pressure off the lender of last resort function, and in so doing it restructures the core operations of the monetary authority. In addition, to the extent that the insurance premiums are below true risk premiums, it furnishes a subsidy to banks by making it more attractive to hold deposits. In turn, the added attraction of deposits because of the confidence in their ultimate viability encourages an increase in the money supply.[24]

The Banking Acts dealt with the structure of banking, in part to mend the fabric of a system that had come apart, and in part to make its foundations sound going forward. But in themselves they did not suffice to overcome the collapse of credit markets that normally fuelled the economy. A host of other measures was required to restart economic activity and in particular to secure financing for new economic activity, while the banking sector was nearly dormant. The linchpin in the effort to unfreeze the money markets was the Reconstruction Finance Corporation. The RFC was created during Hoover's administration, but the original vision was limited to supplying short-term liquidity to banks. This proved insufficient, and within the first year of the New Deal the vision had been replaced 'by a state capitalism involving some sort of federal support of the credit structure', enough indeed to amount to a 'credit revolution'.[25] The RFC was deeply involved, not only in supporting the banks through loans and capital infusions, but also in the rest of the money market including a host of programmes for refinancing debt across the economy ranging from farmers[26] to homeowners,[27] to municipalities,[28] to rural drainage districts,[29] to construction,[30] to insurance companies, and building and loan associations,[31] to railroads,[32] just to mention the most dominant examples. Historian of the RFC James Olson sums up:

> During the 1930s New Deal credit agencies saved the private money market. . . . The development of the federal credit structure had once been viewed as a temporary, short-term program to

[22] Friedman and Schwartz, above n 1, at 434–42; Meltzer, above n 4, at 432–3; Olson, above n 8, at 71–83.

[23] The onset of the Savings and Loan crisis in the 1980s and the subprime crisis in 2008 raised new questions about the continuing effectiveness of the FDIC in preventing large-scale banking failures.

[24] The simple intuition is that the marginal user of money is more likely to hold deposits rather than currency if deposits are risk free (or lower risk than some alternative situation, i.e. in the absence of deposit insurance). For a version of the intuition, and a view of the accounts of it from economics, see R. K. Merton, 'The Self-Fulfilling Prophecy', (1948) 8(2) *The Antioch Review* 193; M. Ricks, *The Money Problem: Rethinking Financial Regulation* (2016) ch 2.

[25] Olson, above n 8, at 88.

[26] Executive order of 27 March 1933, creating Farm Credit Administration; Farm Credit Act of 1933 (27 May 1933), establishing Production Credit Corporation; Farm Mortgage Refinancing Act of 1934 (RFC supplied FCA over $1 billion in 1933–4). Also, Emergency Farm Mortgage Act 1933 (RFC supplies $400 million to Federal Land banks for refinancing programme). By 1940, FCA had loaned nearly $7 billion and refinanced nearly a third of all farm mortgages in the US.

[27] Home Owners' Loan Act of 13 June 1933 creating Home Owners' Loan Corporation (and additional Home Owners' Loan Act of 27 April 1934) issued cash advances of up to half the value of the property and redeemed property lost to foreclosure (RFC supplied $200 million in initial capitalization). National Housing Act of 28 June 1934, establishing Federal Housing Administration (RFC supplied $200 million in operating capital, and it could also buy mortgages pooled by the FHA).

[28] Municipal Bankruptcy Act of 24 May 1934.

[29] RFC loaned directly to drainage, levee, and irrigation districts.

[30] National Housing Act of 1934, establishing Federal Housing Administration.

[31] Act of 10 June 1933, authorizing RFC to purchase preferred stock in insurance companies.

[32] Emergency Railroad Transportation Act of 16 June 1933, allowing RFC to make ten-year term loans to railroads.

> restore liquidity to the money markets until bankers and financiers had regained the confidence and security to begin making working capital loans again. But if the New Deal credit agencies were anything, they were not temporary. The most important of them in the 1930s, the Reconstruction Finance Corporation, played a central role in the New Deal Recovery program.[33]

One way to understand the need for such massive direct infusion of capital in circumvention of the banks is through the concept of capital strike. Banks that received infusions of capital often held onto the cash as excess reserves, as if the most important priority were building bigger capital cushions to guard against the next run. And indeed, capital strike (though they would not have used the term) was so well known to central bankers that they believed easing credit through open market operations would be unsuccessful precisely because additional reserves would turn into excess reserves. Heads of Federal Reserve banks understood this, and they saw it as a reason to avoid action, action they feared would have the futility of pushing on a string. That attitude made it necessary to find more direct avenues for refunding productive activity.

III. Beyond Finance: Fiscal Responses and Monetary Motivations

Beyond the monetary sphere lay the most famous, most clearly corporatist, and also most clearly *fiscal* interventions of the New Deal: the National Industrial Recovery Act (NIRA), and the Agricultural Adjustment Act (AAA).[34] NIRA was a grand piece of enabling legislation, providing the executive with wide-ranging powers to 'reorganize and regulate an obviously ailing and defective business system. There was no definite prescription as to just what course this reorganization and regulation would take. As Hugh Johnson [who would administer the National Recovery Administration] said, the law provided an economic charter, not a prescribed course of action.'[35] The basic idea was to mobilize industry for economic recovery, and the key was replacing uncoordinated and destructive competition with planning and co-operation. The Act allowed for trade association cooperation to set industry-wide codes on issues such as employment practices, wages, and prices. At the same time, it also established the Public Works Administration which spent $6 billion in its first two years of operation, building hospitals, schools, parks and playgrounds, bridges, roads and airfields, and more. The scale of construction and employment, both of the large scale and piecemeal variety, was enormous, and when viewed in retrospect, transformative with respect to expectations about the government's role in supplying infrastructure.[36] So, of course, it is right to see these programmes as pieces of industrial policy that generate primary economic activity on their own, and also guide economic activity in particular channels. It is crucial to recognize the overwhelming fiscal impact of programmes like the Public Works Administration (PWA), the Works Progress Administration (WPA), the Tennessee Valley Authority (TVA), or the Agricultural Adjustment Administration.

However, that is not the whole story. At the same time that these programmes were direct fiscal involvement in the productive economy, they were also motivated by a

[33] Olson, above n 8, at 102–3.

[34] These two are only the most important, but should be viewed together with the Tennessee Valley Authority Act and the establishment of the Civilian Conservation Corps. All were a product of Roosevelt's first hundred days in office. The Agricultural Adjustment Act also included an overtly monetary component known as the Thomas Amendment, which authorized the executive to issue up to $3 billion in United States notes, thus injecting a very significant inflow of high-powered money into the system without mediation of the banks (including ostensibly the Federal Reserve itself). Roosevelt did not avail himself of the authority to issue the notes.

[35] E. W. Hawley, *The New Deal and the Problem of Monopoly: A Study in Economic Ambivalence* (1966), at 20.

[36] J. S. Smith, *Building New Deal Liberalism: The Political Economy of Public Works, 1933–1956* (2006).

monetary theory of how the economy got going and kept running. They were driven by a theory of distributional mismatch, whereby production capacity overwhelmed consumption capability. At that point, generating the capability for consumption was an issue of monetary channelling—getting the money into the hands of the people who would be eager to spend it on the productive capacities present but dormant in society. Roosevelt's administration didn't believe that the PWA would replace private production; it believed it would jump-start it, by rearranging purchasing power. The suggestion here is that we look at things like job creation through a monetary lens. This might have been clear enough in the example of NIRA, but emerged slightly differently though just as powerfully regarding the AAA. This is typical industrial policy, and perhaps the most corporatist moment of planning ambition in the New Deal (alongside NIRA). The idea was to pay farmers to restrict production—thereby benefiting them twice: first, through direct payments, and, second, through the fact that the price of agricultural goods would rise because of the limitations on production. So the basic goal of this programme was to influence the price level. Again, the suggestion here is that regulating agriculture was as much about the price system as about encouraging a particular industry or sector. And if that seems like an odd twist of meaning imposed in retrospect by someone who sees monetary policy at every turn, we could look at the stated goals of the NIRA and the AAA, not as reinterpreted by the historian of money, but as explicitly provided in the AAA itself:

> [T]he present acute economic emergency being in part the consequence of a severe and increasing disparity between the prices of agricultural and other commodities, which disparity has largely destroyed the purchasing power of farmers for industrial products, has broken down the orderly exchange of commodities, and has seriously impaired the agricultural assets supporting the national credit structure, it is hereby declared that these conditions in the basic industry of agriculture have affected transactions in agricultural commodities with a national public interest, have burdened and obstructed the normal currents of commerce in such commodities, and render imperative the immediate enactment of title I of this Act.
>
> Sec. 2 It is hereby declared to be the policy of Congress:
>
> To establish and maintain such balance between the production and consumption of agricultural commodities, and such marketing conditions therefore, as will re-establish prices to farmers at a level that will give agricultural commodities a purchasing power with respect to articles that farmers buy, equivalent to the purchasing power of agricultural commodities in the base period.

NIRA also included a similar declaration of policy in Section 1 of the Act: 'It is hereby declared to be the policy of Congress to remove obstructions to the free flow of interstate and foreign commerce and . . . to increase the consumption of industrial and agricultural products by increasing purchasing power.' Both NIRA and the AAA were engineered to bolster the purchasing power in the hands of the people, not by raising the value of their money (the typical view of purchasing power today), but by making sure that they were employed and thus receiving some kind of salary with which to go out and purchase at all.

Clearly, the engineers of the New Deal understood their fiscal policy at least partially in monetary terms, and influencing the price level was among the primary and overt goals of the legislation. This is noteworthy for at least two reasons. On the level of monetary management, it shows that at least during the New Deal the central bank was not nearly alone in what is often considered the main focus of monetary policy, which is to watch over (and respond to) the price level. Instead, structural change, alternative channels of financing, and spending, can all be understood as monetary measures; they are certainly not exclusively monetary, but they are significantly monetary nonetheless.

IV. Devaluation and Litigation

Up until now, I have concentrated on monetary law through the credit system, and then briefly on monetary impact of fiscal measures. But the New Deal response to crisis also employed a monetary measure pointed at the heart of the monetary system itself: the unit of account. Roosevelt and his advisers were convinced that the economy would not get back on track until prices began to rise. Different plans for generating reflation abounded, and looking back on the New Deal as a whole it may be credibly said that none was completely ignored. But the one that captured popular attention and generated the most ideological heat (including within the administration) was the devaluation of the dollar in terms of gold. Authorization to change the gold content of the dollar (to devalue) was granted to the President in Title III of the AAA, allowing him to reduce the weight of the dollar by up to 50 per cent. Roosevelt did not act on that authority immediately, but first nationalized the gold supply beginning in April 1933.[37] In June, by joint resolution of Congress, the gold clauses in all public and private obligations were abrogated. And soon after, the administration began pushing the price of gold up in domestic, and then international markets, in part by using the RFC to make purchases. The price of gold was pushed up gradually, and in January 1934 the Gold Reserve Act set the official price at $35 per ounce, up nearly 70 per cent from the original price of $20.67 per ounce.[38]

The idea that devaluing the dollar in terms of gold would help ease the Depression by raising prices was controversial. Economists like George Warren and Irving Fisher were adamant that it would work, and indeed believed that its operation in raising prices would be almost automatic. John Maynard Keynes was also a supporter of the idea that leaving the gold standard (or radically revaluing, such as the US was doing for the latter half of 1933) was a major key to economic recovery. Subsequent economic research has also noted a strong correlation between when countries left the gold standard and when they began to recover from the Depression, concluding generally that leaving the gold standard was a 'necessary precondition for economic recovery'.[39] But the effectiveness of the measure was only half the argument. Most of the opposition came from other quarters, and rested on the idea that leaving (or significantly altering) the gold standard was in itself too radical an intervention into the baseline that defined economic relations. Opposition, indeed, could spring from many sources, including within the administration. Roosevelt's budget director Lewis Douglas called the departure from gold 'the end of western civilization', and Undersecretary of the Treasury Dean Acheson could not abide the programme and resigned after trying to prevent its implementation.[40]

It is worth noting that the legal mechanism for devaluation included several interlocking features. In order to achieve the goal of a true change in the value of money while preventing adverse responses such as hoarding, the government had to deal with the

[37] Initially, by presidential proclamation, but the enabling legislation conferred the authority to call in the supply on the Secretary of the Treasury; the proclamation had to be reissued in order to conform with the statute.

[38] The precise devaluation is calculated in terms of grains of gold nine-tenths fine (from 25.8 grains to 15.24 grains), but the more salient result is the official price of the ounce of gold. The US was then in essence back on the gold standard in international terms, because foreign central banks could buy or sell bullion to the US at the official price, and citizens who needed gold for foreign exchange settlement could receive permits to buy at that price as well. However, US citizens were forbidden from holding or trading in gold except for settlement in foreign trade, until the mid-1970s.

[39] B. Eichengreen, *Golden Fetters: The Gold Standard and the Great Depression, 1919–1939* (1992), at 393; B. Eichengreen and J. Sachs, 'Exchange Rates and Economic Recovery in the 1930s', (1985) 45(4) *The Journal of Economic History* 925; Romer, above n 1.

[40] L. Ahamed, *Lords of Finance: The Bankers who Broke the World* (2009), at 462; Schlesinger, above n 9, at 241–3.

physical gold supply itself; with the exchange rate or the international price of gold; with the threat of arbitrage; and with the possibility that the devaluation might be circumvented by continued use of the market value of gold as an anchor in actual transactions. Thus, the collection of gold from private hands, the driving up of the market price of gold, the prohibition on private transactions in gold, and the abrogation of public and private obligations pegged to gold were all pieces of a single mechanism geared towards changing the value of the dollar.

Crucially, these distinct pieces of a single government policy were not subject to the same legal obstacles. Perhaps ironically, the most intrusive piece of the mechanism—the requisition of the gold supply from private holders—was only subjected to minor legal challenges; it never reached the Supreme Court on the merits, and even in the lower courts it was dealt with primarily on technical bases.[41] Similarly, the core feature of revaluation, that is, setting a new dollar price for gold, was also not seriously challenged. Seemingly, these two primary and active elements of the shift in the monetary basis were perceived to be squarely within legally authorized sovereign power.[42]

Indeed, as far as its legality as a matter of positive law was concerned, it would have been difficult to make a serious case against the essential power of Congress to devalue the dollar in terms of gold. The Constitution explicitly grants Congress the power to coin money and to regulate its value. Title III of the Agricultural Adjustment Act enacted in May 1933, delegated the authority to fix the gold content of the dollar (within prescribed limits) to the President, and the Gold Reserve Act (January 1934) ratified executive actions regarding money from the previous year, and directed the President to fix the weight of the gold dollar at not more than 60 per cent of its then current legal value. The President complied on the day following the passage of the Act with a Presidential Proclamation fixing the new weight of the gold dollar.[43]

The weak link in the mechanism was thus not in the establishment of a new standard, but rather in the abrogation of the old standard as it applied to existing obligations. This potential weakness came to the fore in a series of lawsuits decided by the Supreme Court on the same day, 18 February 1935.[44] It was here, at the meeting point between constitutional powers and private law, that the challenge to the government's initiative in changing the value of the dollar would have significant bite, even if it did not ultimately succeed. For this reason, these cases merit somewhat detailed analysis.

The gold clause cases supplied unusually high-profile litigation, inducing widespread popular coverage[45] as well as an outpouring of academic writing. Legal scholars

[41] *Campbell v. Chase Nat'l Bank*, 5 F. Supp. 156 (S.D.N.Y. 1933); *Campbell v. Medalie*, 71 F.2d 671 (2d Cir. 1934).

[42] This explains what might seem to be a curious feature of the litigation over the devaluation, which is that the litigation did not challenge directly the Gold Reserve Act of 1934 and its attendant Presidential Proclamation setting the new gold price, but rather challenged the abrogation of the gold clauses in existing contracts under the Joint Resolution of 5 June 1933. However, it should be noted that while the petitioners in *Perry v. United States*, 294 U.S. 330 (1935) and in *Norman v. Baltimore & O. R.*, 294 U.S. 240 (1935) only challenged the Joint Resolution, the dissenting opinion at times reaches beyond the resolution to the question of inherent limitations on the power to coin money.

[43] Title III, s 43(b)(2) of the Agricultural Adjustment Act authorized the President to fix the weight of the gold dollar, with the limitation that the new weight could not be less than fifty per cent of the existing weight; the Gold Reserve Act amended the authorization, by adding: '[n]or shall the weight of the gold dollar be fixed in any event at more than 60 per centum of its present weight'.

[44] The suits were *Norman v. Baltimore & O. R.*, 294 U.S. 240 (1935) (dealing with gold clauses in corporate bonds); *Nortz v. United States*, 294 U.S. 317 (1935) (dealing with gold certificates issued by the Treasury); *Perry v. United States*, 294 U.S. 330 (1935) (dealing with gold clauses in US government bonds). I will deal primarily with *Perry* and incidentally with *Norman*, while ignoring *Nortz* almost altogether.

[45] D. Glick, 'Conditional Strategic Retreat: The Court's Concession in the 1935 Gold Clause Cases', (2009) 71(3) *Journal of Politics* 800.

concentrated primarily on the constitutional issues involved, but did not limit themselves to the constitutional plane.[46] Contemporary commentators believed that the cases would be 'among the great landmarks of American constitutional history'.[47] The cases were dramatic primarily because of the possibility that the court might attempt to block a central feature of the administration's plan for economic recovery. The fact that the cases directly decided large economic stakes contributed to the charged atmosphere, as did speculation over whether Roosevelt would actually comply with a decision against the government were such a decision to be handed down.[48]

Two cases provided the central challenge to the abrogation of the gold clauses, one regarding private obligations and the other regarding obligations of the government. In *Norman v. Baltimore & O. R.*, the plaintiffs held bonds of railroad companies that included clauses stating that interest and principal would be paid in US gold coin of the standard weight and fineness existing at the time of the issuance of the bonds.[49] The plaintiffs made claims for payment in gold coin or in dollars representing the value of the gold dollar before the devaluation.[50] The defendants refused to make payments except for the nominal amount of the obligation, as required by the Joint Resolution of 5 June 1933. The relevant part of the operative paragraph of the Resolution reads:

> (a) every provision contained in or made with respect to any obligation which purports to give the obligee a right to require payment in gold or a particular kind of coin or currency, or in an amount in money of the United States measured thereby, is declared to be against public policy; and no such provision shall be contained in or made with respect to any obligation hereafter incurred. Every obligation, heretofore or hereafter incurred, whether or not any such provision is contained therein or made with respect thereto, shall be discharged upon payment, dollar for dollar, in any coin or currency which at the time of payment is legal tender for public and private debts.

According to its terms, the Resolution undermined the operation of gold clauses, regardless of whether the clauses were interpreted as mandating payment in gold coin or as mandating payment in the new dollar value that would have attached to gold coin in the absence of devaluation and confiscation of the gold supply. The question, then, was whether it was within Congress's authority to undermine contractual provisions in this manner.

[46] J. P. Dawson, 'The Gold Clause Decisions', (1935) 33(5) *Michigan Law Review* 647; P. J. Eder, 'The Gold Clause Cases in the Light of History', (1935) 23(3) *Georgetown Law Journal* 359; H. M. Hart, Jr, 'The Gold Clause in United States Bonds', (1935) 48(7) *Harvard Law Review* 1057; A. Nussbaum, 'Comparative and International Aspects of American Gold Clause Abrogation', (1934) 44 *Yale Law Journal* 53. Arthur Nussbaum's article conducts a comparative analysis of gold clause abrogation based on the Joint Resolution, but appeared before the Supreme Court decided the cases. There was already a flurry of writing on the topic, as can be seen in the titles cited in footnote 2 of Nussbaum's piece. A few examples of articles that appeared in 1933 and 1934 offer the flavour: 'Gold Contracts and Legislative Power'; 'The Gold Clause'; 'Currency Control and Private Property'; 'Federal Currency Restrictions and Gold Contracts'; 'Constitutional Limitations and the Gold Standard'; 'The Gold Clause: Can it Constitutionally Be Abrogated By Legislation?' (Nussbaum, ibid., at 53, fn 2).

[47] Dawson, above n 46, at 647.

[48] In fact, Roosevelt drafted an address explaining why he would not comply with an adverse decision, but never had to use it: Glick, above n 45; G. N. Magliocca, 'The Gold Clause Cases and Constitutional Necessity', (2012) 64 *Florida Law Review* 1243.

[49] There were three separate cases joined under *Norman*, with two different bonds. One was issued in 1930, the other in 1903. As the standard weight and fineness did not vary during the time period, nothing rides on the exact dates, nor on the differences between the various plaintiffs and defendants in *Norman*. The difference in defendant in *Perry* is of course paramount.

[50] One case revolved around the coupon (interest payment), where the plaintiff demanded $38.10 as payment for the $22.50 coupon in pre-devaluation dollars; another case discussed payment of the principal. Again, there is no difference of substance among these cases, and in terms of the standard of value involved they are also identical with *Perry*.

The majority dealt with this question by placing it in the context of Congress's power to establish a monetary system, and the powers necessary to effect such a system. Reasoning that Congress had the power to create a monetary system and that uniformity of the currency was reasonably viewed as an aspect of such a system, the court's majority found it easy to hold that in principle, private contracts could not be used to thwart Congress's power over monetary policy. Freedom of contract, in other words, could not trump Congress's constitutional power over money. The application to the case was then straightforward: if the gold clauses would interfere with the power of Congress to establish and maintain a uniform monetary system, Congress was within its authority in declaring them void. The majority then explained that allowing the gold clauses to stand would in effect create a dual monetary system, wherein holders of gold clause obligations worked with one standard of value, while everybody else worked with another, thus undermining Congress's power to regulate the entire system. The imbalances thus created seemed clear:

> The devaluation of the dollar placed the domestic economy upon a new basis. In the currency as thus provided, states and municipalities must receive their taxes; railroads, their rates and fares; public utilities, their charges for services. The income out of which they must meet their obligations is determined by the new standard. Yet, according to the contentions [of the plaintiffs] before us, while that income is thus controlled by law, their indebtedness on their 'gold bonds' must be met by an amount of currency determined by the former gold standard.... It requires no acute analysis or profound economic inquiry to disclose the dislocation of the domestic economy which would be caused by such a disparity of conditions in which, it is insisted, those debtors under gold clauses should be required to pay $1.69 in currency while respectively receiving their taxes, rates, charges, and prices on the basis of $1 of that currency.[51]

The majority continued by reiterating that Congress had the authority to create a uniform monetary system by establishing 'parity between kinds of currency, and to make that currency, dollar for dollar, legal tender for the payment of debts, and private parties could not make contracts that would limit that authority'.[52] In so deciding, the Court was facing the issue of the *unity* of the unit of account head on. Its decision made it clear that establishing and maintaining a single unit of account was within the scope of the Congress's power to create a monetary system and that private contract could not trump that power.

On the face of things, this determination would seem to have been sufficient to decide the case of government obligations in *Perry* as well. There, the plaintiff held 'Liberty Bonds' issued by the US Treasury during and immediately following the First World War—the bond held by Perry was issued in 1918, and formally known as a 'Fourth Liberty Loan 4¼% Bond'. The principal on the bond of $10,000 came due in April 1934, and Perry demanded $16,931.25, representing the value of 10,000 pre-devaluation gold dollars. The defendant (the government) refused to redeem the bond except by payment of $10,000 of legal currency, in accordance with the Joint Resolution. The government's case relied largely on the arguments advanced in *Norman*, and it added specific discussion of the importance of a unified unit, including (perhaps especially with regard to) government obligations. In part, this argument rested on a forthright acknowledgment that claims on the government extended in fact through the entire monetary system in the form of money itself: bondholders were not the only claimants on government; instead, everyone holding money claims (cash, deposits, agreements payable in currency) was in effect a claimant with a gold clause,

[51] *Norman*, 294 US, at 315–16. [52] Ibid.

because the gold standard mandated payment in gold at a given weight, according to the Gold Standard Act of 1900.[53]

Distinguishing between gold clause bondholders and all other claimants, according to the government's brief, could have no reasonable basis:

> No reason has been advanced why the holders of the interest bearing time obligations of the United States should, by reason of the gold clause in their bonds, be preferred to the holders of the non-interest bearing demand obligations of the United States. These demand obligations include all of the currency of the United States as to which the undertakings of the Government are no less solemn than those in the gold-clause interest-bearing obligations.[54]

In addition to the injustice of arbitrary discrimination between different kinds of claimants, the government went on to argue that the division of claims would recreate a dual monetary system, precisely the outcome that the entire mechanism of devaluation including the Joint Resolution was engineered to avoid.[55]

The lead opinion in *Perry*,[56] however, was not willing to accept the claim of identity of claimants, and instead found the distinction between claimants to have primary import: 'The bond in suit differs from an obligation of private parties, or of states, or municipalities, whose contracts are necessarily made in subjection to the dominant power of the Congress.'[57] The court went on to say that while Congress could prefer the importance of a unitary monetary system over the freedom of contract of private parties, it could not use this same mechanism to undermine its own contractual obligations: '[t]here is a clear distinction between the power of the Congress to control or interdict the contracts of private parties when they interfere with the exercise of its constitutional authority and the power of the Congress to alter or repudiate the substance of its own engagements when it has borrowed money under the authority which the Constitution confers.'[58] The result of the distinction, for the court, was that Congress could alter the existing contracts of private parties, but it was powerless to alter its own contracts. Freedom of contract as a general matter was subject to Congressional regulation, but Congress's own power to bind itself by contract is inviolable.

One way to understand the distinction propounded by the court is in terms of sovereignty. In *Norman*, the court described Congress's monetary powers (including the power to create a uniform monetary system) as an aspect of sovereignty.[59] When the sovereign power over the monetary system collided with citizens' freedom of contract, sovereignty retained the upper hand. But in *Perry*, the Court performed a subtle twist, by characterizing the act of self-binding in contract as an aspect of sovereignty as well: 'The argument in favour of the Joint Resolution, as applied to government bonds, is in substance that the government cannot by contract restrict the exercise of a sovereign power. But the right to make binding obligations is a competence attaching to sovereignty.'[60] Thus, what had been

[53] *Perry v. US*, Brief for the United States, SC October Term, 1934, at 24. [54] Ibid., at 26.

[55] The government's brief is remarkably clear on this point, noting that only applying monetary legislation to all obligations could maintain the relative values of the obligations unchanged (ibid., at 27). Any other course creates two different standards of value: 'to have continued payment on the public debt in gold coin of the old standard or its equivalent by weight after reducing the gold content of the dollar would, in effect, have led towards a return of a dual monetary system' (ibid., at 30–1).

[56] I refer to the opinion of the Chief Justice as the lead opinion. In the report, it is titled 'the opinion of the Court' and in terms of the final result (rejection of Perry's claim for a remedy) a majority of the Court supports it. However, regarding the question of the validity of the Joint Resolution, the opinion of the Court seems to join with the dissent (i.e. holding the Joint Resolution unconstitutional regarding government obligations), while the concurring opinion by Justice Stone stands as the sole vote for constitutionality.

[57] *Perry*, 294 US, at 348. [58] Ibid., at 350–1.

[59] *Norman*, 294 US, at 303–4. [60] *Perry*, 294 US, at 353.

a contest between sovereignty and freedom of contract in *Norman* becomes in *Perry* a contest between two aspects of sovereignty itself: the sovereign power to create a money system, and the sovereign power to commit the government through contractual obligation. Once these two had been set on the same plane, the road was open to favouring the binding contract over Congress's power to change the money system.[61]

But of course, this was not the final word in *Perry*. After deciding that Congress had overstepped its power in attempting to override the obligation in its own bonds, the court proceeded to the question of whether the plaintiff had suffered harm and whether he had proved his damages in a way that could generate a right to compensation. On this score, the court reiterated its position that the other aspects of devaluation, including changing the weight of the gold dollar and the prohibition on private holding or dealing in gold, were within Congress's legitimate power and indeed not challenged before the court. By accepting that background as established, the Court recognized that the very essence of the value of monetary claims had shifted: '[t]he discontinuance of gold payments and the establishment of legal tender currency on a standard unit of value with which "all forms of money" of the United States were to be "maintained at a parity" had a controlling influence upon the domestic economy. It was adjusted to the new basis.'[62]

Reasoning that a plaintiff could only show damages through an evaluation of his situation within an actually existing system of value, that is, the existing monetary system, the court explained that Perry could not show any loss. Because the 'domestic and restricted market which the Congress had lawfully established' determined that gold itself must be 'adjusted to the new basis', old and new dollars in effect become equalized. A simple way of understanding the reasoning is that if the bondholder were paid in \$10,000 gold dollars of pre-devaluation weight in April 1934, he would immediately have to tender those dollars to the government in return for \$10,000 legal tender paper dollars. 'In the domestic transactions to which the plaintiff was limited . . . determination of the value of the gold coin would necessarily have regard to its use as legal tender and as a medium of exchange under a single monetary system with an established parity of all currency and coins.'[63] In essence, the court was confirming that a dollar is a dollar, and that Congress decides what a dollar is. Any other view, according to the court, would not be a compensation for loss but rather the grant of a windfall:

> [I]n view of the adjustment of the internal economy to the single measure of value as established by the legislation of the Congress, and the universal availability and use throughout the country of the legal tender currency in meeting all engagements, the payment to the plaintiff of the amount which he demands would appear to constitute, not a recoupment of loss in any proper sense, but an unjustified enrichment.[64]

And thus, perhaps ironically, the final resting point for the question of Congress's power over the monetary system is not in constitutional law, but rather in the more prosaic site of the law of damages for breach of contract. It is there, after all, that the court simply could not avoid the results of what it had already acknowledged on the constitutional plane, namely that only the state can decide, finally, what counts as money and how to measure its

[61] This is merely an explanation of the way the court creates rhetorical balance among positions that seem destined to collide, and is not in the least offered in support of this part of the opinion. There are additional ways to try to make sense of the court's opinion regarding the constitutionality of the Joint Resolution in *Perry*, but none of them are particularly satisfying either. For a survey, see Hart, above n 46. Hart was no cheerleader for the Joint Resolution, but he thought that the attempts to portray it as unconstitutional regarding government obligations but constitutional regarding private obligations were patently incoherent.

[62] *Perry*, 294 US, at 357. [63] Ibid. [64] Ibid., at 358.

value. By looking for a technical solution to the rhetorical bind it had created by declaring that Congress was indeed bound by the terms of its own loan contract, the court eventually found itself face to face with 'the force pumping at the core of money's legality—the irreducibly political heart of value'.[65] And perhaps we should not find this connection between contracts and the very definition of value through money so surprising. Keynes, after all, opened his *Treatise on Money* by developing precisely this theme. Money of account, he explained, comes into existence with debt contracts, and the state enforces those contracts, but in fact it does more than mere enforcement:

> The state, therefore, comes in first of all as the authority of law which enforces the payment of the things which corresponds to the name or the description in the contract. But it comes in doubly when, in addition, it claims the right to determine and declare what thing corresponds to the name, and to vary its declaration from time to time—when, that is to say, it claims the right to re-edit the dictionary.... The Age of Chartalist or State Money was reached when the state claimed the right to declare what thing should answer as money to the current money of account—when it claimed the right not only to enforce the dictionary but also to write the dictionary. Today all civilised money is, beyond the possibility of dispute, chartalist.[66]

V. Conclusion

The responses to crisis ranged, then, from a recapitalization and partial reorganization of the banking system to industrial policy geared towards reflation and finally to technical reflation through devaluation of the dollar and a nationalization of the gold supply alongside abrogation of the gold clauses. This combination makes it difficult to pin down whether the responses in question were monetary or fiscal policy, and whether those labels track (exactly or approximately) the distinction between finance and the real economy, or monetary and real analysis. But one might be tempted to ask, so what? Why are the categories of monetary and fiscal even important here?

The abstract answer is that the categories define the terms of engagement over what plans are considered good or legitimate or worthy. This isn't because we always know the valence of 'monetary' or 'fiscal' or 'financial' or 'productive' but rather because we see those words employed in different ways at different stages of argument, different attempts at justification. There is a historiography of Roosevelt that imagines him as intuitive and supremely pragmatic; not simply anti-doctrinaire, but actually anti-theoretical. On this reading, one can actually say, I don't care whether it is fiscal or monetary, financial or real, or anything else—the only thing I care about is whether it helps me reach the goal of a well functioning economic system.[67] But that betrays an indifference to both politics and justification that seems uncannily out of place for an understanding of crisis, crisis response, or economic history. There is no Archimedean point from which to weigh all of the options as if all the agencies and institutions in the economy are simply at one's disposal. The categories help us decide who should act, and what the legitimate limits of that action could be.

When we reduce these abstractions to the concrete case of responses to the Depression, we see some strange (but not completely unpredictable results). First of all, there is no

[65] C. Desan, 'Beyond Commodification: Contract and the Credit-based World of Modern Capitalism', in D. W. Hamilton and A. L. Brophy (eds), *Transformations in American Legal History II: Law, Ideology and Methods—Essays in Honor of Morton J. Horwitz* (2010) 111, at 127.

[66] J. M. Keynes, *A Treatise on Money* (1930), at 4–5.

[67] This seems to be, overall, the understanding advanced by post-New Deal liberals like Schlesinger and Hofstadter. See Schlesinger, above n 9.

simple way to understand what amounts to a progressive as opposed to a conservative position. Compare, for example, Dean Acheson to Irving Fisher: Fisher believed that public works were a waste of energy, and that reflation by changing the gold value of the dollar was all that was necessary for recovery; but more importantly, he believed it was the most legitimate way for a government to intervene into economic relations.[68] Acheson, on the other hand, was open to public works even through deficit spending, but felt that tinkering with the baseline valuation of the dollar by changing the price of gold was anathema, illegal, and immoral. Budget director Lewis Douglas believed both were disastrous. Keynes thought both were beneficial. There are certainly modern moralist bankers who seem to think neither is particularly good, but that the monetary authority should never be involved in the fiscal side of reform—so if such actions are truly required they should be performed by an external agency and not by a central bank.[69] And the Supreme Court, at least if we pay attention to rhetoric as much as result, seemed to believe that while changing the gold value of the dollar might be possible, it represented something quite different from run of the mill monetary policy. For all of these actors, there is a question about where action is appropriate. For all of them, part of the answer runs through an understanding of a system where not all decisions are open to all actors at all times. Some aspects of stability are more guaranteed than others. Some interests come to be understood as rights.

And eventually the question of where we can or ought to intervene politically becomes crucial. The New Deal refused to take as a given that debts on paper must retain a value in terms of gold that they had at the time they were undertaken. This was perhaps the starkness that came out in the gold clause cases. But more subtly, the same kinds of stakes replayed themselves in many contexts, when the role of valuation through money and the role of direct investment in productive projects seemed to combine. How do we adjust the claims to value in the face of change? It seems that the question of whether action is monetary or fiscal plays into the answer—it certainly did for New Dealers, and it seems to be salient today as the advanced economies try to forge a path out of the latest global financial crisis. In this sense, the history of New Deal responses to the crisis is a key point in the history of our financial and monetary present.

[68] He did not believe this in 1896, when the idea of going from gold to bimetallism struck him as deeply unjust. But by 1933 he was adamant that reflation was crucial and just.

[69] W. F. Todd, *From Constitutional Republic to Corporate State: The Federal Reserve Board, 1931–1934* (1995).

32

Monetary Obligations and the Fragmentation of the Sterling Monetary Union

David Fox

I. The Monetary Crises and Monetary Law in the United Kingdom, Australia, and New Zealand

For the private monetary law of the common law countries the immediate aftermath of the First World War brought no marked changes.* The United Kingdom, Australia, and New Zealand avoided the post-war hyperinflations of central Europe. For them the challenges only presented themselves in the years 1929–33, during the monetary crises of the Great Depression. Those years brought about the fragmentation and destruction of what might be called 'the sterling monetary union', and much legal uncertainty about the performance of long-term contracts which crossed two or more countries of the union.

For about eighty years, until the early 1930s, a loose legal structure linked the monetary systems of the United Kingdom, Australia, and New Zealand.[1] Each country denominated its circulating money and monetary obligations in pounds, shillings, and pence. In law—if not consistently in practice—this unified monetary system operated on a gold specie standard.[2] Across all countries of the union, the gold sovereign coin with a nominal legal

* I am grateful for research assistance provided by Jocelyn Williams, Sydney; the University of Otago Library; and the Department of Internal Affairs, New Zealand.

1 There is no single work devoted to the workings of the union but several works cover specific aspects or periods of its operation: C. P. Hyman, *Coins, Coinages, and Currency of Australasia* (1893); R. Chalmers, *History of Currency in the British Colonies* (1893); A. H. Tocker, 'The Monetary Standards of New Zealand and Australia', (1924) 136 *Economic Journal* 556; R. S. Sayers (ed.), *Banking in the British Commonwealth* (1952); R. P. Hargreaves, *From Beads to Banknotes: the Story of Money in New Zealand* (1972); G. R. Hawke, 'The Evolution of the New Zealand Currency', Victoria University of Wellington Working Papers in Economic History No. 84/1 (1984); S. J. Butlin, *The Australian Monetary System: 1851–1914* (1986). In contrast, the workings of the post-World War II sterling monetary area have been studied more fully: C. R. Schenk, *Britain and the Sterling Area* (1994); C. R. Schenk, *The Decline of Sterling* (2010).

2 This chapter follows the contemporary terminology of H. E. Evitt, *A Manual of Foreign Exchange* (1936), at 51–2 who defines a 'gold specie standard' as one where 'full-weight coins of the required legal fineness circulate freely, gold in coin or bullion is allowed unhindered ingress and egress, the Central Authority is always prepared to buy and sell gold in unlimited quantities at legally fixed prices'. In its international operation, the system was closer to what Evitt would call a 'gold exchange standard'. In practice, Australia and New Zealand generally managed their international payment imbalances not by transporting sovereigns but by adjusting reserve balances of sterling

value of £1 had an unlimited legal tender status for the payment of debts of any amount. In principle at least, all forms of paper money and bank money were ultimately reducible to payment in gold sovereigns. Coins issued by the Royal Mint circulated as legal tender in the United Kingdom, New Zealand, and the colonies that became the Commonwealth of Australia in 1901. In the international exchanges the pound traded at or very close to par value between the members of the union. For the public at large—and indeed many of their lawyers—a pound was a pound whether it was paid in England, Australia, or New Zealand.

In 1929, the commercial operation of the union began to fragment. The value of the pound in Australia and New Zealand depreciated against the pound in the United Kingdom.[3] During 1930 and 1931 the trading banks in Australia made a positive decision to devalue their pound by 25 per cent against the pound in the United Kingdom. £100 in England became worth £125 in Australia. This was one of many measures aimed at shoring up the country's balance of payments and insulating Australian exporters from the fall in world prices for primary produce. The same decision to devalue was taken by the New Zealand government in 1933, also by 25 per cent.

These changes produced a spate of litigation in England, Australia, and New Zealand over long-term contracts that had been made during the long period of imperial monetary stability. These contracts suddenly presented a problem of private international law which had not been practically important until then. The courts were forced to determine what was the monetary system governing the valuation and performance of the obligations in these contracts. Depending on the court's determination of these questions, the commercial value of the contractual performance could differ by as much as 25 per cent.

This chapter centres on four of these decisions which considered the legal implications of the fragmentation of the union. Foremost among them is *Adelaide Electric Supply Company Ltd v. Prudential Assurance Co. Ltd* (1933),[4] a decision of the House of Lords arising from the Australian devaluation of 1930–31. Also considered is *Broken Hill Proprietary Company Ltd v. Latham* (1932),[5] a decision of the English Court of Appeal given a year earlier, and which was overruled by *Adelaide* (1933). Next after *Adelaide* (1933) came *De Bueger v. J. Ballantyne and Company Ltd* (1938), a decision of the Privy Council which considered the effects of the New Zealand devaluation of 1933. The final case that will be addressed is *Bonython v. Commonwealth of Australia* (1950),[6] a Privy Council decision from Australia, which clarified—and substantially reversed—the decision in *Adelaide* (1933).

The main point in each case was the identification of the national monetary system which 'measured' the value of the debt, and therefore determined the commercial value of the currency paid to discharge it. In principle, the identification of the governing monetary system was a problem of contractual interpretation, which depended on ascertaining the parties' intentions when they entered into their contracts. In practice, however, the answers depended on the legal significance that the judges attached to the 130 years of monetary

currency in London. These were themselves convertible to sovereigns. See further Section III.2 of this chapter. On the practical operation of the international gold standard, see R. G. Hawtrey, *The Gold Standard in Theory and Practice* (1933); E. W. Kemmerer, *Gold and the Gold Standard* (1944); and A. G. Ford, *The Gold Standard 1880–1914: Britain and Argentina* (1962), chs 2–4; M. de Cecco, *The International Gold Standard: Money and Empire* (2nd edn, 1984), chs 3, 6; B. Eichengreen, *Golden Fetters: the Gold Standard and the Great Depression, 1919–1939* (1992), chs 2, 7.

[3] The leading accounts are L. F. Giblin, *The Growth of a Central Bank* (1951), chs 3–4; C. B. Schedvin, *Australia and the Great Depression* (1970); R. G. Gregory and N. G. Butlin (eds), *Recovery from the Depression: Australia and the World Economy in the 1930s* (1988), chs 1, 2, 5.

[4] *Adelaide Electric Supply Company Ltd v. Prudential Assurance Co. Ltd* [1934] AC 122.

[5] *Broken Hill Proprietary Company Ltd v. Latham* [1933] 1 Ch 373.

[6] *Bonython v. Commonwealth of Australia* [1951] AC 201.

history that preceded the litigation. Between *Adelaide* (1933) and *Bonython* (1950) there was a clear shift in the judges' perception of the independence of the dominion monetary systems from that of the United Kingdom. In 1933, the House of Lords found it difficult to accept that Australia could have an independent currency of its own. By 1950, the position was reversed. The financial upheavals of the previous twenty years seemingly put beyond doubt that Australia must have had its own currency system long before the first signs that the union was fragmenting late in the 1920s.

This chapter begins with a brief account of the facts and issues in the four main cases. It then turns to the history preceding them by describing the structures of the sterling monetary union in law, and its operation in commercial fact. It then analyses the legal steps by which the member countries of the union gradually acquired their monetary independence from the United Kingdom. This background proved to be legally significant in the litigation that began in the 1930s. The final section of the chapter returns to the reasoning in the cases. It explains the judges' analysis of the history, and its significance for the issues before them.

II. The Cases Introduced

Adelaide Electric Supply Company Ltd v. Prudential Assurance Co. Ltd (1933)[7] was a period piece of its kind. Like so many other decisions arising from the monetary dislocations of the early 1930s, it involved a long-term contract by which colonial governments or business ventures raised finance in the London capital markets for investment in colonial infrastructure.[8] Investors in the late nineteenth and early twentieth centuries had no reason to anticipate the monetary dislocations which developed at the end of the 1920s and which brought the long period of stable exchange rates to an end.

The Adelaide Electric Supply Company Ltd was incorporated in England in 1905 to supply electric light and power in Adelaide, South Australia. Prudential Assurance held preference stock in the company, which it gained in 1929 from a conversion of its former shareholding acquired in 1925. The company had shareholders resident in Australia and the United Kingdom. In 1921 it resolved to move all its business to South Australia and that, from then on, all dividends would be payable in Adelaide. Between 1921 and 1931, the company's practice was to pay dividends to the United Kingdom registered stockholders by a cheque drawn on a bank in England, and the Australian stockholders by cheque drawn on a bank in Adelaide. The cheques were for an equal nominal amount of pounds, shillings and pence. No adjustment was made for the small differences arising from the currency exchanges between the two countries.

From 1931 the company resolved to make all its dividends payable at the Bank of Adelaide in Australia. If United Kingdom stockholders wanted to be paid in London, they would only receive the sterling exchange equivalent of the sum in Australian currency. The amount of pounds received in London would be less in nominal terms than the sum paid in Australia since by this stage the two currencies were trading at a rate of about 100:125. The Prudential, which had opted to be paid in London, objected to this proposal. It sought a declaration that it was entitled to payment in United Kingdom currency at the

[7] *Adelaide* [1934] AC 122.

[8] See also *City of Auckland v. Alliance Assurance Co. Ltd* [1937] AC 587; *Goldsborough Mort & Co. Ltd v. Hall* (1949) 78 CLR 1; *National Bank of Australasia Ltd v. Scottish Union and National Insurance Co. Ltd* [1952] AC 493; *National Mutual Life Assurance Association of Australasia Ltd v. A-G for New Zealand* [1956] AC 369. For intra-Empire investment, see, generally, G. B. Magee and A. S. Thompson, *Empire and Globalisation* (2010), ch 5.

nominal value of the dividend due. This would make the commercial value of the payment 25 per cent more valuable to it than if it opted to receive the payment in Australia.

The transaction in *Broken Hill Proprietary Company Ltd v. Latham* (1932) was similar. The company, Broken Hill Proprietary Co. Ltd., was incorporated in the State of Victoria in 1885, and had registered offices in Melbourne and London. It issued mortgage debentures to investors in 1920. Investors had the option of receiving their principal and annual interest payments either in Australia or London. The dispute turned on the payment of the interest dividend for 1932. By this stage, as in *Adelaide* (1933), there was a 25 per cent difference in the value of the pound between Australia and the United Kingdom. The question for the Court of Appeal was whether the London-registered debenture-holders had the right to be paid in English currency, at the nominal value of the interest debt, without any deduction for the exchange between Australia and the United Kingdom.

De Bueger v. J Ballantyne and Company Ltd (1938)[9] differed from the other cases in that it involved a three-year employment contract, rather than a long-term finance contract. De Bueger was a tailor who was recruited in London in 1932 to work in Ballantyne's shop in New Zealand for an annual salary of 'seven hundred pounds sterling'. In 1932 the pound in New Zealand traded at a 10 per cent discount from the pound in the United Kingdom, and by the period of De Bueger's service, the difference increased to 24–25 per cent. The case also differed from *Latham* (1932) and *Adelaide* (1933) in that the employment contract expressly used the term pounds 'sterling'. The question was whether this adjective made any relevant difference to ascertaining the parties' intentions about the monetary system governing the contract.

The money debt in *Bonython v. Commonwealth* (1950)[10] arose from an issue of fifty-year government stock by the Queensland government in 1895, which was then taken over in 1932 by the Commonwealth government. The principal sum was expressed as a sum payable in 'pounds sterling' on 'January 1, 1945 either in Brisbane, Sydney, Melbourne, or London at the option of the stockholder'. The question arose on the maturity of the stock in 1945, when the United Kingdom–Australian exchange rate on the pound had settled to 100:125. As might have been expected, Bonython argued that he was entitled to be paid in London in English currency at the nominal value of the principal sum due to him. As in *Latham* (1932) and *Adelaide* (1933), this would have made the commercial value of the payment considerably greater in London than it would have been if he had been entitled only to the nominal sum calculated in Australian legal tender.

Adelaide (1933) defined the principle that determined the result in itself, *De Bueger* (1938) and *Bonython* (1950), and which caused *Latham* (1932) to be overruled. The House of Lords held that where a contract designated one country as the place of payment, then the debt should be paid in the currency of that country.[11] Accordingly, all the claimants in *Latham* (1932), *Adelaide* (1933), and *Bonython* (1950) who opted for payment in London were entitled to be paid in English, rather than Australian, legal tender currency. That much was uncontroversial, and on this point there was no disagreement between the Court of Appeal in *Latham* (1932) and the House of Lords in *Adelaide* (1933).

On the more difficult issue of determining which monetary system measured the value of the debtor's obligation, *Adelaide* (1933) formulated a test which sowed much confusion in

[9] *De Bueger v. J Ballantyne and Company Ltd* [1938] AC 452.
[10] *Bonython v. Commonwealth of Australia* [1948] HCA 2, (1948) 75 CLR 589; [1951] AC 201.
[11] *Adelaide* [1934] AC 122, at 138 per Lord Warrington, 145 per Lord Tomlin, 148 per Lord Russell.

the later decisions. It conflated the question of the measuring monetary system with that of the proper currency in which the obligor had to discharge his debt. The House of Lords held, as we shall see, that the pound was at all relevant times the same unit of account in Australia and the United Kingdom.[12] That view was consistent with the countries being in a monetary union. On this point it overruled *Latham* (1932) which had held there was a distinct 'Australian pound'. *Adelaide* (1933) held that since the debt to the shareholders in that case was expressed in the common unit of the pound it could be discharged by payment of whatever pound-denominated currency was legal tender in the place of payment designated by the contract. That meant in *Adelaide* (1933) that the debt was payable in Australia at its nominal value in Australian legal tender, and that the shareholders who opted for payment in England would only receive the sterling equivalent, according to the market rate of exchange. As a simple rule of contractual construction, the reasoning in *Adelaide* (1933) was workable enough for contracts without an international element, but it proved problematic where the contract designated more than one place of payment or where there were other indications pointed to a different intention. As New Zealand and Australia took more steps throughout the 1930s to assert their monetary autonomy and as the exchanges between those countries and the United Kingdom were fixed at a rate of 125:100, it became ever more difficult to sustain the fiction that the pound was the same in all three countries.

The anomalies in *Adelaide* (1933) were corrected seventeen years later in *Bonython* (1950). There the contract designated both London and certain cities in Australia as the places of payment for the principal sums due. It was impossible to sustain the rule from *Adelaide* (1933) that the obligation was measured by the currency of the place of payment. The Privy Council held that even in 1895 Queensland had a distinct monetary system, which was eventually assimilated into a distinct Australian pound. Reasons other than the place of payment were relevant to ascertaining the measuring money of account, and Australian currency was interpreted as being the measure of the obligation. Accordingly, the value of the debt due in *Bonython* (1950) was measured in Australian pounds, so that the investors in London would only receive the United Kingdom exchange equivalent of that sum.

De Bueger (1938) was a simpler case since there was only one place of payment in the contract, New Zealand. But the Privy Council distinguished the test in *Adelaide* (1933). The use in the contract of the word 'sterling' was an express contractual term that identified the United Kingdom pound as the currency for measuring the debt. This was perhaps the first legal recognition that the currency systems of the former sterling union countries had become distinct.

The reasoning in *Adelaide* (1933)—odd as it may now seem—was perhaps not so strange by the standards of its own time. We shall see that the sterling union never had a clearly defined legal starting point, and that its fragmentation and death came about by a gradual process. The judges and the public at large doubtless believed that they had a common currency even after events which would indicate, according to legal tests developed later, that Australia, New Zealand, and the United Kingdom had developed distinct monetary systems of their own. This leads us to an historical analysis of the legal steps by which the union was formed and eventually disintegrated.

[12] See Section IV.2 of this chapter.

III. The Internal and International Structures of the Sterling Monetary Union

1. The Internal Structures of the Union

The sterling monetary union had no clearly defined beginning in law. It grew haphazardly from a series of imperial statutes, colonial ordinances and statutes, and prerogative proclamations issued by the sovereign and her local governors. It mirrored on a smaller scale the constitution and operation of the international gold standard during the nineteenth century. Individual countries made the necessary legal changes to the internal workings of their own monetary systems which allowed them to coordinate their international dealings as part of a common gold standard system. The international aspects of the system—such as the settlement of international balances and the adjustment of commercial exchange rates—operated as matters of banking practice without any direct legal foundation.

So far as there was any consistent policy behind the creation of the sterling monetary union, it was that the United Kingdom as 'mother country' should act to ensure that its newly settled colonies had a stable currency that could circulate in sufficient volumes to meet the needs of the colonial governments and private traders.[13] The experience of New South Wales between the 1790s and 1820s was a telling example of the currency problems that a colony might wish to avoid. Coin was generally in short supply. Transactions had to proceed by barter or by using consumable commodities, such as rum, as media of exchange. Privately issued paper money filled some of the gap, but the credit of its issuers was dubious. Foreign coins circulated in the colony at sterling-denominated rates that did not match their intrinsic parity with the coin of the realm.[14]

The sterling union grew incrementally from a policy that sterling 'coin of the realm' should be supplied for use in the Australasian colonies.[15] The Crown's prerogative to issue coinage and assign it a legal value transplanted itself to colonial territories when the British Crown assumed sovereignty there.[16] It was not just that British settlers to the colonies brought their currency with them and established their monetary standard by common usage.[17] Legal support for British coins and the gradual exclusion of alternative currencies were deliberate acts of colonial policy. This was most obvious in New South Wales. From the beginning, transactions were denominated there in sterling units of account. After 1825, the colonial government took steps 'to promote and render more effectual the circulation of British Sterling Money'. British coins were legal tender in the colony, and bills and notes denominated in the Spanish currency of 'holey dollars' were made payable in sterling currency.[18] As new Australasian colonies were established, they quickly

[13] The creation of a trading bloc with a single currency seems to have been a secondary concern. It did, however, figure to the extent that the entire Empire was divided into different currency zones, so that different colonies were best placed to trade with their near neighbours. This explains, for example, why Spanish coins long remained part of the currency of the Caribbean colonies; and why Hong Kong adopted a silver dollar standard. Silver was the preferred medium used in China: Chalmers, above n 1, chs 3–13, 37.

[14] See, generally, Hyman, above n 1 and S. J. Butlin, *Foundations of the Australian Monetary System 1788–1851* (1953), chs 1–7.

[15] This is the term used in the early Australian legislation: see, e.g., (1857) Statute 21 Vic. No. 15, s. 2 (Vic.); (1864) Statute 27 Vic. No. 194, s. 14 (Vic.).

[16] *Gilbert v. Brett* (1604) Davis 18, which affirmed a much older legal practice in England. See further Chapter 12 in this volume.

[17] Indeed, their experience was the very opposite: the shortage of currency in circulation was so acute that the settlers seemed willing to use coins of any currency that they could obtain.

[18] (1826) Statute 7 George IV No. 3 (NSW), repealing (1824) Statute 5 George IV No. 1 (NSW). The statute expressly provided that British copper coins were legal tender up to 12 *d.* and seemed to assume that British gold

developed to the same point of monetary evolution that New South Wales had already reached. So, for example, when New Zealand was annexed in 1840, it was assumed from the start that its monetary system would be founded on the circulation of British coins. Within about ten years nearly all coinage transactions were being made in sterling money, rather than in the mix of British, Mexican, American, and French coins that settlers had previously resorted to.[19]

(a) The sovereign as primary coin of the union

From the 1850s, a consistent policy emerged that the monetary systems of the United Kingdom and the Australian and New Zealand colonies should be grounded on convertibility to the gold sovereign issued by the Royal Mint, and that that coin alone should have an unlimited legal tender status. If we had to trace the operation of the sterling monetary union to its definitive legal origins then they would be to the imperial and colonial statutes of the 1850s and 1860s giving legal tender status to the coins issued by the branches of the Royal Mint in Australia, and the Coinage Act 1870 (UK) which gave the system something like an organized structure. These statutes mark a convenient starting point although they built on a legal structure that had been in place since 1816, before the annexation of New Zealand, Victoria, South Australia, and West Australia as colonies.

The process began with the Coinage Act 1816 (UK).[20] It defined the main elements of the United Kingdom's monetary system which stayed in place until the outbreak of the First World War in 1914. The Act put beyond doubt that the United Kingdom was thenceforward on a gold standard: 'the Gold Coin made according to the Indentures of Mint should henceforth be the sole Standard Measure of Value and legal Tender for Payment'.[21] The Act centred on the gold sovereign coin which was denominated at one pound, and which was given status as legal tender up to an unlimited amount.

Nothing in the Coinage Act 1816 formally enacted that the 'pound sterling' was to be the monetary unit of account of the United Kingdom. Consistently with the practice of the time, the statute defined the weight and fineness of a primary coin, and then assigned it a value in units of money of account.[22] The British unit of account was thus defined in a reflexive relationship with a real coin.[23] The system was premised on identifying a primary coin actually in circulation rather than on identifying a national money of account as some abstract unit of measurement. For all practical purposes, the sovereign coin and the pound sterling were identified as one.

The Coinage Act 1816 was probably in force in New Zealand and the Australian colonies. It definitely extended to Australia as a matter of legal fact. Early New South

and silver coins were already legal tender. The statute applied in the territories that became the state of Victoria until it was formally abolished there in 1864: (1864) Statute 27 Vic. No. 194, s. 2 (Vic.).

[19] Hargreaves, above n 1, chs 1–2.

[20] Statute 56 George III c 468.

[21] Coinage Act 1816, s. 11 (UK). Until then, the United Kingdom had run an almost completely bimetallic coinage system. Since 1774 silver coins were legal tender up to £25: Statute 14 George III, c 42, s. 2. Before then, the system had been completely bimetallic, with no upper limit on the legal tender status of any gold or silver coins issued as 'the lawful money of England'.

[22] Coinage Act 1816, s. 11 (UK).

[23] This method of definition gave effect to the principle that economic values derive from exchange ratios between different things rather than express something inherent in a thing itself: K. Helfferich, *Money*, trans. L. Infield, ed. T. E. Gregory (1927, 1969), at 317–31; G. Simmel, *The Philosophy of Money*, trans. T. Bottomore and D. Frisby, ed. D. Frisby (2nd edn, 1990), at 120–30.

Wales and Victorian legislation took for granted that British gold and silver coins were legal tender there.[24] The British Treasury confirmed this understanding by a proclamation issued in 1852. The 1816 Act applied in New Zealand on the premise that all English laws applicable to New Zealand circumstances were taken to have been in force since it was annexed in 1840.[25] The result was to give a legal foundation for the circulation of British coins in New Zealand and the Australian colonies long before the more formal extensions of the Coinage Act 1870 there.

The consolidation of the monetary union continued when the Royal Mint established branches in Sydney in 1853 and in Melbourne in 1865.[26] They coined the bullion from the local goldfields, and produced much of the circulating medium used throughout Australia and New Zealand. They were from the start merely adjuncts to the Royal Mint in London rather than independent colonial ventures. The specifications of the coins they struck were controlled by British mint indentures or legislation. The first stage of consolidating the union was to provide that Australian gold sovereigns struck at the Sydney Branch Mint were legal tender in the overseas colonies, once the local governors had adopted them by proclamation. Statutes of the New South Wales and Victorian legislatures duly provided that they were to circulate on the same footing as sovereigns minted in London, provided that they were of 'the like weight and fineness as are or shall for the time being be prescribed by law for moneys of Her Majesty's Mint in London'.[27] An Act of 1866 completed the process, and authorized the Queen to proclaim that gold coins struck at any of her branch mints were legal tender anywhere in her dominions where gold coins struck in London already circulated.[28] The second, reciprocal, stage was to provide that coins minted in Australia were legal tender in the United Kingdom. From 1863, the Queen was authorized to proclaim that gold coins struck at the Sydney Branch Mint were legal tender in the United Kingdom, which she duly did in 1866.[29] The sovereign coin thus became the foundation of the common currency of the United Kingdom and its named overseas dominions. So far as the British money of account was identified with the sovereign coin, both had effectively been established in Australia and New Zealand.

The Coinage Act 1870 (UK) marked the last stage in consolidating the sterling union. The Act kept the gold sovereign as the primary coin of the system: its value remained at one pound and its legal tender status remained unlimited.[30] The Act was relevant internationally since the Queen in Council was authorized to issue proclamations extending its operation to 'any colony, plantation, island, territory or settlement within Her Majesty's dominions and not within the United Kingdom'.[31] A United Kingdom proclamation of 1871 made under the authority of the Act directed that gold sovereigns minted in Sydney

[24] See, e.g., (1824) Statute 5 George IV No. 1 (NSW); (1855) Statute 19 Vic. No. 3, Preamble (NSW); (1857) Statute 21 Vic. No. 15, s. 2 (Vic.). When British copper coins were introduced to New South Wales, they were given the same legal tender limit of 12 *d.* as in the United Kingdom: (1826) Statute 7 George IV No. 3, s. 3 (NSW).

[25] English Laws Act 1858, s. 1 (NZ); *Alliance Assurance Co. Ltd v. Auckland City Corporation and Auckland Transport Board* [1936] NZLR 413, at 416 per Ostler J (*in argument*).

[26] The Victorian legislature had previously voted an annual sum to run the mint: Victorian Mint Act 1865, Statute 29 Vic. No. 285, s. 2, consolidated in the Victorian Mint Act 1867, Statute 31 Vic. No. 307.

[27] (1855) Statute 19 Vic. No. 3 (NSW), s. 1; (1857) Statute 21 Vic. No. 15, s. 2 (Vic.), replaced by (1864) Statute 27 Vic. No. 194, s. 14 (Vic).

[28] Colonial Branch Mint Act 1866, s. 1 (UK). For the extension of legal tender status of Australian sovereigns minted in Melbourne to all overseas dominions where London sovereigns were current, see Proclamation (10 August 1869) *London Gazette* 4421.

[29] Sydney Branch Mint Act 1863, s. 1 (UK), brought into effect by Proclamation (3 February 1866) Victoria, (6 February 1866) *London Gazette* 642.

[30] Coinage Act 1870, ss 3, 4, Sch. 1 (UK).

[31] Coinage Act 1870, ss 2, 11(9) (UK).

were legal tender in the United Kingdom on the same footing as sovereigns minted in England.[32] Significantly for the union, it went on to provide:

> [F]rom and after the promulgation of this Our Proclamation by the Governors or Officers administering the Government of the hereinafter-mentioned Colonies and Possessions respectively . . . all the said pieces of money so to be coined shall be current and lawful money in Our said several Colonies and Possessions, and *shall pass and be received as current and lawful money, and be a legal tender in the United Kingdom and the said Colonies and Possessions respectively, from the times aforesaid, at the like values and by the like names as the corresponding coins of the currency of this Realm*, and concurrently with any coins now current in the United Kingdom and the said Colonies and Possessions respectively.

Among the territories listed were New Zealand and the Australian colonies. Surprisingly, the 1870 Act was not formally adopted by them until about twenty-five years later, which is a sign of how the commercial operation of the union had taken on a life separate from its legal constitution.[33]

In New Zealand, as we shall see, British coins minted under the authority of the Coinage Act 1870 (UK) continued in circulation as legal tender until as late as 1935.[34] In Australia, events took a different turn. With the federation of the colonies in 1901 to form the Commonwealth of Australia, the Federal Parliament was given authority to legislate on 'currency, coinage and legal tender'.[35] The Commonwealth duly exercised its powers by enacting the Coinage Act 1909 (Cth). New, distinctive Australian coins passed into circulation. But the move was not a particularly strong assertion of monetary autonomy. The standard weight and fineness of the coins and their legal tender limits were fixed so that they corresponded exactly to British coins minted under the Coinage Act 1870 (UK).[36] The Act of 1909 did not remove the legal tender status of British coins in Australia. British and Australian coins were intended to be interchangeable in Australia and to circulate alongside each other.

Significantly for Australia, the Act of 1909 did not authorize the Commonwealth Treasurer to mint gold coins.[37] That right remained with the United Kingdom Parliament under the Coinage Act 1870 (UK). In this way, the sovereign coin, as the physical embodiment of the pound sterling, remained the primary element of the Australian monetary system. So far as the sovereign and the pound were still identifiable with each other, the Coinage Act 1909 (Cth) did not clearly change the unit of account in Australia.

[32] Proclamation (14 January 1871) Vic., (17 January 1871) *London Gazette* 151 (emphasis added). An earlier proclamation of the same date declared that a new issue of gold sovereigns struck at the Royal Mint in England was legal tender in the United Kingdom: ibid. The legal tender status in the United Kingdom of Australian sovereigns was affirmed in 1900 by the Sydney Mint Proclamation 1900 and the Melbourne Branch Mint Proclamation 1900 (17 September 1900), (21 September 1900) *London Gazette* 5826, at 5827. These proclamations helpfully list all the preceding Orders in Council and Proclamations in their Schedules.

[33] For the Australian colonies, see Proclamation (1 August 1896) Victoria, reproduced in New Zealand Proclamation (17 March 1897), (25 March 1897) *New Zealand Gazette*. For New Zealand, see New Zealand Proclamation (17 March 1897), (25 March 1897) *New Zealand Gazette*. The linkage of the New Zealand monetary system to that of the United Kingdom was still legally explicit a quarter of a century later. When the standard of fineness in British coins was altered in 1920, the necessary statutory amendments had to be proclaimed in New Zealand: see New Zealand Proclamation (14 September 1920), (1920) 80 *New Zealand Gazette* 2650.

[34] See Section III.3 of this chapter.

[35] Commonwealth of Australia Constitution Act 1900, s. 51(xii) (UK).

[36] Compare Coinage Act 1909, Sch. 1 (Cth) with Coinage Act 1870, Sch. 1 (UK).

[37] Coinage Act 1909, s. 4(1) (Cth).

(b) Convertibility to the sovereign

The nineteenth century banking regimes of the United Kingdom, Australia, and New Zealand were grounded on the convertibility of bank money and paper money to the gold sovereign. In the United Kingdom, convertibility of Bank of England notes was restored in 1821 after the long period of suspension during the Napoleonic wars.[38] The notes issued by private banks were payable in coin or in Bank of England notes once the Bank's notes became legal tender in 1833 for any amount over £5.[39] In this way, a chain of convertibility relationships made all the sterling-denominated forms of bank money and paper money reducible to the sovereign coin.

The banking regimes of the Australian and New Zealand colonies worked on the same principle. For most of our period, private banks took responsibility for issuing bank notes. In New Zealand, for example, a succession of private banks issued their own notes, none of which was legal tender.[40] The banks' notes were required by law to be payable in gold, that is, in sovereign coins.[41] Australia, however, took a rather different course with its notes. The Federal Parliament enacted the Australian Notes Act 1910 (Cth), which authorized the Commonwealth Treasury to issue so-called 'Australian Notes'.[42] Although these were legal tender in private payments, they kept the traditional foundation in gold: the notes were payable on demand in gold sovereigns at the Commonwealth Treasury.[43]

With the outbreak of the First World War in 1914 any practical link between the union monetary systems and the gold sovereign was broken. From then on the holders of bank notes and bank money in the United Kingdom, Australia, and New Zealand could no longer convert them to the primary coin of the system. In principle, this might have spelled the end of the union and the pound as a shared unit of account. The picture, however, was more complex. As a matter of law (although not of commercial practice), bank notes were still convertible to the sovereign in some countries of the union. In all of them the sovereign kept its unlimited legal tender status. The sovereign lived on—ghost-like—as the foundational coin of the union even though it disappeared from actual use.

The members of the union took different monetary steps when the First World War broke out. The British government mainly relied on the force of moral persuasion and appeals to wartime national interest to prevent the public from enforcing its right to convert the paper currency to sovereigns.[44] It introduced legal tender currency notes for £1 and 10 *s.* to make up the dearth of small value coinage. This measure also tended to discourage the public from using sovereigns in payments of less than £5. Until then the lowest value note issued by the Bank of England was for £5. These currency notes were

[38] Bank Restriction Act 1797, Statute 37 George III, c 45, s. 2, confirming a Privy Council minute dated 26 February 1797. Statute 1 & 2 George IV, c 26, s. 2. Convertibility of notes to gold ingots had been restored in 1820: Statute 59 George III, c 49.

[39] Bank of England Act 1833, Statute 3 & 4 William IV, c 98, s. 7.

[40] See, generally, Hawke, above n 1; Hargreaves, above n 1.

[41] A consolidating statute, the Banking Act 1908, s. 9 (NZ), confirmed this duty. The one exception was an extraordinary measure in the Bank-note Issue Act 1893, s. 3 (NZ), which temporarily authorized the Governor to declare bank notes legal tender. The power, which was a precaution against runs on Australian banks in 1893 spreading to New Zealand, was not in fact implemented. See N. M. Chappell, *New Zealand Banker's Hundred* (1961), ch 8; and J. S. G. Wilson, ch 1 in R. S. Sayers (ed.), *Banking in the British Commonwealth* (1952), at 3–4.

[42] Australian Notes Act 1910, Part II (Cth), authorizing the issue of legal tender Australian notes by the Commonwealth Treasury, a function eventually assumed by the Note Issue Board of the Commonwealth Bank: Commonwealth Bank Act 1920, s. 4 (Cth), inserting a new Part VIA to the Commonwealth Bank Act 1911–14.

[43] Coinage Act 1909, Sch. 1 (Cth).

[44] See, generally, A. E. Feavearyear, *The Pound Sterling* (1931), ch 12, and in detail de Cecco, above n 2, ch 7 and appendices; R. Roberts, *Saving the City: the Great Financial Crisis of 1914* (2013), chs 3–6.

convertible to sovereigns, as remained the case for Bank of England notes.[45] In legal form, therefore, nothing happened to displace the sovereign as the foundation of the monetary system. But it was regarded as unpatriotic or poor commercial behaviour to insist on payment in gold or for private individuals to hoard sovereigns, and the public soon adjusted to making payments by other means. The New Zealand legal measures to suspend convertibility were more straightforward: the bank notes issued by the trading banks were given legal tender status.[46] The public had nothing to gain by presenting a note to a bank for payment since the bank could discharge its liability by paying out another note of its own or of another bank.[47] In Australia, Australian notes issued by the Commonwealth Treasury already had legal tender status, so no legal change had to be made to their status because of the new wartime conditions.[48] As in the United Kingdom, appeals to the national interest must have been enough to prevent the public from enforcing their legal right to cash their bank notes for sovereigns.

In practice, if not fully in law, bank money and paper money denominated in pounds were from then on delinked from the sovereign coin. But the legal break with the sovereign coin did not happen definitively until 1926 when the United Kingdom went back on to the gold standard.[49] The Bank of England then became bound to sell bullion at a fixed price, and convertibility to gold coin was formally abolished. The final break with gold came in 1931 when, during the instability of the Great Depression, the United Kingdom suspended the Bank of England's duty even to sell gold bullion at a definite price.[50]

The same change would have affected Australia and New Zealand indirectly since the reserves of many of their trading banks consisted in sterling balances held in London. By 1931, those too would have lost their connection with gold. Aside from that, Australia and New Zealand took their own steps to remove any lingering sense that their notes or balances might still have been founded on convertibility to the sovereign. Early in 1930 the Commonwealth Bank of Australia exercised its statutory powers to require banks to surrender their gold coin and bullion in return for Australian notes.[51] The Bank then mobilized this reserve fund to control the country's overseas payments. New Zealand did the same in 1934. We have seen how, for the previous twenty years, all notes issued by New Zealand banks had legal tender status, which nullified their token promise of convertibility to the sovereign. But in 1934, any remaining promise became extinct beyond doubt. The newly founded Reserve Bank of New Zealand requisitioned all the trading banks' reserves of gold bullion and coin.[52] The Bank assumed a monopoly on issuing bank notes, which were no longer convertible to gold.[53]

By each of those dates, therefore, the pound sterling as a unit of account operating in the constituent countries of the sterling union ceased to have any connection—direct or indirect—with the sovereign coin. All that remained were the name and the historical link.

[45] Currency and Bank Notes Act 1914, s. 1(1), (3). As a temporary measure, s. 1(6) also made postal orders legal tender but this was revoked soon after: Proclamation George V (3 February 1915), (5 February 1915) *London Gazette* 1203.

[46] Banking Amendment Act 1914, s. 2(1) (NZ); and Proclamation, (5 August 1914) *New Zealand Gazette* 3043. The proclamation, which was first operative for only one month, had to be renewed periodically.

[47] This strategy followed from the common law rule that when two different kinds of money were legal tender in the same jurisdiction, a tender of either kind would be good to discharge the debt: *Jolley v. Mainka* (1933) 49 CLR 242, at 260 per Dixon J, citing *Ward v. Ridgwin* (1625) Latch 84 per Jones J (*sub nom Ward v. Kedgwin* (1625) Palmer 407).

[48] Australian Notes Act 1910 (Cth).

[49] Gold Standard Act 1925, s. 1(1), (2) (UK).

[50] Gold Standard (Amendment) Act 1931, s. 1(2).

[51] Commonwealth Bank Act 1929, s. 2 inserting a new s. 7B to the Commonwealth Bank Act 1911–27. For the context, see Giblin, above n 3, and Schedvin, above n 3, at 121–6.

[52] Reserve Bank of New Zealand Act 1933, s. 15(2) (NZ).

[53] Ibid.

2. The International Structures of the Union

The international functions of the sterling monetary union followed from the special status given to the sovereign coin in the internal monetary arrangements of each member country. Since bank notes and bank balances were in principle reducible at nominal values to gold sovereign coins in all the member countries, the exchange rates between those countries tended to settle at (or very close to) par. This effect became noticeable in 1866 as soon as the Sydney Branch Mint began issuing Australian sovereigns with mutual legal tender status in Australia and the United Kingdom. Sydney exchange rates for buying and selling pounds in London at sight stayed within 0.5–1.0 per cent of par between 1866 and 1875.[54] One pound sold to a banker in Sydney on sight rates bought almost exactly one pound for spending in London. To a degree, this stability in international exchange rates was to be expected of any two countries operating on a gold standard. The commercial value of the two countries' currencies in terms of each other was unlikely to stray far from the official mint par of exchange.[55] But for the sterling monetary union, this effect was even stronger, since the commercial value of each country's currency was anchored in the same gold coin.

The works of Tocker, Hawke, Wilson, and Butlin[56] have demonstrated that, in actual practice, the mint par of exchange was not the main determinant of exchange rates between the countries in the union. The international aspects of the union worked on what is strictly called a 'sterling exchange' standard rather than on a pure gold standard. The exchange rates with London were thus a function of the level of the sterling reserve balances held by the Australian and New Zealand trading banks at their London branches. Sterling balances in London arose from the sale of colonial exports in or through the United Kingdom, and sometimes from the proceeds of government loans raised in the London capital markets. The banks adjusted the level of credits and loans made to their customers in the colonies in step with the level of sterling balances held in their reserves.

These same fluctuations in sterling reserves held in London determined the movement in rates of exchange between the United Kingdom, Australia, and New Zealand. If sterling balances were high, the cost in Australia or New Zealand of buying London funds fell. From an Australian or a New Zealand perspective, the pound in Australia or New Zealand passed 'at a premium' against the pound in London. If the banks found their London balances of sterling shrinking, they would ration demand for them in Australia or New Zealand by adjusting the exchange rate. More pounds in Australia or New Zealand were needed to buy pounds in London. From an Australian or New Zealand perspective, the pound in Australia or New Zealand passed 'at a discount' against the pound in London.

The effect of the banks' careful management of the exchange rate was important in the public imagination: it supported the popular belief that the member countries of the union shared the same monetary unit of account and the same currency. The slight variations in commercial exchange rates from a strict 100:100 parity did not detract from this perception.[57] The rates for buying and selling pounds between member countries of the

[54] See Butlin, above n 1, ch 2.

[55] See Hawtrey, above n 2, at 35–8; Evitt, above n 2, at 67–8, 109–10; F. A. Mann, *The Legal Aspect of Money* (1st edn, 1938), at 46–8.

[56] New Zealand: Tocker, above n 1; Hawke, above n 1; see also C. G. F. Simkin, 'Banking in New Zealand', in R. S. Sayers (ed.), *Banking in the British Commonwealth* (1952) 327. Australia: J. S. G. Wilson, 'The Australasian Trading Banks', in Sayers (ed.) 20; Butlin, above n 1, ch 2.

[57] It was as if the difference in value between £100 in New Zealand and the United Kingdom represented a charge or bonus paid by or accruing to the bank customer who wanted to remit funds across the union. It was even accepted that a bank might charge 'exchange' when it remitted a sum of money between parts of a single country.

union were not necessarily regarded as rates at which one currency exchanged with another. The practice has been explained by Hawke:

> Exchange rates were not normally quoted as £NZ x = £Stg y, but rather sterling was quoted as being at a discount or a premium. Thus an exchange rate which in later years would have been stated as £NZ97 = £Stg 100 was in the 1920s stated as discount of £3 on sterling.[58]

Talk of premiums and discounts came most naturally when currencies were denominated in the same unit of account, such as the pound or the dollar.[59] It was as if the common name for the unit of account allowed like to be compared with like, with the premium or discount expressing the difference in the official and market values between them, or the costs of remitting money from one country to another. Even by 1931, when the difference in values of the United Kingdom and Australian currencies widened to about 30 per cent, Rowlatt J, a commercial judge in England, was still prepared to say that the disparity only arose because the demand to transmit funds between England and Australia was unequal. What mattered in his mind was that the 'sovereign coin had the same bullion content and was the same coin, issued under the same Imperial Crown, in England and in Australia'.[60] In his view, there was still a common currency because, in legal principle, all paper money and bank balances were convertible to a common foundational coin. The difference in market values implied nothing as to whether the two currencies were legally distinct.

This illusion, typified in Rowlatt J's comments, was so strong because it had been sustained in practice even after the suspension of convertibility of bank notes to sovereigns in 1914. Throughout the First World War, the exchange between New Zealand and the United Kingdom varied by no more than 0.25 per cent from parity even though the currencies were effectively delinked from gold.[61] The divergence for Australia was similar.[62] In the early 1920s, the general public could still justifiably regard a pound in the pocket as the same currency whether they were in Sydney, Wellington, or London. The fact that each country had different bank notes would hardly have changed that perception. Indeed, the situation would not have seemed much different from that in the United Kingdom today. England, Scotland, and Northern Ireland each have different bank notes, but they are all part of a single currency which is denominated in pounds sterling.

3. Fragmentation of the Union

The sterling monetary union fragmented and broke up between 1929 and 1934 under the pressures of the world depression. The formal recognition that it no longer existed, and that

This happened in Australia where a Sydney bank might charge so-called 'inland exchange' to remit money to a different state or even to a country district in the same state: *Thompson v. Wylie* (1938) 38 SR (NSW) 328 (Long Innes CJ in Eq. interpreting the word 'free of exchange' in a bequest by will). For the same bank to charge 'exchange' or a percentage 'premium' for remitting pounds from Sydney to London cannot have seemed much different.

58 Hawke, above n 1.

59 See, e.g., *City of Auckland v. Alliance Assurance Co. Ltd* [1937] AC 587, at 601 per Lord Wright; *De Bueger v. J Ballantyne & Co.* [1938] AC 452, at 547 per Lord Wright. For the same usage involving dollars, see *Saskatoon v. London Western Trusts Co. Ltd* [1934] 1 DLR 103, at 110 per Haultain CJS, and *Weiss v. State Life Insurance Company* [1935] SCR 461, at 466 per Dysart J, 471, at 472 per Davis J.

60 *Westralian Farmers Limited v. King Line Limited* (1931) 47 TLR 586 (Rowlatt J), upheld on appeal (1932) 48 TLR 598 (HL). His comments showed a misunderstanding of fast-moving economic developments. He delivered his judgment just months after the Australian banks formally agreed to fix the rate at 100:125.

61 H. von Jürgen Schneider, O. Schwarzer, and M. Denzel (eds), *Währungen der Welt V* (1994), at 270–1 (New Zealand sight rates for payment in London).

62 The greatest divergence from par 1913–19 was 0.33%: ibid., at 264 (Australian sight rates for payment in London).

the 'pound' referred to legally distinct currencies and units of account in the United Kingdom, Australia, and New Zealand came only later. Crucially, Australia and New Zealand gained separate monetary systems without the public at large—including some judges—even realizing the significance of the changes happening around them.

The clearest commercial sign that the union was fragmenting was the divergence of exchange rates across the different members of the union. At first, it proved difficult to manage the Dominion currencies so they stayed close to the traditional 100:100 parity. Soon afterwards, positive decisions were taken to devalue the Australian and New Zealand currencies against sterling. Australia's balance of payments problems became acute during 1929. In 1930, the pound in Australia was 5.16 per cent off par with the pound in the United Kingdom. In January 1931, the Australian banks agreed to fix the exchange at 100:125. This was a deliberate act of economic policy intended to improve the domestic prices for Australian exports of primary produce. Through the rest of that year the mean market difference in value was 28.57 per cent. When the United Kingdom came off the gold standard in 1931, the exchange value of the pound fell, which brought the United Kingdom: Australia rate back to about the agreed bank rate of 100:125.[63] Similarly in New Zealand, the pound depreciated during 1930, leaving a mean annual divergence of 3.14 per cent from the pound in the United Kingdom. During 1931 and 1932 the divergence widened to 9.0 per cent. In 1933 the New Zealand government assumed responsibility for fixing the exchange rate. This coincided with the establishment of the new Reserve Bank of New Zealand, and a general centralization of government control over the monetary system. The government fixed the rate at 100:125 and the market rate settled at about a 24.44 per cent divergence.[64]

The legal measures taken to separate from the union were less obvious in Australia than they were in New Zealand. We have seen earlier how Australia had already exercised its constitutional powers over 'coinage, currency and legal tender' by issuing its own coins and bank notes.[65] The Commonwealth Bank was already exercising the functions that we would nowadays associate with a reserve bank. Early in 1930 it exercised its central place in the Australian monetary system by requisitioning the gold holdings of the trading banks. The decision taken in 1931 to adjust the exchange rate was the final step towards Australia's assertion of monetary autonomy.

The same changes came later but more quickly in New Zealand, which only asserted its monetary autonomy in 1933.[66] As the New Zealand exchange rate on the United Kingdom fell between 1930 and 1933, the nominal value of the British coins circulating in New Zealand became undervalued in terms of United Kingdom pounds. The solution, provided in the Coinage Act 1933 (NZ), was to mint distinctive New Zealand coins. Soon afterwards, the United Kingdom abrogated its right to provide a coinage for New Zealand by revoking the extra-territorial effect in New Zealand of the United Kingdom Coinage Acts 1870–1920 (UK).[67] Thus the statute, which for over sixty years had been the centrepiece of the sterling monetary union, ceased to apply in New Zealand. Any link between the New Zealand currency and the gold sovereign coin—however unreal it had become by this stage—was formally abolished.

[63] Ibid., at 264 (Australian sight rates for payment in London).
[64] Ibid., at 270–71 (New Zealand sight rates for payment in London).
[65] See Section III.1.(b) of this chapter.
[66] See Hargreaves, above n 1, ch 10.
[67] New Zealand (Coinage) Proclamation 1934, (9 November 1934) *London Gazette* 7147.

Thus by 1934 the monetary break between the United Kingdom, Australia, and New Zealand was complete. The circulating media in each country ceased to have a mutual legal tender status. (The exception in Australia and the United Kingdom was the sovereign, which retained a ghost-like legal tender status, even though it hardly appeared in payments.) The official and commercial values of the currencies were nowhere near parity. The differences in value could no longer be explained, as they had been for the previous eighty years, simply by temporary fluctuations in supply and demand for a common currency. It was strongly arguable that each country had acquired a distinctive national unit of account and a distinctive currency of its own. All that remained of the union seemed to be common name for their currencies—the pound. The question is how those changes were recognized in the litigation of the time.

IV. The Problems in Private Law

1. The Means of Payment and the Place of Discharge

Adelaide Electric Supply Company Ltd v. Prudential Assurance Co. Ltd (1933)[68] presented and resolved one relatively straightforward point about money payments with an international element. Where a contract designated one country as the place of payment, then the debt should be paid in the legal tender currency of that country. On the facts of *Adelaide* (1933), this meant that the stockholders registered in London had to be paid in English legal tender money, and those registered in Adelaide had to be paid in Australian legal tender. Regardless of which monetary system determined the value of the obligation, the obligor could discharge its debt by paying the local currency at the designated place of payment. This aspect of the decision was followed in all the later decisions, and had been accepted in *Broken Hill Proprietary Company Ltd v. Latham* (1932).[69]

This was consistent with the established rule of private international law that the performance of a contractual obligation was governed by the law of the place of performance. The point was well settled by the time that *Latham* (1932) and *Adelaide* (1933) were decided.[70] So when money was payable in the United Kingdom or Australia, the law of the currency governing that place applied to it. The main authority cited by Lord Wright in *Adelaide* (1933) was *Gilbert v. Brett* (1604),[71] which is considered in earlier chapters of this book.[72] The case is commonly understood as the authority that the common law takes a nominalist approach to the valuation of money and monetary obligations. But it also had a private international law element. The contractual debt in question was incurred in England between two English traders, although Dublin was designated as the place for payment. The Justices of the Privy Council held that the obligor could discharge his obligation in Ireland by paying Irish currency, which had by that stage been debased in its fineness. The obligee had to accept the tender since the currency had been issued and proclaimed as the lawful money for circulation in Ireland. The exchange rate between Ireland and England had been fixed at or near 100:100.[73] Even if the debt had been

[68] *Adelaide* [1934] AC 122.

[69] *Latham* [1933] Ch 373, at 397 per Lord Hanworth MR, 408 per Romer LJ; *Bonython* [1951] AC 201, at 219.

[70] See *Dicey on the Conflict of Laws*, ed. A. B. Keith (5th edn, 1932), at 672 cited in *Latham* [1933] Ch 373, at 397 per Lord Hanworth MR. The rule was assumed in earlier cases. The argument turned there on whether the conversion to sterling should be made at the commercial or the official par rate of exchange: *Landsdowne v. Wycombe* (1820) 2 Bligh 60; *Scott v. Bevan* (1831) 2 B. & Ad. 78; *Manners v Pearson & Son* [1898] Ch 581. See further J. Storey, *Commentaries on the Conflict of Laws*, ed. M. N. Bigelow (8th edn, 1883), paras 310–13.

[71] *Gilbert v. Brett* (1604) Davis 18.

[72] See Chapters 11 and 12 in this volume.

[73] For the complexities of this, see further Chapter 12, Section IV.2, in this volume.

denominated in English money rather than Irish money (and this point was not clear from the case), the official exchange rate between the two currencies allowed the obligor to pay the nominal value of the debt in Irish currency. Significantly, the obligee could not demand payment in English coin, even if English money governed the obligation.[74]

2. Identifying the Monetary 'Measure' of the Obligation

The main difficulty in *Adelaide* (1933), *Latham* (1932), *De Bueger v. J. Ballantyne and Company Ltd* (1938), and *Bonython v. Commonwealth* (1950) was to identify the national monetary system which 'measured' the value of the monetary obligation. The notion of 'measurement' figured in the speech of Lord Wright in *Adelaide* (1933) and was repeated in the other decisions.[75] It provided a term for identifying the unit of currency in which the debt was denominated as distinct from the currency media—the coins or bank notes—which were tendered to discharge the debt. The simple statement that the interest or capital payments were due in 'pounds' was clearly insufficient to identify the 'measuring' money since that name applied equally to the United Kingdom, Australia, and New Zealand. At one level, the issue was a simple matter of contractual construction. The court had to determine which monetary system was intended by the parties when they first contracted the obligation,[76] even though, in all cases apart from *De Bueger* (1938), they had no practical reason to consider that question. The pound had the same commercial value in all countries of the union at the time.

In *Adelaide* (1933), the question of identifying the national 'measure' of the obligation took an unhelpful turn, which caused confusion in all later cases. The question was expressed not as whether Australia and the United Kingdom had distinct monetary systems in 1921 (the year when the company resolved to pay its dividends in Adelaide), but as whether those countries had distinct units of account. As Lord Russell said: 'It is not a question of what amount of coins or other currency has the debtor contracted to pay. A debt is not incurred in terms of currency, but in terms of units of account.'[77] That much was true. But he wrongly assumed that a unit of account could be identified with one national system or another, independently of the real coins or notes which had legal tender status in each of those systems. The better view is that the identification of a national currency depends on analysing a reciprocal relationship between the abstract units of account in terms of which debts may be expressed, and the distinctive means of payment which have legal tender status in that country. By overlooking this relationship, the House of Lords concluded that in 1921—and even in 1933—there was no such thing as an Australian pound distinct from that of the United Kingdom. It made no difference that the means of payment were different in each country, and that the coins and bank notes circulating in each country did not have a fully reciprocal legal tender status. This view stood for a full seventeen years until the Privy Council in *Bonython* (1950) corrected it. The Privy Council there directed itself the proper question, which was the autonomy of each monetary system.

[74] *Gilbert v. Brett* (1604) Davis 18, at 26–7.
[75] *Adelaide* [1934] AC 122, at 154, following the usage in *Latham* [1933] Ch 373, at 391 per Maugham J. See similarly *Bonython v. Commonwealth of Australia* [1948] HCA 2, (1948) 75 CLR 589, at 622 per Dixon J.
[76] *Adelaide* [1934] AC 122, at 155 per Lord Wright; *Bonython* [1951] AC 201, at 217.
[77] *Adelaide* [1934] AC 122, at 148.

In *Adelaide* (1933) Lord Tomlin was unequivocal in making the point that there was no independent money of account in Australia, and that the pound remained the national currency unit of Australia and the United Kingdom, even as late as 1933:

> [T]here was no Australian pound as a unit or money of account distinct from the English pound . . . There was . . . a common money of account of the United Kingdom and [Australia], notwithstanding that there were differences between the two countries so far as legal tender was concerned . . . Further, I am unable to convince myself that the course of events subsequent to 1921 has made any difference in the theoretical position that there is one common money of account. It is true that neither country is any longer on the gold standard and that in each country as part of the legal tender there is an inconvertible note issue, but how do those facts affect the matter? There are still in law, as there always have been, common elements in the two currencies. I ask myself, if there has been a change in the money of account, when did it take place and what caused it and I find no answer.[78]

The reasoning was framed in this way in explicit rejection of the view of the English Court of Appeal given a year earlier in *Latham* (1932).[79] As we have seen, this was also a case of interest payments under debenture stock. Romer LJ, in the majority, held that the obligation was denominated in Australian pounds so that a lender who presented his coupon for payment in London was only entitled to the sterling equivalent of the nominal sum in Australian pounds. He considered that by the time the bonds in *Latham* (1932) were issued, Australia had its own currency system, with the Australian pound as a nationally distinct unit of account:

> I cannot agree that there is no "measure of value" that could be described as an Australian pound. That there was no such coin is true; but I cannot agree that there was no "measure of value" that could be described as an Australian pound, if by that phrase the learned judge meant "standard unit of value," for Australia had in 1920 its own currency system and every such system must be based on a standard unit of value, and where that standard unit is gold it consists of a fixed weight of that metal of a determined fineness . . . Had Australia adopted precisely the same weight and fineness for its standard unit, but called the unit by a different name, or, calling it by the same name, had adopted a different symbol for indicating it, the present difficulty could not have arisen; but, though it is given the same name and symbol as ours [in the United Kingdom], and consists of the same weight and fineness as ours, and our sovereign is one of the things that is legal tender for it, it does not follow that there is no Australian pound.[80]

The contrary belief of Lord Tomlin in *Adelaide* (1933) was perhaps commonly held. Although the monetary dislocations occurring in Australia in 1930–1 were abrupt, they were probably not seen at the time as a fundamental interruption to the eighty-year continuum that had preceded them.[81] We see signs of the same view that the money of account was still the same in Australia as in the United Kingdom in the House of Lords' decision given a year earlier in *Westralian Farmers Ltd v. King Line Ltd* (1932).[82] The

[78] *Adelaide* [1934] AC 122, at 143, 144. See also Lord Warrington at 138:

> After consideration of the history of Australian and English money I have come to the conclusion that, merely as a unit of account, the pound symbolized by the £ is one and the same in both countries, and that the difference in the currencies merely concerns the means whereby an obligation to pay so many such units is to be discharged.

[79] *Latham* [1933] 1 Ch 373. [80] *Latham* [1933] Ch 373, 407.

[81] Even the United Kingdom's break with the gold standard in 1931 was expressed as a temporary 'suspension' until the king revived the operation of the Gold Standard Act 1925 (UK) by proclamation: Gold Standard (Amendment) Act 1931, s. 1.

[82] *Westralian Farmers Ltd v. King Line Ltd* (1931) 47 TLR 586 (Rowlatt J); (1932) 48 TLR 598 (HL).

dispute depended on the interpretation of a charter party, dated 5 September 1930, for shipping grain from Western Australia to Europe. This was a few months after the devaluation of the pound in Australia. At the time the rate of exchange stood at 130 Australian:100 sterling. The contract required the ship owners to pay the charterers a commission of 5 per cent on the gross freight when the vessel was loaded in Australia. The contract expressly provided: 'Any sums due in Australia to the charterers shall be paid in Australian currency.' The gross freight, which was payable in sterling in the United Kingdom, was valued at £13,240 2 *s.*, and 5 per cent of this nominal sum was £671 0 *s.* 1 *d.* The owners therefore paid £671 0 *s.* 1 *d.* in Australian currency to the charterers without making any allowance for the 30 per cent difference in exchange between the pound in the United Kingdom and Australia.

The charterers sued for the 30 per cent difference. They argued that they were owed the Australian pound equivalent of the £671 0 *s.* 1 *d.* sterling commission. In other words, United Kingdom pounds were the money of account for measuring the obligation to pay commission since the value of that obligation was fixed by reference to the nominal value of the freight in United Kingdom sterling.

The House of Lords rejected their argument. They interpreted the express stipulation that sums due in Australia were to be 'paid in Australian currency' as determining the value of the obligation. This interpretation of the payment clause produced the odd result: an Australian money of account sum (the commission) was being determined as a percentage part of a United Kingdom money of account sum (the gross freight). Given that the two currencies no longer traded at par values, like was not being derived from like. Only by treating the money of account sums in the contract as identical and abstracted from any real currency in circulation was it possible to make such an odd calculation.

At the heart of the uncertainty in *Adelaide* (1933), *Latham* (1932), and *Westralian Farmers Ltd* (1932) were different views about the legal meaning of the money of account, and the constitutional steps that a sovereign state needed to take to establish a distinct monetary system. For Australia and the United Kingdom, the problem of definition arose from a series of special causes. First, as we have seen, before 1914 the United Kingdom and Australia had never explicitly defined their national unit of account but had based their monetary system on convertibility to the very same coin—the gold sovereign.[83] Secondly, since 1914, that basis of convertibility had been suspended in each country. After then, distinctive coins and bank notes with legal tender status had circulated in the United Kingdom and Australia, and the former basis of convertibility to a common foundational coin was obsolete. To that extent, the units of account applied in each state were abstracted from any real connection with a foundational coin, or in Australia's case, even with any defined weight of gold bullion. In the United Kingdom, for the six years from 1925 to 1931 the pound could at least be expressed in terms of a legally defined quantity of bullion. In Australia, however, the monetary system had been practically detached from any basis in gold since 1914.[84]

In 1920 and 1921, when the contracts in *Adelaide* (1933) and *Latham* (1932) were entered into, and even in 1930 when the charter party in *Westralian Farmers Ltd* (1932) was executed, there was a sense in which the money of account in the United Kingdom and Australia was just an empty name. All that remained was the common name and symbol for the unit of currency in each country,[85] which had never been formally altered by an explicit legal act. Seen from an Australian perspective, very little had happened to change

[83] See Section III.1.(b) of this chapter. [84] See Section III.1.(b) of this chapter.
[85] A point admitted by Lord Wright in *De Bueger v. J Ballantyne and Co. Ltd* [1938] AC 452, at 459.

the impression that it still shared the same unit of account as the United Kingdom. Australia's expression of its monetary independence through the Coinage Act 1909 (Cth) and Australian Notes Act 1910 (Cth) was, as we have seen, both gradual and tentative.[86] There was no formal legal act which clearly marked a break in the continuity with the United Kingdom pound. Neither was there any obvious currency crisis between 1914 and 1929 on the scale of the central European hyperinflations which would have severed any practical connection between the monetary systems of Australia and the United Kingdom.[87] Indeed, the very opposite seemed true. The commercial operation of the union by the Australian banks kept the pound virtually at par across the union. There was an appearance of unbroken continuity in the pound even if the legal structures which supported its use in Australia and the United Kingdom were gradually diverging into autonomous systems.

Without a doubt, Lord Tomlin in *Adelaide* (1933) was aware of the legal steps that Australia had taken to put its issue of currency on an independent legal footing.[88] But he did not see these as establishing an Australian unit of account. With some historical justification, he saw the statutes and proclamations issued since 1825 as extending the British unit of account to Australia. The new kinds of Australian legal tender money issued under the Coinage Act 1909 (Cth) and the Australian Notes Act 1910 (Cth) were, in his view, merely means of payment, intended for exclusive circulation in Australia, but which were denominated in what remained the same common unit of account. Romer LJ in *Latham* (1932) saw those same steps as independent assertions of a national unit of account. True, the foundation for the whole system—real or notional convertibility to the sovereign—remained the same. But in Romer LJ's view, that foundation took on a different legal significance once it was expressed in Australian legislation. On his analysis, it would have made no difference that England and Australia shared an identical coin as the base of their respective monetary systems. Australia had adopted the sovereign for itself. In law it was feasible to treat Australia as having its own unit of account even when its foundational coin and the commercial value of its circulating currency were the same as in the United Kingdom.[89]

Lord Tomlin's test for monetary independence, which seemed to require an explicit adoption of a new unit of account, expected too much. It was actually rare for a state to legislate explicitly for its national unit of account, and so mark the distinctness of its currency from that of other states from which it might have evolved. If it did so, the usual reason was that it was introducing a new kind of unit in place of the old one, as Australia did later when it introduced the decimal currency system in 1966.[90] So when the Australian Commonwealth legislated in 1909 and 1910 for legal tender money denominated in pounds and convertible to the sovereign, it was following the ordinary practice of the United Kingdom at the time. The United Kingdom had never legislated for the pound to be its national unit of account but followed the usual practice of states which linked their currency to a metallic standard. The unit of value was expressed as the price of a fixed quantity of precious metal.[91] Since the Coinage Act 1816 (UK), the United Kingdom had legislated for the weight and fineness of a primary coin, and fixed its value in monetary units of account. Thus the pound as a unit of account was identified with the sovereign

[86] See Section III.1.(b) of this chapter.

[87] This was treated at the time by Mann as one of the events creating a new and separate monetary system: Mann, above n 55, at 38–40.

[88] *Adelaide* [1934] AC 122, at 144.

[89] *Latham* [1932] Ch 373, at 407.

[90] Currency Act 1963, s. 8 (Cth). See similarly Decimal Currency Act 1964, s. 5 (NZ).

[91] Kemmerer, above n 2, at 112, 134–44.

coin, and each derived its value from the other in a reflexive relationship. On the view of Romer LJ in *Latham* (1932), this was what Australia did in 1909 and 1910 when the Commonwealth legislated for its own legal tender currency.

But by the time of the decisions in *Latham* (1932) and *Adelaide* (1933) the question of identifying a distinctive national unit of account had become more difficult. The conversion of bank notes, coins, or bank balances to the sovereign was a dead letter. In 1938, a few years after those cases, Francis Mann confronted the economic basis for this legal problem. Once the value of a money of account was no longer linked to bullion, Mann asked, was there any other referent in terms of which its value could be explained? In the first edition of his *Legal Aspect of Money* (1938), Mann wrote:

> The problem, what is to be understood by the unit of account, e.g. the pound, presents itself in its most serious form when the currency system is in no way based on metal, but merely on inconvertible paper, or in other words on the credit of the bank of issue.[92]

Mann's view, following that of the early twentieth century economist Georg Knapp, was that in an inconvertible paper money system, the value of the monetary unit of account could only be derived by its historical connection with the earlier monetary unit which it replaced and to which its value was fixed by a legally established rate of conversion.[93] The alternative, said Mann, was to accept that the pound was simply 'a name for something that cannot be precisely defined', where the meaning of that name could not be 'further elucidated by relating it to any other conception'.[94] The pound would then become an irreducible, empty unit of measurement.

The reasoning of Lord Tomlin in *Adelaide* (1933) was consistent with just this view. As a unit of account, Australia's inconvertible pound could only be identified with the earlier unit, the English pound, from which it evolved. He thought that there was no such thing as the Australian pound because there had never been any Australian legislation sufficient to break the legal continuity from that earlier, English unit. So it was that Lord Tomlin could hold that an investor in London was entitled to be paid the nominal value of his claim in English currency, and an investor in Australia could claim the nominal value of his claim in Australian currency. As Lord Tomlin held, 'the obligation to pay is an obligation to pay a sum of money expressed in a money of account common to the United Kingdom and Australia, and . . . when the payment under the terms of the contract has to be discharged in Australia it has to be made in what is legal tender in Australia for the sum expressed in that common money of account'.[95]

By the time of *Bonython* (1950), it seems to have been accepted that this extreme view denying Australia a national unit of account was untenable, even before the Australian federation of 1901. The High Court of Australia and the Privy Council accepted that Queensland had its own distinctive colonial currency as early as 1895 when the government bonds in that case were issued. In the Privy Council Lord Simonds said:

> But by 1895 Queensland had for nearly forty years been separated from New South Wales and had been a self-governing colony with power to make laws for its own peace, order and good government. The power to determine what is the lawful money of a country is a power

[92] Mann, above n 55, at 32.

[93] Mann gave the example of the pre-Second World War *Reichsmark* which, he said, was valued as one billion old marks, where the old mark was equivalent to one-third of an 1873 *thaler*: ibid., at 34–5.

[94] Ibid., at 36.

[95] *Adelaide* [1934] AC 122, at 146 per Lord Tomlin. See similarly *City of Auckland v. Alliance Assurance Company Ltd* [1937] AC 587 applying the same principle to the pound in New Zealand and the United Kingdom.

> exercisable by the legislature of that country, and that which was lawful money in the self-governing Colony of Queensland in 1895 was lawful money by virtue of the law of Queensland.[96]

It followed therefore that the Queensland government debentures were repayable at their nominal rate in Australian pounds since the obligation had been denominated in Australian currency units from the outset. This implied an entirely different view of the sterling monetary union. There never was in law a single currency and unit of account, and still less was the English currency system simply extended to the Australian colonies, as Lord Tomlin in *Adelaide* (1933) might have thought. Rather, each member of the currency union operated its own national currency and unit of account. At the outset each adopted a common foundational coin and defined its own national unit of account by a relationship of convertibility to it. On this view, the issue by the Commonwealth of Australia of legal tender coins and notes in 1909 and 1910 was only an affirmation of the monetary autonomy which the Commonwealth (and the colonies before it) already enjoyed. The sterling monetary union, so far as it deserved that name, was a grouping of legally independent currencies which were commercially managed so that they exchanged at similar values.

The view in *Bonython* (1950) was doubtless a reaction to the difficulty of applying the rule in *Adelaide* (1933) to a contract which designated two different countries as the place of payment. It would have been absurd to say that Australia and the United Kingdom had the same unit of account, and therefore that the debt should have been paid at the same nominal value in each country. Lord Simonds realized this difficulty:

> It cannot have been intended that the debenture-holder should obtain a different measure of value, or the Queensland Government be placed under a different liability according to the place of payment.[97]

Dixon J had expressed the same view in the High Court of Australia. The option of a debenture holder to be paid in a different place was only intended the give him the convenience of being paid in a currency more appropriate to the place he chose. It was not 'directed to a different quantification of the substance of the obligation'.[98] But only a decade before the *Bonython* (1950) litigation, it seems that such a commercially untenable view would have been accepted as a consequence of applying the conception in *Adelaide* (1933) that a common unit of account applied across all members of the old sterling union.

The point arose obliquely in *City of Auckland v. Alliance Assurance Company Limited*,[99] which was a decision of the Privy Council on appeal from New Zealand. The payment clause was similar to that in *Bonython* (1950) in that it allowed the holder of a local authority debenture loan the option of claiming repayment of the capital or interest in New Zealand or England. In 1936, the debenture holder claimed interest in London, and the decision confirmed its right to take the interest in English sterling money at the nominal value of the debt, without any deduction for the exchange difference of 25 per cent that had by then developed between the pound in New Zealand and the United Kingdom. That result followed directly from the rule in *Adelaide* (1933). The Privy Council disregarded the

[96] *Bonython* [1951] AC 201. See further F. A. Mann, 'On the Meaning of the "Pound" in Contracts', (1952) 68 *Law Quarterly Review* 195.

[97] *Bonython v. Commonwealth of Australia* [1951] AC 201, at 219.

[98] *Bonython v. Commonwealth of Australia* [1948] HCA 2, (1948) 75 CLR 589, at [23] per Dixon J. Compare the minority view of Starke J at [24].

[99] *City of Auckland v. Alliance Assurance Company Ltd* [1937] AC 587.

question of the rate at which a New Zealand debenture holder, presenting its claim in New Zealand, would have been paid. The point did not arise on the facts. But it seemed to accept that such a payment would have been made in New Zealand currency at the nominal rate of the interest liability. Notwithstanding that the local currency in each country was then trading at commercially different rates relative to each other, the debt was still expressed in a common unit of account.

After *Bonython* (1950), the decision in *Adelaide* (1933) was confined to its own facts. The principle in that case—that the place where the contract was to be performed determined the measure of the obligation—was relegated, rightly, to being just one factor in determining the substance of the obligation.[100] The continuing divergence between the monetary systems of Australia and the United Kingdom between 1933 and 1950 made it easier for the Privy Council to state the test as identifying the 'monetary or financial system' within which the instrument in question should be construed. It was highly relevant that the debenture stock had been issued by the Queensland government: 'The Government of a self-governing country, using the terms appropriate to its own monetary system, must be presumed to refer to that system, whether or not those terms are apt to refer to another system also'.[101] The same reasoning would have applied to a contract issued by a private party.

3. The Meaning of 'Sterling' in Payment Obligations

The use of the word 'sterling' in a contractual payment clause took on a different significance after the monetary dislocations of the early 1930s. The effect is most obvious by comparing the results in *Bonython v Commonwealth* (1950)[102] and *De Bueger v. J. Ballantyne and Company Ltd* (1938),[103] which was also a decision of the Privy Council, but on appeal from New Zealand.

Mr Bonython, it will be recalled, was the holder of some fifty-year government stock originally issued by the government of Queensland in 1895. The debenture entitled the holder to repayment of 'ONE THOUSAND POUNDS STERLING' on the maturity date. His claim in 1945 was for repayment of the loan capital in United Kingdom pounds at nominal rates. Mr De Bueger was tailor who was recruited in London in 1932 to work in Ballantyne's New Zealand shop for an annual salary of 'seven hundred pounds sterling'. In 1932 the pound in New Zealand traded at a 10 per cent discount from the pound in the United Kingdom, and by the period of De Bueger's service, after the 1933 devaluation in New Zealand, the discount rose to 24 or 25 per cent. The question in both cases was whether the obligee was entitled to the nominal value of the debt in United Kingdom sterling (or the local Australian or New Zealand equivalent of that sum) since by then United Kingdom sterling was the markedly stronger currency. The particular point of relevance was that the payment clause in each case used the words 'pounds sterling'.

The words were interpreted as carrying different meanings in each case because the contracts were entered into at different stages during the life and break-up of the union. In *Bonython* (1950) the obligation was held to be measured in Australian pounds. The express inclusion of the word 'sterling' did not identify the United Kingdom unit of account as the measure of the value of the Queensland government's obligation. We have seen how the

[100] *Bonython v. Commonwealth of Australia* [1951] AC 201, at 221 per Lord Simonds.
[101] Ibid., at 221.
[102] *Bonython v. Commonwealth of Australia* [1948] HCA 2, (1948) 75 CLR 589; [1951] AC 201.
[103] *De Bueger v. J Ballantyne and Co. Ltd* [1938] AC 452.

Privy Council in that case held that Queensland, even in 1895, had an autonomous monetary system, distinct from that of the United Kingdom, despite sharing a unit of account of the same name and basing its currency on convertibility to the same foundational coin. Lord Simonds said: 'The Government of a self-governing country, using the terms appropriate to its own monetary system, must be presumed to refer to that system whether or not those terms are apt to refer to another system also.'[104] The inclusion of the word 'sterling' did not rebut the presumption that the money of Queensland—and, eventually, of Australia—measured the value of the obligation. The reasons appeared more fully in the judgment of Dixon J in the High Court of Australia. He said that the intention of the debenture was to denote the money of Queensland, and of Australia generally, at least as much as that of the United Kingdom. The term 'pounds sterling' was used because it denoted what was in 1895 the money obtaining in the 'sterling' parts of the British Empire. Only after the full break-up of the former monetary union in the 1930s was the word 'sterling' identified distinctively with the money of the United Kingdom. '[T]he sense, the denotation of the word 'sterling' underwent some change because it no longer applied to the money of Australia and New Zealand except according to an extended and secondary meaning.'[105] That 'extended and secondary meaning' had nothing to do with identifying the monetary system which measured the value of an obligation. It referred rather to the persistent habit among the public at large of inserting the word 'sterling' after the word 'pounds' in any monetary expression. 'It rounded off the statement of the amount and it sometimes served the humble but perhaps more useful purpose of preventing an unauthorized addition of shillings and pence to the pounds.'[106]

In *De Bueger* (1938), however, the Privy Council considered a contract when the word 'sterling' had come to be identified more strongly with the money of the United Kingdom. By 1932 'sterling' no longer denoted with equal aptness the currency systems of each member country of the union, since by then the commercial operation of the union was fragmenting. The Privy Council held that De Bueger was entitled to payment of £700 of English currency at its nominal value, or its equivalent in New Zealand currency. The inclusion of the word 'sterling' was more than a mere habit of speech. It was sufficient to distinguish the principle in *Adelaide* (1933) that the remuneration would have been payable in New Zealand currency at its nominal rate since New Zealand was the designated place of payment. The word sterling was an express term intended to exclude the prima facie rule that New Zealand pounds would have been meant.[107] By August 1932, when the contract was drawn up in London, exchange questions were commercially relevant since by then the New Zealand and United Kingdom currencies were already 10 per cent off par. De Bueger was an English resident, immigrating to New Zealand on a fixed-term contract of employment, and he might have been keen to be paid in a currency with which he was familiar.

In all, after the early 1930s, 'sterling' became a term of legal art, designating the currency system of the United Kingdom. The House of Lords in *Adelaide* (1933) might have clung to the untenable fiction that the pound remained the common currency and unit of account in Australia, New Zealand and the United Kingdom. But five years later, the Privy Council in *De Bueger* (1938) was forced to recognize the commercial realities against which parties

[104] *Bonython v. Commonwealth of Australia* [1948] HCA 2, (1948) 75 CLR 589; [1951] AC 201, at 222.

[105] *Bonython v. Commonwealth of Australia* [1948] HCA 2, (1948) 75 CLR 589, at 619. See similarly *Maudsey v. Colonial Mutual Life Assurance Society Ltd* [1945] VLR 161.

[106] *Bonython v. Commonwealth of Australia* [1948] HCA 2, (1948) 75 CLR 589, at 618.

[107] See similarly *Permanent Trustee Co. of NSW v. Pym* (1938) SR 39 (NSW) 1; *Guardian Trust and Executors Company of New Zealand Ltd v. National Mutual Life Association of Australasia Ltd* [1942] NZLR 346.

drafted their contracts. The marked difference in the value of the pound across the old sterling countries, which had been caused by official government devaluations, indicated that they must each have had distinct monetary systems, and that the parties were free to choose which of those systems should govern their contracts.

Even so, some hints of the old idea from *Adelaide* (1933) still permeated the decision in *De Bueger* (1938). Lord Wright spoke not of the 'United Kingdom pound' or the 'New Zealand pound' but of whether De Bueger 'was entitled to be paid according to the English or the New Zealand value of the pound'.[108] He used the old terminology of the pound exchanging 'at a discount' across different countries. It was as if the old unitary pound still existed but merely traded at different values across different parts of the union, as it had done in the years before 1929. As a way in which judges viewed the legal and monetary changes happening around them, this contemporary description of the issue is not so surprising. The year 1938 was still a transitional period, and *Adelaide* (1933) was still a leading decision. The realization in law that the old monetary union had broken up, and that the member countries had reached monetary independence only happened in 1950 with the decision in *Bonython* (1950).

IV. Conclusion

Adelaide Electric Supply Company Ltd v. Prudential Assurance Co. Ltd (1933) was decided on the cusp of the full recognition by the common law courts that Australia and New Zealand had developed autonomous monetary systems, which were constitutionally distinct from that of the United Kingdom. An international network which had functioned as a monetary union of the three member countries evolved into a system of distinct currencies that were managed after the 1930s so that they remained at a stable exchange value in terms of sterling. The legal steps which were the obvious foundation for this change first happened as early as 1901 in Australia. But according to the view in *Bonython v. Commonwealth* (1950), the monetary systems of each country must have been autonomous long before 1901, even if the stability in exchange rates until the late 1920s masked their autonomy. Thus *Bonython* (1950) accepted that the decision of local governors or colonial legislatures to adopt United Kingdom currency established distinct national units of account, even if each country used the same foundational coin.

The practical issue in *Adelaide* (1933) faded from relevance. The long-term intra-empire investment contracts that were characteristic of the case eventually lapsed. Once it was clear that the monetary systems were legally autonomous, new contracts would have been more easily identified with the countries where they were made. The inquiry into the legal meaning of the 'pound' slipped into legal history.

[108] *De Bueger v. J Ballantyne and Co. Ltd* [1938] AC 452, at 456.

III

CIVIL LAW

33

The German Hyperinflation of the 1920s

Jan Thiessen

I. Prologue

In the early 1920s, Germany suffered a severe monetary crisis which culminated in hyperinflation.[1] In November 1923, a single US dollar was worth 4.2 billion marks (or for the American reader, 4.2 trillion marks).[2] Many old loans that had been granted before the crisis had to be repaid with worthless paper money. Eventually, both the credit and commodities markets collapsed.[3]

Two legal strategies seemed to provide at least some relief for Germany's precarious economic situation at the peak of the financial crisis. In October 1923, in a measure to cut the hyperinflation, the German government established a bank to issue a new currency.[4] This was the 'miracle of the *Rentenmark*',[5] and it meant that the country once again enjoyed a stable currency. A month later, the *Reichsgericht*, the German Supreme Court, sacrificed its own principle that any debtor could repay his debts with the nominal amount of the loan advance.[6] As a result, loans and collateral were partly revalued,[7] and both creditors and debtors shared the burden of inflation.

Of course, the monetary problems that had mounted since the First World War could not be solved in a single month. The German hyperinflation was an extraordinary phenomenon in economic history, and not only for its immediate effects on one of the world's major economies:[8] Germany had experienced a whole decade of economic

[1] See only C.-L. Holtfrerich, *The German Inflation 1914–1923* (1986), at 102 et seq.; G. D. Feldman, *The Great Disorder: Politics, Economics and Society in the German Inflation 1914–1924* (1993), at 385 et seq. F. Taylor, *The Downfall of Money: Germany's Hyperinflation and the Destruction of the Middle Class* (2013), at 146 et seq., 158 et seq., 270 et seq.

[2] See the conversion table in Feldman, above n 1, at 3.

[3] Ibid., at 577 et seq., 597 et seq.; Holtfrerich, above n 1, at 197 et seq.; F.-W. Henning, *Handbuch der Wirtschafts- und Sozialgeschichte Deutschlands* (2003), vol. 3.I, at 295 et seq.

[4] Verordnung über die Errichtung der Deutschen Rentenbank, 15 October 1923, Reichsgesetzblatt (RGBl.) I 963.

[5] Feldman, above n 1, at 780 et seq.; Holtfrerich, above n 1, at 312–3; Taylor, above n 1, at 316 et seq., 326 et seq.

[6] Reichsgericht, Judgment of 28 November 1923—V 31/23—Entscheidungen des Reichsgerichts in Zivilsachen (RGZ) 107, 78, at 87 et seq.

[7] Dritte Steuernotverordnung, 14 February 1924, RGBl. I 74.

[8] Henning, above n 3, at 311 et seq.; G. Ambrosius, 'Von Kriegswirtschaft zu Kriegswirtschaft 1914–1945', in M. North (ed.), *Deutsche Wirtschaftsgeschichte: Ein Jahrtausend im Überblick* (2nd edn, 2005) 304.

instability from which it never wholly recovered. This caused the political instability that led to National Socialism, the Second World War, and the Holocaust.[9] As Stefan Zweig put it: 'Nothing ever embittered the German people so much—it is important to remember this—nothing made them so furious with hate and so ripe for Hitler as the inflation.'[10]

This chapter will consider the legal background and consequences of the German hyperinflation between 1914 and 1948. It will discuss how legislators, courts, and lawyers responded to the so-called problem of the 'lack of good money'. The chapter first outlines the political, economic, and monetary framework between 1914 and 1925, highlighting its most important legal aspects. Second, it analyses the war economy and the inflation-related case law of the Reichsgericht. Finally, it summarizes the developments during the period, beginning with the revaluation laws of 1924–5, through to the monetary reform of 1948.

II. The 'Lack of Good Money'

The 'lack of good money' began in August 1914 when the German government launched headlong into the First World War.[11] Prior to 1914, anybody could go to the *Reichsbank*, the German central bank, and exchange paper money for the equivalent amount of gold or silver.[12] But on 4 August 1914, Germany effectively suspended the gold backing for the mark.[13] From then on, the government could issue money without regard to the German gold reserves, and it was up to the markets to decide whether the money was good or not.

War is costly, and, with parliamentary consent, the German government decided to raise a substantial part of the necessary funds by borrowing money from the German people rather than by increasing taxes.[14] Public opinion supported the war, at least during the early years, and people were prepared to subscribe to war bonds. In theory at least, the Reichsbank had the duty to limit the volume of money in circulation.[15] Thus, the government and the central bank forced enterprises and citizens to use bank money instead of coins or notes.[16] After the winter of 1916–7, when the German population was reduced to

9 See Feldman, above n 1, 854–5: 'From *Geldmenschen* to *Hitlermenschen*'.

10 S. Zweig, *The World of Yesterday: An Autobiography*, trans. B. W. Huebsch and H. Ripperger (1943), at 315. Of course, one has to add the depression and deflation of the late 1920s: H.-U. Wehler, *Deutsche Gesellschaftsgeschichte* (3rd edn, 2008), vol. 4, at 257.

11 C. Clark, *The Sleepwalkers: How Europe Went to War in 1914* (2013), at 515 et seq.; H. A. Winkler, *Geschichte des Westens: Von den Anfängen in der Antike bis zum 20. Jahrhundert* (3rd edn, 2012), at 1169 et seq.; Taylor, above n 1, at 343.

12 Bankgesetz, 14 March 1875, RGBl. 177, § 18; on the further development, see comprehensively K.-P. Ott, *Geld- und Geldwerttheorien im Privatrecht der Industrialiserung (1815–1914): Ökonomische Wechsellagen in der sogenannten Begriffsjurisprudenz* (1998), at 185 et seq. and 268.

13 Gesetz betreffend die Reichskassenscheine und die Banknoten, 4 August 1914, RGBl. 347; Gesetz betreffend die Änderung des Münzgesetzes, 4 August 1914, RGBl. 326; Gesetz betreffend die Änderung des Bankgesetzes, 4 August 1914, RGBl. 327; Denkschrift über wirtschaftliche Maßnahmen aus Anlaß des Krieges, Verhandlungen des Reichstags, XIII. Legislaturperiode, II. Session, vol. 315 (1914), Anlage No. 26, at 4–5; Taylor, above n 1, at 10 et seq.

14 H.-P. Ullmann, *Der deutsche Steuerstaat: Geschichte der öffentlichen Finanzen* (2005), at 88 et seq.; Henning, above n 3, at 144 et seq.; Holtfrerich, above n 1, at 102 et seq. For an international comparison, see C. Wrigley, 'The War and the International Economy', in C. Wrigley (ed.), *The First World War and the International Economy* (2000) 1, at 14 et seq.

15 Bankgesetz, 4 August 1914, above n 13, §§ 16, 17; for the real growth of the amount of money in circulation, see Henning, above n 3, at 152 et seq.

16 Rundschreiben des Reichsbankdirektoriums, 12 June 1916, *Ministerial-Blatt für die Preußische innere Verwaltung* 141; Bekanntmachung zur Erleichterung der Einzahlung auf Aktien etc., 24 May 1917, RGBl. 431; Bekanntmachung über die Zahlung des Bargebots bei Zwangsversteigerungen, 24 May 1917, RGBl. 432.

subsisting on a staple diet of turnips, the tides of opinion had turned,[17] and the German public's enthusiasm for war bonds waned.[18] The government began to enforce special permissions that were needed for making investments in stock corporations, which had the effect of discouraging investments competing with war bonds.[19]

The plan at the time was to repay the bonds out of reparations gathered from Germany's defeated enemies, as had happened in the aftermath of Bismarck's war against France in 1870–1.[20] As we all know, both the German government and the subscribers miscalculated the outcome of the war. The German state found itself not only having to pay off the bond-holders who had advanced the money for the war effort, but also its enemies under the terms of the Treaty of Versailles.[21] In the end, however, neither the bond-holders nor the enemies got precisely what they had been promised. For a while, printing more money seemed an appropriate way of paying the national debts to weapons suppliers and creditors.[22] Immediately after the war, there was a short period when cheap money induced a German economic boom.[23] But from around 1920 onwards, it became evident that the fall in value of the German currency was making goods and foreign currencies more and more expensive.[24] The German government crashed its own currency to force the enemies to lift some of the burden from the economy.[25]

In November 1923, when one US dollar was equivalent to 4.2 billion marks, the new German government decided to cut the hyperinflation by introducing a new currency—the *Rentenmark*.[26] A newly established bank, the *Deutsche Rentenbank*, issued new money, the *Rentenbankscheine*, as a non-convertible domestic currency.[27] The debts of the Rentenbank were secured by mortgages on all German agricultural, industrial, and commercial real estate, whether in public or private hands.[28] German enterprises had to prepare their financial reports in *Goldmark*, a special unit of account.[29] To promote foreign trade, yet another new bank was established, the *Deutsche Golddiskontobank*.[30] In response to Allied pressure the Reichsbank had been made autonomous in 1922,[31] and following the Dawes Plan, it was restructured under Allied supervision in 1924.[32] It issued a new currency, called the *Reichsmark*, which was backed by gold.[33]

17 Wehler, above n 10, at 62–3. 18 Ullmann, above n 14, at 93.

19 Bekanntmachung über die staatliche Genehmigung zur Errichtung von Aktiengesellschaften etc., 2 November 1917, RGBl. 987.

20 Ullmann, above n 14, at 92; Wehler, above n 10, at 66; Taylor, above n 1, at 20 et seq., 26.

21 Ullmann, above n 14, at 97 et seq.; Henning, above n 3, at 207, 211 et seq., 252 et seq., 264 et seq., 280 et seq.; Holtfrerich, above n 1, at 137 et seq.

22 Ullmann, above n 14, at 100–1.

23 Feldman, above n 1, at 211 et seq.; Ambrosius, above n 8, 305; Taylor, above n 1, at 169 et seq.

24 Henning, above n 3, at 286 et seq., 295 et seq.; Ambrosius, above n 8, at 311–12.

25 Feldman, above n 1, at 309 et seq., 418 et seq., 453 et seq., 631 et seq.; Holtfrerich, above n 1, at 119 et seq., 137 et seq.; G. A. Craig, *Germany 1866–1945* (1978), at 448 et seq.; T. Balderston, 'German and British Monetary Policy, 1919–1932', in C. H. Feinstein (ed.), *Banking, Currency, and Finance in Europe Between the Wars* (1995) 151, at 153 et seq.; S. B. Webb, 'The Supply of Money and Reichsbank Financing of Government and Corporate Debt in Germany, 1919–1923', (1984) 44 *Journal of Economic History* 499.

26 Feldman, above n 1, at 3, 780 et seq,; Holtfrerich, above n 1, at 312 et seq.

27 Verordnung über die Errichtung der Deutschen Rentenbank, above n 4, § 13.

28 Ibid., §§ 6, 9.

29 Verordnung über Goldbilanzen, 28 December 1923, RGBl. I 1253.

30 Gesetz über die Deutsche Golddiskontbank, 19 March 1924, RGBl. II 71; Henning, above n 3, at 398–9.

31 Gesetz über die Autonomie der Reichsbank, 26 May 1922, RGBl. II 135; Ambrosius, above n 8, at 312.

32 Bankgesetz, 30 August 1924, RGBl. II 235; Ambrosius, above n 8, at 315.

33 Bankgesetz, 30 August 1924, above n 32, § 24.

III. The *Reichsgericht* and its War-Economy and Revaluation Case Law

1. Introduction

The long-standing practice among conservative private investors in Germany was to put their money into mortgage-backed loans, which were considered safe investments.[34] But during the period of hyperinflation it became a common strategy for debtors to try to pay off their creditors with devalued paper money. For several years, the Reichsgericht maintained the nominalistic view that one mark equals one mark, irrespective of whether it was a gold mark or a paper mark.[35] The court very gradually changed its view. Eventually, relying on the new direction set by the court, creditors could claim to have their loans revalued. In countless cases, the judges would modify what the parties owed to one another. These cases contravened the fundamental principle that contracts have to be performed according to the terms specified when the contract was concluded.

The so-called 'revaluation decision' (*Aufwertungsentscheidung*) of November 1923[36] was not as surprising, or even as arbitrary, as it may seem.[37] When the judges changed their minds and expressed their new view in legal terms, they actually did no more than confirm the dramatic political and economic transformation that had taken place since 1914. The history of the revaluation cases did not start with the 'revaluation decision'; in fact, this judgment marks almost the end of the story.

Initially, the court had done the very opposite and enforced contracts according to their terms.[38] In German private law, specific performance is not an extraordinary equitable remedy but the primary purpose of any contractual claim.[39] In the early cases, therefore,

[34] Private investors were the major group of creditors of mortgage-backed loans: see J. Bracht, *Geldlose Zeiten und überfüllte Kassen: Sparen, Leihen und Vererben in der ländlichen Gesellschaft Westfalens (1830–1866)* (2013), at 186 et seq., 188, 191, 193, 199–201.

[35] There are several excellent books and articles on the wartime and hyperinflation cases of the Reichsgericht. The main facts about the German hyperinflation with respect to international law are summarized by C. Proctor, *Mann On the Legal Aspect of Money* (7th edn, 2012), at 277 et seq. Most of the cases mentioned in this article have been discussed by B. Rüthers, *Die unbegrenzte Auslegung: Zum Wandel der Privatrechtsordnung im Nationalsozialismus* (7th edn, 2012), at 13 et seq., 64 et seq.; K. W. Nörr, *Zwischen den Mühlsteinen: Eine Privatrechtsgeschichte der Weimarer Republik* (1988), at 55 et seq.; J. Rückert, 'Richtertum als Organ des Rechtsgeistes: Die Weimarer Erfüllung einer alten Versuchung', in K. W. Nörr, B. Schefold, and F. Tenbruck (eds), *Geisteswissenschaften zwischen Kaiserreich und Republik: Zur Entwicklung von Nationalökonomie, Rechtswissenschaft und Sozialwissenschaft im 20 Jahrhundert* (1994) 267, at 281 et seq.; M. Klemmer, *Gesetzesbindung und Richterfreiheit: Die Entscheidungen des Reichsgerichts in Zivilsachen während der Weimarer Republik und im späten Kaiserreich* (1996), 51 et seq., 125 et seq.; J. Emmert, *Auf der Suche nach den Grenzen vertraglicher Leistungspflichten: Die Rechtsprechung des Reichsgerichts 1914–1923* (2001), at 247 et seq., 309 et seq., 379 et seq. The most comprehensive contemporary analysis has been provided by J. P. Dawson, 'Effects of Inflation on Private Contracts: Germany, 1914–1924', (1934–35) 33 *Michigan Law Review* 171. On the monetary and political preconditions, see R. Scholz, *Analyse der Entstehungsbedingungen der reichsgerichtlichen Aufwertungsrechtsprechung: Untersuchung unter besonderer Berücksichtigung der konservativen Geldpolitik der Reichsbank und der Inflationspolitik der Reichsregierung* (2001), at 19 et seq., 25 et seq., 40 et seq., 79 et seq., 95 et seq. For a comparative perspective including England, France, Germany, and the Netherlands, see J. Oosterhuis, 'Unexpected Circumstances arising from World War I and its Aftermath: "Open" versus "Closed" Legal Systems', (2014) 2 *Erasmus Law Review* 67, at 74, 76 et seq.; see also for a broader comparison the contributions published in the special issue on 'The Great War and Private Law', (2014) 2(2) *Comparative Legal History*.

[36] Reichsgericht, Judgment of 28 November 1923—V 31/23—RGZ 107, 78, at 87 et seq. For the historical background of the decision, see M. H. Geyer, 'Recht, Gerechtigkeit und Gesetze: Reichsgerichtsrat Zeiler und die Inflation', (1994) 16 *Zeitschrift für Neuere Rechtsgeschichte* 349.

[37] And as it has been insinuated by the German minister of Justice Erich Emminger in the Reichstag session of 24 February 1924, Verhandlungen des Reichstags, I. Wahlperiode 1920, vol. 361, 1924, 12504.

[38] Nörr, above n 35, at 59 et seq.; Dawson, above n 35, at 178 et seq.; H. Dörner, 'Erster Weltkrieg und Privatrecht', (1986) 17 *Rechtstheorie* 385, at 397 et seq; Oosterhuis, above n 35, at 71.

[39] M. P. Weller, *Die Vertragstreue: Vertragsbindung—Naturalerfüllungsgrundsatz—Leistungstreue* (2009), at 36 et seq.

the judges ordered the obligor to perform in kind, regardless of any impediment resulting from the war. At first, the court did not have to confront the monetary crisis, which, at that stage, was not yet fully apparent. Instead, their business was to deal with the legal consequences of restrictions on trade and services caused by the war. As long as the war seemed to be a brief interlude, the judges decided the cases as they would have done in peacetime. But the longer the war lasted, the greater the pressure the judges felt to reconsider their old rulings.[40] Was it right to decide the cases the usual way? Was it up to the judges to correct what the politicians had done wrong? The decisions became more and more voluminous. The court's practice moved from merely applying statutes to 'reasoning from case to case'. While, at first, the judges looked for explicit provisions in the *Bürgerliches Gesetzbuch* (BGB), the German Civil Code, that might be relevant to the cases at hand, in the end, they resorted to the indeterminate principle of *bona fides* so that they could reach whatever decision seemed appropriate.[41]

2. Circuses, Dance Halls, Nightclubs, Pubs, and Newspapers

The war affected all spheres of life. The court also had to solve many questions that, at first glance, might have seemed trivial. In May 1915, the court held that the tenant of a circus building was not entitled to withdraw from the contract even though the war brought the number of spectators below the minimum necessary for the circus to make any profit.[42] The judges considered that they did not have any competence to 'alleviate the hardships of war'.[43] They held that there was no right to terminate a contract on the grounds of changed circumstances, and relied on the fact that the lawmakers of the German Civil Code had not accepted a general doctrine of *clausula rebus sic stantibus*.[44] In their view, '[g]ood faith and general custom [did] not justify passing the damage incurred by the war onto the defendant.'[45]

Following the same rationale, in July 1917, the court denied a rent rebate to a tenant of a pub after the authorities ordered a one-third reduction in the production of beer.[46] The tenant could not serve enough beer to his customers to bring in the rent money, but this was held to be a risk he had to bear. Once again, the tenant was not allowed to pass the damage onto the landlord. The court's justification for this result was that the landlord might have had to honour the mortgage he had taken out to buy the pub on the same terms as before. The tenant therefore had to pay the original rent. The judges left open the question how they would have decided the case if the beer production had been banned altogether. In earlier cases, the court had held that a tenant of a dance hall or a nightclub could withdraw from the contract if official restrictions completely prevented the leased

[40] M. L. Hughes, 'Private Equity, Social Inequity: German Judges React to Inflation, 1914–24', (1983) 16 *Central European History* 76, at 79 et seq.; D. B. Southern, 'The Impact of Inflation: Inflation, the Courts and Revaluation', in R. Bessel and E. J. Feuchtwanger (eds), *Social Change and Political Development in Weimar Germany* (1981) 55, at 60 et seq.; K. W. Nörr, *Der Richter zwischen Gesetz und Wirklichkeit: Die Reaktion des Reichsgerichts auf die Krisen von Weltkrieg und Inflation und die Entfaltung eines neuen richterlichen Selbstverständnisses* (1996), at 18 et seq.; M. H. Geyer, *Verkehrte Welt: Revolution, Inflation und Moderne, München 1914–24* (1998), at 205 et seq., 319 et seq., 382 et seq.

[41] Rückert, above n 35, at 294 et seq.; Klemmer, above n 35, at 425 et seq.; Emmert, above n 35, at 420 et seq.; Haferkamp, above n 35, at 337 et seq.

[42] Reichsgericht, Judgment of 4 May 1915—III 578/14—RGZ 86, 397.

[43] Ibid., at 398.

[44] R. Meyer-Pritzl, '§§ 313–14. Störung der Geschäftsgrundlage. Kündigung von Dauerschuldverhältnissen aus wichtigem Grund', in Schmoeckel, et al. (eds), above n 35, vol. 2, 1714.

[45] Reichsgericht, Judgment of 4 May 1915—III 578/14—RGZ 86, 397, at 399.

[46] Reichsgericht, Judgment of 3 July 1917—III 98/17—RGZ 90, 374.

premises from being used as intended.[47] These cases of complete impossibility were covered by the German Civil Code. Either the premises had some legal defects or the landlord was unable to grant the use of the premises without being in breach of some duty himself.[48]

Impossibilium nulla obligatio est.[49] This rule might be easy enough to formulate, but its application to cases of temporary impossibility was far from simple. Temporary impossibility was problematic, since it was understood that the war would, some day, come to an end. But it was unclear how long the war was going to last before the debtor could claim that the impossibility of performance was effectively permanent rather than merely temporary. Before answering this question, however, it is necessary to introduce another rule known in civil law systems, including Germany: 'One must have money'.[50] The effect of the rule was that the performance of a monetary obligation was never impossible, since it was assumed that the debtor could always obtain money from somewhere. In November 1915, the court ordered a publishing house to pay the salary of the editor-in-chief of a journal called *Süd- und Mittelamerika*. Due to the Atlantic blockade, the publisher could not deliver the journal to his readers in Southern and Central America, and so he lost advertising revenue.[51] Nevertheless, the judges said that it was not impossible either to continue publishing the journal, or to pay the editor.[52] One must have money—although the reality was that if one had no money, one had to go bankrupt.

3. Raffia, Saltpetre, Tin, and Galician Eggs

Journals are not essential to a national economy but raw materials are, and during the war they became hard to acquire.[53] The scarcity of raw materials generated difficult case law.

In February 1916, a seller who was unable to deliver raffia from Madagascar to Hamburg was released from his obligation.[54] The court confirmed its old case law from the nineteenth century that if a debtor performed the contract much later than required, then the performance supplied was completely different from what had been promised.[55] In the case at hand, the buyer suffered a long delay in being able to resell the raffia. Throughout the same period, the seller had to store and insure the goods. But the consequence of the

[47] Reichsgericht, Judgment of 9 November 1915—III 145/15—RGZ 87, 277; Reichsgericht, Judgment of 15 February 1916—III 333/15—RGZ 88, 96; Reichsgericht, Judgment of 20 February 1917—III 384/16—RGZ 89, 203.

[48] 275 BGB 1900, §§ 537 subs. 1, 542 subs. 1, 323 subs. 1; BGB 2002, §§ 536 subs. 1 Satz 1, 543 subs. 1 und 2 No. 1, 326 subs. 1 Satz 1, 275 subs. 1.

[49] Celsus, D. 15.17.185; BGB 2002, § 275 subs. 1; R. Zimmermann, *The Law of Obligations: Roman Foundations of the Civilian Tradition* (1990), at 686 et seq.; M. J. Schermaier, '§ 275: Ausschluss der Leistungspflicht', in Schmoeckel, above n 35, vol. 2, 941, at 942 et seq., 953 et seq., 978 et seq.

[50] D. Medicus, '"Geld muß man haben": Unvermögen und Schuldnerverzug bei Geldmangel', (1988) 188 *Archiv für die civilistische Praxis* 489, at 497 et seq.; Zimmermann, above n 49, at 688; Schermaier, above n 49, at 995–6; Proctor, above n 35, at 105–6.

[51] Reichsgericht, Judgment of 30 November 1915—III 193/15—RGZ 87, 349. For the effects of the blockade, see Taylor, above n 1, at 17 et seq.

[52] Reichsgericht, Judgment of 30 November 1915—III 193/15—RGZ 87, 349, at 351–2.

[53] R. Roth, *Staat und Wirtschaft im Ersten Weltkrieg: Kriegsgesellschaften als kriegswirtschaftliche Steuerungsinstrumente* (1997), at 157 et seq.; Wehler, above n 10, at 48–9.

[54] Reichsgericht, Judgment of 4 February 1916—II 409/15—RGZ 88, 71.

[55] Reichsgericht, Judgment of 6 July 1898—I 174/98—RGZ 42, 114, at 115–6, referring to Reichsgericht, Judgment of 12 July 1889—III 129/89—(1890) 45 *J.A. Seuffert's Archiv für Entscheidungen der obersten Gerichte in den deutschen Staaten* 282 (No. 176), concurring with Reichsgericht, Judgment of 27 September 1881—IVa 760/80—RGZ 5, 278, at 279. See also Reichsgericht, Judgment of 6 July 1899—I 174/98—(1899) 54 *Seuffert's Archiv für Entscheidungen der obersten Gerichte in den deutschen Staaten* 140–1 (No. 81); Reichsgericht, Judgment of 26 March 1919—I 164/18—(1919) 48 *Juristische Wochenschrift* 717–18 (No. 4).

buyer's right to withdraw from the contract for non-performance was that he could gamble on the uncertainty arising from the wartime conditions. If the prices for raffia should rise, the buyer would insist on delivery. If they fell, the buyer would withdraw. For that reason, the court held that temporary impossibility was equivalent to permanent impossibility.[56] The usual rule applied, and the seller was discharged from the contract.

The court decided another case on the same grounds in March 1917, where the seller could not deliver Chilean saltpetre.[57] In contrast to the court's new reasoning, the predecessor of the Reichsgericht, the *Reichsoberhandelsgericht*, or the Supreme Commercial Court, had held that a ban on exports of French sardines during the war between Germany and France in 1870–1 suspended the seller's obligation but only for the duration of the war.[58]

Prices rose higher and faster as it became increasingly difficult to obtain goods from abroad. At this stage, the inflation was still caused primarily by the scarcity of resources rather than by problems with the money supply or with rising levels of public debt. Obligors argued that the performance owed by them was unaffordable. This argument had already been rejected in the editor-in-chief case of 1915,[59] and it was rejected many times more from March 1916 onwards.[60] As long as the goods in question—*in casu*, English tin—were traded at all, the court held that the debtor was obliged to do everything to obtain the goods, notwithstanding the enormous price increases. Otherwise, the seller who had not bought the goods early enough, but who had speculated on falling prices, could shift his own risk onto the buyer who had expected that the contract would protect him against this risk. Once again, the principle of *bona fides* was directed against the party who invoked the war as an obstacle to his own performance.

The German Supreme Court stuck to its strict ruling until the end of the war—and beyond—in two other cases on tin delivery contracts.[61] The result was that the parties remained bound by their contracts. The main reason given by the court was that in foreign trade, businessmen had to consider the likelihood of armed conflicts. If they did not include an explicit war-risk clause in their contract, the courts could not help them by interpreting the contract as if such a clause had been included from the beginning. The price increase could not of itself release the seller even if he had suffered significant losses. The contrary view, the court held, would lead to 'unbearable legal uncertainty'.[62]

In March 1920, however, the court made an exception in the case of a person selling 'Galician eggs'.[63] The seller had fled in November 1914 before the impending Russian invasion. The judges understood that when he rescued himself and his family on a farm cart, carrying with him only some simple belongings, he could not have carried the '115 chests of eggs' that his contract had required of him. Under those circumstances, the buyer's claim was considered unjust and unreasonable.

[56] Reichsgericht, Judgment of 4 February 1916—II 409/15—RGZ 88, 71, at 74.

[57] Reichsgericht, Judgment of 27 March 1917—II 619/16—RGZ 90, 102, at 104–5; distinguishing Reichsgericht, Judgment of 22 January 1918—II 304/17—RGZ 92, 87.

[58] Reichsoberhandelsgericht, Judgment of 17 January 1873—938/72—Entscheidungen des Reichs-Oberhandelsgerichts 9, 1, at 2.

[59] Reichsgericht, Judgment of 30 November 1915—III 193/15—RGZ 87, 349, at 351 et seq.

[60] Reichsgericht, Judgment of 21 March 1916—II 473/15—RGZ 88, 172. Further concurring judgments are cited by W. Schubert and H. P. Glöckner (eds), *Nachschlagewerk des Reichsgerichts Bürgerliches Gesetzbuch* (1995), vol. 4, at 22.

[61] Reichsgericht, Judgment of 15 March 1918—III 522/17—RGZ 92, 322; Reichsgericht, Judgment of 25 February 1919—II 353/18—RGZ 95, 41.

[62] Reichsgericht, Judgment of 25 February 1919—II 353/18—RGZ 95, 41, at 44.

[63] Reichsgericht, Judgment of 12 March 1920—II 362/19—RGZ 99, 1.

4. Cotton and Copper Wire

When the court reviewed the tin delivery contract cases in 1920, it took a different view. It explained its strict ruling in those cases by saying that they concerned a 'specific and idiosyncratic area'. The precise question in the cases was 'how price increases due to the war affect sales contracts on unascertained goods which were traded on the open market?'[64] As it turned out, however, the principle of *pacta sunt servanda*,[65] which was followed in those cases, was held to be an exception. The court recognized a new rule that temporary obstacles in obtaining goods were to be treated in the same way as permanent impossibility in the performance of a contract.[66] But the distinction as to whether the goods were traded on the open market became blurred in the aftermath of the war. Once the seizure by the German authorities and the Allied blockade had ended, all trade in goods and overseas transport services resumed.[67]

In economic terms, it often made little difference whether the contract concerned goods that were traded during or after the war. This became particularly noticeable when the parties would postpone the performance of the contract until the end of the war. The question then was, which party should bear the risk of a price increase? The judges' rulings allocated the risk to the very small number of parties who had actually anticipated the problem by explicitly providing a price-review clause in their contracts.[68] Since the much anticipated peace failed to appear, the court reiterated its prior ruling. The obligor could not be forced to perform the contract under substantially changed circumstances. The effect of the change in circumstances was that performance of the contract had become impossible.[69]

Some of the most remarkable decisions were made shortly before the end of the war. By that stage, the judges apparently suspected that peace would be made under terms that no one had previously expected. In February and October 1918, the court ruled in favour of three different sellers, stating that after the war they would no longer be bound to deliver 4,500 kilograms of Egyptian cotton for automobiles,[70] 10,000 kilograms of copper wire,[71] and 990 bales of Indian cotton,[72] respectively. The main reason given by the court was the 'complete change in all economic circumstances' caused by the war, 'which could not have

[64] Reichsgericht, Judgment of 19 May 1920—I 229/19—RGZ 99, 115, at 116.

[65] P. Landau, 'Pacta sunt servanda: Zu den kanonistischen Grundlagen der Privatautonomie', in M. Ascheri et al. (eds), *Ins Wasser geworfen und Ozeane durchquert: Festschrift für Knut Wolfgang Nörr* (2003) 457; Weller, above n 39, at 58 et seq.

[66] Besides the decisions cited above in nn 54 and 57, see Reichsgericht, Judgment of 4 January 1916—II 332/15—(1916) 45 *Juristische Wochenschrift* 487 (No. 6); Reichsgericht, Judgment of 23 May 1916—II 108/16—(1916) 45 *Juristische Wochenschrift* 1017 (No. 4); Reichsgericht, Judgment of 6 July 1917—II 70/17—(1918) 47 *Juristische Wochenschrift* 33 (No. 4).

[67] Henning, above n 3, at 208.

[68] Reichsgericht, Judgment of 4 January 1916—II 332/15—(1916) 45 *Juristische Wochenschrift* 487, 488 (No. 6); Reichsgericht, Judgment of 12 July 1917—I 104/17—(1917) 46 *Juristische Wochenschrift* 899, at 900 (No. 2); Reichsgericht, Judgment of 12 July 1917—II 46/17—(1918) 47 *Juristische Wochenschrift* 33, at 34 (No. 5); in addition to Reichsgericht, Judgment of 19 May 1920—I 229/19—RGZ 99, 115, at 116, see similarly Reichsgericht, Judgment of 8 February 1918—II 413/17—RGZ 93, 341, at 343–4; Reichsgericht, Judgment of 15 October 1918—III 104/18—RGZ 94, 45, at 47; Reichsgericht, Judgment of 22 October 1918—II 187/18—RGZ 94, 68, at 70. RGZ 94, 45, at 48 referred also to the seemingly unreported judgments of 26 January 1918—I 188/17; 30 January 1918—I 285/17; 6 February 1918—I 259/17; 4 May 1918—I 319/17; and 15 May 1918—I 253/17, the *rationes decidendi* of some of which are cited by W. Schubert and H.-P. Glöckner (eds), *Nachschlagewerk des Reichsgerichts Bürgerliches Gesetzbuch*, vol. 5.1 (1997), at 123–4.

[69] See above nn 55–6.

[70] Reichsgericht, Judgment of 8 February 1918—II 413/17—RGZ 93, 341.

[71] Reichsgericht, Judgment of 15 October 1918—III 104/18—RGZ 94, 45.

[72] Reichsgericht, Judgment of 22 October 1918—II 187/18—RGZ 94, 68.

been expected even if the parties had considered that the war was likely to last longer.'[73] If the seller 'was obliged to perform after the war, then he alone, contrary to the purpose of the contract, would bear the risk of a complete change of all circumstances', while the buyer 'would benefit from exploiting the goods in completely changed economic circumstances when he had purchased them at the pre-war price'.[74] Indeed, to hedge against fundamental economic changes was the real purpose of a long-term contract, which was concluded in peacetime and confirmed during the war.

In the second cotton case, the contract contained an express war-risk clause, which would have released the seller from his obligation in the event of war.[75] The seller did not invoke that clause but, instead, signed an additional agreement providing that the delivery be 'postponed until the end of the present state of war, i.e. until the steamboats which are on the way for us will enter [the German harbour] or, in case of loss, until new transports from India can arrive'. The court considered this additional agreement irrelevant. 'Because of the long duration of the war and its deep impact on cotton trade, the parties could only have been mistaken in thinking that the resumption of imports would coincide with the restoration of normal conditions.' The court turned the principle of *pacta sunt servanda* on its head. It held that when the circumstances were substantially changed, 'only specific indications could suggest that the parties' undertaking would be unconditional, and that would be an exceptional case'.[76]

The copper wire case relied on the same reasoning. 'It cannot be presumed that either of the parties, especially the seller, would assume any or all risk. The assumption of risk has to be considered as a rare exception which is only applicable if the parties clearly and unambiguously express their will to adhere to the obligation regardless of any changes in circumstances.'[77] The copper wire decision is remarkable, because the judges desperately and dramatically analysed the situation of the German economy and, against that background, reconsidered their own role.[78] They emphasized that the entry of the United States into the war in April 1917 enlarged its scope and importance. They predicted that, after the war, both the increase in demand and the destruction of shipping capacity, would make it impossible to return to the pre-war conditions of foreign trade.[79] Of course, it was not unusual to evaluate commercial litigation from an economic perspective. But in the copper wire decision the judges assumed that supporting the German economy was one part of their 'jurisdiction':

> Although one must adhere to the principle that contracts are to be honoured, this principle should not necessarily entail that contracts must be performed under completely changed circumstances which could not have been foreseen when the contract was concluded. This is especially true for the state of commerce after this unprecedented world war. The war has reshaped everything and cannot be compared to anything that people have previously experienced. Under the difficulties which we anticipate, German merchants will need an extraordinary

[73] Reichsgericht, Judgment of 8 February 1918—II 413/17—RGZ 93, 341, at 342; similarly see Reichsgericht, Judgment of 15 October 1918—III 104/18—RGZ 94, 45, at 48–9; Reichsgericht, Judgment of 22 October 1918—II 187/18—RGZ 94, 68, at 70.

[74] Reichsgericht, Judgment of 8 February 1918—II 413/17—RGZ 93, 341, at 343.

[75] Reichsgericht, Judgment of 22 October 1918—II 187/18—RGZ 94, 68, at 69; similarly Reichsgericht, Judgment of 19 May 1920—I 229/19—RGZ 99, 115, at 116.

[76] Reichsgericht, Judgment of 22 October 1918—II 187/18—RGZ 94, 68, at 70.

[77] Reichsgericht, Judgment of 15 October 1918—III 104/18—RGZ 94, 45, at 47.

[78] Nörr, above n 35, at 60.

[79] Reichsgericht, Judgment of 15 October 1918—III 104/18—RGZ 94, 45, at 48–9. For the impact of the entry of the United States into the war, see also Reichsgericht, Judgment of 19 May 1920—I 229/19—RGZ 99, 115, at 117–18.

> level of courage, strength, and perseverance to reinstate fruitful commercial relations and to restore German trade with countries abroad. The fulfilment of this task would be made unreasonably onerous for them if they were bound by old contracts which were concluded before the war, under completely different circumstances, or which were confirmed during the war, or if they were forced to litigate to obtain a release from their obligations. The uncertainty of that litigation, which would affect the merchants' entire resources to an indeterminate degree, would virtually paralyse their spirit of enterprise and their vigour. Therefore, the legal system has to make an insightful response to the German merchants' needs for clarity and certainty in the aftermath of the war.[80]

Soon afterwards the court had an opportunity to apply its new insights to the 'complete change of economic conditions affected by the revolution'.[81]

5. Electricity and Steam Power

By the end of the war, the court had reached a clear decision that contracts had to be fulfilled according to their terms. As mentioned earlier, the judges were not willing to 'alleviate the hardships of war',[82] and they therefore refused to set aside or modify individual provisions of the contract, since this would have given the obligor a partial release from his obligation.[83] Instead, the court favoured an 'all or nothing' approach. The obligor's 'sole' option was to withdraw from the contract *in toto* if the circumstances had changed to an extent determined by the court. This 'all or nothing' approach was questioned after the war by academic writers and by the federal legislature itself.

In October 1915, an operator of a local power station bought a minimum quantity of electricity from a public utility company for a specified period. During the war, the authorities restricted the consumption of electricity, and the demand from the consumers of the local operator fell below the minimum quantity he had agreed to buy. In 1919, he asked the courts to release him from his obligation for the period when the restrictions were in force. The Reichsgericht refused his claim, and stated that the contract was 'designed especially for the case in question'. The contract provided a minimum purchase level precisely to enable the public utility company to adjust its levels of production. The local operator had taken 'the risk of restrictions on consumption'.[84]

Meanwhile, however, scholars and lawyers had been discussing proposals to ease the burden on parties to long-term contracts. The legislature had enacted a 'Regulation on Arbitration for the Raising of Prices for Delivery of Electricity, Gas, and Water, dated 1 February 1919'.[85] Under this regulation, energy suppliers at all levels in the distribution network could apply to have their contracts amended. In particular, they could apply for an increase in sale prices 'if, and to the extent that, the war has caused primary costs to increase since the previous price agreement to a degree that was unforeseeable, even by exercising due commercial care, and that it was unreasonable that only the supplier should

[80] Reichsgericht, Judgment of 15 October 1918—III 104/18—RGZ 94, 45, at 49.

[81] Reichsgericht, Judgment of 2 December 1919—VII 303/19—RGZ 98, 18, 21; similarly see Reichsgericht, Judgment of 19 May 1920—I 229/19—RGZ 99, 115, at 116.

[82] See Reichsgericht, Judgment of 4 May 1915—III 578/14—RGZ 86, 397.

[83] Reichsgericht, Judgment of 30 October 1919—VII 282/19—(1920) 49 *Juristische Wochenschrift* 373 (No. 1); Schubert and Glöckner (eds), above n 60, vol. 4, at 35 (§ 242 BGB No. 78).

[84] Schubert and Glöckner (eds), above n 60, vol. 4, at 35 (§ 242 BGB No. 78).

[85] Verordnung über die schiedsgerichtliche Erhöhung von Preisen bei der Lieferung von elektrischer Arbeit, Gas und Leitungswasser, 1 February 1919, RGBl. 135; amended by Verordnung, 11 March 1920, RGBl. 329; Gesetz zur zweiten Änderung der Verordnung über die schiedsgerichtliche Erhöhung von Preisen bei der Lieferung von elektrischer Arbeit, Gas und Leitungswasser, 9 June 1922, entered in force 16 June 1922, RGBl. I 509.

bear the increase'.[86] This regulation did not apply to the power station case, since neither the public utility company nor the local operator wanted to raise their prices. The local operator simply did not take the agreed quantity of electricity because he could not sell it to his customers. Nevertheless, Adolf Heilberg, a lawyer from Breslau, who reviewed the judgment of the Reichsgericht in a widely read journal, argued that the rationale behind the regulation should be applied to other cases.[87] He suggested that buyers and customers should have the option of either accepting that the other party could withdraw from the contract, or of paying a premium. Although Heilberg admitted that the judgment in the power station case was consistent with the existing precedents and legislation, he predicted that the judges would change their minds by 'administering the panacea of sections 133, 157, and 242 of the Civil Code'. He suggested therefore that they should interpret the contract in the spirit of good faith. He observed that the courts had 'gradually become more flexible in allowing for the actual effects of the war and its consequences, as well as in the legal influence that Krückmann's doctrine of *clausula rebus sic stantibus* had on them'.

The Münster law professor Paul Krückmann was one of the leading scholars to rethink the strict concept of performance and default under the German Civil Code. He had criticized several times the court's vague distinction between temporary and permanent impossibility.[88] In 1918, when Krückmann still believed Germany would win the war,[89] he argued for the view that the *clausula rebus sic stantibus* doctrine was part of German civil law,[90] despite there being no explicit provision in the German Civil Code.[91] While the regulation of 1919 mentioned above could be viewed as a first step towards a new doctrine of *clausula rebus sic stantibus*, Krückmann noted the court's emphasis that 'the wartime legislation' was not an authority for 'general principles in this direction'.[92] But, according to Heilberg, it was only a matter of time before the legislator introduced those principles. Similarly, the famous lawyer Max Hachenburg[93] wrote:

> [T]he regulation had solved a much-debated issue. Changed circumstances give rise to a claim for the modification of a contract. But is this right limited to energy supplies? Does it extend to a continuing obligation to deliver tangible items? And will it not be necessary to judge a one-off obligation the same way? After all it is generally accepted that an obligation is limited by the principle of reasonableness.[94]

Nevertheless, it remained difficult to predict when the court would allow the modification of a contract and when it would not. Again in 1920, the court refused to apply the so-called *clausula rebus sic stantibus* doctrine in another case concerning an energy supply regulation

[86] Verordnung, 1 February 1919, RGBl. 135, above n 85, §§ 1 and 5.

[87] H. Heilberg, 'Anmerkung zu Reichsgericht, Urteil vom 30.10.1919—VII 282/19', (1920) 49 *Juristische Wochenschrift* 373. For Heilberg's biography, see T. van Rahden, *Jews and Other Germans: Civil Society, Religious Diversity, and Urban Politics in Breslau, 1860–1925* (2008), at 75–6, 78, 80, 170 et seq., 179, 192.

[88] P. Krückmann, 'Einmal unmöglich immer unmöglich', (1916) 10 *Leipziger Zeitschrift für Deutsches Recht* 713, at 716; P. Krückmann, 'Unmöglichkeit der Leistung infolge des Krieges (RGZ 88, 172)', (1918) 12 *Leipziger Zeitschrift für Deutsches Recht* 961, at 963 et seq.

[89] L. Steveling, *Juristen in Münster: Ein Beitrag zur Geschichte der Rechts- und Staatswissenschaftlichen Fakultät der Westfälischen Wilhelms-Universität Münster/Westf.* (1999), at 158–9.

[90] P. Krückmann, *Clausula rebus sic stantibus, Kriegsklausel, Streitklausel* (1918), at 188 et seq., 201 et seq., 253 et seq., 312–13, first published (1918) 116 *Archiv für die civilistische Praxis* 157.

[91] See Meyer-Pritzl, above n 44.

[92] Reichsgericht, Judgment of 30 October 1919, above n 83.

[93] D. Kleindiek, 'Max Hachenburg zum Gedenken', in P. Hommelhoff, H. Rowedder, and P. Ulmer (eds), *Max Hachenburg: Fünfte Gedächtnisvorlesung 2002* (2003) 83.

[94] M. Hachenburg, 'Juristische Rundschau', (1919) 24 *Deutsche Juristen-Zeitung* 234, at 238–9.

of 1919.[95] A landlord wished to terminate the lease because 'in light of the extraordinary increase of prices for electricity and steam power, it was unreasonable for him to continue the tenancy'. The court dismissed the landlord's action. It held that it did not follow from the cotton and copper wire cases that 'any unfavourable major change in economic conditions, even one that was unforeseen and unforeseeable, entitled the debtor to renege on a commitment'. On the contrary, following the tin cases, it held that 'the right to a price increase generally has to be denied and not only in wholesale contracts'.[96] But the court allowed one important exception: the debtor could withdraw from the contract if 'an extraordinary increase in prices had an extraordinary impact on the affected party's circumstances, as in the case where the performance of a long-term contract became "virtually ruinous" for that party'. In any other case, the obligor had to honour the contract, even if it seemed unfair for the obligee to insist on the performance. At most, fairness and reasonableness required that the obligation be amended, rather than entirely annulled. As long as there were no applicable statutory provisions, such as the energy regulation of 1919, then legal certainty required the court to uphold the sanctity of contract: 'Just as the tenants could not have successfully pleaded that an event, such as an extraordinary slump in prices, made the landlord's contractual performance no longer worth the agreed rent so, conversely, these extraordinary increases in prices cannot entitle the landlord to rescind the contract.'

Within just two and a half months, this judgment was no longer good law.[97] In the next case, a landlady who had leased commercial premises was bound under the contract to supply steam power. She wanted to charge higher rates in the wake of the enormous price increases in the coal markets. The same 'senate' of the Reichsgericht, a panel of judges with special jurisdiction, that had only recently refused to apply 'the so-called *clausula rebus sic stantibus* doctrine'[98] now considered that 'the claim of the plaintiff on the grounds of the so-called *clausula rebus sic stantibus* was justified'.[99] The senate reached conclusions that seemed quite logical in their assumptions. But those assumptions were, in fact, based on prior lack of consequence:

> If 'impossibility' in section 325 of the German Civil Code [1900] can be read not only as meaning factual impossibility but also economical unviability, then the existence of the *clausula rebus sic stantibus* principle in the code becomes fully apparent.... If a contractual performance has become economically impossible, this creates a lacuna in the contract that has to be filled by judicial decision, as it does with every other contractual lacuna.[100]

The Civil Code, however, did not expressly provide that a contractual performance could be considered impossible owing to serious economic difficulties, nor was this the implied intention.[101] According to the Code's draftsmen, reasonableness was not a legal criterion for impossibility, any more than *clausula rebus sic stantibus* was a general principle under German civil law. At first, the judges refused to allow the obligor to withdraw from the contract by relying on an argument that he could not gain a reasonable amount of money in return for his own performance. Although the court had conceded that the obligor could rely on the principle of reasonableness to demand higher remuneration, the judges found

[95] For the following quotations, unless indicated otherwise, Reichsgericht, Judgment of 8 July 1920—III 89/20—RGZ 99, 258, at 259–60.

[96] For the tin cases, see nn 60–1.

[97] Reichsgericht, Judgment of 21 September 1920—III 143/20—RGZ 100, 129.

[98] Reichsgericht, Judgment of 8 July 1920—III 89/20—RGZ 99, 258, at 259.

[99] Reichsgericht, Judgment of 21 September 1920—III 143/20—RGZ 100, 129, at 130.

[100] Ibid., at 131.

[101] Schermaier, above n 49, at 969 et seq., 978 et seq.

that the legislator did not in fact provide an appropriate remedy. The court held that if, exceptionally, the contract could be terminated to avoid 'virtually ruinous' consequences,[102] then it followed *a fortiori* that individual provisions of the contract could be amended.[103] The court legitimized this shift in attitude about judicial interference by statements that read almost like a manifesto. Admittedly, the court had stated several times:[104]

> [T]hat a judge cannot strike a balance between the interests of both parties in order to alleviate the hardships of war. Nevertheless, the primary task of a judge is to meet the inevitable needs of life and, in this respect, to be guided by experiences of life. The senate is now convinced that its earlier view can no longer be maintained in its strict generality; the senate's experiences during the war, and above all the war's unexpected outcome and the subsequent displacement of the entire economy, have all combined to prove the senate's earlier view wrong. Under these conditions, the need for judicial interference in on-going contracts is essential. Otherwise, the affront to the principle of good faith and any imperative of justice and fairness would be nothing short of intolerable.[105]

Highly emotional passages such as this are very uncommon in German judgments. Obviously, the judges felt a little uneasy about arguing as they did. They added an urgent warning against parties abusing the new 'principle' that allowed judicial amendments to individual contractual provisions. Those amendments would only be acceptable to the court if both parties were willing to adhere to the general terms of the contract; they would only be allowed where 'a reshaping and change of circumstances due to the war were very special and entirely exceptional'.[106] Finally, the senate stated that 'the damage arising had to be shared proportionally between both [parties]. Finding the right balance depended on the experience of the judge and his insightful evaluation of each side's circumstances.'[107]

Eventually, this new approach to loss allocation ceased being an exception and turned into a new rule. In the case in question, the court refused to blame the landlady for having 'miscalculated' when she failed to take into account the possible effects of a war. When the contract was concluded in 1912, 'considering the standing of the German Empire at the time', no one 'could have even remotely contemplated or taken into account such a war, its extent, its outcome, and its effects. No one in Germany anticipated anything like that, nor could they have anticipated it; those events were beyond human calculation.'[108]

6. Real Estate in Weimar

In April 1921, another senate of the Reichsgericht limited the rights[109] which had recently been recognized in the steam power case.[110] In the present case, the buyer accepted an offer allowing him to buy real estate in Weimar in 1920. The property had first been offered to him in 1913 when the seller granted a ten-year option. Of course, the current offer was based on the prices of 1919. The court of first instance held that the buyer could accept the

[102] See Reichsgericht, Judgment of 8 July 1920—III 89/20—RGZ 99, 258.
[103] Reichsgericht, Judgment of 21 September 1920—III 143/20—RGZ 100, 129, at 132.
[104] See Reichsgericht, Judgment of 4 May 1915—III 578/14—RGZ 86, 397; Reichsgericht, Judgment of 3 July 1917—III 98/17—RGZ 90, 374.
[105] Reichsgericht, Judgment of 21 September 1920—III 143/20—RGZ 100, 129, at 132.
[106] Ibid., at 132. [107] Ibid., at 133. [108] Ibid., at 133–4.
[109] Reichsgericht, Judgment of 16 April 1921—V 484/20—RGZ 102, 98.
[110] See Reichsgericht, Judgment of 21 September 1920—III 143/20—RGZ 100, 129.

offer in 1920, despite the inflation in the intervening year. By contrast, the court of appeal considered that the buyer would have acted in bad faith by insisting on the fulfilment of the contract.

The Reichsgericht agreed with the court of first instance. If the buyer had accepted the offer sooner, the seller would have suffered the same loss due to the devaluation of the money he would have received as the purchase price for the land. The buyer would have benefitted from the increase in the value of the land. This latter argument was purely hypothetical. If the seller had received the money earlier, he could have invested it in assets with a stable value. On the other hand, the buyer could have resold the land in return for money, which by that stage would have been devalued. Nevertheless, the Reichsgericht overruled the court of appeal's decision 'for the sake of legal certainty and sanctity of contracts'.[111]

The reasoning of the Reichsgericht was consequentialist in its approach. The performance that the buyer insisted on was a corporeal asset, and was the same as it would have been before the war. It was not as if there was some added difficulty or delay in obtaining the object of performance, as there had been in the cotton and copper wire cases. All that had to happen was that the land be transferred from the seller to the buyer. But the court regarded the main economic issue as irrelevant:

> The amount that had to be paid as consideration was fixed by the offer and, [like the object of sale], that amount has not changed. All that has changed substantially since 1913 is the ratio between the value of the performance and the value of the consideration. The value of the money consideration has fallen significantly whereas the value of the land has tripled. However extraordinary this change in the ratio between those values may be, it does not allow [the seller] to withdraw from the contract. . . . No decision of the Reichsgericht has ever recognised a right to withdraw from a contract because one party has missed the chance to obtain a higher sale price by duly performing the contract. Nor can such a right be granted under the *clausula rebus sic stantibus* doctrine because [the seller cannot argue] that it was economically unreasonable for [him] to adhere to the contract.[112]

In fact, however, this was the very *thema probandum*. The seller lost his property, which was of stable value, and got devalued paper money in return. Nonetheless, the court stuck to the principle of *pacta sunt servanda* even in long-term contracts such as this one, 'unless very special circumstances in particular cases require a different view'.[113]

7. The 'Volatility which Will Inhere in the German Currency for a Long Time'

The late war and the early post-war periods exposed the monetary issues brought about by the German method of financing the war, even in cases where the parties had made express provision for currency fluctuations. In one such case of 1919, a Dutch creditor had stipulated for the right to choose between requiring repayment of the loan in Dutch *guilder* or in *mark*, precisely to prevent any risk of devaluation in one or the other currency.[114] During the term of the contract, however, the German government restricted the trade in foreign currencies. The debtor could not in fact pay in Dutch guilder even though the

[111] Reichsgericht, Judgment of 16 April 1921—V 484/20—RGZ 102, 98, at 99.

[112] Ibid., at 101–2.

[113] Ibid., at 102.

[114] Reichsgericht, Judgment of 11 December 1919—VI 269/19—(1920) 49 *Juristische Wochenschrift* 373–4 (No. 2).

creditor required him to.[115] Under section 265 of the German Civil Code, the Reichsgericht could have exempted the debtor from paying in Dutch guilder on the ground of legal impossibility. Instead, the court required the debtor to pay the equivalent in marks of the Dutch guilder sum that was equal to the original amount of the loan in marks when the contract was concluded. As a result, the debtor had to pay far more than the 80,000 marks initially borrowed because he incurred the contractual risk of devaluation. The effect of this express provision was the very opposite of the *clausula rebus sic stantibus* doctrine.

The Berlin lawyer and law professor Arthur Nußbaum[116] welcomed the judgment as a counterbalance to the increasing number of decisions to the contrary: 'Everywhere, we can see the increasing tendency to violate concluded contracts, and it is necessary to assert the idea of *sanctity of contracts* against it, both in theory and in practice. It is a development which is extremely dangerous to our economic life and our credit.'[117] With regard to similar decisions of the *Reichsgericht* he had remarked not long before:

> The consequences of the currency collapse suffered by the countries which have been defeated in the world war have gradually been exposed in the judicial process.... Such cases will be prominent for quite some time. Unfortunately, the legal questions concerning foreign currencies are expected to remain generally important rather than being relevant only in the short term. The investment of foreign capital in our economic organism, the poor situation of German merchants who will be routinely forced to undertake payment commitments in foreign currencies, and the long-term volatility of the German currency—the combination of these and other circumstances will make the legal treatment of payment commitments in foreign currencies an important problem for legal practice and academic commentary. The resolution of the problem is all the more difficult since, before the war, German legislation was in the fortunate position of being able to deal with these matters quite superficially.[118]

Indeed, 'legal practice and academic commentary' still had to wait several years before the German legislator addressed the problem described by Nußbaum.

In September 1920, the Reichsgericht was once again faced with the unsatisfactory state of German law.[119] In this case, a Swiss bank extending a loan to a German debtor had hedged against currency fluctuations with two different clauses. First, a gold clause required the debtor to repay the loan in official German gold coins (*Reichsgoldmünzen*).[120] Second, another clause required the debtor to compensate for any exchange losses on the German currency. The parties disputed whether this clause referred only to the occasional minor fluctuations in the pre-1914 gold-backed mark, or whether it now entitled the bank to demand compensation for the enormous exchange losses incurred after the war. These losses had become more acute because of the German war legislation which prohibited the creditor from requiring payment in gold coins.[121] The Reichsgericht found in favour of the

[115] Verordnung über den Zahlungsverkehr mit dem Ausland, 8 February 1917, RGBl. 105; Bekanntmachung über den Zahlungsverkehr mit dem Ausland, 8 February 1917, RGBl. 109. For the context of this regulation, see R. Banken, 'Das nationalsozialistische Devisenrecht als Steuerungs- und Diskriminierungsinstrument 1933–1945', in J. Bähr and R. Banken (eds), *Wirtschaftssteuerung durch Recht im Nationalsozialismus: Studien zur Entwicklung des Wirtschaftsrechts im Interventionsstaat des 'Dritten Reichs'* (2006) 121, at 122 et seq.

[116] K. J. Hopt, 'Arthur Nußbaum (1877–1964)', in S. Grundmann et al. (eds), *Festschrift 200 Jahre Juristische Fakultät der Humboldt-Universität zu Berlin: Geschichte, Gegenwart und Zukunft* (2010) 545.

[117] A. Nußbaum, 'Replik zu Walter Lux, Valuta-Schiffspfandrechte: Eine Ergänzung zu den Aufsätzen von Hoeninger und Nußbaum, JW. 19, 472; 20, 13 f.', (1920) 49 *Juristische Wochenschrift* 370, at 371.

[118] A. Nußbaum, 'Juristische Valutafragen', (1920) 49 *Juristische Wochenschrift* 13, at 13–4.

[119] Reichsgericht, Judgment of 30 September 1920—VI 229/20—RGZ 100, 79.

[120] Gesetz betreffend die Ausprägung von Reichsgoldmünzen, 4 December 1871, RGBl. 404; J. Cholet, *Der Etat des Deutschen Reiches in der Bismarckzeit* (2012), at 461 et seq.

[121] Bekanntmachung über die Unverbindlichkeit gewisser Zahlungsvereinbarungen, 28 September 1914, RGBl. 417; Denkschrift, above n 13, at 7–8; Ott, above n 12, at 268–9.

bank, holding that their claim was not outside the wording of the contract. The court did not regard the claim as an abuse of rights because the bank had to refinance in Swiss *francs*, and it was not trying to benefit by speculating on the higher nominal value of marks in Germany. As in the copper wire case, the court accepted its 'jurisdiction' to promote economic policy: 'Even though it would be desirable to protect German debtors who owe foreign currencies, it would be unfair and detrimental to the standing of German credit to seek [that protection] at the expense of foreign creditors.'[122] The court did not protect the individual German debtor but it did support the prospects of the German economy to raise capital on the foreign markets.

On the other hand, the court was willing to help German debtors if their foreign creditors had not taken sufficient precautions to help themselves. In another 1920 case, decided only three months later, the contract included a gold clause, but not a gold parity clause for offsetting exchange losses.[123] The court refused to interpret the gold clause as a gold parity clause, which would have entitled the creditor to demand an amount of paper money equal to the gold value of the nominal amount of the loan when the contract was concluded before the war. As long as the wartime prohibition on gold payments remained in force, then, in principle, the debtor could pay the creditor the nominal amount of the loan in devalued paper money. In this particular case, however, the court had no need to decide the case in that way, since a bilateral treaty between Germany and Switzerland resolved the matter shortly before judgment was given.[124] The treaty allowed Swiss creditors under mortgage-backed loans either to claim payment in gold or in an amount of paper money at a rate adjusted to the devaluation of the German currency. The treaty applied even if the loan had been called in before the treaty was concluded.

8. Farm Lease

The cases concerning steam power and Swiss mortgage-backed loans showed that the judiciary, the legislature, and the executive authorities competed among themselves to solve the economic issues triggered by the war and devaluation. In March 1922, when the hyperinflation was already obvious, the Reichsgericht had to decide who should have the final say on the payment of higher rents under farm leases.[125] In the case at hand, the landlord had hedged against currency fluctuations before the war by including a gold clause, as opposed to a gold parity clause. In this respect, the case was like that of the Swiss bank. According to the Reichsgericht's view, which had prevailed until then, the landlord would have had to accept paper money at the nominal value because wartime regulations continued to invalidate the gold clause. Indeed, the landlord had been accepting the paper money until spring 1920. But in June 1920, the federal government passed a new regulation on tenant protection,[126] proposed by the Weimar National Assembly, originally to protect small tenants against rent termination and rent increase.[127] However, under that regulation, new authorities were established to settle conflicts between landlords and tenants.

[122] Reichsgericht, Judgment of 30 September 1920—VI 229/20—RGZ 100, 79, at 82.

[123] Reichsgericht, Judgment of 18 December 1920—V 278/20—RGZ 101, 141.

[124] Gesetz über das Abkommen zwischen dem Deutschen Reiche und der Schweizerischen Eidgenossenschaft, betreffend schweizerische Goldhypotheken in Deutschland und gewisse Arten von Frankenforderungen an deutsche Schuldner, 9 December 1920, RGBl. 2023, at 2024.

[125] Reichsgericht, Judgment of 24 March 1922—III 413/21—RGZ 104, 218.

[126] Pachtschutzordnung, 9 June 1920, RGBl. 1193; F. Theisen, '§§ 581–97: Pacht und Landpacht', in Schmoeckel et al. (eds), above n 35, vol. 3 (2013) 595, at 624–5.

[127] Cabinet meeting of 15 April 1920, in M. Vogt, 'Das Kabinett Müller: 27. März bis 21. Juni 1920', in K. D. Erdmann and W. Mommsen (eds), *Akten der Reichskanzlei: Weimarer Republik* (1971), at 104–5 fn 4.

These so-called *Pachteinigungsämter* were authorized to adjust the scope of obligations that were no longer justifiable under the changed economic conditions owing to the striking disproportionality between the performance and the consideration.[128] The Minister of Justice raised his concerns over this interference in the sanctity of continuing contracts, but he was outvoted in the cabinet.[129]

The Reichsgericht shared the minister's concerns about the extensive powers of these new executive bodies. In the case in question, the *Pachteinigungsamt* in Bremen had raised the annual rent from 5,000 marks to 30,000 marks in 1921, and to 40,000 marks in 1922. The effect was that the amount owed was six or eight times higher than originally agreed.[130] Although the parties could consent to the new regulation being given retroactive effect from 1 January 1920,[131] the *Pachteinigungsämter* had not decided how to deal with rental periods before 1921. As the *Reichsgericht* emphasized, this failure did not preclude 'the evaluation of that relationship by the courts according to the general principles of civil law'.[132] But the real effect of the ruling was that the civil courts refused to allow governmental or parliamentary regulations to deprive them of their powers under the general law. The court gave a retrospective explanation for its reasoning in the steam power case of 1920. It reasoned that, at that time, the judges had deliberately based the decision 'only on the general principles of civil law'. They 'intentionally did not mention the special legislation which was motivated by particular considerations, namely, the regulation on arbitration for the raising of prices for delivery of electricity etc. The senate sought to avoid the appearance that it was relying solely on those provisions when it laid down the judges' absolute power to amend individual contractual provisions while maintaining the contractual relationship'.[133]

It seems that it was quite difficult for the judges to handle the absolute power they had arrogated to themselves. This became particularly clear in 1922 when the court had to decide a case that was remarkable in every respect.[134] A manor estate which had been leased in 1904 was to revert to the landlord in 1922. The German Civil Code has always contained provisions governing leases that include inventory. These provisions, which are still in force, require the tenant to pay an extra amount for the inventory, usually based on its estimated value.[135] During the period of the contract, the tenant is free to make use of the inventory only in the same way as the landlord would. Therefore, the tenant is allowed to dispose of inventory items that are no longer needed, and he is obliged to replace those that are worn or defective. When the contract ends, the landlord takes the old and new items as his own property. If the estimated value of the returned inventory differs from its estimated value at the time of the takeover, the difference has to be compensated by the tenant or the landlord, as the case may be. In 1985, a new provision was added to the original version of the German Civil Code. Under the current rules, the estimated values are to be based on current prices at the end of the contract.[136] During the hyperinflation of

128 Pachtschutzordnung, § 1 subs. 1 (2) lit. b, subs. 2.

129 Cabinet meeting of 24 April 1920, in Vogt, above n 127, at 151–2.

130 Reichsgericht, Judgment of 24 March 1922—III 413/21—RGZ 104, 218, at 219.

131 Cabinet meeting of 1 June 1920, in Vogt, above n 127, 304.

132 Reichsgericht, Judgment of 24 March 1922—III 413/21—RGZ 104, 218, at 221.

133 Ibid., at 221–2.

134 Reichsgericht, Judgment of 27 June 1922—III 558/21—RGZ 104, 394; Nörr, above n 35, at 64; Dawson, above n 35, at 195 et seq.

135 BGB 1900, §§ 587–589; BGB 1985, §§ 582–583a.

136 BGB 1985, § 582a subs. 3 Satz 4; V. Emmerich and R. Schaub, '§ 582a: Inventarübernahme zum Schätzwert', in *J. von Staudingers Kommentar zum Bürgerlichen Gesetzbuch mit Einführungsgesetz und Nebengesetzen, Zweites Buch: Recht der Schuldverhältnisse, §§ 581–606 (Pacht, Landpacht, Leihe)* (rev. edn, 2013) 265, at 274.

the 1920s, the question arose whether the landlord had to bear the risk of price increases on the inventory since the lease was first granted. In the case at hand, in 1904, the tenant had paid 130,000 marks for the inventory and, in 1922, he claimed 4,000,000 marks, which was its value estimated in the current prices.[137] The landlord refused to pay anything. He argued that only the 'inherent' value of the inventory was relevant, and that each item should revert to him specifically.

The Reichsgericht realized that, in the absence of special contractual or statutory provisions, the case could not be decided simply by ruling wholly in favour of one party or the other. The tenant had used the inventory but had also invested in it. Should he come out empty-handed? The landlord got back what he owned, but it was unclear whether he should pay thirty times the nominal value of the money originally received.

> There is no justification for the argument of the tenants who think that they should reap the full benefit of the changed conditions or for the argument of those landlords who think that everything should accrue to them. Rather the senate considers that a *halfway line* has to be drawn here, that a *balance between the interests of both parties* has to be struck.[138]

Consequently, the court pushed the parties to reach an amicable settlement in public. It proposed to refer the case to a special arbitration panel which would consist of economic experts and at least one or two judges of the Reichsgericht.[139] The judges were aware of how uncommon this procedure was: '[s]pecific and idiosyncratic conditions require idiosyncratic and new steps and measures.'[140] For the purpose of 'explanation and substantiation', the court felt obliged to introduce its settlement proposal by extensive 'considerations and thoughts': '*[t]he law is not an end in itself* but is only a means of *protecting and safeguarding the interests of the citizens*, both their personal interests, and above all the economic interests. Therefore, these are the main interests behind the legal provisions and rules which are directed at protecting them.' 'Specific and idiosyncratic', 'steps and measures', 'explanation and substantiation', 'considerations and thoughts', 'protection and safeguard', 'legal provisions' and 'legal rules'—such a cluster of tautologies brings to mind the all-too-meaningful legal texts of bygone ages.[141] Moreover, the personal and economic interests no longer stood 'behind the legal provisions and rules', but had to be brought to the forefront. 'This is *less a legal dispute than a dispute of interests*.'[142] The 'inner economic corpus which the law envelopes like a husk can sometimes gain such inner vitality of its own that, so to speak, it bursts open the husk and demands special attention on its own terms'. The 'husk' was 'burst open' by the changed conditions:

> The provisions of the contract of 1904 were based on the conditions and ideas of that time. No man unless he was a clairvoyant could have prophesied the events that happened later. One might perhaps have anticipated that one day Germany would be at war but nobody could have had any idea of the *world war* as it has developed, or its consequences.... [Nor had the] legislators of the civil code any idea of how things would have developed by now. The legal

137 See further Reichsgericht, Judgment of 26 May 1922—III 558/21—(1922) 51 *Juristische Wochenschrift* 910, at 910.

138 Ibid. 139 Reichsgericht, Judgment of 27 June 1922—III 558/21—RGZ 104, 394.

140 For the following quotations, unless indicated otherwise, Reichsgericht, Judgment of 26 May 1922—III 558/21—RG, (1922) 51 *Juristische Wochenschrift* 910–11 (original emphasis).

141 R. Schmidt-Wiegand, 'Paarformeln', in A. Erler and E. Kaufmann (eds), *Handwörterbuch zur deutschen Rechtsgeschichte* (1984), vol. 3, 1387, at 1387, 1392.

142 On the background of such statements, see H. Schoppmeyer, *Juristische Methode als Lebensaufgabe: Leben, Werk und Wirkungsgeschichte Philipp Hecks* (2001), at 178–9.

foundations they created were based on the ideas of their time. The primary point is that people, and particularly the legislator, had forgotten the turn of events of all former times.

The romanticized view of the 'merry imperial era' made the contrast with the Weimar Republic appear even sharper, and the saviour even more glorious: 'The *judicial* law' was on exactly the same footing as the statutory law and the law made by the parties in their contracts, for the simple reason that 'both the other sources of law' were imperfect. If 'the parties had no intentions at all, because they only thought about the development when it actually occurred, then there can be no question of giving effect to any law made by the parties. In this area one also has to follow the principle that something cannot come out of nothing.' Only a judge could make something out of nothing:

If the parties had no intentions at all, the judge, the *absolute judicial power*, takes the place of the parties. If the statutory law fails, the judge takes place of the lawmaker for the case at hand. In this respect, it is often suggested that there is a lacuna in the law but this is not true. That view is based on the assumption that the whole diversity and fullness of life can be included in the codified law. But this is impossible. Every new day reveals new legal structures, the creativeness of life is endless, and in all of such cases the judge has to create the law. All legislation, even the civil code, in fact is piecemeal.

This judicial attitude, which would be familiar to a common lawyer, is also an integral part of the German doctrine on the sources of law.[143] However, the attitude still showed something of a *lèse-majesté*, a 'desecration' of the 'cathedral of national glory',[144] which the construction of the German Civil Code was supposed to represent. In any event, the judges themselves did not know how to render a decision in place of the legislator, and in May 1922 they were not yet willing to strike the balance they had sought. The role of the Reichsgericht was to answer *quaestiones iuris*, not *quaestiones facti*. Since the court could not make findings of fact, it could not consult economic experts about the extent of the economic changes in order to find an appropriate measure for its decision. On the other hand, the court wanted to avoid a result among the lower courts where 'the one rules one way and the other rules the other way'. Thus, the court's plan was to establish a 'college of experts'. '[A]t least one member of the senate' should attend its proceedings 'in order to ensure the connection with the senate, especially the consideration of the relevant legal aspects'.

But the outcome was not what the Reichsgericht intended. Both parties were supported by powerful lobbies,[145] and they forced the court to issue a decision by way of guidance 'which responds to the current situation resulting from the unfortunate outcome of the war and the monstrous devaluation of the German currency'.[146] The court held that the 'catastrophic turn of monetary conditions . . . was unpredictable for both the legislator and the parties'.[147] It held that it would be inappropriate simply to compare the estimated nominal values of the inventory at the beginning and at the end of the lease. Rather, the original value, which was assessed on the basis of a gold-backed currency, had to be converted into an amount of paper money capable of purchasing similar agricultural equipment.[148]

[143] J. Schröder, *Recht als Wissenschaft: Geschichte der juristischen Methodenlehre in der Neuzeit (1500–1933)* (2nd edn, 2012), at 305 et seq.; S. Vogenauer, 'History of Interpretation of Statutes', in J. Basedow et al. (eds), *The Max Planck Encyclopedia of European Private Law* (2012) 986, at 989–90.

[144] B. Windscheid, 'Das römische Recht in Deutschland' [1858], in B. Windscheid, *Gesammelte Reden und Abhandlungen*, ed. P. Oertmann (1904) 25, at 48.

[145] Nörr, above n 35, 64; Dawson, above n 36, 196 fn 77.

[146] Reichsgericht, Judgment of 27 June 1922—III 558/21—RGZ 104, 394, at 395.

[147] Ibid., at 397. [148] Ibid., at 400.

9. One Coach, Two Horses, and One Coachman

As Hachenburg had prophesied, devaluation required an increase in payments under all kinds of contracts.[149] In May 1921, the Reichsgericht responded to that need when it heard a case arising out of a settlement concluded between divorced spouses.[150] This settlement was 'definite' in specifying the amount of alimony that the husband owed his former wife. It was explicit in naming the husband 'alone' as the 'guilty party'. But the court considered it unlikely

> that a change in the value of money, however enormous it might be, should have no impact on the amount of the annuity specified at the time.... There can be no question that, when the settlement was concluded, the parties did not consider the risk of devaluation, as it has now emerged.... The value of money is particularly important when annuities are specified. Basically, the subject of the contract is not the actual amount specified [as the annuity] but what is required to enable the maintenance creditor to obtain a certain amount of things which are necessary for subsistence. The precise amount of money needed for this depends on the actual monetary value. If after the sum has been specified, the monetary value changes so significantly that the amount agreed is no longer sufficient to obtain those things, then the whole purpose of the contract would be defeated. Since it has to be assumed that this result often does not correspond with the parties' intentions, such cases inevitably require the court to consider some supplementary interpretation of the contract, as recent judicial practice has required.

In a judgment pronounced a year later, the 'things which are necessary to subsist on' included 'one coach, two horses, and one coachman', since these were the assets required to allow the widow of a wealthy Berlin landowner to live a life befitting her social status.[151] In 1902 and 1903, however, the widow had signed two settlements in which she had declared that 'all claims' which had arisen, or might arise, from a contract of inheritance with her husband and from a legacy left by him, were 'compensated', and she had waived any further claim. The judges ruled that those settlements did not exclude the claims at issue because the widow had 'not waived claims for increasing their annuity in the case of devaluation'.[152] The defendant, which was a foundation established by the husband, had to pay.

10. Honourable People and Elastic Law

As the steam power and manor estate cases showed, the increasing inflation led the judges to express themselves in impassioned terms. The judges had asked whether extraordinary price increases could become 'virtually ruinous' for the party affected by them.[153] If the increases on that scale had resulted from war or revolution, the obligor was released from his obligation.[154] In contrast, if the increases were enormous but not unexpected, then the

[149] See Hachenburg, above n 94.

[150] For the following quotations, unless indicated otherwise, Reichsgericht, Judgment of 26 May 1921—IV 27/21—Otto Warneyer (ed.), (1921) 14 *Die Rechtsprechung des Reichsgerichts auf dem Gebiete des Zivilrechts, soweit sie nicht in der amtlichen Sammlung der Entscheidungen des Reichsgerichts abgedruckt ist* 118–20 (No. 99).

[151] Reichsgericht, Judgment of 25 September 1922—IV 740/21—Warneyer (ed.), above n 150, (1923) 16 *Rechtsprechung* 3–4 (No. 3).

[152] Reichsgericht, Judgment of 25 September 1922—IV 740/21—Bundesarchiv Berlin, R3002 Prozessakten Zivilsenate No. 11287, fo. 21, the quoted phrase is not published in Warneyer (ed.), above n 150.

[153] See Reichsgericht, Judgment of 8 July 1920—III 89/20—RGZ 99, 258.

[154] Reichsgericht, Judgment of 22 October 1920—III 138/20—RGZ 100, 134, at 136 et seq.; similarly in a case in which one of the parties had partially fulfilled its obligation: Reichsgericht, Judgment of 10 December 1920—VII 318/20—RGZ 101, 79.

obligor had to perform.[155] When such cases became standard, the highest German court reminded the whole judiciary of their obligation 'to meet the inevitable needs of life'.[156] Indeed, such phrases were common already among the German jurists of the nineteenth century.[157] But the practical consequences of that idea were far more important after the First World War than they had been in the former times of stability. In 1880, when the German Empire had just recovered from a severe economic crisis (*Gründerkrise*), the much-read and oft-cited *pandectist* Bernhard Windscheid wrote: '[t]he needs of commerce are no source of law.'[158] After the early 1920s, things changed. Faced with the disappointing incompleteness of the German Civil Code, the methodological debates of the late nineteenth and early twentieth centuries about the role of the judiciary began to have an impact on judicial practice. Even where the practice was not actually affected, it at least illustrated those methodological debates.[159]

> It is not just any economic shock that can justify the termination of a contract, even if the performance would lead to enormous monetary losses for the party who is obliged to perform in kind.... Only if the performance becomes economically impossible, or if the obligor's duty to perform other contracts at similar costs destroys his economic livelihood or drives him to the verge of bankruptcy, only then is there an economic and legal imperative that [the obligee, as] the party who wants to burden the other party with all disadvantages of the turn of economic events, should be denied legal protection. For honourable people would not understand a judgment which awarded all the benefits of the new and unpredictable economic conditions... to one party, leaving the other party to perish. It would conflict harshly with their sense of justice. Legal transactions concerning property rights—like all legal transactions—are not ends in themselves. They have only one object, which is to fulfil the economic purposes for which they exist. When courts give rulings in that area of law, economic interests have to be considered paramount, and the law has to be adjusted elastically to those interests if at all possible. Only in that way can the judicial system meet its true responsibility to serve practical life, which in this context has to be understood as the needs and requirements of life.[160]

Given these grand statements, the facts of the case in which they were made seemed 'much ado about nothing'. It concerned a humble car sale concluded in April 1917 and to be performed after the war.

Phrases such as 'honourable people' and their 'sense of justice', and 'elastic' law might have been used occasionally in earlier writings.[161] But after the economic crisis that started

[155] On price increases between April/May and June/July 1919, see Reichsgericht, Judgment of 8 December 1920—I 162/20—RGZ 101, 74.

[156] See Reichsgericht, Judgment of 21 September 1920—III 143/20—RGZ 100, 129.

[157] H.-P. Haferkamp, 'Lebensbezüge in der Zivilrechtsdogmatik des 19. und 20. Jahrhunderts', in L. Breneselović et al. (eds), *Spomenica Valtazara Bogišića o stogodišnjici njegove smrti 24. apr. 2008 godine* (2011), vol. 1, 301, at 302 et seq.

[158] B. Windscheid, 'Wille und Willenserklärung', (1880) 63 *Archiv für die civilistische Praxis* 72, at 81; U. Falk, *Ein Gelehrter wie Windscheid: Erkundungen auf den Feldern der sogenannten Begriffsjurisprudenz* (1989), at 30 et seq.; R. Schröder and J. Thiessen, 'Von Windscheid zu Beckenbauer—die Schuldrechtsreform im Deutschen Bundestag', (2002) 57 *Juristenzeitung* 325, at 326–7.

[159] R. Ogorek, *Richterkönig oder Subsumtionsautomat? Zur Justiztheorie im 19. Jahrhundert* (1986), at 269 et seq.; R. Schröder, 'Die deutsche Methodendiskussion um die Jahrhundertwende: Wissenschaftstheoretische Präzisierungsversuche oder Antworten auf den Funktionswandel von Recht und Justiz', (1988) 19 *Rechtstheorie* 323, at 325 et seq.; Rückert, above n 35, at 269 et seq., 281 et seq.; Nörr, above n 40, at 1 et seq.; Schröder, above n 143, at 305 et seq.

[160] Reichsgericht, Judgment of 7 June 1921—III 508/20—RGZ 102, 272, at 273–4.

[161] J. Rückert, 'Das "gesunde Volksempfinden"—eine Erbschaft Savignys?', (1986) 103 *Zeitschrift der Savigny-Stiftung für Rechtsgeschichte, Germanistische Abteilung* 199, at 235; J. Rückert, 'Das BGB und seine Prinzipien: Aufgabe, Lösung, Erfolg', in Schmoeckel et al. (eds), above n 35, vol. 1 (2003) 34, at 44; R. Brodhun, *Paul Ernst Wilhelm Oertmann (1865–1938): Leben, Werk, Rechtsverständnis sowie Gesetzeszwang und Richterfreiheit* (1999), at 318 et seq.

in 1929, they became common in legal usage, especially in the Nazi era. The hyperinflation cases laid the ground for this usage.[162]

Only a few months later, in November 1921, another senate of the Reichsgericht took the debate one step further. It asked why the question raised in the car sale case about offending honourable people's sense of justice should be confined to the case of a party who would perish if he had to perform the contract.[163] The court ruled that that formulation of the rule in the car sale case was too restrictive. There were an increasing number of cases where performance would not be 'ruinous' but only unreasonable. Every obligor risked bankruptcy if he could not perform the contract, and was subsequently sued for damages. This very issue arose in 1922 in a case involving a sale of '10 tons of annealed iron wire'. The seller was released from his obligation.[164] But since other senates of the Reichsgericht had emphasized that the contract had to be 'ruinous' before the court granted relief, the court now had to look for a new legal concept.

11. Spinning Mill and 'Basis of Transaction'

In February 1922, the time came for the court to introduce a legal innovation to its case law.[165] The spinning mill case illustrates close interaction between the German judiciary and legal academia, which continues to the present day. Many scholars—including Paul Krückmann who has already been mentioned—attempted legal solutions to problems that had troubled judges since the breakout of the war. Many of those scholars' names are still familiar to German lawyers today. Those that stand out the most are Hans Carl Nipperdey and Paul Oertmann. Nipperdey was then a young lecturer in Jena. Later, in Cologne, he was a leading labour law professor during the Nazi era and in post-war West Germany.[166] Paul Oertmann was a well-known civil law professor in Göttingen.[167] Both scholars offered legal solutions to compensate for the devaluation. Their aim was to require the obligee to pay more to the obligor who had to perform in kind since the obligor was the party who had to transfer assets of stable value.[168] The meticulous attention which was paid to legal concepts may seem artificial to English or American lawyers who are more accustomed to distinguishing cases on their material facts. In the cases in question, the judges had to find a more or less 'rational' justification for the irrational feeling that a contract could not persist as it had originally been intended.

The facts of the case were quite intricate.[169] Two partners had run a spinning mill which produced *vigogne*, a special kind of yarn. In spring 1919, they wanted to dissolve the partnership, but it was unclear who would be able to pay off the other partner. One of the partners, the defendant in this case, had agreed with the plaintiff that the plaintiff would

[162] C. Wegerich, *Die Flucht in die Grenzenlosigkeit* (2004), at 79; J. Thiessen, 'Gute Sitten und "gesundes Volksempfinden": Vor-, Miss- und Nachklänge in und um RGZ 150, 1', in A. Kiehnle, B. Mertens, and G. Schiemann (eds), *Festschrift für Jan Schröder zum 70. Geburtstag am 28. Mai 2013* (2013) 187, at 192 et seq.; J. Thiessen, *Der Ausschluss aus der GmbH als 'praktische Durchführung einer verbrecherischen Irrlehre'—eine Rechtsfortbildungsgeschichte* (2015).

[163] Reichsgericht, Judgment of 29 November 1921—II 247/21—RGZ 103, 177, at 179.

[164] Ibid., at 178.

[165] Reichsgericht, Judgment of 3 February 1922—II 640/21—RGZ 103, 328.

[166] K. Adomeit, 'Hans Carl Nipperdey als Anreger für eine Neubegründung des juristischen Denkens', in S. Grundmann and K. Riesenhuber (eds), *Deutschsprachige Zivilrechtslehrer des 20. Jahrhunderts in den Berichten ihrer Schüler: Eine Ideengeschichte in Einzeldarstellungen*, vol. 1 (2007) 149, at 150 et seq.

[167] Brodhun, above n 161, at 87 et seq.

[168] H. C. Nipperdey, *Vertragstreue und Nichtzumutbarkeit der Leistung* (1921), at 16 et seq.; P. Oertmann, *Die Geschäftsgrundlage: Ein neuer Rechtsbegriff* (1921), at 25 et seq., 124 et seq.

[169] Reichsgericht, Judgment of 3 February 1922—II 640/21—RGZ 103, 328, at 328 et seq.

provide the financial means that the defendant needed to outbid his partner. By this contract, the defendant wanted to prevent his partner from buying the assets of the partnership too cheaply, if it happened that the defendant could not match the bid of his partner. If the defendant was successful, the plaintiff would buy the assets from him at the same price paid by the defendant. If the defendant bought at a specified favourable price, he would receive a bonus from the plaintiff. If the plaintiff became the new owner of the spinning mill, he would appoint the defendant as the managing director. Similarly, if the partner bought the assets, the plaintiff should benefit if the defendant realized a specified high profit from apportioning assets and liabilities. As a measure for their mutual claims, the parties had agreed a certain reference amount, which was the estimated value of the defendant's share in the partnership. However, by early 1920, it was apparent that any amount of money that the parties had specified in this way, would have been immediately devalued. Thus, the defendant preferred to remain a partner in a partnership with assets of stable value rather than being paid off by his partner or by the plaintiff. Consequently, the plaintiff wanted to buy the assets cheaply at the nominal, but devalued, price which the defendant was required to pay. He therefore insisted on fulfilment of the contract even in the event that another person might one day buy the assets in a public auction.

The plaintiff pleaded that the defendant's problems were not caused by the hyperinflation, such that they could have justified a withdrawal from the contract. It was not the case, he argued, that the defendant had to buy something at unaffordable prices. All he had to do was to transfer what he had already held before the inflation—the value of his position in the partnership.[170] Another senate of the Reichsgericht had decided the Weimar real estate case by similar reasoning only in April 1921. It will be recalled that the seller who had offered a long-term option was bound to sell his real estate at peacetime prices.[171] Now, in April 1922, the senate of the Reichsgericht responsible for company law was hearing the spinning mill case and distinguished the Weimar real estate case.[172] The judges noted that the real estate decision 'was criticized by legal academia'.[173] They went on to hold that it could not be interpreted

> . . . as if fundamental changes in prices alone, without other impediments to the performance, could never justify an exception [*ex fide bona*] under section 242 of the civil code in favour of the disadvantaged party. . . . In general, it always depends, in the words of Oertmann, *Geschäftsgrundlage* (1921), on whether the basis of transaction no longer stands. The basis of the contract is to be understood as a mutual expectation of the parties in concluding the contract about the continued existence of certain conditions which, in fact, have become obsolete. In principle, this can also happen as a result of a mere fluctuation in value if a continued equivalence of performance and consideration was implied.

According to the court, it could be generally assumed that the basis of the contract no longer stood, 'since a devaluation, as happened in autumn 1919 surprised the business world and could not have been anticipated'. In the particular case, the plaintiff asserted that the parties had concluded an 'aleatory contract', so that 'every party has undertaken the risk of unfavourable changes in value for whatever reason'. This question of fact had to be clarified by the court of appeal.

170 Ibid., at 331. 171 See Reichsgericht, Judgment of 16 April 1921—V 484/20—RGZ 102, 98.

172 For the following quotations, unless indicated otherwise, see Reichsgericht, Judgment of 3 February 1922—II 640/21—RGZ 103, 328, at 332.

173 The court cited E. Heymann, 'Anmerkung zu RG, Urteil vom 16 April 1921—V 484/20 und RG, Urteil vom 8. März 1921—III 403/20', (1921) 50 *Juristische Wochenschrift* 830; P. Krückmann, 'Mißverständliches zur *clausula rebus sic stantibus*', (1921) 50 *Juristische Wochenschrift* 1447.

The Reichsgericht had to determine the legal consequences that followed if the basis of transaction no longer stood. In the steam power case, the senate responsible for long-term contracts had proposed that the judges should fill the lacuna in the contract arising from economic impossibility.[174] The company-law senate dissented on the ground that the judges did not have the power to interfere in contractual provisions by a constitutive judgment. They were not allowed to specify the amount of monetary obligations. They did, however, have to examine whether or not the requirements of the *exceptio ex fide bona* had been fulfilled. 'Before an obligor can withdraw from the contract because of a fundamental change in the value ratio between performance and consideration, he has to request the obligee to increase the consideration; only if the [obligee] refuses to do so, is [the obligor] released.'[175]

In the end, it made no significant difference whether a judge adjusted the amount of the obligation by a constitutive judgment, or allowed the disadvantaged party to request such adjustment.[176] But the concept of 'basis of transaction' was not a reason for requiring the judge to 'invent' a power which the lawmakers had not given him. Nor was it a reason for interpreting the contract in a way that the parties had not contemplated when they concluded it. The concept of the 'basis of transaction' passed the problem onto the legislator and the parties. The reference to *bona fides* meant that the parties had submitted to a law that required that, if necessary, they deviate from the wording of the contract. Remarkably enough, the concept of the basis of the transaction was not an integral part of the German Civil Code until 2002, when section 313 was enacted.[177] In 1922, it was the well-known judge Richard Mansfeld[178] who adopted the doctrine of the 'basis of transaction', which had been developed by his close friend Paul Oertmann.[179] Oertmann, in turn, had vindicated the doctrine of 'precondition', which his father-in-law Bernhard Windscheid[180] had failed to have included in the draft of the German Civil Code in the 1880s.[181]

12. *Lüderitzbucht*—the 'Revaluation Case' and Its Consequences

In November 1923, the senate of the Reichsgericht responsible for real-estate law made legal history.[182] As mentioned earlier, mortgage-backed loans were the preferred investment for the German middle class.[183] Thus, the devaluation affected the very social stratum that was so necessary to supporting any prospect of a stable civil society within the new democratic order of the Weimar Republic.[184] A judge of the Reichsgericht was just the kind

[174] See Reichsgericht, Judgment of 21 September 1920—III 143/20—RGZ 100, 129, at 131.

[175] Reichsgericht, Judgment of 3 February 1922—II 640/21—RGZ 103, 328, at 333–4.

[176] Nörr, above n 35, at 67 fn 55.

[177] Meyer-Pritzl, above n 44, at 1738 et seq.; T. Finkenauer, '§ 313', in F. J. Säcker, R. Rixecker (eds), *Münchener Kommentar zum Bürgerlichen Gesetzbuch*, vol. 2 (6th edn, 2012) 1868, at 1881–2.

[178] D. Miosge, 'Richard Mansfeld (1865–1943): Richter und Senatspräsident am Reichsgericht', in H. Heinrichs et al. (eds), *Deutsche Juristen jüdischer Herkunft* (1993) 507, at 509 et seq.

[179] Oertmann, above n 168; Brodhun, above n 161, at 201 et seq., 223 et seq.; Meyer-Pritzl, above n 44, at 1717 et seq.

[180] B. Windscheid, *Die Lehre des römischen Rechts von der Voraussetzung* (1850); Falk, above n 158, 193 et seq.; Brodhun, above n 161, at 223 et seq.; Meyer-Pritzl, above n 44, at 1713–14.

[181] Meyer-Pritzl, above n 44, at 1714–15; Finkenauer, above n 177, at 1879.

[182] Reichsgericht, Judgment of 28 November 1923—V 31/23—RGZ 107, 78, at 87 et seq.

[183] See Bracht, above n 34.

[184] L. E. Jones, 'Inflation, Revaluation and the Crises of Middle-Class Politics: A Study in the Dissolution of the German Party System, 1923–28', (1979) 12 *Central European History* 143; L. E. Jones, *German Liberalism and the Dissolution of the Weimar Party System, 1918–33* (1988), at 163 et seq.; Taylor, above n 1, at 210 et seq., 344 et seq.

of person who might have lost his investments, and therefore might have been inclined to decide in the creditors' favour.[185]

When the court came to decide the 'revaluation case', the case law already mentioned provided ample 'tools' for the job. Nevertheless, there were some issues of the case itself that were hard to solve. First, the real estate which served as collateral for the loan was located in Lüderitzbucht (now Lüderitz), a city in German South-West Africa (now Namibia). In the German colonies, German paper money was in use, but, unlike German coinage, it did not have legal tender status. Under the colonial law, therefore, a creditor was not bound to accept paper money.[186] There was therefore an issue whether the place of performance was Lüderitzbucht or Berlin, which was where the parties lived at the time of the lawsuit. Assuming that domestic German law applied, the judges also considered that the debtor could not require the creditor to give him a discharge by paying paper money at the nominal value of the loan.[187] Neither a statute nor a precedent provided for such a solution. The statutes and decrees already in force at the time were restricted to particular areas of law. They permitted a revaluation in cases such as taxes, court fees, fines, and certain kinds of pensions.[188] The case at hand was not concerned with a periodic payment or with the equivalence of performance and consideration, which the judges had dealt with in the past.[189] The parties' dispute was about the simple repayment of the loan. The only precedent that came even close related to furniture which the owner had transferred to his creditor in 1909 by way of security. In 1920, the senate of the Reichsgericht responsible for movable property law had relied on the good faith doctrine to prevent the owner from paying off the creditor with an amount of money 'which equals only a small fraction of the value the [creditor] had expended', when the creditor himself had 'paid his expenses in money of stable value'.[190] This apparently unusual long-term chattel mortgage case did not achieve the same popularity as the 'revaluation case' although the decision was based on similar facts and similar economic and legal considerations.

Section 607 of the German Civil Code,[191] requires the debtor under the loan to return what he has received in the same kind, quality, and amount. By introducing paper money as legal tender in 1909,[192] the German legislature laid down that paper money of equivalent nominal value had to be accepted as being of the same kind, quality, and amount as the gold coins in which the loan was made. So by deciding that the debtor could not repay the loan in paper money, the judges had to overrule a statute. They did this on the same grounds on which they had overruled the wording of the contracts in other cases. The 'almost ingenuous'[193] argument was as follows: the lawmakers could not have foreseen that the war and revolution would cause paper money to become so devalued that it could no longer be

[185] Geyer, above n 36, at 350 et seq.

[186] Reichsgericht, Judgment of 28 November 1923—V 31/23—RGZ 107, 78, at 81 et seq.

[187] Ibid., at 80 and 85 et seq.

[188] See the legislation cited in ibid., at 88–9.

[189] Apart from other judgments mentioned in this chapter, in ibid., at 90–1 the court refers to Reichsgericht, Judgment of 23 February 1923—VII 184/22—Warneyer (ed.), above n 150, (1923) 16 *Rechtsprechung* 42–3 (No. 36); Reichsgericht, Judgment of 22 September 1923—V 427/23—unreported; Reichsgericht, Judgment of 3 October 1923—V 865/22—unreported; Reichsgericht, Judgment of 6 January 1923—V 246/22—RGZ 106, 7; Reichsgericht, Judgment of 31 January 1923—V 229/22—Warneyer (ed.), above n 150, (1923) 16 *Rechtsprechung* 33–5 (No. 29).

[190] Reichsgericht, Judgment of 16 March 1923—VII 156/22—(1923) 52 *Juristische Wochenschrift* 919 (No. 1).

[191] Since 2002, BGB, § 607, has been partially superseded by specific rules for monetary loans in contrast to loans of tangible assets, BGB, § 488.

[192] Gesetz betreffend Änderung des Bankgesetzes, 1 June 1909, RGBl. 515, Art. 3.

[193] Nörr, above n 35, at 65.

recognized as having the same quality as gold coinage. According to the judges, the nominalist equation of paper money and gold coinage conflicted with another statute. Sections 157 and 242 of the German Civil Code required a contract to be interpreted so that an obligor had to perform in accordance with good faith as understood in common usage. The court concluded that to satisfy the creditor with devalued paper money neither met the requirements of good faith nor was consistent with the intentions of both the parties and the legislator.[194] In other words, the legislator had to make law in accordance with good faith, and if he failed to do so, the courts could correct him.

Indeed, some of the judges developed that argument outside the courtroom. In January 1924, the board of the association of the judges at the Reichsgericht (*Richterverein beim Reichsgericht*) submitted a petition to the Reich Chancellor Wilhelm Marx. The judges asked him to respect the revaluation decision of November 1923 and indicated they would disobey any statute that opposed it:

> If, after a careful consideration of the competing views, the highest court of the Empire has come to such a decision, then it believes it is entitled to expect the federal government not to overturn the court's opinion by some *fiat* of the legislature.... [The] idea of good faith stands outside any particular statute, and outside any particular provision of positive law. No legal order which deserves this honorific title can exist without that principle. Therefore, the legislator must not use his command to thwart a result which good faith so strongly requires... [It] would deal a heavy blow to the reputation of the government and to the people's sense of justice and belief in the law, if someone who relied on the new statutory provision was dismissed by the courts on the ground that his reliance on that provision infringed the principle of good faith.[195]

It is unclear whether the board of the judges' association was properly representative of their *communis opinio*.[196] It was clear, at least, that the revaluation decision and the petition were out of line with the *communis opinio doctorum*.[197] Franz Bracht, the Secretary of State, who drafted an answer for the Chancellor was outraged:

> The... statement of the judges' association is extraordinarily brusque and indicates a misunderstanding of proper judicial functions. While the judges' association... expresses the expectation that the opinion of the Reichsgericht will not be overthrown by a *fiat* of the legislator, it ignores the fact that the courts' only duty is to search for and lay down the established law. The further demand that the opinion of the Reichsgericht on the established law has to be respected by future legislation is unsustainable and untenable. Moreover, we reject strongly the indirect threat that if a statute prohibiting the revaluation were enacted, then the Reichsgericht would dismiss any person who relied on the statute on the ground that he was infringing the principle of good faith.... It would be categorically unjustified for the courts to arrogate to themselves the power effectively to repeal statutes which have been passed by proper constitutional processes, by relying on the argument that their content was inconsistent with the principle of good faith. I only can assume that the members of the judges' association... in formulating their petition

[194] Reichsgericht, Judgment of 28 November 1923—V 31/23—RGZ 107, 78, at 88, 91–2.

[195] Richterverein beim Reichsgericht, Eingabe an die Reichsregierung, 8 January 1924, (1924) 53 *Juristische Wochenschrift* 90.

[196] Nörr, above n 35, at 57–8; Geyer, above n 36, at 364 et seq., 372; Emmert, above n 35, at 408 et seq.

[197] See only the controversial statements by famous scholars, such as P. Oertmann, *Die Aufwertungsfrage bei Geldforderungen, Hypotheken und Anleihen* (1924), at 38 et seq. (dedicated to his friend, Judge Richard Mansfeld, see above n 178); P. Heck, 'Das Urteil des Reichsgerichts vom 28. November 1923 über die Aufwertung von Hypotheken und die Grenzen der Richtermacht', (1924) 122 *Archiv für die civilistische Praxis* 203, at 204; J. Goldschmidt, *Die Aufwertungskrise. Ein Ergebnis der Lehre vom Nominalismus des Geldes und des Rechts. Vortrag gehalten im Berliner Anwaltverein am 7. Juni 1926* (1926), at 11 et seq.

have not realized what an outrageous allegation they had made against the members of the federal government and the legislative bodies.[198]

Officially, the Minister of Justice Erich Emminger also refused any unlawful pressure of this kind:

[It] would lead to a disintegration of the legal order and to a fatal disturbance of the political system if a court arrogated to itself the power to disapply a statute which has been passed constitutionally because the majority of the court's members considered that the statute was incompatible with the moral law. According to all the indications from diverse sections of the population, the unanimous conviction of the [German] people is that, as they struggle hard for their existence and renewal, they would be deprived of any certitude if any doubts were raised that individual and communal life might not require them to comply with law and that the courts might not administer justice according to law.[199]

Before the judges submitted their petition, the Minister and his Secretary Curt Joël had privately supported the position of the court in sessions of the cabinet:

Since the Reichsgericht pronounced its approval of the revaluation, the legal position favouring creditors has been clear. It would be an egregious interference to override this new situation and to provide other rules by statute.[200]

In the end, the Federal Government refrained from enacting a decree which prohibited a judicial revaluation of mortgages. It was the government's consideration of such a decree in December 1923 which had provoked the petition of the judges. Instead of revaluation, the Minister of Finance Hans Luther proposed to impose a tax on profits attributable to the devaluation of debts:

Even with respect only to the outstanding war bonds of 60 billion [marks], a revaluation was absolutely impossible for the state. To him, it seemed impermissible to differentiate between the various kinds of debts. The only solution was to prohibit the revaluation in general.[201]

Both the Reichsgericht and the Ministry of Justice regarded the general prohibition on judicial revaluation as an unjustified expropriation of creditors.[202] In February 1924, the government passed the 'Third Emergency Decree on Taxes' which revalued mortgages and certain kinds of bonds by 15 per cent of the gold mark amount or less, depending on the economic fitness of the debtor.[203] In parliament, the Minister of Justice emphasized that this decree was enacted in accordance with the revaluation decision of the Reichsgericht: 'Whatever view one might take on the particular arguments of the judgment, it was a great

198 Secretary of State Franz Bracht to Minister of Justice Erich Emminger, 24 January 1924, published in G. Abramowski, *Die Kabinette Marx I und II November 1923 bis Juni 1924. Dok. Nr. 1 bis 213,* vol. 1, in K. D. Erdmann and H. Booms (eds), *Akten der Reichskanzlei: Weimarer Republik* (1973), at 2012.

199 Statement of Erich Emminger, Minister of Justice, 31 January 1924, in Abramowski, above n 198, at 2645.

200 Cabinet meeting of 15 December 1923, Committee for Economic Affairs, in Abramowski, above n 198, at 110. See also Cabinet meeting of 17 December 1923, in Abramowski, above n 198, at 127–8, and the statement of the Minister of Justice to the Chancellor of 7 January 1924, in Abramowski, above n 198, at 194 et seq.

201 Cabinet meeting of 15 December 1923, Committee for Economic Issues, in Abramowski, above n 198, at 109; see also the statement of the Minister of Finance Hans Luther to the Chancellor Wilhelm Marx, and other ministers, of 23 January 1924, Abramowski, above n 198, at 261 et seq.

202 Richterverein, 8 January 1924, above n 195; Cabinet meeting of 15 December 1923, above note 201; Cabinet meeting of 22 January 1924, in Abramowski, above n 198, at 261.

203 Dritte Steuernotverordnung, above n 7, § 2; for the final consultations, see Cabinet Meeting of 25 January 1924, in Abramowski, above n 198, at 267 et seq.; Cabinet Meeting of 28 January 1924, in Abramowski, above n 198, at 294 et seq.; Consultations with Deputies to the Reichstag of 9 February 1924, in Abramowski, above n 198, at 343 et seq.; Consultation of Ministers of 12 February 1924, in Abramowski, above n 198, at 349; Cabinet Meeting of 13 February 1924, in Abramowski, above n 198, at 360–1; Holtfrerich, above n 1, at 318 et seq.

deed and I am grateful to the *Reichsgericht* for attempting to find a solution at the right time, thus enabling the Federal Government to solve the question according to the people's common sense, to ethics and morality.'[204] This statement was gratefully acknowledged by the court.[205] In return, the court did not insist on assessing acts of legislation according to the requirements of good faith or morality.[206] All governmental or legislative measures which disadvantaged certain kinds of creditors or favoured the state were held to be compatible with the Weimar constitution and international law.[207] It was accepted that creditors had no grounds for claiming damages against the Reich Chancellor and the ministers for their management of the crisis. The supposed grounds were that they had been negligent in causing the inflation and in intentionally deceiving the public about the value of the German currency, and then, in enacting statutes which restricted the contractual rights of the deceived creditors.[208] The court restricted its jurisdiction to questions which were not clearly regulated by statutes.[209] In the end, the executive, the legislature, and the judiciary had made their peace in the spirit of separation of powers.[210]

The limited statutory revaluation was a compromise between the needs of the state and the many middle-class creditors. The state could not afford a general revaluation of public bonds issued to cover the public debt and the burden of reparations,[211] and therefore prohibited it.[212] In particular, the claims of 'the civil servants and employees, the freelancers, the pensioners, the widows and orphans'[213] were secured *in rem* so to some extent their position was comparable with that of real estate owners. The political position of mortgage-backed creditors was strong enough to make the politicians increase the revaluation rate up to 25 per cent by the Revaluation Act in July 1925.[214]

Initially, the Minister for Economic Affairs Albert Neuhaus was very reluctant to agree to a further revaluation. In a memorandum of early February 1925, he prophesied the crisis of 1929 and described how a further revaluation would aggravate the problems of the German economy:

> The recent economic situation can only be characterized as a delusive calm and a specious prosperity. The boom which has been developing since the depression of the first half of 1924 has resulted almost exclusively from the injection of foreign assets which have been made

[204] Speech of Erich Emminger, Minister of Justice, above n 37, at 12504.

[205] Reichsgericht, Judgment of 1 March 1924—V 129/23—RGZ 107, 370, at 373.

[206] Nörr, above n 35, at 58; Geyer, above n 36, at 365–6; Reichsgericht, Decision of 25 January 1924—III 882/22—RGZ 107, 315, at 317; Reichsgericht, Judgment of 1 March 1924, above n 205, at 376; Reichsgericht, Judgment of 4 November 1927—III 60/27—RGZ 118, 325, at 326–7.

[207] Nörr, above n 35, at 58–9, 70; see the relevant legislation and the corresponding Reichsgericht judgments (i) Verordnung über die Erweiterung des Abgeltungsverfahrens für Ansprüche gegen das Reich, 24 October 1923, RGBl. I 1010: Reichsgericht, Decision of 25 January 1924, above n 206, at 316 et seq.; Reichsgericht, Decision of the Unified Civil Senates of 22 February 1924—I 548/23, IV 779/23—RGZ 107, 320, at 321 et seq.; (ii) Dritte Steuernotverordnung, above n 7: Reichsgericht, Judgment of 1 March 1924, above n 205, at 376 et seq.; (iii) Gesetz über die Aufwertung von Hypotheken und anderen Ansprüchen (Aufwertungsgesetz), 16 July 1925, RGBl. I 117: Reichsgericht, Judgment of 4 November 1925—V 621/24—RGZ 111, 320, at 322 et seq.; Reichsgericht, Judgment of 4 November 1927, above n 206, at 330; (iv) Gesetz über die Ablösung öffentlicher Anleihen, 16 July 1925, RGBl. I 137: Reichsgericht, Judgment of 27 January 1927—(1927) 56 *Juristische Wochenschrift* 1843 (No. 21); Reichsgericht, Judgment of 5 June 1930—IV 474/29—RGZ 129, 189, at 197 et seq.; Reichsgericht, Judgment of 24 November 1932—IV 245/32—RGZ 139, 6, at 7 et seq.; (v) principles of international law: Reichsgericht, Judgment of 6 June 1928—I 25/28—RGZ 121, 203, at 205–6.

[208] Reichsgericht, Judgment of 4 November 1927—III 60/27—RGZ 118, 325, at 326 et seq.

[209] Nörr, above n 35, at 57, 71; Emmert, above n 35, at 413 et seq.

[210] Reichsgericht, Decision of the Unified Civil Senates of 22 February 1924—I 548/23, IV 779/23—RGZ 107, 320, 326; Reichsgericht, Judgment of 1 March 1924—V 129/23—RGZ 107, 370, 376.

[211] Nörr, above n 35, at 68–9; Geyer, above n 36, at 365.

[212] Dritte Steuernotverordnung, above n 7, Art. II.

[213] See Speech of Erich Emminger, Minister of Justice, above n 37, at 12504.

[214] Aufwertungsgesetz, above n 207, §§ 4, 31, 32.

available for the German economy. . . . As soon as the inflow of foreign capital stops—which has to be expected in one or at most three years—the crisis that has been postponed till then will become fully apparent. . . . The demand for credit, which will be increased by revaluation, will lead to a further need for foreign funds, which will only be available at rising interest rates. . . . In the end, any attempt at a further revaluation of debts will effectively turn into a bill of exchange drawn on the future. When that bill falls to be honoured, it will very severely threaten the strength of the German industry within its definite crisis of reconstruction. No one can take economic responsibility for such a consequence.[215]

Nevertheless, for reasons of social peace, the government and the political parties close to it agreed that there should be a higher revaluation rate, at least for mortgage-backed creditors.[216] Like the Third Emergency Decree on Taxes, the Revaluation Act provided an equitable remedy for debtors and landowners, respectively, to seek a reduction in the revaluation rate 'if this seems essential, in the light of his economic situation, to avoid a serious inequity'.[217] The payment of the revaluation amount was deferred by law until 1 January 1932. Equitable amendments of this date were made by decision of a special authority (*Aufwertungsstelle*).[218]

At the same time, public bonds were converted at a much lower rate.[219] When discussing the draft of the 'Act on repayment of public bonds' with the leading parties of the *Reichstag*, the Reich Chancellor and former Minister of Finance Hans Luther emphasized that an equation of the revaluation of private mortgages and public bonds would lead to the consequence 'that Germany would work for the international bankers' who were the most important creditors of German public bonds. Therefore, the government could only agree to give partial satisfaction to those creditors who had held the bonds prior to hyperinflation. Besides that, one had to 'help by way of social welfare'.[220]

13. The 'Burden of Revaluation'

One of the most controversial topics concerning the Revaluation Act was its retroactive effect.[221] According to the Minister for Economic Affairs, this was 'by far the most devastating part

[215] Statement of Albert Neuhaus, Minister for Economic Affairs, 8 February 1925, in K.-H. Minuth, *Die Kabinette Luther I und II Januar 1925 bis Oktober 1925. Dokumente Nr. 1 bis 170*, vol. 1, in K. D. Erdmann and H. Booms (eds), *Akten der Reichskanzlei: Weimarer Republik* (1977), at 65 et seq. See also the quite similar statement of the President of the Reichsbank Hjalmar Schacht, Cabinet Meeting of 16 March 1925, in Minuth, at 172–3.

[216] Cabinet Meeting of 20 February 1925, in Minuth, above n 215, at 91 et seq.; Consultation of Ministers of 22 January 1925, in Minuth, above n 215, at 10–11; Cabinet Meeting of 7 March 1925, in Minuth, above n 215, at 147 et seq.; Consultation of Ministers of 11 March 1925, in Minuth, above n 215, at 166 et seq.; Cabinet Meeting of 16 March 1925, in Minuth, above n 215, at 171 et seq.; Consultation of party leaders with the Reich Chancellor and ministers of 18 March 1925, in Minuth, above n 215, at 185 et seq.; Agreement of the parliamentary groups supporting the Federal Government of 14 May 1925, in Minuth, above n 215, at 288 et seq.; Entwurf eines Gesetzes über die Aufwertung von Hypotheken und anderen Ansprüchen (Aufwertungsgesetz), Verhandlungen des Reichstags, III. Wahlperiode 1924, vol. 400 (1925) Drucksache No. 804; Bericht des 18. Ausschusses (Aufwertungsfragen) über den Entwurf eines Gesetzes über die Aufwertung von Hypotheken und anderen Ansprüchen, Verhandlungen des Reichstags, III. Wahlperiode 1924, vol. 402 (1925) Drucksache No. 1125, at 2–3.

[217] Dritte Steuernotverordnung, above n 7, § 2 subs. 1 Satz 2; Aufwertungsgesetz, above n 207, § 8 subs. 1 Satz 1.

[218] Aufwertungsgesetz, above n 207, §§ 25–7.

[219] Gesetz über die Ablösung öffentlicher Anleihen, above n 207; Nörr, above n 35, at 70; Cabinet Meeting of 7 March 1925, in Minuth, above n 215, at 150; Consultation of Party Leaders with the Reich Chancellor and Ministers of 18 March 1925, in Minuth, above n 215, at 188–9; Cabinet Meeting of 21 March 1925, in Minuth, above n 215, at 200 et seq.

[220] Consultation of Party leaders with the Reich Chancellor and Ministers of 18 March 1925, in Minuth, above n 215, at 193; see also the letter of Reich Chancellor Hans Luther to Reich President Paul von Hindenburg of 17 June 1925, in Minuth, above n 215, at 350–1.

[221] Cabinet Meeting of 7 March 1925, in Minuth, above n 215, at 149; Cabinet Meeting of 16 March 1925, in Minuth, above n 215, at 174–5; Consultation of Party leaders with the Reich Chancellor and Ministers of 18 March

of the entire revaluation problem'.[222] If the creditor had accepted payments between the beginning of the hyperinflation in June 1922[223] and the enactment of the Third Emergency Decree on Taxes in February 1924, then both the contractual claim and the mortgage were revalued. The revaluation was made regardless of whether the creditor had failed to reserve his rights,[224] or whether a legal dispute on the claim or the mortgage had been finally settled.[225] Even if the mortgage had been removed from the land register, it could be re-entered into the register unless in the meantime someone had acquired the property in good faith in the belief that it was unencumbered.[226] Chancellor Luther criticized the retroactivity of the revaluation on the ground that it violated the principles of legal logic: 'As a matter of legal logic, something which was no longer there, which did not exist any more, could not be revalued.'[227] But his criticisms went unheard.

The character of the non-existent right was unclear. The usual scenario was that the creditor would accept payment in paper *mark* without reserving his rights. But at that time neither the creditor nor the debtor could have known that there would eventually be a judicial or statutory claim for revaluation. Before the Revaluation Act was passed, the Reichsgericht had ruled that such mortgages remained in existence and could be revalued. The court took that view even though section 11 of the Third Emergency Decree on Taxes excluded the revaluation of claims from mortgage-backed loans which had been paid off.[228] If a mortgage had been cancelled prior to the inflation, the unsecured loan could be revalued under the retroactivity clause of the Revaluation Act[229] even if the creditor had used judicial process in 1923 to enforce the loan by payment of paper marks. Since the creditor could not enforce any revaluation claim at that time, he had no reason for reserving his rights.[230]

Once retroactivity had become part of the law, it gave the Reichsgericht an occasion to refer to the doctrine of 'basis of transaction' which it had adopted in the spinning mill case in 1922.[231] The revaluation, especially the retroactive revaluation, also affected land sales which were concluded before a mortgage on the property had been revalued.[232] For the purposes of the 'basis of transaction' doctrine, it made no difference whether the mortgage had already been cancelled when the specific contract was concluded.[233] The seller had to ensure that the mortgage would be cancelled anyway.[234] This obligation was amended by

1925, in Minuth, above n 215, at 190; Cabinet Meeting of 9 May 1925, in Minuth, above n 215, at 276; Agreement of the Parliamentary groups supporting the Federal Government of 14 May 1925, in Minuth, above n 215, at 289–90.

222 Cabinet Meeting of 16 March 1925, in Minuth, above n 215, at 174.

223 See the conversion table from paper mark to gold mark, in the Aufwertungsgesetz, RGBl. I 133–5, attachment.

224 Aufwertungsgesetz, above n 207, § 15.

225 Ibid., § 68 subs. 2.

226 Ibid., § 20; BGB, § 892; for the re-registration, see already Reichsgericht, Decision of 13 March 1925—V B 3/25—RGZ 110, 65, at 69–70 in contrast to Reichsgericht, Judgment of 28 November 1923—V 31/23—RGZ 107, 78, at 92–3; Reichsgericht, Judgment of 1 March 1924—V 129/23—RGZ 107, 370, at 373; on good faith, see Reichsgericht, Judgment of 26 November 1927—V 468/26—RGZ 119, 126, at 128 et seq.; Reichsgericht, Judgment of 26 November 1927—V 6/27—RGZ 119, 142, at 144 et seq.

227 Consultation of Party leaders with the Reich Chancellor and Ministers of 18 March 1925, in Minuth, above n 215, at 190; see also Cabinet Meeting of 20 February 1925, in Minuth, above n 215, at 96–7; Letter of Reich Chancellor Hans Luther to Reich President Paul von Hindenburg of 17 June 1925, in Minuth, above n 215, at 350–1.

228 Reichsgericht, Judgment of 3 December 1924—V 83/24—RGZ 109, 111, at 113 et seq.

229 Aufwertungsgesetz, above n 207, §§ 62, 63.

230 Reichsgericht, Judgment of 4 November 1925, above n 207, at 332 et seq.

231 Reichsgericht, Judgment of 3 February 1922—II 640/21—RGZ 103, 328, at 332.

232 Nörr, above n 35, at 67–8.

233 Reichsgericht, Judgment of 30 January 1928—VI 221/27—RGZ 119, 133, at 138.

234 BGB 1900, § 439 subs. 2 (1), now BGB 2002, §§ 435 (1), 442 subs. 2.

the revaluation. The effect was that the 'basis of transaction' became obsolete. In such cases, the Reichsgericht required the debtor and the buyer to share the 'burden of revaluation' (*Aufwertungslast*). The buyer who had acquired unencumbered property (or property from which the mortgage had to be cleared later) had to give partial compensation for the expenses incurred by the debtor in paying off the creditor's revalued claim.[235] Alternatively, if the buyer had assumed potential debts, the former debtor who had been paid the price for the property on the assumption that it was unencumbered property had to give partial compensation to the buyer unless he, the buyer, had assumed the 'burden of revaluation'.[236] As long as the compensation failed, the affected party was not obliged to cancel the mortgage.[237] On the other hand, if the burden was too heavy for the debtor or the buyer to bear, then the creditor could not claim the full amount of revaluation,[238] or the disadvantaged party could withdraw from the land sale contract.[239] These principles also applied if the contract was concluded after the stabilization of the currency, unless one of the parties had taken the risk of further revaluation.[240]

14. The 'Suicide of the German People'

When the draft of the Revaluation Act was discussed, Chancellor Luther advocated a uniform percentage for the revaluation process. He criticized his opponents' proposal for individual revaluations, case by case, on the ground that they would 'clog up all sources of credit'. The proposal would lead to 'millions of judicial decisions' that would require many years to resolve. No one, not even a judge, could find an 'objectively correct' measure for the economic capacity of individual debtors and creditors. Chancellor Luther summed up his criticism of the proposal for individual revaluations by saying that it 'would involve a suicide of the German people, which would never be committed as long as he was Reich Chancellor'.[241] Even the Reichsgericht admitted that, without a legislative intervention, many legal disputes were to be expected.[242] For that reason the court did not question the validity of the legislation that imposed the uniform revaluation.

Outside the boundaries drawn by the legislature, the courts adjudicated in individual revaluation cases.[243] Revaluation was precluded only for current accounts and plain bank deposits.[244] Any claims not covered by the Revaluation Act could be revalued 'according to the general provisions',[245] which meant that the claim would be considered according to the requirements of good faith.[246] All claims from investments not specified in the Revaluation Act could be revalued by up to 25 per cent, not necessarily by 25 per cent.[247] Claims from unspecified investments such as those based on corporate shares, severance

[235] Reichsgericht, Judgment of 10 February 1926—V 567/24—RGZ 112, 329, at 333 et seq.

[236] Reichsgericht, Judgment of 23 February 1927—V 351/26—(1927) 56 *Juristische Wochenschrift* 1412.

[237] Reichsgericht, Judgment of 10 February 1926—V 567/24—RGZ 112, 329, at 333–4.

[238] Aufwertungsgesetz, above n 207, § 15 (2); Reichsgericht, Judgment of 10 February 1926—V 567/24—RGZ 112, 329, at 334; Reichsgericht, Judgment of 30 January 1928—VI 221/27—RGZ 119, 133, at 138–9.

[239] Reichsgericht, Judgment of 10 February 1926—V 567/24—RGZ 112, 329, at 333; Reichsgericht, Judgment of 30 January 1928—VI 221/27—RGZ 119, 133, at 141–2.

[240] Reichsgericht, Judgment of 30 January 1928—VI 221/27—RGZ 119, 133, at 137.

[241] Consultation of Party leaders with the Reich Chancellor and Ministers of 18 March 1925, Minuth, above n 215, at 189, 191.

[242] Reichsgericht, Judgment of 1 March 1924—V 129/23—RGZ 107, 370, at 374; Reichsgericht, Judgment of 4 November 1925—V 621/24—RGZ 111, 320, at 324 et seq.

[243] Nörr, above n 35, at 57, 71.

[244] Aufwertungsgesetz, above n 207, §§ 65, 66. [245] Ibid., § 62.

[246] Reichsgericht, Judgment of 4 November 1925—V 621/24—RGZ 111, 320, at 332.

[247] Aufwertungsgesetz, above n 207, § 63 subs. 1.

payments, or the enormous number of reciprocal contracts were open to free and individual revaluation.[248] As already seen, the 'burden of revaluation' was also balanced individually by the courts, even in cases where the revaluation ratio was specified by the Revaluation Act. The legislature contemplated this case to case reasoning,[249] and the courts appreciated the opportunity it gave them.[250] Ultimately, those judges who had formulated 'the' revaluation decision in 1923 and the petition of the judges' association in 1924 were proven right.

Nevertheless, one cannot blame the courts' individual revaluation decisions for the 'suicide of the German people' which was in fact committed in the years from 1929, 1931, or 1933 onwards. Judges and legislators could not undo what had already been done, as they attempted 'to preserve what was left of order in the midst of universal collapse, and finally to reconstruct those values that the wreck had not wholly destroyed'.[251]

By the end of 1929, the German economy was entering a deflationary phase. The judges initially refused to devalue pension obligations as the general principles of revaluation, applied on a reciprocal basis, would have required.[252] 'Although one can cannot ignore the severe economic crisis which has recently borne down on commercial life, particularly in the German Empire, the present general economic situation cannot be compared to that of 1923 which made the judiciary intervene against the dogma that "one mark equals one mark".'[253] An exception was made by the *Reichsarbeitsgericht*, the Supreme Labour Court, in cases where the amount of a pension liability borne by an enterprise threatened its economic viability.[254] The continuing fall in the sterling exchange rate from 1931 onwards[255] reminded the Reichsgericht judges of the German inflation. In a case decided in 1933 between two German contracting parties who had specified the purchase price for four tons of yarn in sterling, the court once again had reason to invoke the concept of 'basis of transaction' in its decision.[256]

IV. Epilogue

Once the currency had been stabilized in late 1923, Germany became an attractive market for foreign investors.[257] Interest rates for German bonds increased since the Reichsbank limited the amount of money in circulation to recover the stability of the Reichsmark.[258] But the investors mistrusted the stability of the German economy. Putting aside the special injection of loan capital provided under the Dawes Plan, ordinary investors in Germany preferred to subscribe to short-term bonds issued by German municipalities, enterprises,

[248] Ibid., § 63 subs. 2 Nos. 1 and 4, and subs. 3.
[249] Reichsgericht, Judgment of 10 February 1926—V 567/24—RGZ 112, 329, at 331–2.
[250] Ibid., at 334–5; Reichsgericht, Judgment of 30 January 1928—VI 221/27—RGZ 119, 133, at 139.
[251] Dawson, above n 35, at 238.
[252] Nörr, above n 35, at 25 fn 42.
[253] Reichsgericht, Judgment of 11 March 1933—V 3/33—(1933) 87 *J.A. Seufferts Archiv für Entscheidungen der obersten Gerichte in den deutschen Staaten* 233, at 236 (No. 125). See also Reichsarbeitsgericht, Judgment of 10 August 1932—RAG 168/32—(1932) 15 *Entscheidungen des Reichsarbeitsgerichts und der Landesarbeitsgerichte* 553.
[254] Reichsarbeitsgericht, Judgment of 24 May 1933—RAG 4/33—(1933) 18 *Entscheidungen des Reichsarbeitsgerichts und der Landesarbeitsgerichte* 153.
[255] A. Cairncross and B. Eichengreen, *Sterling in Decline: The Devaluations of 1931, 1949, and 1967* (1983), at 27 et seq., 84 et seq.
[256] Reichsgericht, Judgment of 21 June 1933—I 54/33—RGZ 141, 212, at 217 et seq.
[257] Wehler, above n 10, at 253–4.
[258] Henning, above n 3, at 390 et seq., 397 et seq.; H. James, *The Reichsbank and Public Finance in Germany 1924–1933: A study of the Politics of Economics during the Great Depression* (1985), at 19 et seq., 34 et seq.

and banks.[259] As Minister Neuhaus had predicted,[260] during the Great Depression, many investors called in their loans or did not renew them.[261] Many debtors were unable to repay the loans and bonds.[262] Several German banks went insolvent and had to be saved by the state.[263] All banks became subject to public supervision.[264] The German government tried to raise taxes,[265] restricted the convertibility of the Reichsmark,[266] supervised trade in foreign currencies,[267] cut prices, and reduced public investment and the social welfare system.[268] The lessons learned from the recent hyperinflation resulted in a deflationary policy.[269] For enterprises, it became difficult to raise money in capital or credit markets.[270] Under these circumstances, they could not pay old debts or their employees, nor could they pay for new goods. A new Act allowing insolvent debtors to force creditors into arrangements was rarely efficient.[271] Furthermore, enterprises were entitled to reduce the wages of their employees,[272] and at least six million unemployed people were unable to earn the money for their daily needs.[273]

German myth has it that the Nazis stabilized the German economy.[274] The truth is that the Nazis benefited from global economic growth, widened the public sector, prepared for war, and ran up a mountain of new debt, thus creating a hidden hyperinflation.[275] Once again, war finance and inflation went hand in hand. But this time, the inflation was almost invisible to ordinary people in Germany, as it came at the expense of foreign creditors, Jews, or other ‘enemies’, and later at the expense of the occupied countries.[276] Private law as it

[259] H. A. Winkler, *Geschichte des Westens: Die Zeit der Weltkriege 1914–1945* (2011), at 483; Wehler, above n 10, at 254; Henning, above n 3, at 470–1; H. James, *The German Slump: Politics and Economics 1924–1936* (1986), at 318–9. In fact, the financial situation of the public sector, industry, and agriculture from the mid 1920s on was much more complex: James, *The German Slump*, at 39 et seq., 132 et seq, 246 et seq.

[260] Statement of Albert Neuhaus, 8 February 1925, above n 215.

[261] Wehler, above n 10, at 261.

[262] Henning, above n 3, at 394; Winkler, above note 259, at 551.

[263] Verordnung des Reichspräsidenten über Bankfeiertage, 13 July 1931, RGBl. I 361; Verordnung des Reichspräsidenten über die Darmstädter und Nationalbank, 13 July 1931, RGBl. I 359; Verordnung des Reichspräsidenten über die Sanierung von Bankunternehmen, 20 February 1932, RGBl. I 83; James, above n 259, at 293 et seq., 314 et seq.; Henning, above n 3, at 468 et seq., 482–3; G. Hardach, ‘Banking in Germany, 1918–1939’, in Feinstein, above n 25, at 269–95, 284 et seq.

[264] Verordnung des Reichspräsidenten über Aktienrecht, Bankensanierung und über eine Steueramnestie, 19 September 1931, RGBl. I 493.

[265] Verordnung des Reichspräsidenten auf Grund des Artikel 48 der Reichsverfassung über Deckungsmaßnahmen für den Reichshaushalt 1930, 16 July 1930, RGBl. I 207, repealed by Reichstag, Verhandlungen des Reichstags, IV. Wahlperiode 1928, vol. 428 (1930), at 6523, renewed in Verordnung des Reichspräsidenten zur Behebung finanzieller, wirtschaftlicher und sozialer Notstände, 26 July 1930, RGBl. I 311; Ullmann, above n 14, 135–6; Winkler, above n 259, at 555.

[266] Verordnung über den Verkehr mit ausländischen Zahlungsmitteln, 15 July 1931, RGBl. I 306.

[267] Verordnung des Reichspräsidenten über die Devisenbewirtschaftung, 1 August 1931, RGBl. I 421.

[268] Zweite Verordnung des Reichspräsidenten zur Sicherung von Wirtschaft und Finanzen, 5 June 1931, RGBl. I 279; Vierte Verordnung des Reichspräsidenten zur Sicherung von Wirtschaft und Finanzen und zum Schutze des inneren Friedens, 8 December 1931, RGBl. I 699; Winkler, above n 259, at 562–3.

[269] Ambrosius, above n 8, at 321 et seq.

[270] Henning, above n 3, at 476–7.

[271] Gesetz über den Vergleich zur Abwendung des Konkurses, 5 July 1927, RGBl. I 139; superseded by Vergleichsordnung vom 26 Februar 1935, RGBl. 321; S. Madaus, *Der Insolvenzplan: Von seiner dogmatischen Deutung als Vertrag und seiner Fortentwicklung in eine Bestätigungsinsolvenz* (2011), at 62–3.

[272] Dritte Notverordnung des Reichspräsidenten zur Sicherung von Wirtschaft und Finanzen und zur Bekämpfung politischer Ausschreitungen, 6 October 1931, RGBl. I 537, 557–8, Kapitel III.

[273] Henning, above n 3, at 464 et seq.; Wehler, above n 10, at 260–1, 317 et seq.; Winkler, above n 259, at 551 et seq.

[274] Wehler, above n 10, at 644–5.

[275] James, above n 259, at 343 et seq.; F.-W. Henning, *Deutsche Wirtschafts- und Sozialgeschichte in der ersten Hälfte des 20. Jahrhunderts*, vol. 3/II (2013), at 204 et seq.; Ambrosius, above n 8, at 335 et seq.; Craig, above n 25, at 602 et seq.; Wehler, above n 10, at 709 et seq.

[276] Henning, above n 275, at 342 et seq., 651; Wehler, above n 10, at 698–9; G. Aly, *Hitler's Beneficiaries: Plunder, Racial War, and the Nazi Welfare State*, trans. J. Chase (2007).

had developed during the First World War and the 1920s became an important stepping-stone in implementing one key element of the regime's policy. The doctrine of 'good faith' was used as an instrument to deprive Jews of their contractual and statutory rights.[277]

In 1933, the notorious *Mefo-Wechsel* was invented.[278] Five major suppliers of weapons established a private limited liability company, which served as a special purpose vehicle for issuing acceptance bills for armament debts incurred by the German state to the suppliers. The Reichsbank had to honour the bills because they were signed by another acceptor in addition to the government. This was the same technique of hidden money printing that had been used in the late Weimar period to provide employment.[279]

Payment in foreign currencies was again restricted.[280] Both export and autarky were promoted.[281] In bilateral trade between Germany and its satellites, money was replaced by goods.[282] When the so-called 'New Plan' had failed, the Nazis established a 'Four-Year Plan' based on the ideas of autarky and increased armaments production, all of which was state-funded.[283] To obtain 'real' money, the state forced stock corporations and limited liability companies to cut their dividends and to invest the remaining profit in bonds of the Deutsche Golddiskontobank.[284] For ideological reasons, the legal capital needed for establishing a stock corporation was raised to 500,000 Reichsmarks to promote partnerships where 'honourable merchants' were subject to unlimited liability.[285] In 1937, the state sold off the bank shares it had bought during the great depression.[286]

The Nazis abolished the autonomy of the Reichsbank, which enabled them to pay their debts with treasury acceptance bills (*Schatzwechsel*).[287] On the eve of the war all Jewish enterprises in Germany were 'Aryanised'.[288] Legal restrictions on foreign currencies which

[277] Rüthers, above n 35, at 224 et seq.

[278] James, above note 259, at 373 et seq.; Henning, above n 275, at 361 et seq.; Ambrosius, above n 8, at 343–4.

[279] Ambrosius above n 8, at 325; James, above n 259, 373; Henning, above n 3, at 655; Henning, above n 275, at 360; Wehler, above n 10, at 693.

[280] Gesetz über Zahlungsverbindlichkeiten gegenüber dem Ausland, 9 June 1933, RGBl. I 349; Banken, above n 115, at 146–7; James, above n 259, at 387–8.

[281] Gesetz über Maßnahmen zu Förderung des Außenhandels, 18 October 1933, RGBl. I 744; Gesetz über den Verkehr mit industriellen Rohstoffen und Halbfabrikaten, 22 March 1934, RGBl. I 212; Gesetz zur Übernahme von Garantien zum Ausbau der Rohstoffwirtschaft, 13 December 1934, RGBl. I 1253; Banken, above n 115, at 152 et seq.; J. Scherner, 'Das "Gesetz zur Übernahme von Garantien zum Ausbau der Rohstoffwirtschaft" und die NS-Autarkiepolitik', in Bähr and Banken (eds), above n 115, 343; James, above n 261, at 391 et seq.; M. Ebi, 'Devisenrecht und Außenhandel', in D. Gosewinkel (ed.), *Wirtschaftskontrolle und Recht in der nationalsozialistischen Diktatur* (2005) 181, at 188 et seq., 194 et seq.

[282] On clearing agreements, see further Banken, above n 115, at 160 and fn 142.

[283] Henning, above n 275, at 201 et seq., 232 et seq.; Banken, above n 115, at 157–8; James, above n 259, at 395; Ambrosius, above n 8, at 337 et seq.; Craig, above n 25, at 612 et seq.; Wehler, above n 10, at 693 et seq.

[284] Gesetz über die Gewinnverteilung von Kapitalgesellschaften (Anleihestockgesetz), 4 December 1934, RGBl. I 1934, 1222; James, above note 259, at 416; J. Bähr, 'Unternehmens- und Kapitalmarktrecht im "Dritten Reich": Die Aktienrechtsreform und das Anleihestockgesetz', in Bähr and Banken (eds), above n 115, 35, at 56 et seq.; Ambrosius, above n 8, at 344–5.

[285] Gesetz über Aktiengesellschaften und Kommanditgesellschaften auf Aktien (Aktiengesetz), 30 January 1937, RGBl. I, S. 107; Bähr, above n 284, at 44 et seq., 53 et seq.; B. Mertens, 'Das Aktiengesetz von 1937—unpolitischer Schlussstein oder ideologischer Neuanfang?', (2007) 29 *Zeitschrift für Neuere Rechtsgeschichte* 88, at 105 et seq.

[286] D. Ziegler, 'Der Ordnungsrahmen', in J. Bähr (ed.), *Die Dresdner Bank in der Wirtschaft des Dritten Reichs* (2006) 43, at 52 et seq., 68 et seq.

[287] Gesetz zur Änderung des Bankgesetzes, 27 October 1933, RGBl. II 827; Gesetz zur Neuregelung der Verhältnisse der Reichsbank und der Deutschen Reichsbahn, 10 February 1937, RGBl. II 37; Gesetz über die Deutsche Reichsbank, 15 June 1939, RGBl. I 1015; H. James, 'Die Reichsbank 1876 bis 1945', in Deutsche Bundesbank (ed.), *Fünfzig Jahre Deutsche Mark: Notenbank und Währung in Deutschland seit 1948* (1998) 29, at 64 et seq.; Henning, above n 275, at 341–2; Wehler, above n 10, at 692.

[288] Verordnung über die Anmeldung des Vermögens von Juden, 26 April 1938, RGBl. I 414; Verordnung zur Ausschaltung der Juden aus dem deutschen Wirtschaftsleben, 12 November 1938, RGBl. I 1580; Verordnung über den Einsatz des jüdischen Vermögens, 3 December 1938, RGBl. I 1709; Henning, above n 275, at 225 et seq., 646; C. Essner, '*Die Nürnberger Gesetze*' *oder Die Verwaltung des Rassenwahns 1933–1945* (2002), at 246 et seq., 257 et seq.

had been in force since the First World War and which had affected contractual parties under private law were now deployed to exploit the Jews who wanted to leave Germany.[289] After the *Anschluss*, the Austrian gold reserve was captured by the Reichsbank.[290] During the war, the Nazis raised taxes in Germany and looted the occupied countries.[291] Even so, the level of public debt rose enormously.[292] Real inflation was kept invisible by government measures, especially through wage and price regulation, and through restrictions on trade in goods and capital.[293]

Obviously, this policy of robbery and fraud could not continue after the war. Inflation was channelled to black markets.[294] In the end, the 'lack of good money' was made up for, at least in West Germany, by the monetary reform in 1948 which replaced the devalued Reichsmark by the Deutsche Mark,[295] and by the London Agreement on German External Debts, which restored the credibility of Germany.[296]

[289] Banken, above n 115, at 122 et seq., 125 et seq., 176 et seq., 188 et seq; C. Kuller, *Bürokratie und Verbrechen: Antisemitische Finanzpolitik und Verwaltungspraxis im nationalsozialistischen Deutschland* (2013), at 185 et seq., 201 et seq.; Ullmann, above n 14, at 157 et seq.

[290] Verordnung zur Übernahme der Österreichischen Nationalbank durch die Reichsbank, 17 March 1938, RGBl. I 254; Ambrosius, above n 8, at 354.

[291] Henning, above n 275, at 342–3, 650 et seq.; Ambrosius, above n 8, at 348 et seq., 353; Ullmann, above n 14, 168 et seq.; Craig, above n 25, at 732 et seq., 740 et seq.; Aly, above n 276, at 75 et seq.; for details, see the individual contributions in J. Bähr and R. Banken (eds), *Das Europa des 'Dritten Reichs': Recht, Wirtschaft, Besatzung* (2005).

[292] Henning, above n 275, at 343–4, 650; Ambrosius, above n 8, at 353–4.

[293] Kriegswirtschaftsverordnung, 4 September 1939, RGBl. I 1609.

[294] Ambrosius, above n 8, at 354; Taylor, above n 1, at 348.

[295] C. Buchheim, 'Die Errichtung der Bank deutscher Länder und die Währungsreform in Westdeutschland', in Deutsche Bundesbank (ed), above n 287, at 91–138, 117 et seq.; Wehler, above n 10, at 971.

[296] C. Buchheim, 'Das Londoner Schuldenabkommen', in L. Herbst (ed.), *Westdeutschland 1945–1955: Unterwerfung, Kontrolle, Integration* (1986) 219, at 223 et seq.; R. M. Buxbaum, 'The London Debt Agreement of 1953 and Its Consequences', in H.-E. Rasmussen-Bonne et al. (eds), *Balancing of Interests*: Liber Amicorum *Peter Hay zum 70. Geburtstag* (2005) 55, at 56 et seq.

34

Swedish Government Bonds, their Gold Dollar Clause, and the 1933 Roosevelt Act

—Georges Sauser-Hall's 'Opinion on Loans issued by the Government of Sweden'—

I. Editors' Note

Franklin D. Roosevelt's June 1933 decision to prohibit payment in gold triggered innumerable legal disputes all over the world.[1] They were characterized by an intermingling of issues of monetary law, the law of obligations, international jurisdiction and the conflict of laws. One such dispute concerned Swedish bonds, bought in 1924 by a Swedish insurance company. The terms of the bond included an arbitration clause; if payment in gold were chosen, payment was to be made by the National City Bank of New York. The insurance company sued the Swedish treasury in a Stockholm court demanding payment in Sweden. The treasury saw itself as empowered, by the US Joint Resolution, to discharge the debt in US (paper) money. Georges Sauser-Hall (1884–1966) was asked for an expert opinion.

Sauser-Hall was a renowned Swiss lawyer.[2] A comparative law professor in Neuchâtel since 1912, he had held a prominent position as legal advisor to the Swiss government from 1915 to 1924, handling, on the Swiss side, the war and post-war legal conflicts, notably those springing from the Treaty of Versailles. He was involved in high profile cases, both as an arbiter and as a party representative. The following opinion was given in Geneva on 10 June 1934.[3] We have chosen to include this opinion because of its outstanding lucidity. Sauser-Hall later reworked his deliberations into a publication: 'La clause-or dans les contrats publics et privés', (1937) 60(2/II) *Recueil de Cours* 710.

Wolfgang Ernst and David Fox

II. The Opinion

I, the undersigned, George [sic] Sauser-Hall, Professor of International Private Law and Comparative Legislation at the Universities of Geneva and Neuchatel, Associate of the Institute of International Law, ***being consulted as to the influence of the American***

[1] For the legislation and its effect in the United States of America, see Chapter 31 in this volume.

[2] On Sauser-Hall, see E. Flury-Dasen, 'Sauser (-Hall), Georges', in *Dictionnaire historique de la Suisse* (DHS) (2011), available at http://www.hls-dhs-dss.ch/textes/f/F15772.php.

[3] The opinion was published in A. Plesch, *The Gold Clause: A collection of International Cases and Opinions* (2nd edn, London 1936), at 69–89.

legislation on the fulfilment of obligations in gold dollars undertaken by the State of Sweden*, reply as follows to the questions which have been put to me:*

As for the facts: By contract concluded in Stockholm on the 1st November, 1924, between the Swedish Government represented by the *Riksgaldskontoret* and the National City Bank of New York, this latter undertook to place in New York on the conditions specified in the text of the bonds an external loan of the Swedish Government of thirty million dollars in 5½ per cent. gold bonds 1924/54.

The contract and the bond certificates contain a clause relating to payment in gold. But since the promulgation of the Roosevelt Acts, principally the Acts of the 9th March, the 29th May and the 5th June, 1933—which are assumed to be known and which to analyse would merely cause delay—payment in gold has been refused and the creditor limits himself to offering payment in paper dollars at their nominal value, thus causing his debtors a loss equal to the devaluation of the dollar on the exchange markets, *i.e.*, about 40 per cent.

The Swedish insurance company *Forsakringsaktiebolaget Skandia* has brought an action against the Swedish National Debt Office before the competent Swedish tribunal to obtain payment either in New York or in Stockholm of the gold value of bonds issued by the Swedish Government, payment to be made either in Swedish kroner or in paper dollars not at the nominal value of these monetary tokens, but in such a manner that payments made by the debtor should effectively cover the substantial value of the debt.

Before starting a study of the problems which have been submitted to me, it is of importance to analyse the contents of the engagement undertaken by the Swedish State in order properly to fix the importance of the gold clause which figures in the bonds.

Analysis of the Obligations Assumed by the Swedish Government.

I base this analysis on the following documents:

1. Bond Certificates of the 1st November 1924.
2. Prospectus of issue.
3. Loan contract.

It results from these documents:

(a) The clause stipulating payment in gold of the bonds due by the Swedish Government, appears on the bonds and on the coupons (in abbreviated form on the latter); it is as precise and clear as could be desired; the debtor undertakes to pay the capital and the coupons 'in gold coin of the United States of America of or equal to the present standard of weight and fineness'. The formula adopted in (sic) particularly interesting: it does not only foresee payment in dollars according to the gold standard in force in the United States on the 1st November, 1924, but also payment *equal* to the weight and fineness of this gold currency.

There is, therefore, very clearly a gold value clause.

(b) The intention of this engagement to guarantee the holder a certain value is still further accentuated by the clause providing that payment will take place equally as well in times of war as in times of peace without distinction as to whether the holder is a national of a friendly or an enemy state.

The desire of the debtor to assure to the holders, both in the matter of capital and of interest, repayments and interest payments of an absolutely fixed amount and independent of all fluctuations resulting from any political or economic contingencies, is manifest.

(c) On each bond it is expressly mentioned that it forms a part of the issue of an external loan of the Government of Sweden, authorised by the Swedish Diet of the 14th June 1924, in strict conformity with Swedish constitution and law. Each bond also bears signatures in facsimile of six directors of the Riksgaldskontoret and that of the Secretary General of the latter institution. It is countersigned by the Minister Plenipotentiary of Sweden in the United States and is furnished in facsimile with the seal of the Swedish National Debt Office.

(d) The bonds thus issued on the financial market do not contain any reference to United States law. They simply provide that payment of capital and interest will take place through the intermediary of a fiscal agent, the National City Bank in New York.

The point of fact having thus been clearly defined, let us pass to the examination of legal questions.

In Law: First question: *By admitting that Swedish law is to be regarded as the law of contract for determining the obligations of the debtor in general and, in particular, his obligation to effect payment according to the gold value, what effect, insofar as this obligation is concerned, will the fact have that the place of the payment stipulated was New York, and that the application of the clause stipulating payment in gold even in engagements contracted before the 5th June, 1933, is to-day forbidden as being contrary to the interest of public policy?*

This question involves the two following enquiries:

(a) *Is it possible to impose on a debtor the obligation to effect payment in paper dollars according to their gold value in New York, if such payment is permissible?*

(b) *If it is admitted, on the other hand, that Swedish law is applicable to the engagement itself which has to be met, is it possible to demand from the debtor payment in Stockholm either in Swedish kroner or in dollars, in case that payment in accordance with gold value in New York should be forbidden?*

I.

In order to examine the problems which the first question raises, I shall start not only with the hypothesis that Swedish law is applicable to the engagements which are incorporated in the bonds of the Swedish 5½ State Loan of thirty million dollars (1924/54) but with the certainty that Swedish law is competent to govern these obligations.

This competence is beyond any doubt and easy to demonstrate.

By its two famous decisions of the 12th July, 1929, in the cases of the Serbian and Brazilian loans, the Permanent Court of International Justice at The Hague declares ([Clunet] Journal de Droit International, 1929, pages 1003 and 1026) that in the matter of 'the question of knowing what is the law which governs the contractual obligations which came into question, the Court can only determine this law by appreciating the very nature of these obligations and the circumstances which accompanied their creation, by taking into account equally the expressed or presumed intention of the parties concerned.' When it is a question of State loans, the Court has considered that the debtor 'is a sovereign state which cannot be presumed to have submitted the substance of its debt and the validity of its engagements in this connection to another law than its own'. The Court, nevertheless, admits that a State may very well desire to submit its loans to another law, 'if proof of this desire were given', it declares, 'nothing could prevent it', but this proof cannot result from simple indications nor from simple presumptions of a more or less approximate kind. In the judgement concerning the Brazilian loans, the Permanent Court of International Justice laid down the following rule, which may be considered to apply best to the present state of international law on this question: 'in order to admit that a borrowing state desired to refer to another law than its own insofar as the substance of its debt and the validity of the fixed clauses on this question are concerned, it would have been necessary, provided there were no express stipulations to this effect, at least for there to be circumstances which would prove in a manner which could not be refuted that such had been its intention.' (Clunet 1929, page 1026.)

It is incontestable that such irrefutable proof is not to be met with in the circumstances under which the Swedish loan has been issued.

It is sufficient to refer to the analysis of the obligations assumed by the Kingdom of Sweden to be immediately convinced of this.

First of all, there is no express adoption of the law of the United States. On the contrary, the bonds of the loan contain a formal reference to the constitution and laws of *Sweden*; the validity of the bonds which are incorporated therein is indubitably a matter for Swedish law. The bonds are bearer bonds which have been signed at Stockholm by six managers and by the Secretary General of the *Riksgaldskontoret* and carry the seal of this latter; they have been simply countersigned by the Minister of the Kingdom of Sweden in the United States, evidently at the Legation, *i.e.*, in an extra-territorial building, which is consequently not subject to American law. The country of issue is, therefore, certainly Sweden.

The text of the bond provides, it is true, that the bond is not valid if it has not been authenticated by the fiscal agent of the loan, but this is simply a formal matter of control aimed at guaranteeing the authenticity of foreign bonds. The country of issue remains simply Sweden.

A loan issued by a state on its own territory without the least reference to a foreign law, containing on the contrary a passage in the text of the bonds according to which these latter are issued in conformity with Swedish law, is a loan which is clearly subject to the *law of the debtor state*.

The exactitude of this point of view is further strengthened by the proof that the contract of the loan was concluded in Stockholm between the Swedish Government and the National City Bank of New York. As far as I can judge, this is the type of loan which consists in the sale of bonds to a bank or to a consortium of banks; the bank or the consortium which has granted the loan resell [sic] the bonds to the public. It is, therefore, a question of a sale contract relating to paper values as set out very clearly in Meili: Internationales Zivil- und Handelsrecht 11, page 59, where it is written 'from a juridical point of view a public loan must be treated as a sale and not as a loan.' In the same sense are Cosack: Lehrbuch des Handelsrecht, par. 119, page 126, 11th edition, and Rechtsvergleichendes Handwörterbuch für das Zivil- und Handelsrecht 1931, volume 3, page 43.

This contract for the sale of securities referring to an arrangement concluded by a private bank with a sovereign State, in its capital and without any reserve in favour of a foreign State, can only be subject to the law of this State in conformity with the principle clearly set out by the Permanent Court of International Justice. And it is a second reason for submitting to Swedish law the contents and the validity of the bonds issued by the Swedish Government.

There is also a third point of not less importance than its two predecessors, which is: The bonds issued by a State have the character of a strictly unilateral obligation as long as it is a question of bearer bonds, as is the case, in principle, with the bonds of the Swedish loan (in this sense, Meili, 2, page 274). This applies whether the theory of contract or that of putting into circulation (Kontrakts- oder Bewegungstheorie) is applied as the basis of the validity of the bond, or the theory of creation is adopted (Emissions- oder Ausstellungstheorie). I do not know which of these two conceptions is predominant in the legal doctrine and in the jurisprudence of the Kingdom of Sweden, but the adoption of one or the other cannot modify the legal nature of the bond.

According to the contract theory, the bond only acquires its legal value at the moment when the debtor starts to dispose of it and passes it on to the first holder (Goldschmidt in the Zeitschrift für Handelsrecht XXIII, page 306, XXVIII, page 100, and XXVII, page 128); according to the creation theory the bond already acquires its legal value at the moment it is created (Dernburg: Das Bürgerliche Recht des deutschen Reichs, Vol. II, 1, par. 147, page 381). The question is particularly of importance for the defences which the debtor may raise against the bearer of the bond, notably the acceptability or otherwise of an objection to the putting into circulation of the bond without the wish of the debtor. According to these two theories the bearer bond only brings about a unilateral obligation which is clearly incorporated in the bond. It is thus universally admitted in the international private law that universal obligations are subject to the law of the debtor at the moment when the bond comes to life. (In this sense are Meili, op. cit. No. 2, page 50; von Bar: Theorie und Praxis des Internationalen Privatrechts 11, 135; Amadio: Dollaro e Clausula ora in the Rivista di legislazione Fiscale No. 7 of the 1st July, 1933).

Relating to bearer bonds the application of the Lex Domicilii is absolutely certain when the place of domicile of the debtor is the same as the place of issue and the place of conclusion of the contract of the loan. Frankenstein: Internationales Privatrecht 1929 II, page 352, writes: 'If the place of issue is at the same time the domicile of the issuing party there is no doubt that the latter has submitted to the law of this place in so far as his bonds are concerned, assuming that he was not already subject to it (that is to say, in cases where the law in question is his own national law).' It has, moreover, already been pointed out under reference to the decisions of the Permanent Court of International Justice that very characteristic circumstances must be present to allow admission that the engagements of a Sovereign State towards private persons should not be governed by its own national law.

These considerations do not come into question. Far from finding in them the irrefutable proof of the adoption of a foreign law, everything indicates on the contrary that Swedish law is applicable; in the first place there is the fact that the Swedish Government is the debtor, then the fact that the contract for the loan was concluded in Stockholm and that the Acts rendering the issue legally valid were performed in Sweden under the Swedish laws to which the bonds definitely allude; further, the absence of any adoption of another law; and, finally, the fact that it is a question of bearer bonds which even when they are issued by private persons are subject to the law of the place of the domicile of the debtor.

I consider it to be established that the substance of the engagements incorporated in the bonds of the Swedish State, their validity and their contents, are a matter concerning Swedish law. By foreseeing a payment in gold dollars the debtor has simply introduced into his bonds the legal conception of the gold dollar as established in the United States on the 1st November, 1924, at the time when the loan was issued. He has thus bound himself to adopt the definition of the gold dollar contained in American law, that is to say, he has undertaken to pay as many times the value of 1 gramme 6.718 of gold of a fineness of 900/1000$^{\text{ths}}$ or 1 gramme 50.464 fine gold as he owes dollars. By thus appropriating the legal definition of the dollar to indicate the measure of these engagements, the Swedish State has not placed itself under the sway of the law of the United States. On the contrary, it has introduced *as a convention* certain American conceptions into its bond; if it is absolutely necessary to have recourse to American law to arrive at the definition of the gold dollar, it does not result therefrom that this law governs the contract; it is on the contrary that this law has become an element of a convention which is subject as a whole to a different law, the law of Sweden. It is only for the sake of brevity and also for the requirements of the financial advertising of the loan that it was fixed in gold dollars instead of containing a detailed reproduction of the weight and fineness of the gold currency serving as a standard of value.

There occurred then a phenomenon which is frequent in international private law, namely, the introduction of certain conceptions of a foreign law into the agreements come to by the parties. This process is well known and has been so well described by André Weiss in his Traité de Droit International Privé, Volume IV, page 351, that it would be superfluous to add any more detailed commentary. 'The parties,' this author writes, 'may adopt in the agreement, reproducing them one by one, all the rules admitted, insofar as they are concerned, by any foreign law which they may care to choose; nothing will hinder them from referring thereto in a summary way, by simple reference. But in one case as in another, if the foreign law governs the conditions which arise out of the contract, *it does not do so as law*; the parties concerned have voluntarily appropriated it by incorporating it in the stipulations which have been come to between them; it has changed its character; it has become an agreement.'

The obligations assumed by the Swedish Government being subject to the Swedish law, the adoption of the gold standard of the United States does not have the effect of modifying the laws applicable to the extent of the debtor's borrowing; this gold standard comes in simply by way of a conventional clause to give a precise, invariable and clear definition of the exact value of the engagements of the debtor at the date on which he issued his bonds.

In other words, the contractual currency or, still more exactly, the currency of the obligation, is the gold dollar, but the gold dollar as it existed *at the moment when the engagement came into being*. It is by applying this gold standard which the parties concerned have not only considered stable but which they have intended to remain unchanged by adopting the extremely prudent clause of a payment in gold equal to the existing weight and fineness, that is to say, that existing on the 1st November, 1924, of the gold currency of the United States, it is, I say, by the application of this gold standard clearly specified, that the engagement of the Swedish Government must be measured; it is this that will indicate *how much* and not *how* payment should be made.

This point of view has been established with admirable lucidity and firmness in the two judgments of the Permanent Court concerning the Serbian and Brazilian loans.

The Court decided that the 'gold franc' which served as the measure of the financial engagement of Brazil and of Serbia must be a standard of monetary value which was invariable and that, from the moment when French law recognised two definitions of the gold franc, that of the law of the 17 Germinal of the year XI and that of the monetary law of the 25th June, 1928, which reduced the gold franc by four-fifths of its value, the first having been in force at the date of the issue of the loans and the other at the date of their repayment; it is the standard defined by the law in force at the moment of the issue of the loans which must be retained.

It is worth reproducing this chief passage of the arguments of the Court: 'At what period, they asked, must the standard of value be taken? Clearly at the period of the issue of the loans. The engagement would be devoid of sense if it had in view a standard which was unknown and still to come. The parties, if they had in view a gold value standard, must be considered as having referred to an existing standard.' (Receuil des Arrets Serie A, No. 20–21, Arret No. 14, page 32 & foll. and Arret No. 15, page 115 and following.)

The applicability of so sound a document to the bonds issued in gold dollars by the Government of Sweden is certain. The American law in force at the moment when the engagements were assumed confines itself to specifying one of the clauses of the contract; this law cannot pretend to be applied as emanating from a desire on the part of the legislature but simply as a contractual clause permitting the debtor to indicate briefly to what amount he intends to engage his responsibility. It is thus quite evident that a contractual clause of this kind cannot be influenced by any subsequent modification of the American law since the parties concerned have not agreed to introduce this modified law into their agreements.

II.

If the bonds of the Swedish Government are subject to Swedish law in spite of the clause for payment in gold dollars which they contain, we must further examine the influence which the fact that payment is effected for capital and for interest at the head office of the National City Bank as their fiscal agent in New York may have on the bonds.

There results an inevitable conflict between Swedish law which determines the value of the debt and the American law which serves to indicate how the debt could be paid, what monetary tokens the creditor is bound to accept and what offers on the part of the debtor must be considered satisfactory.

To settle this question it must be recalled that the practically unanimous doctrine and findings of international private law have recognised that an engagement is not necessarily subject to one single law. For a long time past authorities and courts have worked on the principle that the engagement may be split up, for the various elements thereof to be submitted to the different laws.

This point of view has been upheld by the Permanent Court of International Justice in its judgements concerning the Serbian and Brazilian loans of the 12th July, 1929. It declared that 'it must be remarked that, even leaving aside regulations made for the protection of public policy, it is quite possible that it is not the same law which governs the bond under all its aspects. The distinction which seems to be imposed to meet the requirements of the business is notably that existing as between the substance of the debt and certain conditions of its payment' (Clunet 1929, page 1003).

It is in effect established in international private law that the conditions of payment are dependent on the law of the place where payment must be made; this law will notably determine the currency in which the payment may take place, but it only has a qualitative and not a quantitative effect. The law of the place of payment indicates how the debtor can clear himself but not how much he must pay.

It clearly results that insofar as the debtor is bound to execute his contract in the United States, the details governing the execution are a matter for American legislation. But in sound doctrine and in equity the law of the place of payment can only fix the manner of payment of a certain debt which is subject to another law in respect of its contents. It has no power to extend or restrain the extent of the loan due.

Insofar as the American law of the 29th May–5th June, 1933, suppresses the validity of the gold clauses and renders valid payment in paper dollars at the nominal value of the notes, of debts stipulated as payable in gold value, it affects the substance of the bonds, for the equitation 'paper dollar for gold dollar' which was laid down in an imperative way by American law has the effect of diminishing the amount of the debt in reality. American law encroaches on the prerogative of Swedish law insofar as the substance of the bonds of the Swedish Government are concerned.

This excessive consequence of applying the law of the place of payment in the matter of debts with a gold clause has been well appreciated by Nussbaum, who writes, 'the suppression of the gold clause cannot be simply considered as a modification of the method of execution, it affects the very substance of the right of the creditor and cannot in consequence be recognised except insofar as from the beginning the debt has been placed under the law of the state of execution.' (Das Geld [Tübingen, 1925], page 178.)

Once it is established—and I think I have proved that it is—that the substance of the obligation is not governed by the law of the United States, the conclusion must be drawn that the suppression of the gold clause decreed in that country cannot apply to loans of foreign States and that the gold clause which was stipulated when they were concluded retains its full validity. In other words, the inconvertibility of notes decreed by the United States, which was the place of payment of the loan, can have no influence on the extent of the debtor's borrowing, for this latter is dependent on its own law.

This point of view is admitted in Swiss jurisprudence. In the decree of the 23rd May, 1928, concerning the Crédit Foncier Franco-Canadian, the Federal Tribunal delivered a very careful judgment and in doing so confirmed a very well established previous ruling, that Article 84, par. 1, of the Code of Obligations Suisse in the sense of which the debtor of a debt fixed in foreign currency has always the right to discharge himself in the currency of the country, indicates the *manner* in which payment should be made, but *has no effect on the extent of the payment* (Journal des Tribunaux 1928, page 485): the debtor must furnish a number of Swiss monetary tokens sufficient to cover the value effectively due in the terms of the agreement come to with his creditors.

It is altogether significant that in a State whose finances are as depressed as Austria's, nevertheless, recently the judicial opinion has been expressed reversing the previous point of view which governed both in doctrine and in practice, according to which the debtor cannot discharge his obligation in the currency of the place of execution by invoking an official and fictitious rate of exchange which hinders the creditor from receiving what is really due to him. On the 1st February, 1933, the Supreme Court of Vienna ruled in effect that, under the Devisen-Ordung, the Debtor of a credit expressed in foreign currency, the place of execution of which was in Austria, can pay in Austrian schillings but only on the basis of the true value of the foreign currency according to international exchange and not on the basis of the official exchange prescribed by the Austrian National Bank which is, in reality, a fictitious exchange. The Vienna Court applied strictly par. 989 of the Austrian Civil Code, which demands that the debtor should render to the creditor the intrinsic substance of that which he has received, a value which must be fixed on the day on which the loan is granted, when the currency of the contract is no longer in circulation on the day of payment; the debtor may not claim an official exchange which does not allow the creditor to receive that which is really due to him (Clunet 1933, page 1030–1031).

Mutatis mutandis the situation is the same in the United States; there is also an official relation between the gold dollar and the paper dollar which does not at all correspond to the true exchange rate of these monetary tokens.

In particular, it is impossible to overestimate the importance of the judgment given in England on the 15th December, 1933, by the House of Lords in the case of the bonds of the Société Intercommunale Belge d'Electricité.

This company issued in 1928 sterling bonds to the amount of half a million in England; the place of payment was fixed in London; the bonds contain a gold clause referring to the gold currency of the United Kingdom of a weight and fineness equivalent to those existing on the 1st of September, 1928. Putting aside the opinion of two lower courts, the House of Lords based themselves on the jurisprudence of the Permanent Court of International Justice; they admitted that the clause in English gold currency did not apply to the method of payment but served as a measure for the debtor's obligation (the reference to gold coin of the United Kingdom is clearly not a reference to the mode of payment but to the measure of the company's obligation); they conclude by admitting payment in paper pounds sterling, the gold standard having been abandoned in Great Britain in September, 1931, and Bank Notes having since constituted a legal currency with validity as purchasing power, but condemned the Belgian company to pay an amount representing the gold value of its debt in such a way that 'each pound comprised in the nominal amount of each payment should be considered as representing the price in London in sterling of 123.27447 grains of gold of a standard specified in the Monetary Act of 1870.'

This excellent decision, which very happily has reversed the rulings of the lower courts, distinguishes clearly the role of the currency of contract and that of the currency of payment. It lays down clearly the rule that recourse to the currency of the place of execution can only have the consequence of modifying the substance of the bond and reducing the contents thereof.

III.

This survey of judicial opinion may be summed up in the following passage taken from a judgement of the Civil Tribunal at Cairo on the 16th February, 1933, in a case relating to the Crédit Foncier Egyptien: 'payment in execution of international contracts fixed in gold are not subject to national laws relating to inconvertibility' (Clunet, 1933, page 439).

Such is in effect the scientific proof. If it is broadly recognised in most recent cases of a number of states, it is [sic]also recognised by the Courts of a country, the attitude of which the holders of the Swedish loan are particularly interested to know, that is to say, the Courts of the United States? The answer is difficult for I have not found in the collection of European and American legal findings which I have consulted any legal precedent regarding the constitutionality of the Roosevelt Acts nor any judgement interesting the holders of international loans.

I am therefore obliged to remain in the realm of hypothesis.

It may be expected that the American Court will declare the Roosevelt Acts to be a matter of public policy and prescribe their application to all creditors whether American or foreign even when the substance of the debt is not governed by American law. This rather pessimistic conclusion is probable but not certain.

It is probable because when studying the history of the protection afforded to the gold clause in American law, particularly after the War of Secession, 1861–65, which had disorganised the finances of the country, the following points must be recognised.

In virtue of the legal tender acts of 1862 and 1863, the Government of the United States was authorised to issue 'greenbacks,' paper dollars inconvertible and without metallic covering. This paper money depreciated rapidly by two-thirds of its nominal value and many legal judgments were rendered regarding the validity of the clauses relating to payment in gold introduced in the contracts to guarantee the creditor against the depreciation of 'greenbacks.'

The Supreme Court of the United States settled the problem in favour of recognising the gold clause. But it considered this latter either as a clause for payment in gold bars 'commodity contracts' or as a clause for payment in a gold currency (Specification Clause).

The first point of view was adopted in the case of Bronson v. Rodes 1868 and Butler v. Horwitz 1869; the Court declared that a contract with the gold clause 'is not to be distinguished in principle from a contract which has as its object the delivery of an equal weight in gold bars.' They drew the logical conclusion that in contracts expressly stipulating the obligation to pay in coined dollars, this obligation cannot be fulfilled by the offer of bank notes of the United States (Russel L. Post & Charles H. Willard: The Power of Congress to Nullify Gold Clauses in the Harvard Law Review, June, 1933, page 1235; John Hanna: Currency Control & Private Property in the Columbia Law Review, April, 1933, page 643).

The second point of view was adopted in the case of Trebilcock v. Wilson 1872 confirming the case of Willard v. Taylor 1870 and Hepburn v. Griswold 1870; the Court admitted that the contracts contained an obligation to pay in gold and silver coin of legal tender at the date of the conclusion of the contract and it did not consider satisfactory payment in notes which only amounted to the half of the price agreed, judgements which indeed were before their time and the argument of which was taken up by the Permanent Court of International Justice half a century later (John Hanna: Federal Currency Restrictions & Gold Contracts in the American Bar Association Journal, June, 1933, page 350, Note 10, and page 351).

But the Supreme Court of the United States has never admitted that the parties have stipulated a gold value clause with the character of a guarantee against the fluctuations of the value of the currency although American doctrine has no hesitation in attributing this role to it (Russel L. Post & Charles H. Willard, op. cit. pages 1239 and 1342).

It is evident that the Roosevelt Acts of 1933 aim at completely paralysing the findings of the Supreme Court and particularly at impeding any evolution in the direction of a recognition of the gold value clause since they clearly laid down the principle, binding the Courts, of the equality of value of the paper dollar and the gold dollar. They clearly aim at relieving the American debtor and this result would not be attained if the gold clause (which figures in thousands of contracts, which has even become a clause adopted as a matter of style in the United States since the experiences after the War of Secession) could have the effect of diverting in favour of the creditor recognition of the right to demand in paper dollars the payment of an amount covering the effective value of his gold credit. The Roosevelt Acts are most clearly opposed to this.

The character of these Acts as being a matter of public policy is, however, not absolutely certain insofar as debts assumed by foreigners in gold dollars and payable in the United States is [sic] concerned.

I have just mentioned that their object is to protect the debtor established in the United States. It will naturally be for the American authorities and Courts in the first place to determine what bonds are affected by the exceptional measures contained in the Roosevelt Acts.

In the absence of precise definitions in this matter, it should nevertheless be emphasised that there is no *ratio legis* for applying them to bonds subject to a foreign law and payable by a debtor outside the United States; in fact by a foreign state neither the creditor nor the financial situation of which need be protected by American law. As Nussbaum: Deutsches Internationales Privatrecht 1932, page 257, very pertinently points out 'in case of doubt the measures of protection resulting from suppression of the gold clause are considered to be limited to the inhabitants of the State which promulgated them without any considerations of the conditions governing the bond.' In any case it is natural to find it somewhat strange that a debtor state should insist on placing itself thus under the protection of a foreign law of an exceptional character which was clearly not promulgated with the object of allowing it to reduce its engagements.

Laws must be interpreted in the light of their social object; the social object is the essence of the law; without an object a law is only an unreasonable suppression of liberty. A logical and intelligent application of the Roosevelt Acts should lead to a recognition that the suppression of the gold clause in the United States cannot be purely and simply extended to all the bonds which in all parts of the world are fixed payable in gold dollars, since the latter have only one point of contract with the United States namely; that it should be possible for them to be paid there. For such an extension to be granted to American legislation is, properly speaking, unreasonable and absurd from the moment when the debtors are outside the scope of American jurisdiction and have no need to be defended against impending ruin. The French and Swiss Governments freely adopted this point of view which is that of simple common sense, declaring that they wish to execute strictly their engagements in gold dollars and effectively pay their creditors at the gold value.

Decisions in this sense are also met in international jurisdiction; thus the Supreme Court of Austria refused by its judgment of the 12th February, 1929, to apply the German decree of the 28th September, 1914, abolishing gold payments, to a debt in gold marks promised by an Austrian house and subject to Austrian law. A similar judgement of the same Court of the 9th October, 1930, rejected the application of a Jugoslav law of the 24th April, 1920 (Die Oesterreichische Rechtsprechung 1929, 182 & 1931, 13).

Can it be reasonably hoped that the American Courts will arrive at decisions on the basis of these considerations?

It is not absolutely impossible although the issue of an action of this kind before the American Courts cannot be predicted.

But one cannot help remarking that the American State has no interest in being opposed to debtors domiciled outside their territory executing their engagements in gold values in the United States. The only effect thereof can be an affluence of gold or of foreign exchange into the country and a part will, in all probability, remain there. The funds destined for payment will be collected abroad, sent in one form or another (gold, foreign exchange, transfers) to the office of payment in New York to be distributed to debtors. By an international payment in notes, the requisite counter value would clearly be furnished by Sweden.

It must also be considered that the repudiation of the gold clause upsets the international financial relations to a far greater extent than it does internal relations, for there is no compensatory balance between losses incurred by creditors and the profits realised by debtors, who completely escape the risks of monetary devalorisation.

Following the fall of the dollar, persons domiciled in the United States have in effect seen their liabilities diminish in a manner proportionate to their assets; as it is further a question of legislation by a Government in the general interest, they may expect an indirect advantage which the Government hopes to provoke in the long run, otherwise the financial policy it has followed has no point. Foreign creditors, on the contrary, often have liabilities in appreciated currency, so they will only sustain losses; foreign debtors inversely do not always have assets in depreciated currency and escape the losses which result from the devalorisation of the dollar; they enrich themselves at the expense of their creditors. There is no kind of compensation as between the unjust losses of the one class and the unhoped for profits of the other.

Finally, the Gold Reserve Act of the 30th January 1934, on the basis of which President Roosevelt fixed as the 31st January following the weight of the new gold dollar at 15 grains 5/21 of 900/1000 fine as against 25 grains 8/10 of 900/1000 fine for the previous gold dollar, always foresees the possibility of licences. Section 3 of this Act stipulates in effect: 'the Secretary of the Treasury will prescribe by a regulation approved by the President, the conditions on which gold may be acquired and held, transported, melted or worked, imported, exported or stamped; . . . (*c*) for all other objects which in their opinion are not incompatible with the objects of this Act.' This ruling is, anyhow, only an interpretation of the executive order of the 10th March, 1933, which already provided certain exceptions to the ban on paying in gold or in gold value.

It is thus undeniable that even under present American legislation there exists a possibility in law of arriving at legal findings analogous to those of the French Courts, which recognise the validity of the gold clause in international relations and abolish it in internal relations. It is even possible that the United States may be brought to agree to a solution of this kind under the pressure of economic circumstances, as was the case in France. It is quite characteristic that in this State the law of the 25th June 1928, by which the stabilisation of the franc was brought about, prescribes in Article 2, par. 2, that the new definition of the gold franc 'is not applicable to international payments which previous to the promulgation of the present law could have been validly stipulated in gold franc'.

All these considerations evidently have their value. They have not got legal sanction in the United States. The holders of the Swedish loan could attempt to bring an action in the American Courts. The result would not be certain. It is very possible that the Courts of the United States would entrench themselves behind the fact that the Roosevelt Acts are acts for the public safety and without any considerations reject claims of this kind.

IV.

In the hypothesis that the American authorities should admit strictly that payment in New York at the gold value is contrary to public policy there would arise the problem of the possibility of demanding from the debtor payment in Stockholm in Swedish kroner or in dollars.

In order to settle this point the tenor of the clause which appears in the bonds of the Swedish Government and foresees the payment of capital and interest by the intermediary of a fiscal agent, the National City Bank, must be examined.

I am inclined to see in a clause of this kind not the designation of a real place of execution in the technical sense of the word but simply of an office of payment fixed in the interest of the holders in order to centralise and simplify the business of settlement and which creditors may at any time renounce since it is fixed in their interest. The fiscal agent is less a real executive agent than simply an intermediary charged with remitting to the persons interested the content of the bonds of the Swedish Government which are in effect executed elsewhere, that is to say, in Sweden, at the moment when the funds, or the orders for payment, are despatched, or the opening of the necessary credits instructed to the fiscal agent in New York. As Nussbaum points out [Das Geld (Tübingen, 1925)], page 261, the office of payment is simply an organisation adopted in the interest of numerous and unknown creditors to facilitate the actual operation of payment.

The notion of the place of execution is in effect a subjective notion and not an objective notion. The place of execution is the place where the debtor has taken the necessary steps for the creditor to be paid. It is—to employ the German terminology—the place where the Erfüllungshandlung is realised; it is not the place where the result of the execution 'Erfüllungserfolg' is realised. This point of view is accepted by the greatest civil lawyers of Switzerland and Germany: Oser, Becker, Staudinger, Enneccerus, Oertmann, Planck, etc., see Richard Meier: 'Der Erfüllungsort (1919)', page 5.

Bearer bonds, then, incorporate engagements which are of necessity debts which must be collected in person (Präsentations-Holschulden) it being materially impossible for the debtor to know all his creditors so as to bring them the amounts which are due. It results therefrom that the technical place of execution for this kind of debts is always the domicile of the debtor; it is in this point that the act of execution by sending the funds to an office of payment, the fiscal agent, is realised; it is the Swedish National Debt Office in Stockholm which accomplishes those which are necessary to the result of the execution; it is clear that there is only one intermediary.

The subjective and objective notions of the place of execution frequently coincide though not of necessity; it is possible to distinguish them definitely in all engagements which have to be executed at a distance (Schickschuld).

This point of view has already been accepted by the Supreme Court of the German Reich which expressed itself in the following manner in a judgment of the 7th December, 1921: 'The situation is not altered by the fact that interest and sinking fund payments to be made by the plaintiffs must be paid at P. at the office of the defendant. For this agreement does not concern the place of execution but simply the obligation of the plaintiffs to hand to the defendants the loans which they owe.' (Juristische Wochenschrift 1922, page 1121.)

The Dutch Courts at The Hague adopted a similar point of view in the case against the Royal Dutch in payment of bonds fixed in gold dollars; this case is not substantially different from that of the Swedish loans, but I cannot overlook the fact that the clauses in the bonds are more precisely defined; payment in New York must be made through the offices of a trustee, who certainly in American law holds the situation of a fiduciary representative of the bondholders so that—the same terminology being frequently employed in one place and the other—he has the same quality as a fiscal agent. Like this latter he is charged with the business of payments. In their judgment of the 15th February, 1934, when analysing the situation of the bank of Dillon, Read & Co., in New York, which was encharged with the functions of trustee for the service of the loans of the Royal Dutch, the Dutch Court stated:

> whereas the plaintiff demands in this basis payment at Amsterdam in florins, but in return the defendant has proved that he need only pay in New York, and this in dollars, up to the equivalent of the total amount of his debt.
>
> Whereas in support of this thesis he has alleged that the coupons—it is proved—are collectible in Amsterdam, but that even if the holder uses this right, payment must, nevertheless, be made at the counter of Dillon, Read, in New York, by handing over the sum due by them;
>
> Whereas, however, this pretension must be rejected in view of the fact that this payment is to be considered not as payment but merely as a means of placing Dillon, Read in a position to effect the payments due by the defendant in the latter's name;
>
> Whereas, this follows from article X, Section 2 of the indenture according to which Dillon, Read will receive all the sums necessary for the above purposes as deposited in trust and will pay therefore the usual interest to the defendants until the above-mentioned sum must be paid; . . . whereas the clause also figuring on the bonds, the clause according to which the defendant must 'pay the bearer . . . but only upon presentation and surrender of the annexed interest coupons as they shall severally mature' implies that the payment by the defendant is effective at the moment when the coupons are sent that is to say, at Amsterdam insofar as the coupons there presented are concerned; whereas payment to the holders is then made by the defendant, although by the intermediary of Dillon, Read.

This line of argument is entirely correct and can be adopted for the bonds of the Swedish Government all the more readily because they contain the same clause as that in the English language set out above.

Besides, even if the worst construction is put upon the matter, even if it is admitted that the only place of execution is in New York, it must nevertheless be recognised that the holders have the right to call for payment in gold-value in Stockholm.

The bonds must be interpreted according to the rules of good faith. This is a principle expressly set out in Article 2 of the Swiss Civil Code, but is recognised universally. In the case of engagements which are absolutely clearly set out, no debtor can take advantage of events which were absolutely clearly set out, no debtor can take advantage of events which were absolutely unforeseeable and against which the contracting parties could not protect themselves. They had the intention, which can no more be denied than can the light of the day, of guaranteeing the holders a fixed amount, independent of every fluctuation of the exchanges. If the law of the country in which payment must be made places obstacles in the way of the engagements being kept, the rules of good faith demand that the clause fixing the place of execution must be considered inexistent. Every engagement is null and void in principle which aims at producing the impossible, with the reserve that it can be maintained in force if the contract intended by the contracting parties can be executed in some other way. *Utile per inutile non vitiatur*. If payment in gold in the United States is impossible, the debtor's contract must be executed where it can be without regard to the place of execution specified in the contract. The place where it can be executed in toto does exist; it is the place which is at once the place of issue, the domicile of the debtor and in my opinion the true technical place of execution: Stockholm.

The correctness of this conclusion is shown by the absurdities to which the contrary procedure would lead. Supposing that the United States had not only reduced the value of its debt with a gold clause by 40 per cent but, carrying to its logical conclusion their experiment in directed economics and the relief of debtors, had decreed actual 'tabulas novas' and completely cancelled the value of engagements fixed in gold dollars, is it admissible for one moment that European debtors, and above all Governments, could pretend that they were in this way released by the legislation of a foreign country? The question is answered as soon as it is asked. It is quite evident that the substance of the debt could not be affected by such exceptional legislation: the debtors would still exist; they would be solvent: it would be an utter abuse of the law on their part to venture to repudiate their debts under cover of foreign legislation. What is not permitted in the case of 100 per cent cannot any more readily be allowed in the case of 40 per cent. If execution in the terms of the contents of the engagement is rendered impossible by American laws, it must be able to take place elsewhere.

As regards how execution can take place in Sweden, this is naturally a matter of Swedish law. I do not know the latter in detail. But I can presume that, as in most other countries payment of a debt in gold dollars can be effected in the currency of the country, in Swedish kroner, but at the rate of gold; if Swedish law permits payment in paper dollars, this would also have to be calculated at the rate of gold, since it is the gold value which fixes the amount of the contract assumed.

In these two eventualities the lender will be able to obtain payment of the gold value of his loan and the fact that the gold dollar is no longer quoted on the foreign exchange markets cannot constitute any difficulty for conversion operations: as basis will be taken the quantity of fine gold represented by the gold dollar according to the American law in force on the 1st November, 1924; then the value of this quantity of gold on the day of payment will be arrived at according to the price of gold on the open market; and this gold value will have to be met in full Swedish kroner or in paper dollars.

V.

My reply to the first question, based upon the considerations set out above, is the following: I. The bonds of the Swedish Government Loan of $30,000,000–1924/54 5½% Gold Bonds are subject to Swedish law which fixes the extent of the debtor's contract; the definition of the gold-dollar itself is taken from the laws of the United States which were in force on the 1st November, 1924, but has been introduced in the bonds as a simple clause of the contract. It results that American law is not applicable to the substance of these engagements.

(a) In principle, the debtor is bound to execute his payments in New York in such a way that the number of paper dollars to be paid to the creditors shall correspond to the value of the debt in gold dollars, for the real amount of this latter cannot be reduced by the currency of the payment. It is in fact doubtful whether this method of settlement can be realised in the United States where the principle of the paper dollar and the gold dollar being equivalent will probably be declared a matter coming under the definition of 'Public policy' not only in the case of internal debts but also for international debts. There are, however, powerful reasons for the latter being considered unaffected by the Roosevelt Acts of 1933 and 1934.

(b) Assuming that payment calculated at the gold value could not be obtained in the United States, the holders still have the right to demand payment in full in Stockholm, in accordance with the clauses contained in the bonds, that is at the value of the gold. The method of execution will then be decided solely by Swedish law which will determine whether payment will have to be made in Swedish kroner or can be made in paper dollars, but in either case, not taking account of the nominal value of these currencies but their effective value in relation to gold.

Second Question: *What would in this case be the effect of the obligation to pay in Sweden, if American law were held to be applicable and what American law would be applicable to the legal effects of the clause regarding payment in gold;*

(a) The law in force at the date of the engagement, or

(b) Present legislation, the question being regarded also from the point of view of the special character of the Presidential legislation which—in American municipal law—is an executive law in the United States with retroactive effect.

VI.

I have already said that the application of American Law to the substance of the bonds in question cannot be justified in law and I have shown the reasons for this. It may, however, be worth while to consider the possibility of this point of view not being adopted by the courts of law which, for reasons which to tell the truth escape me, might in considering a debt assumed by a Government, admit that American law is applicable not only to the method of payment when payment is called for in the United States, but to the substance of the bonds itself.

In this case, the Swedish courts could not avoid examining the serious question of whether the Roosevelt Acts are compatible with 'public policy' as understood in Sweden. The problem may be simply set out in these terms: Can the American laws which suppressed the validity of the gold clause in bonds contracted, contrary to the clearly expressed will of the parties concerned, and even with retroactive effect for contracts concluded before their promulgation be recognised in foreign countries which, like Sweden, cling firmly to the principle of the sanctity of contracts?

To appreciate the problem it must not be forgotten that the Act of the 29th of May–5th of June, 1933, which categorically repudiated the gold clause is one of a vast collection of political measures aimed at (1) reducing volume of debts which was oppressing American economic life and the service of which is contributing to the maintenance of costs of production at too high a figure; (2) to revive economic activity in the United States by causing an increase of orders for purchase and consequently higher prices.

To obtain this result—if it could ever be attained by the means chosen—the American Government had recourse to measures of an exceptional and revolutionary character. These culminated in the Gold Reserve Act of the 30th January, 1934, which devalorised the gold dollar by more than 40 per cent., the new dollar having a value of 59.06 cents gold, as against 100 cents gold for the dollar previously in force.

In reality this is a case of a kind of composition with creditors up to an approximate amount of 60 per cent. of their claims applicable to all holders of bonds payable in gold dollars to the advantage of American debtors. This composition was not rendered necessary by a decline in the relations between the fiduciary circulation and the metallic cover of the dollar, as was the case in most European states which were obliged to decree the inconvertibility of their notes in order to try and escape from the inextricable difficulties of the War and of the period that followed. The devalorisation of the dollar was brought about artificially by the withdrawal of the gold in circulation; the gold reserve has not decreased in the United States; it has on the contrary increased and is, both taken absolutely and relatively, the largest in the world, as appears from the calculations of American economists themselves who place it at more than 3½ milliards of gold dollars of the old weight and fineness.

It is, then, a case of legislation of a strictly political nature in the sense which the internationalists give to this word, that is to say, of legislation heavily tinged with partiality not aimed at realising justice but at attaining certain results in favour of certain classes of persons. (Arminjon: Précis de droit international privé 2nd edition, 1934, II., page 368.) At no period have political acts and other exceptional measures been recognised abroad, although they might take a legislative or judicial form when they cause obvious injustice. This is certainly the case with the Roosevelt Acts which although far from allowing the State to exercise its normal functions of judicial sponsor for contractual obligations, allow it to interfere in private contracts, not in order to ensure the execution thereof but to upset their course by rendering realisation impossible in the sense which the parties concerned intended, and falsifying all the premises.

Laws of this kind are laws of a strictly territorial nature. They could not claim to be recognised and applied outside the United States unless they applied to the situation of bonds created subsequently to their promulgation; the parties concerned would have undertaken their reciprocal engagements fully alive to the fact and would have arranged them accordingly.

This point of view may gain authority from numerous precedents. Let us simply mention that in the course of the World War the Courts of neutral countries always refused to admit that exceptional war measures, such as sequestrations, the liquidation of sequestrated goods, the embargo on trading with the enemy, etc., decreed in the belligerent countries had any effect abroad (Sauser-Hall: Les traités de paix et les droits privés des neutres 1924, page 28/41). The Courts of Switzerland, Holland, Monaco, and of the United States before the entry of that power into the War, based themselves on this principle. It is found as the basis of a recent judgement of the Court of Appeal of Paris of the 30th of June, 1933, declaring that the application of laws which simply have a political and penal object such as the laws governing the export of capital during the War can only be territorial (Clunet 1933, page 963).

Besides, American law itself does not seem to take into consideration payments effected outside the United States. The Roosevelt Act of the 29th of May–5th June, 1933, is based upon the argument that free trade in gold affects the public interest and that payments in gold or based on gold constitute an obstacle to the power of Congress to regulate the value of the currency of the United States and cannot be reconciled with the declared policy of Congress to maintain at all time the same power for each dollar. It is very evident that this law can only apply to payments which take place on the territory of the United States as formally admitted by the District Court at the Hague in a judgment of the 13th of February, 1934, relating to the gold bonds issued by the Royal Dutch. In a decree of the 23rd of January, 1934, the French Court of Cassation likewise forcibly declared: 'Whereas the inconvertibility of the note issue, a measure adopted in the national interest, is restricted to the territory of the nation which brings it into being.' (André Prudhomme: De la règle 'The place of payment determines the nature of the currency' Clunet [Journal de Droit International] 1925, page 880).

While being matters concerning the public policy in the United States, the American laws which suppressed the gold clause must be considered as contrary to public policy of foreign countries and cannot either be applied or recognised there. Their effect ceases outside the limits of jurisdiction of the United States. They cannot make the exorbitant claim of being able to annul stipulations which have been agreed upon. (In this connection see Nussbaum, [Das Geld (Tübingen, 1925)], page 257.)

VII.

Supposing that, as is highly improbable, the Court should reject the exception taken, based upon the principle of public policy in Sweden, and should admit that American law is, by interpretating [sic] the probable wish of the parties concerned, applicable to the whole of the engagements relating to the external loan of the Swedish Government, its conclusion, its contents and its execution, this would still not have the consequence that execution in Sweden must be governed by the Roosevelt Acts of 1933.

The reason for this is simple; the parties cannot have desired to commit themselves to a legislation which they do not know and which they could not know at the moment when the bonds were created, for the simple reason that it did not exist. At the moment when these latter were issued, the American law recognised the validity of the gold payment clause and the parties concerned took the precaution to insert in the wording of the bond a passage containing a very definite reference to the monetary standard, that is to say, the 'present' (actual) gold standard, that is to say, the only one which the parties could have had in mind at the time when the engagements were assumed, the gold dollar which was legal purchasing power on the 1st November, 1924.

In the face of such a clear intention it may be assumed as certain that the parties concerned would have adopted another monetary standard if they could have foreseen that the law which governed it could be altered. It is quite unreasonable to admit on the basis of their presumed intention that they intended to submit themselves to future American legislation which would upset their engagements, annul with retroactive effect the gold clause which they considered essential because they desired to be entirely clear as to the unalterable character of the debtor's engagements, completely upset the contents of the loan and suppress rights previously acquired.

This point of view was generally admitted before the promulgation of the Roosevelt Acts by American lawyers who refused to interpret contracts under the influence of elements which came into being subsequent to their conclusion. In any case in the United States it has been considered that 'the engagement implied in the contract is determined by the law existing at the moment when the contract is concluded.' (Shatzky: Les Décisions des tribunaux américains, Clunet [Journal de Droit International] 1933, page 546.) This is the doctrine also arrived at by the Permanent Court of International Justice.

The Supreme Court of the German Reich concurred in the same conception in a decision of the 19th of September, 1923, by which, in connection with the modification of the law which was applicable subsequent to the coming into effect of the new legal relationship, it refused to apply the new law to the party to the contract who lived outside the territory of the State which had promulgated it, arguing as follows: 'Granted this situation, it is possible that the rights of the party who is in the territory of the State which has altered its law may be governed by the new law of a foreign power. But this is not in any way the result of the probable intention of the contracting parties; nor can it be presumed that the new law is also the determining factor for the bonds of those parties to an engagement who are not subject to the territorial powers of this new foreign law.' (Juristische Wochenschrift, 1924, page 1357.)

The right to a credit in dollars, defined by the gold standard which existed at the moment when the creditors acquired their credit, is particularly obvious when, as in this case, it is a question of bearer bonds. As there is not mentioned on the bonds any question of an election of legislation it cannot be held up against the holders that they have agreed to be subject to American law and have voluntarily exposed themselves to the risk of change which this law causes in the monetary unit. This intention is in reality always absent.

In fact, even in the hypothetical case of it being admitted that the bonds are subject to the law of the United States and of the Roosevelt Acts not being considered contrary to public policy in Sweden, the conclusion must be arrived at that these latter cannot affect abroad the clearly declared intention of the parties concerned.

They ought, in any case, to be set aside as they concern not the currency of the contract but the currency of payment. In no State in the world can the rule regarding the manner in which payment must be made, in order to have validity, be drawn from foreign laws, even when it is certain—as is not at all the case in the matter under consideration, in my opinion—that the engagement is subject to the law of a foreign country. Not only is it unreasonable to suppose that a creditor who claims payment of what is due to him outside the United States should be expected to choose American law to determine the manner in which payment has to be made, but I submit that it is impossible for him to do it. Everywhere the laws regarding the manner in which the payment must be made are imperative laws quite outside the freewill of the parties concerned. If a state decrees that all engagements expressed in foreign currencies or containing a gold clause must be paid in the legal currency the parties concerned have not the power to escape from this ruling and it is the State of the place of payment which will indicate the rate on the basis of which the conversion of a currency into another must be effected. (The rate of the day on which payment is due as in Swiss law, the rate of the day of payment as in German law, etc.)

VIII.

As a conclusion to the arguments set out above, I can reply in the following way to the second question put:

2. In case the law of the United States should be held to be applicable in Sweden, to the substance of bonds issued by the Swedish Government, this law could only be that in force in the United States at the moment when the bonds were issued, as the bonds contain an express reference to this effect.

(a) The American law in force on the 1st of November, 1924, would not be competent to govern the method of execution which would be a matter subject to Swedish law.

(b) The Roosevelt Acts of 1933 could not apply, inasmuch as they are political laws of an exceptional nature, and strictly territorial, since they must be considered contrary to the preservation of public order in Sweden, insofar as they alter the contents of the debtor's engagements with retroactive effect.

Insofar as laws fix the method of execution of bonds with a gold clause, these Acts are normally inapplicable abroad, as the method of execution of the obligations is everywhere and of necessity a matter governed by the law of the country of execution.

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CHAPTER 9 (WIJFFELS)

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