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**The Late-Medieval Origins of the Modern Financial Revolution:
Overcoming Impediments from Church and State**

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The Late-Medieval Origins of the Modern Financial Revolution:
Overcoming Impediments from Church and State

Abstract: John H. Munro (University of Toronto)

The basic thesis of this article is that the essential origins of the modern 'financial revolution' were the late-medieval responses, civic and mercantile, to financial impediments from both Church and State that reached their harmful fruition in the later thirteenth and early fourteenth century. That 'financial revolution', in terms of those national institutions for government borrowing and international finance, involving negotiable securities, in the form of annuities or *rentes*, and bills of exchange, is generally thought to have originated in eighteenth century England; but as James Tracy has earlier shown it first took place, on a fully national basis, in the sixteenth-century Habsburg Netherlands. The major obstacle from the Church was of course the usury doctrine, and more accurately the final evolution of this doctrine in Scholastic theology and canon law, along with the intensification of the campaign against usury from the early thirteenth century. The major obstacles that the State provided, with the spreading stain of ever more disruptive international warfare from the 1280s, were the nationalistic bullionist philosophies and related monetary-fiscal policies (to finance warfare) that together hindered the international flow of specie in later medieval Europe. For public borrowing, one must begin with the contentious policies of Venice, Florence, and other Italian city states in basing their finances on forced loans, which did pay interest, and thus with the usury controversies that erupted, over not just such loans, but the sale of interest-bearing debt certificates in secondary markets. The alternative solution, found elsewhere – first in northern French towns from the 1220s -- and one that would govern European public finance up to the nineteenth century, was to raise funds for urban governments through the sale of *rentes*, both life-rents (one or two lives) and hereditary or perpetual rents. These were not in fact loans but annuities, and hence they were not usurious, because the buyer of such *rentes* had no expectation of repayment (unless the government chose to redeem them); instead they represented the purchase of a continuous future stream of income (for at least one lifetime). Those *rentiers* who sought to regain some part of their invested capital had only one recourse: to seek out buyers in secondary markets. The true efficiency of modern public finance also rested upon the development of such markets and thus upon the development of full-fledged negotiablity; and public finance also depends upon satisfactory instruments to permit low risk, low cost international remittances. The solution to both problems lay in the development of the negotiable bill of exchange. Such bills, at first non-negotiable, emerged in the late thirteenth century as a response to circumvent not only the usury doctrine (to 'disguise' interest payments in the exchange rate) but also the almost universal bans on bullion exports. Yet another barrier that medieval English merchants faced was the virtual absence of deposit-banking because of the crown's strict monopoly on the coinage and money supply, so that the usual origin of such banking, in private money-changing, was unavailable. Although English merchants sought remedies by using transferable commercial bills, they were not truly negotiable, for they had no legal standing in Common Law courts. But from the late thirteenth century, the Crown was incorporating the then evolving international Law Merchant into statutory law, and it also established law merchant courts, which did give such financial instruments some legal standing. In 1436, a London law-merchant court was the first, in Europe, to establish the principle that the bearer of a bill of exchange, on its maturity, had full rights to sue the 'acceptor' or *payer*, on whom it was drawn, for full payment and to receive compensation for damages. From that precedent, and then from those provided by similar law-merchant court verdicts in Antwerp and Bruges (1507, 1527), the Estates General of the Habsburg Low Countries (1537-1541) produced Europe's first national legislation to ensure the full legal requirements of true negotiability – including the right to sue intervening assignees to whom bills had been transferred in payment. These Estates-General also legalized interest payments (up to 12%), thus permitting open discounting, another obviously essential feature of modern finance, private and public. Antwerp itself, with the foundation of its *Bourse* in 1531, became the international financial capital of Europe, especially as a secondary market in national *rentes* – the very instrument that became the foundation of English public finance, in the form of annuities, from the 1690s.

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The Late-Medieval Origins of the Modern Financial Revolution: Overcoming Impediments from Church and State [1]

John H. Munro (University of Toronto)

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As Earl Hamilton observed many years ago, a 'national debt is one of the very few important economic phenomena without roots in the Ancient World'.[2] The first evidence for organized public debts are to be found in various towns of twelfth-century Italy. But these interest-bearing loans were fundamentally different from what came to be known as the modern 'financial revolution' in public debt, which, in its English version, had six fundamental components. First, the national debt was 'permanent', in that it consisted largely of perpetual annuities (known on the continent as *rentes*), which, however, were redeemable at the will of the issuing government authority, in contrast to interest-bearing loans with stipulated redemption dates. Second, that debt was truly national, and not merely a financial obligation of towns or princes (as persons); i.e., it was created by the national state through representative parliamentary institutions. Third, the annual payments on such annuities and their periodic redemptions were authorized by the national parliament or legislative assembly, which thus undertook to fund that debt by levying specific taxes (usually on consumption). Fourth, the government's sale of these annuities took place in free markets, without any elements of state coercion. Fifth, in order for the public to purchase such annuities willingly, it had to have complete confidence that the government would never fail to meet its obligation to make the stipulated annuity payments (usually annual). Sixth, those annuities were freely negotiable through financial intermediaries, and secondary markets, for purchase by any buyer, both inside and outside the national state.

According to Peter Dickson, this modern 'financial revolution' (a term that he coined) began in later

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[1] A shorter version of this paper was delivered the 61st Annual Meeting of the Economic History Association, on *Finance and Economic Modernization*, on 26 October 2001, in Philadelphia, Pennsylvania. With the usual disclaimers, I thank the following for their comments, suggestions, and advice in revising this paper for publication: Meir Kohn, Clyde Reed, Lawrin Amstrong, and James Tracy, and four anonymous referees. I am especially indebted to James Tracy for his publications, communications, and advice. I also acknowledge support from the Social Sciences and Humanities Research Council of Canada, General Research Grant (410-99-0274) for the archival research in the Algemeen Rijksarchief in Belgium.

[2] Earl J. Hamilton, 'The Origin and Growth of the National Debt in Western Europe', *American Economic Review*, 37:2 (May 1947), 118-30.

Stuart England, in the reign of William III (1689-1702) and Mary II, though reaching its fruition only in the mid eighteenth century. Recently Forrest Capie, in referring to these events, has remarked that 'the word *revolution* has perhaps been overused in economic historical studies, but perhaps this is an occasion when it is appropriate'; and Marjolein 't Hart has also observed that 'currently the financial revolution in England is being regarded as one of the hallmarks of the Modern State, with England as the model country...'.[3] James Tracy has, however, contended that the true origins of the 'financial revolution' are to be found in the sixteenth-century Habsburg Netherlands, while other historians have made similarly strong claims for sixteenth-century Habsburg Spain and France.[4]

That all of these national debts were based on the sale of annuities or *rentes* is the most striking feature to be observed, simply because they were *not* loans; and thus they differed markedly from the forms of national public finance that had prevailed earlier, in medieval Europe, and would again prevail, in more modern times, first in North America and then in twentieth-century Europe (and elsewhere), especially in the form of bonds and debentures. To explain this perplexing historical anomaly one must understand first the late-medieval origins of the *rente* itself, and second, for the complete fruition of the modern financial revolution, the origins and evolution of full-fledged negotiability for all credit instruments. For the true foundations of the modern 'financial revolution', in both respects, were the thirteenth-century responses, from both town governments and private merchants, to increasingly severe impediments that both Church and State were imposing on borrowing and international financial transactions.

The Medieval Usury Doctrines and Scholastic Analyses of Loan, Rental, and Commercial Contacts

The most obvious, most important, and the seemingly best known impediment imposed on borrowing

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[3] Peter G. M. Dickson, *The Financial Revolution in England : A Study in the Development of Public Credit, 1688-1756* (London, 1967); Forrest Capie, 'The Origins and Development of Stable Fiscal and Monetary Institutions in England', in Michael Bordo and Roberto Cortés-Conde, eds., *Transferring Wealth and Power from the Old to the New World: Monetary and Financial Institutions in the 17th Through the 19th Centuries* (Cambridge, 2002), p. 43; Marjolein 't Hart, ' "The Devil or the Dutch": Holland's Impact on the Financial Revolution in England, 1643-1694', *Parliaments, Estates and Representatives*, 11:1 (June 1991), 40. See also Henry Roseveare, *The Financial Revolution, 1660 - 1760* (London, 1991); and below, pp. 00.

[4] James D. Tracy, *A Financial Revolution in the Habsburg Netherlands: Renten and Renteniers in the County of Holland, 1515 - 1565* (Berkeley-London, 1985). See below, pp. 00.

was the Church's prohibition of usury: i.e., the exaction of interest, as *any* pre-specified return beyond the principal value of a loan. Over the past century, however, many scholars have contended that the anti-usury doctrine was never really a serious issue in medieval society for one or more of four major reasons: that it applied only to so-called 'consumption loans'; that it concerned only 'excessive interest' (rarely defined) – as in the modern definition of usury; that canon law came to permit many so-called 'exceptions' (*extrinsic titles*) that permitted the payment of interest on commercial loans; and finally that, in any event, the usury ban waned, in not just in its enforcement but also its presence in the public's mind, during the High Middle Ages, with the increasing commercialisation of the European economy.[5] On the contrary, just when the Commercial Revolution was reaching its apogee, during the thirteenth century, western Europe experienced a vigorous and very harsh resuscitation of the 'campaign against usury'; and most of the ecclesiastical tracts and fulminations against usury came to focus primarily on commercial or investment loans.

Chiefly responsible for this campaign, commencing in the early thirteenth century, were the two newly established mendicant religious orders: the Order of Friars Minor or Franciscans (founded c.1206-10) and the Order of Friars Preacher or Dominicans (1216). Certainly they were aided by a contemporary decree of the Fourth Lateran Council (1215) that made annual confessions obligatory for all. This same Council also issued an excoriating diatribe against Jews, for their supposed 'treachery' and 'cruel oppression' in extorting 'oppressive and excessive interest', while engaging (as non-Christians) in licensed pawnbroking. By so associating Jewish money lenders with usury, the Council certainly made it appear all the more heinous a mortal sin to a largely anti-Semitic public.[6] The mendicant friars found even more ammunition in the

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[5] See Appendix A, for a discussion of the now extensive literature on usury, pp. 00. Since so many historians and economists contend that the usury doctrine was either irrelevant to, or merely a minor impediment in, the later medieval economy, the entire thesis of this article depends upon on proving the contrary: that usury was a major economic impediment to be circumvented, especially in public finance. My own mentor at Yale, Prof Roberto Lopez, was certainly one of those scholars who dismissed the importance of the usury doctrine. See also Charles Kindleberger, *A Financial History of Western Europe* (London, 1984), p. 41: that usury 'belongs less to economic history than to the history of ideas'. Admirably suited for the modern era, this book has virtually no relevance for this study on the origins of the 'financial revolution'.

[6] See Constitution 67, from the Fourth Lateran Council (1215), translated and published in John Gilchrist, *The Church and Economic Activity in the Middle Ages* (New York, 1969), pp. 182-83. This passage is evidently a source of the common erroneous view that the Church opposed only 'excessive'

Decretales of Pope Gregory IX (1234). After confirming the Third Lateran Council's decree (1179) excommunicating all usurers, and denying the unrepentant burial in consecrated ground, the *Decretales* prescribed a long list of other harsh punishments, requiring all princes 'to expel usurers from their territories and never to readmit them'.[7] Not content with citing all these stern measures, the Franciscans and Dominicans contrived their own lurid and horrifying *exempla* – diabolic stories about the ghastly fates awaiting usurers in and after death; and in their incessant inflammatory preaching, they managed to convince most of the public that usurers were 'linked with the worst evildoers, the worst occupations, the worst sins, and the worst vices'; and they were also influential in persuading many secular governments to enforce the usury ban during the later Middle Ages.[8] Thus loan contracts of an earlier era that openly admitted the payment of interest would rarely be encountered from the thirteenth century.[9]

The other major component in the thirteenth-century anti-usury campaign was the re-introduction of Aristotle's philosophical treatises and their impact upon the so-called Scholastics. Undoubtedly their chief inspiration came from Aristotle's concept on the inherent 'sterility of money' in the context of natural law.

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interest. On licensed Jewish money-lenders, see Joseph Shatzmiller, *Shylock Reconsidered: Jews, Moneylending, and Medieval Society* (Berkeley, Los Angeles, and London, 1990); and Maristella Botticini, 'A Tale of "Benevolent" Governments: Private Credit Markets, Public Finance, and the Role of Jewish Lenders in Medieval and Renaissance Italy', *Journal of Economic History*, 60:1 (March 2000), 164-89.

[7] See James A. Brundage, 'Usury', in Joseph R. Strayer, et al., eds., *Dictionary of the Middle Ages*, 13 vols. (New York, 1982-89), Vol. XII (1989), pp. 335-39 (an excellent survey), with quotation on p. 337; John W. Baldwin, *Masters, Princes, and Merchants: The Social Views of Peter the Chanter and His Circle*, 2 vols. (Princeton, 1970); John F. McGovern, 'The Rise of New Economic Attitudes: Economic Humanism and Economic Nationalism during the Later Middle Ages and the Renaissance', *Traditio*, 26 (1970), 217-53; John F. McGovern, 'The Rise of New Economic Attitudes in Canon and Civil Law, A.D. 1200-1550', *The Jurist*, 32 (1972), 39-50; Langholm, *Economics in the Medieval Schools: Wealth, Exchange, Value, Money and Usury According to the Paris Theological Tradition, 1200 - 1350*, Studien und Texte zur Geistesgeschichte des Mittelalters, vol. 19 (Leiden and New York, 1992), pp. 52, 88-97.

[8] Jacques Le Goff, 'The Usurer and Purgatory', in Center for Medieval and Renaissance Studies, UCLA, ed., *The Dawn of Modern Banking* (New Haven, 1979), pp. 29-34.

[9] For Genoese examples, see Robert Lopez and Irving Raymond, eds., *Medieval Trade in the Mediterranean World: Illustrative Documents Illustrative Documents Translated with Introductions and Notes*, Records of Civilization, Sources, and Studies no. 51 (New York, 1955), no. 66, pp. 158-59 (Genoa, 16 July 1161; and Pryor, John, ed., *Business Contracts of Medieval Provence: Selected Notulae from the Cartulary of Giraud Amalric of Marseilles, 1248*, PIMS, Studies and Texts 54 (Toronto, 1981).

For Aristotle had clearly stated that: [10]

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

To be sure, somewhat similar Aristotelian concepts had been familiar in the earlier Middle Ages, first appearing in the fifth- or sixth-century palea *Ejiciens*, which was itself incorporated into in the earliest compilation of canon law, the *Concordia discordantium canonum*, commonly known as Gratian's *Decretum,* compiled between 1130 and 1140.[11] But the first genuine and complete Aristotelian treatise to be received in the medieval European West was the *Nichomachean Ethics*, which Robert Grosseteste (Bishop of Lincoln) translated from the original Greek into Latin, in 1246-47. That edition of the *Nichomachean Ethics* was subsequently revised by William of Moerbeke, who, during the 1260s, also translated Aristotle's *Politics* into Latin. Both works had a most profound influence on the writings of that eminent Dominican priest St. Thomas Aquinas (1225- 1274), as did the extensive Aristotelian commentaries produced by his mentor and fellow Dominican St. Albert the Great, or Albertus Magnus (c.1200 - 1280).[12]

In making his chief contribution to the modern debate, Odd Langholm has re-asserted a much older view that this Aristotelian concept of the 'sterility of money', as embedded in natural law, formed the essential core of the Scholastic usury doctrine. John Noonan, and several other modern commentators, have put forth a rather different argument: that many late-medieval Scholastics did not really believe in the

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[10] Benjamin Jowett, trans. and ed., *The Politics of Aristotle: Translated Into English*, 2 vols., vol. I: *Introduction and Translation* (Oxford, 1885), p. 19: *Politics,* Book I.10. 1258b. For similar views in the *Nichomachean Ethics*, see Langholm, *Legacy of Scholasticism in Economic Thought*, pp. 21-22; Langholm, *Aristotelian Analysis of Usury*, pp. 5-21, 54-61.

[11] *Decretum Gratiani* D. 88, c.11, cited in Langholm, *Aristotelian Analysis of Usury*, pp. 71-72. The *Decretum* also incorporated decrees of the Second Lateran Council (1139). Though not officially sanctioned by the papacy of this era, the it 'became the first part of the body of canon law in the law curriculum'; and it was finally ratified as part of the *Corpus iuris canonici* by Pope Gregory XIII in the Roman edition of 1582. See Kenneth Pennington, 'Gratian', in Joseph Strayer, et al., eds., *Dictionary of the Middle Ages*, 13 vols., vol. V (New York, 1985), pp. 656-58.

[12] See Noonan, *Scholastic Analysis of Usury*, pp. 38-39, 52-53; Ralph McInery, 'Aquinas, St. Thomas', in Joseph Strayer, et al., eds., *Dictionary of the Middle Ages*, vol. I (New York, 1982), pp. 353-66.

'sterility of money', but were only too willing to cite these Aristotelian precepts for their great popular appeal in the revived campaign against usury, in all forms. Clearly that campaign against usury had begun in earnest well before Aristotle's views had become widely disseminated; but no real ingenuity was required in seeking powerful arguments, beyond traditional ones emphasizing charity issues, to attack usury in all its forms. For, as early as the fourth century, the revered St. Ambrose of Milan (339-97) had bluntly stated that: 'if someone takes usury, he commits violent robbery (*rapina*), and he shall not live'.[13] That stricture was both quoted and emphasised (along with the palea *Ejiciens*) in Gratian's *Decretum*.[14] Indeed, the concept that usury is theft runs through almost all of the subsequent Scholastic literature. Thus, if money in a loan was deemed to be sterile, unable 'to bear fruit', any exaction of more money for the mere use of money in a loan was clearly 'iniquitous', as a form of robbery, as St. Thomas himself contended.[15] A closely related and powerful Scholastic argument was that, since usury (interest) was calculated according to the duration of the loan, it therefore meant the 'theft of Time', which belongs to God alone – a dreadful sin.[16] Some later Scholastics challenged this particular view, however, noting that licit rent contracts also specified a return that was based on the passage of time.

That usury exacted from lending funds that the borrower used to invest in property or in some other licit enterprise was 'theft' can also be seen in the Roman-law concept of the loan, or rather the concept as interpreted by the sixth-century Justinian Code and then canon law. The term for such a loan is *mutuum*:

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[13] Langholm, *Legacy of Scholasticism*, p. 59: 'Si quis usuram accipit, rapinam facit; vita non vivit'. (From *De bono mortis*, 12:56, CSEL 321/1, p. 752; based on Ezekiel 18.5-13.)

[14] See Langholm, *Legacy of Scholasticism*, p. 59; Langholm, *Aristotelian Analysis of Usury*, pp. 71-72.

[15] In *Summa Theologiae*: 'But [money] is the measure of utility of other things, as is clear according to the Philosopher [Aristotle] in the *Ethics* V:9. ..... Whence to receive more money for less seems nothing other than to diversify the measure in giving and receiving, which manifestly contains iniquity'. Cited in Noonan, *Scholastic Analysis of Usury*, pp. 38-39, 52-53.

[16] See for example William of Auxerre (c. 1220): the usurer acts contrary to natural law, for 'he sells time, which is common to all creatures', cited in Langholm, *Aristotelian Analysis of Usury*, pp. 112-13. According to Langholm, *Economics in the Medieval Schools*, p. 57, n. 78, this argument was first developed by Peter the Chanter (d. 1197), whose views are analysed in Baldwin, *Masters, Princes, and Merchants*.

literally 'what had been mine becomes thine'. Thus, in making the loan the lender transferred the actual ownership of the capital or principal sum, in money (or goods), including all attached property rights, in perpetuity, requiring in repayment only the *exact equivalent* sum. Hence, it would be clearly unjust, and an obvious violation of 'commutative justice' – equality of exchange between lender and borrower – to exact any more than that sum and thus to 'rob' the borrower of the fruits of his own industry in utilizing capital that had become his/her own private property. For John Noonan, this Scholastic analysis of the *mutuum* became the real core of the late-medieval usury doctrine. But the basic argument was actually pre-Scholastic; for as early as 1165, the Bolognese canon lawyer Paucapalea had correlated the Justinian Code entries on the *mutuum* with Gratian's entry on *usura* in the *Decretum*. Langholm contends, furthermore, that by 1187, Huguccio, the more renowned commentator of the Bolognese law school, had even more clearly set forth this argument on the transfer of ownership rights in a *mutuum*.[17]

Such concepts were further developed, within the specific context of 'natural law', by the most prominent predecessors of St. Thomas Aquinas: William of Auxerre (1160-1229), Thomas of Chobham (c.1168-c.1235), Robert of Courçon (in his *Summa* of 1208), St. Bonaventure (1221-74), and Albertus Magnus (1206-1280).[18] Furthermore, although the eminent John Duns Scotus (1265-1308) did disagree with some aspects of St. Thomas Aquinas's analysis of the usury doctrine, he also based his own natural law case against usury on the issue of the transfer of ownership rights in a *mutuum*, as did the subsequent Scholastics:

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[17] The codification of Roman law under Emperor Justinian I (527 - 565 CE). Chiefly compiled by the lawyer Tribonian, the *Corpus iuris civilis* consists of: the *Code* (12 books) of 528-29; the *Digest* (50 books) and *Institutes* (4 books) of 529-33; and the *Novellae post codicem constitutiones,* most of which were completed by Tribonian's death, in 542. Note that, for Roman citizens, usury – lending money for a specified rate of interest – had been prohibited by the *Lex Genucia*, in 322 BCE. Under Roman law, *mutuum* contracts themselves could therefore not specify interest, and permitted the repayment only of the exact sum lent; but Roman law did permit auxiliary contracts (*stipulatio*) to specify interest payments under certain conditions, with supposedly 'moderate' interest rates. See Geoffrey Poitras, *The Early History of Financial Economics, 1478-1776: From Commercial Arithmetic to Life Annuities and Joint Stocks* (Cheltenham, 2000), pp. 77-78; and Langholm, *Economics in the Medieval Schools*, p. 37; Noonan, *Scholastic Analysis of Usury*, pp. 22-33, 39-40, 51-81 (noting that canon lawyers used only those parts of Roman law on the *mutuum* that supported the usury ban, while ignoring other aspects).

[18] See Langholm, *Economics in the Medieval Schools*, pp. 39-49, 52-56, 67-87, 163-65, 196-246, 344-73 (and other works of Langholm, cited above in Appendix A); Noonan, *Scholastic Analysis of Usury*, pp. 41-57.

such as Giles of Lessines (*De usuris*, 1278), Alexander Lombard (*Tractatus de usuris*, 1307), the politician and lay canonist Lorenzo Ridolfi (in *Tractatus de usuris*, 1404), John Gerson (*De contractibus*, 1420), St. Bernardino of Siena (*De Contractibus*, 1425; *De Evangelis Aeterno*, c.1430-44), and St. Antonino of Florence (*Confessionale* of 1440, and *Summa Theologiae* of 1449).[19]

Well before the publication of these later Scholastic treatises, but certainly from at least the era of St. Thomas' own *Summa Theologiae* (1266-73), both theologians and jurists had come to consider any interest on any loan to be a sin against not just charity but commutative justice and natural law, and thus a truly mortal sin. It was even a mortal sin for the lender to *hope* for any such gain beyond the principal. The culmination of the campaign against usury arguably came in the Council of Vienne (1311-12), which decreed the punishment of excommunication for all 'magistrates, rulers, consuls, judges, lawyers, and similar officials' who 'draw up statutes' permitting usury or 'knowingly decide that usury may be paid'; and the Council furthermore declared that, 'if anyone falls into the error of believing and affirming that it is not a sin to practise usury, we decree that he be punished as a heretic'.[20] At this very time, Dante Alighieri (1265-1321) was writing his *Commedia* or Divine Comedy, in which he placed usurers, 'the last class of sinners that are punished in the burning sands', in the lower depths, the Seventh Circle, of Hell (*Inferno*).[21]

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[19] Langholm, *Economics in the Medieval Schools*, pp. 221-590 (ending his survey c. 1350); Langholm, *Aristotelian Analysis of Usury*, pp. 23-10; Langholm, *The Legacy of Scholasticism in Economic Thought*, pp. 63-70 (and other publications of Langholm, cited in Appendix A); De Roover, *San Bernardino of Siena and San'Antonino of Florence: The Two Great Thinkers of the Middle Ages* (Boston, 1967), pp. 1-42, esp. pp 27-33, 38-42. Duns Scotus denied the consumptability argument in St. Thomas's treatise; but all of these Scholastics maintained that the inherent 'sterility of money' was an equally powerful part of the natural-law case against usury. Noonan, *Scholastic Analysis of Usury*, pp. 65-67, was incorrect in stating that Johannes Andreae (1270-1348) had rejected the 'transfer of ownership' argument; and indeed the only one to do so was Gerard of Siena (d. ca. 1336), according to Armstrong, *Usury and Public Debt*, pp. 278-79.

[20] Council of Vienne, decree no. 29, text published in Gilchrist, *The Church and Economic Activity*, p. 206; Francis Oakley, 'Councils, Western (1311-1449)', in Joseph Strayer, et al., eds., *Dictionary of the Middle Ages*, 13 vols. (New York, 1982-89), Vol. III (1983), pp. 642-56; Geoffrey Poitras, *The Early History of Financial Economics, 1478-1776: From Commercial Arithmetic to Life Annuities and Joint Stocks* (Cheltenham, 2000), p. 85.

[21] Canto XVII of *Inferno*, in Dante Alghieri, *The Divine Comedy*, Carlyle-Okey-Wicksteed translation, ed. C.H. Grandagent, Modern Library Editions (New York, 1950), p. 93. Set in the year 1300, it was probably written between 1304 and 1321.

But as already intimated, such dire strictures applied specifically and only to a predetermined return on money lent in a *mutuum*, and they certainly did not apply to other, legitimate forms of capital investment. In view of the great importance of 'rent' in the evolution of European financial institutions, the distinction between the perfectly licit nature of rents and profits and the mortally sinful nature of usury must be clearly understood; and that difference was again based on ownership. Thus, anyone who owned or invested in land or other forms of real estate or physical property and who then leased the use of that property to others was entitled to receive a rental income on what still remained his own property, even though that rental return was obviously also fixed and predetermined. Furthermore, anyone who invested money capital in a partnership contract (*societas*) or a maritime-based *commenda* contract was licitly entitled to receive a share of the profits, or dividends, whose amount was based on the investment of *equity* capital; for such an investor had similarly retained his or her ownership of that capital. [22]

In response to those medieval contemporaries who were unconvinced that retention of ownership provided the key distinction, St. Thomas offered an ingenious solution in his analysis of *fungibles* in a loan: any commodities not distinguishable from others in its type or group by any specific defining individual characteristics, such as sheaves of wheat, flagons of wine, jars of olive oil, and coined money. St. Thomas added another important qualifying addition: that the very use of such commodities in a loan *ipso facto* meant their total transfer, consumption, and thus complete destruction. That meant that repayment had to be made only with other but identical units: i.e., coins of an exactly equivalent value.[23] Conversely, a non-fungible is a commodity with individual distinguishing characteristics and one that is not consumed and destroyed by its use: such as land, a house, barn, or horse. Therefore, one may licitly earn a rental income for the use of such property, whose ownership the lender retains, while subsequently regaining its possession.

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[22] For various medieval partnership, commenda, and other commercial contracts, see Lopez and Raymond, *Medieval Trade in the Mediterranean World*, pp. 174-211. In a unilateral commenda, the silent investing partner who supplied the entire capital received 75 percent of the profits (but bore no risk for any losses); in a bilateral commenda, in which the silent partner put up two-thirds of the capital, and the active sea-going partner supplied the remainder, each received 50 percent of the profits.

[23] Noonan, *Scholastic Analysis of Usury*, pp. 53-54, citing St. Thomas, *De malo*, Q.13, art. 4c..

At the same time, both canon law and Scholastic treatises, influenced by civil law commentators on Roman law from the twelfth century, permitted some seeming ‘exceptions’ to the usury doctrine itself, which did allow a lender to receive some payment beyond the principal in a contractual *mutuum*. They were not, however, exceptions but rather *extrinsic titles* that were carefully defined to be in full accordance with both commutative justice and the usury doctrine itself, so that the lender was entitled to make a compensatory claim for actual damages that had occurred *only after* the loan contract had been issued.[24] The first such title was *poena detentori* or *mora:* a penalty imposed for late payment, after the specified date of maturity of the loan, a penalty often assessed per week of late payment; but any tacit agreement to make late payment was usurious (*in fraudem usurarum*). The second title was *damnum emergens:* a compensation for any damages or loss that the lender incurred after having made the loan: i.e., from not having the money accessible for some sudden emergency that had clearly taken place after the money had been lent – a fire or storm that destroyed the lender's barns or livestock.[25]

The third title long remained the most contentious: *lucrum cessans*, which literally means ‘cessant gains’. More specifically it meant foregone potential gains that could have been derived from other, alternative, but fully licit forms of investments, e.g., in commerce or industry. Thus *lucrum cessans* may be viewed as the lender's opportunity cost in the form of *interesse*.[26] The problem was that this claim to

[24] I am indebted to one anonymous referee for alerting me to the role of twelfth-century civil lawyers, in two publications: Dieter Medicus, *Id quod interest: Studien zum römischen Recht des Schadensersatzes,* Forschungen zum römischen Recht, 14. Abhandlung (Cologne, 1962); and Hermann Lange, *Schadensersatz und Privatstrafe in der mittelalterlichen Rechtstheorie*, Forschungen zur neueren Privatrechtsgeschichte, Band 2 (Münster and Cologne, 1950). The following discussion is based principally upon the various publications by Noonan, Langholm, McLaughlin, and de Roover, cited in Appendix A (after reconciling their theoretical differences).

[25] See Langholm and Noonan in sources cited in Appendix A.

[26] The most widely cited text for the concept of *lucrum cessans* is the following observation by Henry of Susa (Cardinal Hostiensis) sometime before 1271: ‘If some merchant, who is accustomed to pursue trade and the commerce of fairs, and there profit from, has, out of charity to me, who needs it badly, lent money with which he would have done business, I remain obliged to his *interesse*, provided that nothing is done in fraud of usury... and provided that the said merchant will not have been accustomed to give his money in such a way to usury.’ Noonan, *Scholastic Analysis of Usury*, p. 118, citing Hostiensis [in modern form: *In Decretalium libros commentaria*, ad X 5.19.16, n.4, vol. V, fols. 58vb-59ra. (repr. in 2 vols. Turin, 1965)]. According to Noonan, Azo, a member of the twelfth-century Bologna law school, was the first to

compensation could easily be seen as pre-determined and fixed, so that it did not meet the required conditions of loss under commutative justice, thus making the return usurious. For these reasons, Thomas Aquinas himself, and most medieval canon lawyers, popes, and other Church authorities would not accept *lucrum cessans* as a legitimate *extrinsic title* to exact any return above the principal.[27]

If these debates over *lucrum cessans*, along with the candid admissions about the licit nature of both rent and profit, clearly indicate that many theologians were quite cognizant of the role that money did play as invested capital in the economy, nevertheless they also consistently argued that the fruits of such capital investment were entirely the product of the investor's industry. Thus, once more, to exact any usury was to 'rob' the borrower of the fruits of his own industry, an argument that provided a powerful reason for rejecting *lucrum cessans*, as an extrinsic title: for fear of implicitly accepting the concept that money was in itself 'fruitful'.[28] Although the theologian Petrus Johannis Olivi (1247-98) wrote a treatise that seemed to endorse the legitimacy of *lucrum cessans*, in support of the earlier views of Hostiensis (c.1251), the Papacy had placed it on its banned list (for other reasons). Nevertheless his treatise may have influenced both St. Bernardino (1425) and St.Antonino (1449), in their arguments that offered some grudging acceptance of *lucrum cessans,* but (in echoing Hostiensis) only for those merchants who charitably made loans *ex pietate*; for its use was ' never to be counseled' and certainly not to those merchants who preferred to seek gains from 'a usurious loan [rather] than in commerce' [29] According to Langholm, this doctrine was

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compress the Roman law term 'quod interest' – what remains, lies between, or differs from (from *intersum*) – into the substantive *interesse*, to mean any licit payment beyond the principal; and this concept was further developed by his student Roland of Cremona; also see Langholm, *Economics in the Medieval* Schools, p. 88.

27 See Noonan, *Scholastic Analysis of Usury*, pp. 118-21, 31-32, 249-68; and Langholm, *Economics in the Medieval Schools*, p. 51, for Robert of Courçon's rejection of *lucrum cessans* in 1208; and p. 246, for St. Thomas Aquinas' rejection (ca. 1266-73).

28 Certainly that view was upheld by St. Bonaventura (c. 1217) and all his successors. See Noonan, *Scholastic Analysis of Usury*, pp. 68-81; 126-28; Langholm, *Aristotelian Analysis of Usury*, pp. 25-26; 98-110.

29 Julius Kirshner, 'Reading Bernardino's Sermon on the Public Debt', in Domenico Maffei and Paolo Nardi, eds., *Atti del simposio internazionale cateriniano-bernardiniano, Siena, 17 - 20 April 1980* (Siena, 1982), pp. 550-51; de Roover, *San Bernardino*, pp. 30-31 [both citing the influence of Peter Ancarano (1333-1416), as well]; Noonan, *Scholastic Analysis*, pp. 126-27. For Olivi's *Tractatus de*

first judged fully acceptable by the Church only in 1642.[30]

There were, of course, various illicit ways of circumventing the usury ban, i.e., for the *mutuum*, but not without some impact on increasing transaction costs, in both the private and state spheres of finance. One device was to cloak the loan in a sales contract that specified future payment. This could be deemed usurious if goods were actually sold on credit; but the contract could be considered a licit *venditio sub dubio*, if the stipulated future price was considered to be a fair market or 'just price', and a lower current cash price as 'a discount gratuitously given by the seller'.[31] Perhaps the most common technique was to disguise the actual amount of the loan, by augmenting the stipulated principal to be repaid – over and above the amount actually lent – by the amount of the required interest payments.[32] But a defaulting debtor might claim that he/she had been the victim of extortion in agreeing to a fraudulent contract. Apart from the threat or prospects of

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emptionibus et venditionibus, de usuris, de restitutionibus, see in particular, Giacomo Todeschini, ed., *Un tratto di economia politica francescana: il "De emptionibus et venditionibus de usuris, de restitionibus" di Pietro di Giovanni Olivi* (Rome, 1980), an edition with some faults, as revealed in Julius Kirshner and Kimberly Lo Prete, 'Peter John Olivi's Treatises on Contracts of Sale, Usury and Restitution: Minorite Economics or Minor Works?' *Quaderni fiorentini per la storia del pensiero giuridico moderno* 13 (1984), 233-86; Amleto Spicciani, *Capitale e interesse tra mercatura e povertà nei teologi e canonisti dei secoli XIII-XV* (Rome, 1990); Lawrin Armstrong, 'The Politics of Usury in *Trecento* Florence: The *Questio de Monte* of Francesco da Empoli', *Mediaeval Studies*, 61 (1999), 1-44; Lawrin Armstrong, *Usury and the Public Debt in Early Renaissance Florence: Lorenzo Ridolfi on the Monte Comune,* PIMS, Studies in Medieval Moral Teaching 4 (Toronto, 2003), pp. 63-65. See also n. 26 above.

[30] Langholm, *Aristotelian Analysis of Usury*, pp. 25-26; 98-110; and Langholm, *Legacy of Scholasticism,* p. 75, citing the 1642 treatise *De iustitia et iure* by Juan de Lugo of Salamanca, as one finally accepted by canon lawyers. For a prominent sixteenth-century treatise favouring *lucurum cessans,* by Leonardus Lessius of Leuven (1554-1623), see Raymond de Roover, *Leonardius Lessius als economist: de economische leerstellingen en van de latere scholastiek in de Zuidelijke Nederlanden*, Mededelingen van Koninklijke Academie voor Wetenschappen, Letteren en Schone Kunsten van België, Klasse der Letteren, XXXI (Brussels, 1969), p. 3-15, 23-27.

[31] Based upon Gregory IX's decretal *Naviganti* (X 5.19.19: c. 1234); but the purchase of property or goods (by a de facto lender) and subsequent resale to the original owner (de facto borrower) at the same (let alone lower) price was denounced by most theologians as usurious. See Noonan, *Scholastic Analysis of Usury*, pp. 90-93. Furthermore, de Roover, *San Bernardino*, pp. 29-30, notes that most fifteenth-century theologians remained suspicious of *emptio-venditio* contracts with prices higher for future goods than for current goods, as contracts *in fraudem usurarum.*

[32] See for example, Carlos Wyffels, 'L'usure en Flandre au XIII[e] siècle', *Revue belge de philologie et d'histoire/Belgisch tijdschrift voor filologie en geschiedenis*, 69:4 (1991), 855; but also noting that such cloaking was virtually impossible with demand loans (*à manaie*), pp. 859-71.

unpleasant prosecutions, and of severe social stigma, the participants would know that they were guilty of both usury and fraud. As Noonan has remarked, even if the Church normally chose to inflict excommunication and other severe punishments only on 'open' and 'flagrant' or 'notorious' usurers, nevertheless 'all hidden usury was still a mortal sin, and the ultimate punishment of [eternal] damnation still awaited all hidden usurers'. Thus, 'the real force of the usury law lay in its hold on men's souls, and there no evasion was possible'. Particularly in this medieval era, when the Church held such sway, 'who will say that there is no meaning to the salvation or damnation of a man'?[33] As the Dominican Domenico Pantaleoni (c.1362-1376) and the Franciscan St. Bernardino (c. 1430-44) both exclaimed, those who escaped convictions in ecclesiastical courts, for lack of concrete evidence, would nevertheless 'be found guilty of usury in the confessional and before God (*quoad deum*)'.[34] As for non-Christians, one must recall the virtually universal abhorrence of usury, and its prohibition in both the Hebrew Pentateuch and the Islamic Koran (as *riba*).[35]

Whether or not such moral questions are really susceptible of econometric analysis, Francesco Galassi has provided convincing statistical evidence that, with the intensification of the anti-usury campaigns, Genoese merchants, financiers, and other businessmen evidently sought 'fire insurance' or 'passports to Heaven', by increased donations to the Church, some clearly in the form of restitution of illicit gains from usurious transactions.[36] Richard Goldthwaite, in analyzing records of fifteenth-century Florentine banks, comments on a significant peculiarity: 'the lack of a cash account, which ... resulted from what was perhaps the strongest external constraint imposed on the banker, the usury doctrine'; and Reinhold Mueller

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[33] Noonan, *Scholastic Analysis,* pp. 35-36; cf. LeGoff, 'The Usurer and Purgatory', pp. 25-26.

[34] Cited in Julius Kirshner, 'Storm over the *Monte Comune*: Genesis of the Moral Controversy over the Public Debt of Florence', *Archivum Fratrum Praedicatorum*, 53 (1983), p. 256; and in Kirshner, 'Reading Bernardino's Sermon', p. 589: Bernardino was repeating Pantaleoni. See below n. 00.

[35] See Exodus 22:24 and Leviticus 25:37; Haym Soloveitchik, 'Usury, Jewish Law', and Seth Ward, 'Usury, Islamic Law', both in Joseph Strayer, et al., eds. *Dictionary of the Middle Ages*, vol. XII (New York, 1989), pp. 339-41. Jewish law, however, also permitted exacting usury from gentiles. See also n. 0 above.

[36] Francesco L. Galassi, 'Buying a Passport to Heaven: Usury, Restitution, and the Merchants of Medieval Genoa', *Religion*, 22 (October 1992), 313-26.

has also noted that the records of fifteenth-century Venetian bank deposit accounts do not mention interest, even though it was certainly paid.[37] Indeed, Goldthwaite asserts that the risk of disclosure was not trivial, citing, for example, usury charges brought against the Florentine banker Lorenzo di Buonaccorso Pitti in 1493. For a century earlier, he also reports that, when the renowned Francesco Datini had asked advice about opening a Florentine bank in 1398, an associate told him that he 'risked the ruin of his reputation as a merchant by entering this business, since no banker could avoid usurious contracts'.[38]

That very statement is echoed in one of the most eloquent historical comments on the social costs of the usury doctrine: from Lawrence Stone, in commenting about sixteenth-century English society, which had supposedly entertained less negative views about interest.[39]

> Money will never become freely or cheaply available in a society which nourishes a strong moral prejudice against the taking of any interest at all – as distinct from objection to the taking of extortionate interest. If usury on any terms, however reasonable, is thought to be a discreditable business, men will tend to shun it, and the few who practise it will demand a high return for being generally regarded as moral lepers.

Medieval Public Borrowing: the Italian Republics of the twelfth, thirteenth, and fourteenth centuries

Obviously no medieval European governments – urban, territorial, or national – were ever able to function without some form of borrowing, all the more so since their taxing and rent-exaction powers were relatively limited, while they were so often engaged in costly warfare.[40] But such loans were generally short term and *ad hoc*, often at punitive rates of interest, reflecting both concerns about usury and risks of defaults. During the apogee of the Commercial Revolution era, its Italian progenitors and leaders established what

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[37] Richard Goldthwaite, 'Local Banking in Renaissance Florence', *Journal of European Economic History*, 14:1 (Spring 1985), 13-16, 31-37, noting also that interest paid on time deposits was always *a discrezione*; Mueller, *Money and Banking*, p. 13. See also Raymond de Roover, *The Rise and Decline of the Medici Bank, 1397-1494* (Cambridge, Mass., 1963), pp. 77-141.

[38] Goldthwaite, 'Local Banking', pp. 13, 32.

[39] Lawrence Stone, *The Crisis of the Aristocracy, 1558 - 1641* (Oxford, 1965), p. 529; also cited, for similar purposes, in Geoffrey Parker, 'The Emergence of Modern Finance in Europe, 1500 - 1750', in Carlo Cipolla, ed., *The Fontana Economic History of Europe*, Vol. II: *The Sixteenth and Seventeenth Centuries* (London, 1974), p. 539.

[40] See Philip Jones, *The Italian City-State: From Commune to Signoria* (Oxford, 1997), pp. 382-401.

came to be a system of civic-financed permanent funded debts. Genoa was evidently the first to do so, in 1149, when the communal government agreed to grant a consortium of civic lenders full control over a so-called *compera*, a consolidated fund of tax revenues to be used in paying civic creditors.[41]

Venice followed suit in 1164, by securing a loan of 1,150 silver *marci* to be reimbursed from commercial tax revenues on the Rialto market, over a twelve-year period. These early loans appear to have been purely voluntary. But shortly after, in 1172, the Venetian Doge Sebastiano Ziano inaugurated what came to be the hallmark of late-medieval Italian civic finances: the exaction of forced loans, known as *prestiti* in Venice.[42] In 1187, in return for a new loan to finance the Venetian siege of Zara, the creditors were given control over the salt tax and certain house rents for thirteen years to ensure timely repayments of both interest and principal; and henceforth the Salt Office was made responsible for such payments. These early loans were considered to be purely temporary; and Doge Ziano himself had pledged that the Procurators of San Marco would maintain records of the public debts 'until such times as the Republic can pay off its debts'. By 1206-07, virtually all of the Venetian public debt was in form of *prestiti*, whose interest charges were to be financed by taxes on the Rialto market and the weigh-house until such loans were repaid.[43] In the years 1262-64, however, the Venetian Senate consolidated all the outstanding national debts into one fund (later called the *Monte Vecchio* – a mountain of debt); and decreed that debt-holders were to receive an annual interest of five percent, to be paid twice yearly from eight specific excise taxes. These *prestiti* debt claims (with interest payments) were, however, readily assignable, though only through the offices of the Procurator

[41] See Jean-Claude Hocquet, 'City-State and Market Economy', in Richard Bonney, ed., *Economic Systems and State Finance*, European Science Foundation (Oxford: Clarendon Press, 1995), pp. 89-91; and James Tracy, 'On the Dual Origins of Long-Term Debt in Medieval Europe', in Karel Davids, Marc Boone, and V. Janssens, eds., *Urban Public Debts, Urban Governments, and the Market for Annuities in Western Europe, 14th-18th Centuries* (Turnhout, forthcoming).

[42] Jones, *Italian City State*, p. 398, states, however, that the first evidence that he has found for a forced loan was at Pisa, in 1162. See the following notes.

[43] Jean-Claude Hocquet, 'Venice', in Richard Bonney, ed., *The Rise of the Fiscal State in Europe, c. 1200-1815* (Oxford and New York: Oxford University Press, 1999), pp. 381-415; and Tracy, 'Dual Origins', citing the classic study of Gino Luzzatto, *I prestiti della repubblica di Venezia (secoli XIII - XV): Introduzione, storia, e documenti* (Padua, 1929), pp. iv - xii (unavailable to me).

of San Marco; and by at least 1320 a secondary market for them had developed.[44] In this era when interest payments were regular, they traded between par and 75 percent. From 1363, however, all redemptions of the principal ceased, except for occasional repurchases (e.g., in 1375), but only at prevailing market values, so that these forced loans became, in effect, perpetual liabilities. The interest payments themselves were always paid on schedule, until the nearly fatal War of Chioggia, in 1377-81, when the Venetian government imposed a new series of forced loans.[45]

Elsewhere, in Tuscany, Siena commenced exactions of forced loans in 1287, though continuing to solicit voluntary loans;[46] and Florence evidently did so also not long after. Subsequently, in the years 1343-45, Florence set up a consolidated fund for what its public debt, similarly consisting chiefly (if not entirely) of forced loans (*prestanze)*: the *Monte Comune*, for which the communal government made annual interest payments (*paghe*) of five percent.[47] At about the same time, in 1340, Genoa also consolidated all of its

[44] In 1262, Venice established the Ufficiale degli Prestiti to pay interest on the public debt from civic revenues. On the Venetian public debt, see in particular Reinhold Mueller, *Money and Banking in Medieval and Renaissance Venice*, vol. II: *The Venetian Money Market, Banks, Panics, and the Public Debt, 1200 - 1500* (Baltimore and London, 1997), pp. 453-567; Gino Luzzatto, *Storia economica di Venezia dall' 11 al 16 secolo* (Venice, 1961); Gino Luzzatto, *Il debito pubblico della Reppubblica di Venezia, 1200 - 1500* (Milan, 1963), with appendix by Frederic Lane, 'Sull'ammontare del "Monte Vecchio" di Venezia', subsequently published in translation as 'The Funded Debt of the Venetian Republic, 1262 - 1482', in Frederic C. Lane, *Venice and History: the Collected Papers of Frederic C. Lane* (Baltimore, 1966), pp. 87-108; and Luzzatto, *I Prestiti della Repubblica di Venezia.* See also: Frederic C. Lane, 'Public Debt and Private Wealth, Particularly in 16th Century Venice', in *Mélanges en honneur de Fernand Braudel*, 2 vols. (Toulouse, 1973), vol. I, pp. 317-25; Tracy, *A Financial Revolution*, pp. 9 - 13. Luzzatto does not believe, and Lane and Mueller also agree, that Venice had a genuine permanently funded public debt before 1262-64.

[45] See Hocquet, 'Venice', pp. 395-96; and Hocquet, 'City State', pp. 87-89. Interest payments resumed in 1382, but were subject to withholding taxes, so that some netted only 3 percent, and others 4 percent. See also Lane, 'Funded Debt', pp. 87-88; Mueller, *Money and Banking*, pp. 465-76.

[46] William Bowsky, *The Finances of the Commune of Siena, 1287-1355* (Oxford, 1970), pp. 166-88, Appendix 12, pp. 329-39; Maria Ginatempo, *Prima del debito: Finanziamento della spesa pubblica e gestione del deficit nelle grandi città toscane (1200-1350 ca.)*, Biblioteca storica toscana, no. 38 (Florence, 2000).

[47] Bernardino Barbadoro, *Le finanze della Repubblica fiorentina: Imposta diretta e debito pubblico fino all'istituzione del Monte*, Biblioteca storica toscana, no. 5 (Florence, 1929), pp. 629-87; Anthony Molho, *Florentine Public Finance in the Early Renaissance, 1400 - 1430* (Cambridge, Mass., 1971), pp. 63-74; Anthony Molho, 'The State and Public Finance: a Hypothesis Based on the History of Late Medieval Florence', *Journal of Modern History*, 67 (Dec. 1995), republished in Julius Kirshner, ed., *The Origins of the State in Italy* (Chicago, 1996), pp. 97-135; Anthony Molho, 'Tre città-stato e i loro debiti pubblici:

forced loans (back to 1258), known as *luoghi*, into a consolidated debt fund called a *compera*; and in 1407-08, under French rule, the Genoese government effected a consolidation of subsequent loans, in the *compere nuova regiminis Sancti Georgi*, better known as the *Casa di San Giorgio*, a state bank that Jacques Heers called 'la plus puissante institution financière de l'Occident'. It reduced the interest rates on the *luoghi* from 10.0, to 7.0 (in 1405), and finally to 5.25 percent (1420).[48] Lucca established a consolidated public debt (*Dovana Salis et Massa Creditorum)* based on forced loans (called *proventus*) only in 1370, a year after regaining its civic independence from Pisa.[49]

While also frequently soliciting purely voluntary short-term loans, these Italian city states imposed their various *prestiti, prestanze*, or *luoghi* as fixed levies based upon the citizens' ability to pay, in accordance with the value of their properties and assets recorded in communal census registers; and the interest payments were financed by the salt tax and other indirect taxes (*gabella*), thus transferring income from the lower to upper income strata. Not all Italian cities resorted to forced loans, however; and many of those ruled by *signori* (e.g. Milan) seem to have relied instead on a floating debt of voluntary short-term loans. As several historians have variously noted, those city-states that did base their urban finances on forced loans, with consolidated long-term debts, were chiefly those with strongly independent republican

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Quesiti e ipotesi sulla storia di Firenze, Genova e Venezia', in *Italia 1350-1450: Tra crisi, trasformazione, sviluppo: tredicesimo convegno di studi, Pistoia, 10-13 maggio 1991* (Pistoia, 1993), pp. 185-215.

[48] Jacques Heers, *Gênes au XVe siècle: activitié économique et problèmes sociaux*, Université de Paris, Faculté des Lettres (Paris, 1961), p. 110; see also pp. 97-190. The funadmental study remains Heinrich Sieveking, *Genueser Finanzwesen mit besonderer Berücksichtigung der Casa Di S. Georgio,* Volkswirtschaftliche Abhandlungen der Badischen Hochschulen, 2 vols. (Freiburg, 1897-98), republished as *Studio sulle finanze genovesi nel medioevo e in particolare sulla casa di San Giorgio*, Atti della Società Ligure della Storia Patria, XXXV (Genoa, 1906); see also Giuseppe Felloni, 'I primi banchi pubblici della Casa di San Giorgio (1408-45)', in Dino Puncuh and Giuseppe Felloni, eds., *Banchi pubblici, banchi privati e monti di pietà nell'Europa preindustriale: Amministrazione, tecniche operative e ruoli economici*, Atti della Società Ligure di Storia Patria, new series, vol. 31, 2 vols. (Genoa., 1991), Vol. I, pp. 225 - 46. In 1441, the rate was ostensibly reduced to 4.0 percent; but with an additional payment one florin, the real rate remained at 5.25 percent. In 1444, the *Casa di San Giorgio* terminated its banking functions, resuming them only in 1586.

[49] Tracy, 'On the Dual Origins', pp. 7-8; Christine Meek, *Lucca, 1369-1400: Politics and Society in an Early Renaissance City State* (New York and Oxford, 1978), pp. 53-76, esp. p. 56.

traditions.[50]

For such states, forced loans had three major advantages. First, they clearly demonstrated that all communal citizens had two related public duties: to provide the independent state with personal financial support – *sub necessitate et pro utilitate publica*, if only to help ensure the state's security and territorial integrity; and to provide their 'fair share' of such support. Second, forced loans were far preferable to the obvious alternative, direct taxation, since subscribers received both interest income and a marketable asset. Indeed, Florence had abolished its *estimo* land tax in 1315; and Siena was evidently the only important Italian commune that combined forced loans (*preste*) and direct taxes (*dazi)*, though permitting such loans to be deducted against the *dazi*, before Venice imposed its *decima* tax in 1463, in commencing its long war with the Turks.[51] Third, because these loans were forced, under such circumstances of rendering one's public duty, many theologians and jurists were able to justify the payment and receipt of interest payments, with some version of *damnum emergens* or *interesse*, since volition was at the very core of the usury doctrine.[52]

Such justifications became far more difficult to concoct, however, after secondary markets in the various civic *monti* had developed, from the early to mid-fourteenth century. Obviously, if individuals who had been forced to make such loans were not permitted the right to sell their claims to their shares in the public debt (the *crediti di monte* or *compera*), including the annual *paghe* or interest payments, public

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[50] Those cited in nn. 40-49 above.

[51] The Florentine government, during war emergencies, temporarily and abortively restored the *estimo* in 1328, 1342-43, 1352, 1355, and 1494 (Savonarola). Only the Kingdom of Naples regularly resorted to direct taxes. See Barbadoro, *Finanze della repubblica fiorentina*, pp. 73-215. Molho, *Florentine Public Finances*, pp. 22-73; David Herlihy and Christian Klapisch-Zuber, *Tuscans and Their Families: A Study in the Florentine Catasto of 1427*, Yale Series in Economic History (New Haven and London, 1985), pp. 3-27; Bowsky, *Siena*, pp. 98-113, 310-15 (for 1286-1354); Molho, 'State and Public Finance', p. 105-06, and Hocquet, 'City State', pp. 87-91, for Venice's *decima* in 1463.

[52] See sources cited in nn. 00-00 above; and in particular Kirshner, 'Bernardino's Sermon', pp. 553-60; 583-85; Armstrong, 'The Politics of Usury in *Trecento* Florence', pp. 1-44; and also Armstrong, *Usury and the Public Debt*, which includes an edition of the portions of the *Tractatus de usuris* dealing with the monte and related questions. One very major exception was Alexander of Lombard (c. 1303-07, commenting on the Genoese *compere*), cited in Julius Kirshner, 'Conscience and Public Finance: A *Quaestio Disputata* of John of Legnano on the Public Debt of Genoa', in Edward Mahoney, ed., *Philosophy and Humanism: Renaissance Essays in Honor of Paul Oskar Kristeller* (New York, 1976), pp. 439-40.

resistance to such forced loans would very likely have mounted. Because this secondary market was a free one, those seeking to sell their debt claims often had to accept a considerably discounted value (below par) in order to attract buyers; and thus the buyer would have acquired an asset whose yield was substantially above the nominal five percent *paghe* (generally the standard rate in Venice, Florence, and finally Genoa). Thus an obvious question was frequently posed: what justification did such third parties, entering into fully voluntary contracts, have for receiving interest payments on the shares of the *monte* that they had just purchased, and often at much higher yields?

That very question engendered a great deal of debate in fourteenth- and fifteenth-century Italy, amongst both theologians and jurists. The debate may have commenced in 1353, shortly after Florence had established the *monte*, with the treatise *Determinatio de materia montis* by the Franciscan master Francesco da Empoli (d. 1370). He contended that those who purchased shares of the *monte*, bearing annual interest payments, had not become lenders to the state and thus were not engaged in usurious conduct, because these *crediti di monte* were no longer based on the original *mutuum* (loan); instead, they were the subject of an *emptio-venditio* (purchase-sale) contract in which the holder was now the purchaser of the right (*ius*) to collect a stream of future income from the state – an argument with considerable significance for the evolution of *rentes*. Those views encountered bitter opposition from the Dominican theologian Piero degli Strozzi (1293-1362), who contended that the commune's annual payments on *monte* shares were just a *donum* or gift; that holders of *monte* shares had no right to sell the *ius* or right to a gift; that the purchaser became 'a true creditor of the commune [so that] the commune is his debtor', and that the purchaser entertained the corrupt intention (hope) to profit from the loan.[53] Raymond de Roover, evidently relying on Matteo Villani's *Cronica* for the 1353 debate, contended that the Franciscans 'gave their blessings to state creditors' who purchased *crediti di monte*, while 'the Hermits of St. Augustine, soon joined by the

[53] See Armstrong, 'The Politics of Usury in *Trecento* Florence', pp. 1-44; Kirshner, 'Storm over the *Monte*', pp 219-22, 227-30, 240-52; Umberto Santarelli, ' "Maxima fuit Florentiae altercatio": l'usura e i "montes"', in Dino Puncuh and Giuseppe Felloni, eds., *Banchi pubblici, banchi privati e monti di pietà nell'Europa preindustriale: Amministrazione, tecniche operative e ruoli economici*, Atti della società Ligure di storia patria, new series, vol. 31, 2 vols. (Genoa, 1991), vol. I, vol. I, pp. 81-94. See also nn. 51-52.

Dominicans, were representing them as parasites who were sucking the lifeblood of the state'.[54] But Julius Kirshner, and more recently Lawrin Armstrong, have strongly denied that any such rigid division in theological opinions ever prevailed, while also contending that the majority of those opposing Francesco da Empoli's position were theologians. Both Dominicans and Franciscans condemned any participation in secondary markets for *crediti di monte* as 'unnatural and nutritive of sin', *in fraudem usurarum,* or else expressed severe reservations, counselling all citizens 'to refrain from such investments'.[55] Conversely, most of those supporting Francesco da Empoli's position and thus the right of citizens to participate in markets for *crediti di monte* were jurists (with just a few theologians).[56] The most famous was the aforementioned Florentine patrician and lay canonist, Lorenzo di Ridolfo, who composed his very influential *Tractatus de usuris* in 1403-04.[57] At the same time, however, virtually all theologians and jurists agreed that anyone who had willingly subscribed to loans, forced or not, 'out of greed', *hoping* for interest payments, should be treated as 'plain usurers', while conceding that civic governments had every right to exact forced

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[54] De Roover, *San Bernardino*, pp. 38-40, also noting that the 1343 Florentine statute creating the *monte comune* 'incautiously used the word *prestantiae* [loans] and mentioned redemption of capital', thus causing serious problems for many theologians. For de Roover's evident reliance on Matteo Villani, *Cronica*, ed. F. Dragomanni (Florence, 1846), lib. III, cap. 106, 296, see Kirshner, 'Storm over the *monte*', pp. 219-21.

[55] Julius Kirshner, 'The Moral Theology of Public Finance: A Study and Edition of Nicholas de Anglia's *Quaestio disputata* on the Public Debt of Venice', *Archivum Fratrum Praedicatorum*, 40 (1970), 47-72; Julius Kirshner, ' "Ubi est ille?": Franco Sacchetti on the *monte comune* of Florence', *Speculum: A Journal of Medieval Studies,* 59 (1984), 556-84; Kirshner, 'Storm Over the *Monte*', pp. 219-52; Kirshner, 'Reading Bernardino's Sermon' , pp. 547-82; Armstrong, 'Politics of Usury', pp. 1-44; Armstrong, *Usury and Public Debt*, p. 80. Theologians who opposed such market participation were: Piero degli Strozzi and Domenico Pantaleoni (Dominicans); Gregorio da Rimini, Johannes Klenkock, Guido de Belloriguardo (Augustinians); Alessandro d'Alessandria, Guglielmo Centueri da Cremona, and San'Bernardino da Siena (Franciscans). Though St. Bernardino, in some recorded passages in *Sermo LXI*, merely counselled avoidance of the market, Kirshner states (in 'Bernardino', pp. 562-63, 592) that Bernardino 'condemned investments in city-state loans', and engaged in an 'onslaught against citizens who lend voluntarily to the city-state and purchase credits in the public debt'.

[56] Jurists or lay writers who supported the licit participation in a market for public debts: Lapo da Castiglionchio, Franco Sacchetti, Giovanni da Legnano, Antonio de Budrio, Pietro d'Ancarano, Bartolomeo Bosco, Lorenzo Ridolfi, Niccolo dei Tedeschi. Theologians who supported Francesco da Empoli's position were few, including two who preceded him : Astesanus (d. 1330: a Franciscan); Bartholomew of San Concordio (d. 1347: a Dominican); Nicholas de Anglea (1390s: a Dominican); and San'Antonino of Florence (d. 1359: a Dominican), who gave very qualified approval. See nn. 50-52 above.

[57] See Armstrong, *Usury and Public Debt*; in n. 00 above.

loans and to pay an annual compensation in the form of *dampnum, interesse, provisione*, or *donum*. A very similar heated debate on usury and the public debt, prolonged and prolix, may also be found in late-medieval Genoa and Venice.[58] Such legal treatises, brilliant and eloquent though they were, never sufficed to satisfy most theologians, and the consciences of many investors. Indeed Julius Kirshner, in discussing theological debates over the Genoese *comperi,* cites some 'well-documented cases of investors who, because of scruples of conscience, were hesitant about purchasing shares in the public debt'.[59]

Furthermore, in an early fifteenth-century will, discovered by Julius Kirshner and recently edited by Lawrin Armstrong, a wealthy Florentine merchant confessed that he was 'uneasy in his conscience' about the income earned from credits in the Florentine *monte*, accounting for thirty percent of his assets, even though these credits were solely 'on account of *prestanze*' that he and his parents had been forced to pay. His will therefore stipulated that 'if a declaration or decision is made by the Roman church or a general council' that should determine the illicit nature of such income, then his 'heirs shall act in every respect in conformity with the decree, decision, determination or conclusion of the Roman church'.[60]

Because so many people in late-medieval society held serious moral qualms about receiving interest from public debts, some other European town governments had sought out a less problematic alternative financial solution, and indeed from the early thirteenth century, in the form of the aforementioned *rente* contracts. Such contracts were unknown in Roman law; and a recent contention that they were employed in

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[58] For Venice, see Kirshner, 'The Moral Theology of Public Finance', pp. 47-72; F. C. Lane, 'Investment and Usury', *Explorations in Entrepreneurial History*, 2:2 (1964), 3-15, republished in *Venice and History: the Collected Papers of Frederic C. Lane* (Baltimore, 1966), pp. 56-68; and Mueller, *Money and Banking*, pp. 484-87. For Genoa, see Kirshner, 'Conscience and Public Finance', pp. 434-53; Kirshner, 'The Moral Controversy Over Discounting Genoese Paghe, 1450 - 1550', *Archivum Fratrum Praedicatorum*, 47 (1977), 109-67.

[59] Kirshner, 'Conscience and Public Finance', p. 450. Cf also Lane, 'Investment and Usury', p. 64: Usury's 'greatest importance was its moral influence', while also noting that from 1254 the Venetian government had enacted civil legislation against usury.

[60] Lawrin Armstrong, 'Usury, Conscience and Public Debt: Angelo Corbinelli's Testament of 1419', in John Marino and Thomas Kuehn, eds., *A Renaissance of Conflicts: Visions and Revisions of Law and Society in Italy and Spain* (Toronto, 2003), acknowledging Prof. Kirshner's discovery of the document in the ASF archives. Corbinelli was probably referring to the Council of Constance (1414-18). See below, pp. 00.

the ancient Greek world has no real foundation.[61]

Origins of the *Rente* Contract and Its Theological Controversies

As an instrument of public finance, the *rente* was evidently based on the Carolingian *census* contract that many monasteries had long utilized in order to acquire bequests of lands: on condition that the donor would receive an annual usufruct income (*redditus*) from that land in kind or in money, for the rest of his or her life, and sometimes for the lives of the heirs as well.[62] This income was deemed to be part of the 'fruits' of that property – e.g., the harvest yield; and originally it was delivered in wheat, wine, olive oil, or similar commodities, and then, from the twelfth century, more commonly in money. For that reason the *census* or *cens* later came to be generally known as 'rent' or *rente*, from which, of course, we have derived the term *rentier*. The modern English term with the closest equivalence is *annuity*, though this term does not really imply that the annual return was necessarily based on a 'fruitful good', as stipulated in all subsequent analyses of these contracts in both canon and civil law.[63]

Bernard Schnapper has further demonstrated that the *census* subsequently evolved into two related financial contracts. The older of the two was known as the *bail à rente:* the sale of real estate or some form of immobile property in return for a perpetual annual income (normally hereditary). The other form, more

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[61] For the statement that the Greek city state of Miletus, in Asia Minor, had engaged in the sale of *census* contracts, from as early as 203 BCE, see Raymond Van Uytven, *Stadsfinanciën en stadsekonmie te Leuven: van de XII^{e} tot het einde der XVIe eeuw* (Brussels, 1961), p. 196, citing M. Van Haaften, 'Lijfrente', *Winkler Prins Encyclopaedie*, 18 vols. (Amsterdam, 1947-54), vol. XIII, p. 165 (footnote). Van Haaften, however, provides no evidence for this claim; and in his revised entry on 'Lijfrente', in the *Grote Winkler Prins*, vol. XII (Amsterdam-Brussels, 1971), pp. 351-52, he does not repeat this contention.

[62] Abbott Payson Usher, *The Early History of Deposit Banking in Mediterranean Europe*, vol. I: *The Structure and Functions of the Early Credit System: Banking in Catalonia: 1240-1723*, Harvard Economic Studies, vol. 75 (Cambridge, Mass., 1943; reissued New York, 1967), p. 146, citing Theo. Sommerlad, *Die Wirtschaftliche Thätigkeit der deutschen Kirche* (Leipzig, 1905), vol. II, p. 171: reference to Abbey of St. Gallen, 816 CE; Tracy, 'On the Dual Origins', p. 4, citing the seminal work of Bruno Kuske, *Das Schuldenwesen der deutschen Städte im Mittelalter*, Zeitschrift für die gesamte Staatswissenschaft, Ergänzungsheft XII (Tübingen, 1904), pp. 12-24 (whose earliest example is for the Abbey of St. Gallen, in Hergau, 'um 700'). Tracy also discusses the more modern German literature on this subject, in particular: Werner Ogris, *Der Mittelalterlicher Leibrentenvertrag: Ein Beitrag zur Geschichte des deutschen Privatrechts* (Vienna and Munich, 1961).

[63] See Noonan, *Scholastic Analysis of Usury,* pp. 154-70 (quotation on p. 155).

relevant to the history of public finance, evidently evolved from the first to become the *constitution de rente* -- also known as the *rente à prix d'argent:* a contract by which a property holder (the *débirentier*) sold, for a specified sum of money, the right to receive a fixed annual income from his property or other real assets, though the property itself remained under his ownership. In virtually all of the *rente* contracts, certainly those from the early thirteenth century, the issuer or *débirentier* pledged all of his goods and assets to meet the annual payment, on penalty of forfeiture. [64] Evidently well before it became a vehicle of public finance in northern Europe it had became widespread as a form of private investment in agricultural economies of Mediterranean western Europe: one by which a merchant or financier would supply needed capital to small peasant landholders in return for this form of perpetual *rente* income.[65]

When the *rente* contract does emerge during the early thirteenth century, in financing town governments, we find two distinct forms: the traditional perpetual hereditary rents, known as *rentes héritables* (*erfelijk renten, erfrenten,* and later *losrenten,* in Flemish/Dutch); and a newer form, in life-rents, known as *rentes viagères* or *lijfrenten*, which normally were extinguished on the death of the holder (*credirentier)*, though some were issued for two or three designated lives, to be transferred to a spouse, child, or close relative. In general, through the centuries, the annual 'annuity' payments on single life-rents, though always far lower than interest rates on voluntary short-term loans, were always much higher than those on perpetual or hereditary rents, sometimes double, perhaps reflecting the fact that the latter, by their very nature assignable, proved to be more marketable.[66]

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[64] Bernard Schnapper, *Les rentes au XVI siècle: histoire d'un instrument de crédit*, S.E.V.P.E.N , École Pratique des Hautes Études: Centre de recherches historiques: Affaires et gens d'affaires, vol. 12 (Paris, 1957), pp. 50-61; Herman Van der Wee, 'Monetary, Credit, and Banking Systems', in E.E. Rich and Charles Wilson, eds., *The Cambridge Economic History of Europe*, Vol. V: *The Economic Organization of Early Modern Europe* (Cambridge, 1975), pp. 303-05.

[65] See David Herlihy, *Medieval and Renaissance Pistoia, 1200-1430* (New Haven, 1967), pp. 136-45, and Table 18, with graph 3: median price of a perpetual rent of one *staio* of wheat); p. 241 (church revenues in perpetual rents); Pryor, *Business Contracts of Medieval Provence*: see *censuales*, in *notulae* 55 (pp. 168-71), 93 (pp. 230-31).

[66] See sources in n. 65, and Georges Bigwood, *Le régime juridique et économique du commerce de l'argent dans la Belgique du moyen âge*, Academie Royale de Belgique, Classe des Lettres, vol. XIV, 2 vols. (Brussels, 1921-22), vol. I, pp. 120-23. Thus in late thirteenth-century Flemish towns, the annuity rate

Professor James Tracy, who must be credited with the recent research demonstrating that the first to adopt the *rente* contract as a new vehicle of public finance were towns in thirteenth-century northern France, has offered several hypotheses to explain why the northern towns did and the southern towns did not do so. To be sure the prime incentive came from the pressing need to convert or consolidate very large volumes of short-term loans into lower-cost long-term debts; but that problem afflicted many other western European towns. His principal argument, based on historical studies by Charles Petit-Dutaillis, concerns the differences in the towns' legal status in relation to the crown. Louis IX (1226-1270), influenced by university jurists during his long reign, granted the chartered communes of the central and northern *langue d'oeil* region an augmented status as corporate legal entities, thereby enhancing their magistrates' authority to 'obligate not just the revenues of the town itself but also the property of its citizens', as surety for these new *rentes.* But in the *languedoc* regions, from about 1260, 'a stronger English crown forcibly subjected the southwestern communes to its control', while most south-eastern towns had never become incorporated communes (continuing with consuls).[67] Both of these developments, however, evidently occurred or achieved their fruition after the earliest northern town *rentes* were issued, in the early 1220s.

Although Tracy's hypotheses on the origins of the northern *rente* does not include the role of the usury doctrine, he does cite an observation from Pierre Desportes, the historian of medieval Rheims that, after the *bourgeoisie* of this northern French town had been threatened with an ecclesiastical investigation of their 'usures', in 1234 – creating a 'véritable terreur', they quickly came to prefer 'les achats de rentes aux

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on perpetual rents (*erfelijk renten*) was 10 percent, falling to 6.25 percent (1/16) in the fifteenth century; the rate on *lijfrenten* in the late thirteenth century was typically 12.5 percent (1/8), falling to 10 or even 8 percent (1/12.5) in the fifteenth century. In Leiden, in 1520, *erfelijke* or *losrenten* were sold at 6.25 percent (1/16); *lijfrenten* for two lives, at 10.0 percent; and for one life, at 12.5 percent (1/8). See Tracy, *Financial Revlution*, p. 92, n. 57. Some historians have suggested that those buying *lijfrenten* demanded a higher rate in the mistaken belief that such rates would amortize their investment over their lifetime.

[67] Tracy, 'Dual Origins', citing Charles Petit-Dutaillis, *Les communes françaises: caractères et évolution, des origines au XVIII siècle* (Paris, 1947); in English translation (by Joan Vickers), as *The French Communes in the Middle Ages,* Eruope in the Middle Ages Selected Studies vol. 6 (Amsterdam-New York, 1978), especially pp. 23-36, 86-94, 97-125.

prêts proprement dits'.[68] Furthermore, in 1254 Innocent IV relieved the monks of Saint-Rémi and the commune of Beauvais of any obligation to pay interest owing to their creditors, 'notwithstanding their obligations'.[69] In discussing northern France's most important county (in a different context), David Nicholas has observed that 'the Flemings seem to have been more concerned than the Italians to avoid the imputation of usury'.[70] Much earlier the Belgian scholar Georges Bigwood asserted that, from the thirteenth century, 'the struggle against usury was energetically and remorselessly conducted' by the Church, the town governments (Douai from 1247), and the princes in Flanders and Artois.[71] To be sure, from 1281, Count Guy de Dampierre and successor counts of Flanders had licensed Italian 'Lombard' merchants to maintain regulated pawnbroking 'tables'; but such pawnbroking could be interpreted as a discounted sale and repurchase of goods (*venditio sub dubio*), rather than as usury. In any event, as Raymond de Roover has so aptly commented, 'the lombards in Flanders as elsewhere lived in constant fear of a sudden reversion to repressive methods and under the permanent threat of expulsion and spoliation'.[72]

The continuous risks of debt repudiation for 'usurious' lenders was demonstrated during the financial crises that the Flemish towns experienced during the 1290s.[73] In November 1291, the Parlement de Paris issued a formal decree cancelling Flemish communal debts deemed to be usurious 'ou soupetenneuse

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[68] Quotation from Pierre Desportes, *Reims et les Rémois au XIIIe et XIVe siècles* (Paris, 1979), pp. 126, and 131, cited in Tracy, in 'Dual Origins'(forthcoming).

[69] Desportes, *Reims*, p. 126.

[70] David Nicholas, *The Metamorphosis of a Medieval City: Ghent in the Age of the Arteveldes, 1302 - 1390* (Lincoln, 1987), p. 122 (though referring in fact to the fourteenth-century private transactions).

[71] Bigwood, *Régime juridique,* I, pp. 567-603. For example, in July 1288 the Synod at Liège excommunicated all manifest usurers and forbade acceptance of their donations (p. 580). Some of his views are challenged, not entirely successfully, in Carlos Wyffels, 'L'usure en Flandre au XIII^{e} siècle', *Revue belge de philologie et d'histoire/Belgisch tijdschrift voor filologie en geschiedenis*, 69:4 (1991), 853-7.

[72] Raymond de Roover, *Money, Banking, and Credit in Mediaeval Bruges: Italian Merchant Bankers, Lombards, and Money-Changers: A Study in the Origins of Banking* (Cambridge, Mass., 1948), pp. 99-148; Wyffels, 'L'usure', pp. 866-67; Bigwood, *Régime juridique*, vol. I, pp. 319-88, 639-48. In 1280-81, eight Yprois citizens and two Lombards were condemned for usury; but Lombards also lent funds to the towns, at rates up to 18 percent.

[73] See David Nicholas, *Medieval Flanders* (London and New York, 1992), pp. 180-94.

d'usure', commanding the investigation and punishment of civic 'administrateurs par lesquelz la commune aura estre dommagé' by such usuries.[74] In February 1294, King Philip VI ordered his bailiffs in Ghent to take any measures necessary to protect the town's victims of 'usurious transactions'.[75] Shortly after, in January 1296, Pope Boniface VIII, evidently under pressure from Philip VI, issued a decree to relieve Bruges from the 'vicious usurious obligations' (*per usurariam pravitatem de solvendis*) owed to the prominent Arras financiers Robert and Baldwin Crespin 'beyond the principal sums owed to them'.[76] Count Guy de Dampierre was himself heavily indebted to the Crespins, and during these same years, he also appealed for papal assistance in releasing him from the 'usurious loans' owed to these Arras bankers.[77]

Obviously these measures were not really intended to suppress usury as such but rather to enhance the bargaining power of severely indebted civic governments in periods of crisis, perhaps to extort loans at lower rates of interest (if not to abrogate their obligations). Such measures, to be sure, might have backfired and undermined these towns' financial viability, by hindering their ability to secure new loans, were it not for the newly alternative forms of financing that proved more attractive to risk-averse creditors, especially those concerned about the morality of interest-bearing loans. While many, like the aforementioned timid bourgeoisie of Rheims, might have sought to invest just in *rentes*, many more might have preferred to hold a balanced investment portfolio, containing both long-term or perpetual *rentes* with low yields and riskier, and thus high-interest bearing short term loans, with specific redemption dates.[78]

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[74] Bigwood, *Régime juridique*, vol. II, doc. no. 17, pp. 299-300.

[75] *Ibid.,* vol. II, doc. no. 19, pp. 303-04 (26 Feb 1294): 'plures pecuniarum quantitates extorquere nitantur per usurariam pravitatem'.

[76] *Ibid.*, vol. I, pp. 578-83; vol. II, doc. no. 21, p. 306 (21 Jan 1296), imposing those penalties prescribed by the Lateran councils. A similar letter sent on 12 June 1297 indicates that this initiative was ineffective.

[77] Bigwood, *Régime juridique*, vol. II, doc. no. 15, pp. 293-98, for a partial list of Count Guy's loans to the Crespin brothers. See also Fryde, 'Public Credit, with Special Reference to North-Western Europe', in Michael Postan et al., eds., *The Cambridge Economic History of Europe*, Vol. III: *Economic Organization in the Middle Ages* (Cambridge, 1963), p. 495.

[78] See n. 00.

Such evidence therefore serves to reinforce the view that these thirteenth-century French and Flemish town governments, in reaction to perceived consequences of the now greatly intensified anti-usury campaign, resorted to the new *rente* contracts to provide some investors with a morally superior alternative, and even financially superior, if town government would have less excuse to renege on payment obligations. But establishing the validity of hypothesis depends upon satisfying two other historical conditions. The first, to be confirmed with subsequent evidence, was that civic and then state governments benefited from not only a better supply of long-term funding that proved attractive to investors, but also one with much lower servicing costs. The second condition was that no taint of usury be attached to any of these *rente* contracts.

There was evidently no theological discussion of these *census* or *rente* contracts before the early thirteenth century, indeed not before the northern towns first resorted to these contracts. That initial discussion, however, did not seem to be promising for the future of civic *rentes*. For the very first reference to such contracts, in July 1218, was the refusal of the Archbishop of Rheims to approve the *Hôtel-Dieu*'s sale of a *rente viagère* for reasons that evidently involved the usury question.[79] Subsequently, in 1241-43, Geoffrey of Trani contended that those who purchased *rentes* were guilty of usury, because of their 'immoral hope' to receive a greater value, in the sum of annual payments, than the amount paid in purchasing a *rente.* In or about 1250, Guillaume de Rennes, in his gloss on the *Summa* of Raymond de Peñafort, concluded that, although the *rente viagère* was not in itself (*ex forma*) usurious, it was nevertheless immoral and illegitimate, for reasons similar to those cited by Geoffrey of Trani; and he further rejected the validity of any *rentes* that were not strictly tied to real estate. The very next year (or c. 1251), however, Pope Innocent IV declared *rentes* to be non- usurious, and legitimate contracts of sale, provided that the annual payments were indeed based on 'real' properties.[80] Furthermore, in two treatises, one written shortly after (c. 1253) and the other

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[79] Desportes, *Reims et les Rémois* , pp. 127-28 and n. 226. The proposed sale of a *rente viagère* for £45 *parisis,* to Hugues, *coûtre* of the church of Rheims, for an annual payment of 50 *sols parisis* (thus: 5.55 percent); and if he should die his sister Isabelle was to receive 40 *sols* per year for life. See also Tracy, 'On the Dual Origins'.

[80] Geoffrey of Trani (Goffredo di Trani), *Summa super titulis decretalium;* Innocent IV , *Apparatus seu commentaria super libris quinque decretalium,* ad X 5.19.6, *In Civitate* (Frankfurt, 1570; reprinted Frankfurt, 1968). I owe these references to Julius Kirshner and Lawrin Armstrong. See Fabiano Veraja,

twenty years later (c. 1270), Henry of Susa (Hostiensis) rejected all of Geoffrey of Trani's arguments concerning *rentes* and thus endorsed those of Innocent IV.[81] Nevertheless, in 1276, Henry of Ghent, a leading theologian in the Paris faculty, vigorously condemned all *rentes* as mere subterfuges to engage in usury. Echoing Geoffrey of Trani's views on 'immoral hopes to gain', he contended that *rentes* promised gains well beyond the principal sum, especially perpetual *rentes*; and that in any event they involved the 'sale of money, which is non-vendible'. The reaction, even at his own university, was quite hostile. By this time, the almost universally accepted view was that the *census* was simply a contract of purchase and sale (*emptio in forma*) involving the perfectly licit purchase of future streams of income or usufruct from property. Most argued, as had Innocent IV, that the legitimacy of such contracts should be governed by the canon law on 'just price', rather than of usury (especially if the annual payments were made in kind rather than money).[82] Indeed, in 1278, almost immediately following the issue of Henry of Ghent's *Quodlibets*, Giles of Lessines justified the return on *census* contracts in this very context, in making the telling point that 'future things over a period are not estimated of such value as things collected in an instant [in the present]'.[83] In the late

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Le origini della controversia teologica sul contratto di censo nel 13 secolo, Storia ed economia 7 (Rome, 1960), pp. 30-43; Bernard Schnapper, 'Les rentes chez les théologiens et les canonistes du XIIIe au XVIe siècles', in Georges Vedel (Centre National de la Recherche Scientifique), ed., *Études d'histoire du droit canonique dédiées à Gabriel le Bras*, 2 vols. (Paris, 1965), vol. I, pp. 966-67; and Philippe Godding, 'Wilhelmi Bont Lovaniensis de redditibus perpetuis et ad vitam (1451)',*Tijdschrift voor rechtsgeschiedenis/Revue d'histoire du droit/The Legal History Review*, 58 (2000), 261-62; Langholm, *Economics in the Medieval Schools*, p. 97. The Dominican Roland of Cremona (d. 1259) had also contended that since the return on a *rente* was uncertain, because the date of the buyer's death was uncertain, the contract was therefore not usurious.

[81] Veraja, *Origini della controversia*, pp. 43-47: *Summa aurea* or *Summa super titulis decretalium* (ca. 1253); and *Commentaria in V librum decretalium,* ad X.5.19.6, *In civitate* (ca. 1270).

[82] Veraja, *Origini della controversia,* pp., 50-52, 55-81, 106-11, 125-31; Schnapper, 'Les rentes chez les théologiens', pp. 969-72; Langholm, *Economics in the Medieval Schools*, pp. 249-73. Henry of Ghent (d. 1293) had issued his *Quodlibets* in response to questions from the Flemish Beguines on the morality of investing in *rentes*. He advised them to use their funds instead to purchase real estate or other property that they could then lease out for annual rents, to achieve the same financial goals. Noonan, *Scholastic Analysis of Usury*, p. 155, was not, however, justified in stating that 'his opinion was singular and apparently startling to his thirteenth-century contemporaries, who had placidly accepted the contract as lawful.'

[83] Veraja, *Origini della controversia,* pp. 89-99; Noonan, *Scholastic Analysis of Usury*, pp. 155-57; Langholm, *Economics of Medieval Schools*, pp. 310-17: '.. a present and assembled thing is estimated at a higher value than a future and divided one' (i.e., in terms of future annuity payments).

thirteenth and early fourteenth centuries numerous Scholastic treatises – *inter alia* from Gervais de Mont Saint-Eloi, Matthew d'Aquasparta, Godfrey of Fontaines, Richard of Middleton, and Alexander Lombard – fully endorsed the *census* and the various related *rente* contracts.[84]

The governing principle of this theological discussion was that anyone who purchased a *rente* could never ever demand redemption – repayment of the principal sum -- so long as the seller or *débirentier* continued to honour the obligation to make the annual annuity payments, for which all of his or her assets had been pledged. For obviously if *crédirentiers* were to enjoy such redemption rights, their *rentes* would be nothing more than a devious and sinful device to cloak a usurious loan. Thus, if there is no stipulated repayment, there is no loan; and, to quote Leonardius Lessius (professor of theology at Leuven), 'where there is no loan there is no usury' (*ubi non est mutuum, ibi non est usura*).[85] Otherwise, a *crédirentier* who wished to regain some or all of the principal had to find some third party willing to buy the *rente*, with its annual income, but often at some discount.[86] The development of markets for *rentes* will be discussed later in this study, for obviously only when reliable, efficient secondary markets developed, with untrammelled rights of negotiability and low transaction costs, would the public find *rentes* to be a truly attractive investment.

In the early history of *rente* contracts, the much more pressing issue was the right of redemption on the part of the seller, a right not then universally held by *débirentier* town governments. That problem became all the more aggravated during the Hundred Years' War (1337 - 1453) era, with concomitant economic contractions, periodic economic crises, from not only warfare but also plague and other disruptions to the international economy, when many urban governments found themselves without the tax and other

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[84] Veraja, *Origini della controversia*, pp. 69-73, 101-24, 131-62; and conclusions, pp. 163-95; Schnapper, 'Les rentes chez les théologiens', pp. 969-72, stating that 'aucun Docteur de quelque notoriété ne reprit les idées d'Henri de Gand'. Langholm, *Economics in the Medieval Schools*, p. 283; Noonan, *Scholastic Analysis of Usury*, pp. 154-70. Perhaps the most extreme positive view was that of that Henry of Langenstein (or Hesse: 1325-1397), who argued that those who purchased a *census* in effect became part-owners of the property, and were thus entitled to some share of its fruits.

[85] Leonardus Lessius (1554-1623), *De justitia et jure* (Paris, 1606), Liber 2, cap. 21, dub 2, n. 9, cited in de Roover, *Leonardus Lessius*, pp. 11; and on *renten*, p. 26.

[86] See Schnapper, *Les rentes au XVI siècle*, pp. 50-61.

economic resources to make the annual payments on their *rentes*. Thus, they sought legal support for the right to redeem them, in part or more often in full, though usually just the *rentes héritables*. Some towns in France and the Low Countries did issue redemption ordinances to meet this need; but there still remained considerable resistance to such redemptions without consent from the *crédirentier*, many of whom, of course, were most reluctant to surrender such a seemingly guaranteed source of annual income. In the later fourteenth century, theologians in Vienne (France) strongly objected to the principle of such redemptions, citing the injury to ecclesiastical institutions vitally dependent on such *rente* incomes.[87]

Subsequently, in 1416, the Council of Constance was asked to rule on the question of *rentes* and rights of redemption. All of commissioners consulted, seven jurists and four theologians, agreed that *rentes* were essentially licit and that the *débirentier* had the right to redeem any *rentes* sold, provided that such redemptions did not involve any reduction in (nominal) capital values. Finally, all remaining moral, legal, and ecclesiastical doubts were fully resolved by the three papal bulls, which were evidently influenced by the debates at the Council of Constance: those of Martin V (*Regimini*, 1425), Nicholas V (*Sollicitudo pastoralis,* 1452), and Calixtus III (*Regimini*, 1455).[88] According to these bulls, *census* or *rente* contracts were fully licit, but only under three strict conditions: that the contracts had to be tied to real estate, or other real property; that the annual return or annuity payments could not exceed ten percent of the capital sum

[87] Schnapper, 'Les rentes chez les théologiens', pp. 973-74; Schnapper, *Les rentes au XVIe siècle*, pp. 62-64; 130-33. His list includes: Vienne (1360), Amiens (1393), Tournai (1410), and Brussels (1436), and Paris (1441). But the Parlement de Paris's decree was limited to *rentes héritables* drawn on houses and buildings and restricted redemption to twelve times the annual payment. In 1483, the Estates General permitted certain *rentes*, based on royal *tailles* to be redeemed after two years. For France, see below, pp. 38-41, and nn. 00 - 000. For the right of Flemish towns to redeem their *erfelijke renten*, from 1288, see below nn. 00. For literature on the war-torn economic crises of this era, see below nn. 000-00.

[88] Schnapper, 'Les rentes chez les théologiens', pp. 977-87; Schnapper, *Les rentes au XVIe siècle*, pp. 65-59; Noonan, *Scholastic Analysis of Usury*, pp. 160-61, 206-08, 230-37; Van der Wee, 'Monetary, Credit, and Banking Systems', pp. 304-05. The bull of Martin V (1425, confirmed by Calixtus III in 1455, in *Extravagantes communes*, 3.5.2 *Regimini*) had been restrictive in limiting the validity of *rentes* to those based on real estate (fixed, real properties). Thus the crucial bull was that of Nicholas V in 1452, which recognized the validity of *rentes* based merely on the assets or patrimony of the vender. That bull in turn had been influenced by the *quodlibet* that Willem II Bont of Leuven issued in 1451: as a refutation of Henry of Ghent's treatise (n. 34 above), so that, in conclusion, the purchase of all such rents – *de redditibus perpetuis et ad vitam est omni iure licita et nullo modo usuraria*. See Godding, 'Wilhelmi Bont Lovaniensis de redditibus', pp. 262-67. The maximum rates actually ranged from 1/10 (10.0 percent) to 1/14 (7.14 percent).

(almost never observed); and that the *débirentier* (i.e., the seller, but not the *crédirentier*) had the unrestricted right to redeem the *census* or *rente* contracts.[89]

Thus, if an increasing resort of northern French towns to *rentes* in financing long-term debts had sparked these theological controversies about these *rente* contracts, then fortunately for the financial future of western urban governments, and indeed for the origins of the modern financial revolution, that debate was fully resolved in their favour. In so far as this issue is discussed at all in the historical literature the consensus seems to be that the taint of usury was removed only with the three fifteenth-century papal bulls.[90] But those bulls were issued under the special circumstances of this era; and they clearly did little more, other than resolving the issue of redemption, than ratify what had been the crucial papal decrees, those of Innocent IV in c. 1251, less than a quarter century after this urban financial experiment had commenced.[91]

The first documented issue of urban *rentes*, following Rheims' abortive attempt in 1218, evidently took place in Troyes, the leading town of the Champagne Fairs, just before 1228, when several Artesian financiers from Arras and St. Quentin acknowledged the purchase of a series of *rentes viagères*.[92] Four years later, in December 1232, Troyes sold a further 32 *rentes viagères* – 26 of them to Rheims financiers. Amongst the more interesting provisions were those that allowed the *crédirentiers* to sell their *rentes* to third parties; or, on their death, to transfer the claims to their wives, who were to receive half of the annual income

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[89] In 1569, Pope St. Pius V issued the bull *Cum onus*, which revalidated the fifteenth-century bulls, the provisions tying the *census* to immobile real estate and guaranteeing the seller's right of redemption, while specifically invalidating any mutually redeemable *rentes (census)* and thus the right of buyers to demand redemption. Noonan, *Scholastic Analysis of Usury*, p. 237; Schnapper, *Les rentes au XVIe siècle*, pp. 117-20.

[90] See Usher, *The Early History of Deposit Banking*, p. 137, thereby denying any link between *rentes* and the usury question: 'Although the sale of rent-charges began in the thirteenth century, the practice was not explicitly recognized by the Church until 1425'; Van der Wee, 'Monetary, Credit, and Banking Systems', pp. 303-04.

[91] See above, pp. 00 and n. 00.

[92] Tracy, 'On the Dual Origins', pp. 6-7, citing in particular Pierre Bougard and Carlos Wyffels, *Les finances de Calais au XIIIe siècle* (Brussels, 1966).

for their lifetime.[93] In 1235, the commune of Auxerre also issued *rentes viagères*, many of which were purchased by Rheims financiers.[94] In the great financial centre of Arras itself, the earliest extant financial accounts, from October 1241 to February 1244, indicate that the town had sold a total of £2,500 *parisis* in *rentes viagères*, at 1/6.5 (i.e., at 15.4 percent), for one or two lives; and the annual payments on such *rentes* accounted for almost 75 percent of Arras's expenditures in servicing its total debt.[95] Subsequently, many other northern French towns began issuing *rentes* from just after the mid-century: Roye, in1260; Calais, in1263; Saint-Riquier, in 1268; and Saint-Omer, in 1271.[96]

In the quasi-independent yet still French county of Flanders to the north, Douai, currently the leading Flemish producer of textiles, was probably the first to do so. In its archives, Georges Espinas discovered a document, dated about 1250, with a list of 'rentes que li ville doit a hiretage' (i.e., *rentes héritables*), and then another dated March 1270, concerning *rentes viagères*. After Douai was incorporated directly into the French kingdom, in 1305, it continued to issue *rentes héritables*, but was not allowed to sell *rentes viagères* without royal permission. Those that were sold were marketed chiefly in Arras, Tournai, and Valenciennes, and were transferable to the spouses and offspring (sometimes grandchildren) of the buyers.[97]

To the north, its Flemish-speaking neighbour Ghent began selling *lijfrenten* only in 1275, once more

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[93] Desportes, *Reims et les Rémois*, pp. 127-29. Count Thibaud of Champagne guaranteed the annual payments; and bishop of Troyes promised to place the town under an interdict if it failed to meet its obligations.

[94] Desportes, *Reims et les Rémois*, p. 128; similarly cited (and brought to my attention) in Tracy, 'On the Dual Origins', pp. 6-7.

[95] Pierre Bougard, 'L'apogée de la ville (1191-1340)', in Pierre Bougard, Yves-Marie Hilaire, and Alain Nolibos, *Histoire d'Arras*, Collection Histoire des villes du Nord - Pas de Calais (Arras, 1988), pp. 61-62. Tracy, 'On the Dual Origins', cites Desportes, *Reims et les Rémois*, for a somewhat different figure of £2,610 *parisis* (a year). Note that in medieval Europe, percentages were always expressed as fractions.

[96] Tracy, 'On the Dual Origins', pp. 6-9; Tracy, *Financial Revolution*, pp.13-15; Hans Van Werveke, *De Gentsche stadsfinanciën in de middeleeuwen*, Koninklijke Academie voor Wetenschappen, Letteren, en Schone Kunsten van België, Klasse der Letteren, Jaaregang XXXIV (Brussels, 1934), pp. 164-71, 282-90.

[97] Georges Espinas, *Les finances de la commune de Douai, des origines au XVe siècle* (Paris, 1902), p. 314, n. 3; and p. 315-56. For perpetual rents, see pp. 314-21; for life-rents, see pp. 321-46. See also Georges Espinas, *La vie urbaine de Douai au moyen âge* (Paris, 1913).

finding most of its purchasers (for sales amounting to £1,600 *parisis*), in Arras. Its financiers evidently agreed to convert their short term debt claims into these much longer-term *rentes.* Ghent's sale of *erfelijk renten* evidently commenced in July 1288, when Count Guy de Dampierre (1278-1305) issued an ordinance stipulating that the Flemish town governments had the right both to sell and to redeem such *renten* whenever they chose to do so.[98] Furthermore, the count undertook the obligation to guarantee such *renten*.[99] At this same time, Bruges, another leading Flemish town, was also heavily indebted to Arras bankers, especially to the Crespin family. In 1298, they held almost half of Bruges's steeply mounting financial obligations: £157,093 *parisis* of a total of debt of £346,880 *parisis*, of which £124,307 were in 'usurious loans' and £32,787 in *rentes viagères* (20.9 percent).[100] Far less important were issues of *rentes héritables.* [101]

Despite this seemingly positive role that Count Guy had evidently played in Flemish urban finances, he and his mother Countess Marguerite de Constantinople (1244 -78, died 1280) had initiated, from as early as 1275, what became an increasingly bitter conflict with the leading Flemish towns. In response to growing complaints from the citizenry, they arbitrarily deposed the virtually hereditary mercantile government of

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[98] Ordinance of 1 July 1288: 'ke li eschevins puissent vendre a leur bourgois ki aisiet en second et a autre gent, rentes sur le vile devant dite, pour convertir les deniers en payements des debts de le vile ke ele doit à ore, leskeles rentres on puis racater kant le vile en iert aisie': in Charles-Louis Diericx, ed., *Mémoires sur les lois et coutumes et les privilèges des Gantois, depuis l'institution de leur commune jusqu'à la revolution de l'an 1540*, 2 vols. (Ghent, 1817-18), cited in Van Werveke, *Gentsche stadsfinanciën*, pp. 289-90. From October 1288 to 1290, a total of 118 *erfrenten brieven*, with a yearly average of £2,046 *parisis*, with an annuity rate of 10 percent (£1 *parisis* for each £10 *par.*)

[99] Van Werveke, *De Gentsche stadsfinanciën*, pp. 164-71, 282-90. The guarantees, however, probably did not extend beyond using his coerceive powers to ensure that the town governments made their annual payments.

[100] See Alain Derville, 'La finance Arrageoise: usure et banque', in Marie-Madelaine Castellani and Jean-Pierre Martin, eds., *Arras au moyen âge: histoire et littérature* (Arras, 1994), pp. 40-41: based upon the municipal accounts in Carlos Wyffels and Jan de Smet, eds., *De rekeningen van de stad Brugge, 1280 - 1319,* 2 vols. (Ghent, 1965 - 1971), Vol. I: *1280 - 1302* (evidently based doc. no. 10, for 14 Sept 1297 - 23 Dec. 1298, pp. 509-675). The total financial obligations were 13.62 times as much as Bruges's revenues that year: £25,460.75 *parisis*; though my calculations of the data differ from those of Derville.

[101] In the account for Sept 1297 to Dec 1298, the total payments made to holders of *rentes viagères* or *lijfrenten* (*redditus ad vitam*) amounted to £3,154 5s 11 d *parisis* (225 persons, including Robert and Baldwin Crespin and Jehan Boinebroke); but payments for *rentes héritables* (*redditu hereditario* or *rente yretaule*) were only £99 (4 persons). Wyffels and De Smet, *Rekeningen van de stad Brugge*, vol. I, p. 551.

Ghent (the so-called XXXIX). The governments of the leading towns (Douai, Lille, Ghent, Bruges, and Ypres) then sought support from the kings of France, whose Parlement de Paris did indeed restore the Ghent government, though on condition that it submit to external financial audits. In 1289, King Philip IV (1285-1314) installed his chief lieutenant, the Bailiff of Vermandois, as virtual governor of Flanders, and placed Ghent under his personal protection. Two years later, in 1291, Ghent's town government ceased the sale of *renten* – and indeed for over four decades. Once more (November 1291) it had secured support from the Parlement de Paris, which specifically permitted not only Ghent but other Flemish towns to suspend further payments to all those holding 'rentes à vie' who had already received more than their original investment, 'jusques à tant que la commune sera délivrée des debtes'.[102]

Count Guy then sought support from Philip's chief enemy, Edward I of England (1272-1307), all the more so since Flanders's textile economy was so heavily dependent on the English wool trade. Guy's injudicious decisions, undertaken in 1296-97, to banish the Ghent XXXIX oligarchy and then to declare a formal alliance with Edward I provoked Philip IV into invading Flanders (June 1297), seizing half the county, and the remainder in 1300. After two years of oppressive French rule, the Flemish townsmen and guild militias rose in revolt, vanquishing the French cavalry at the Battle of Kortrijk (1302); but, in 1305, Philip IV's armies forced the Flemings to surrender; and by the Truce of Athis-sur-Orge, he imposed enormous indemnities, and acquired the towns of Lille and Douai, thus inciting further conflicts, so that peace was not achieved until 1319-20.[103] There is no evidence that, during this protracted era of conflicts, any of the Flemish towns resorted to the use of *renten* to finance their wars or to pay these heavy indemnities.

Not until 1325-26 did Ghent's town government again begin selling *renten*, now exclusively *erfelijk renten*, while continuing to pay the annuities owing on those suspended *renten* from the 1290s. It did so in

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[102] See Bigwood, *Régime juridique,* vol. I, pp. 120-23, 578; vol. II, doc. no. 17, pp. 299-300; Schnapper, 'Les rentes chez les théologiens', p. 972; and n. 67 above.

[103] See: Hilda Johnstone, ed., *Annales Gandenses: The Annals of Ghent, translated from the Latin with Introduction and Notes* (London, 1951), pp. 3-84; Nicholas, *Medieval Flanders,* pp. 186-202, 212-24; David Nicholas, *Town and Countryside: Social, Economic, and Political Tensions in Fourteenth-Century Flanders* (Bruges, 1971); Nicholas, *Metamorphosis of a Medieval City*, passim; Henri Nowe, *La bataille des éperons d'or* (Brussels, 1945), pp. 13-113.

the midst of yet another civil war, the Revolt of Maritime Flanders (1323-28), in which Ghent, this time, wisely refused to participate, thereby gaining considerable ascendancy in Flanders when French armies defeated the rebel forces of Bruges and Ypres (at Cassel, August 1328). In virtually every succeeding year of the medieval era Ghent continued to sell small but respectable amounts of such *renten*.[104] A detailed examination of annual revenues from sales of these and other *renten*, from standard loans and other debt contracts and annual expenditures on annuity payments, *renten* redemptions, and loan payments may be found, in Tables 1 and 2, which, however, suffer from many missing or fragmentary accounts.

The most remarkable financial event to be observed in these town accounts took place in the fiscal year 1346-47, just on the eve of the Black Death: with a very large-scale sale of *lijfrenten*, in total worth £21,295 *parisis*, almost thirty times the value of the *erfelijk renten* sold that year. During this revolutionary 'Artevelde era' (1335-1349), Ghent was under the rule of a weaver-led guild regime, which in turn dominated Flanders, virtually independent of the feckless count (Louis de Nevers, 1322-46); but it was also antagonizing the other leading Flemish towns.[105] Such circumstances may explain the other remarkable feature of this

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[104] So far I have examined only the fourteenth-century *stadsrekeningen* (town accounts), which have been published in the following sets of documents: Jules Vuylsteke, ed., *Gentsche stads- en baljuwsrekeningen, 1280 - 1336/ Comptes de la ville de Gand, 1280 - 1336*, in the series *Oorkondenboek der stad Gent*, eerste afdeeling: *Rekeningen [Cartulaire de la ville de Gand*, première série: *Comptes*] (Gent: F. Meyer-Van Loo, 1900), pp. 397-498 (for 1325-26); Napoleon De Pauw and Julius Vuylsteke, eds., *De rekeningen der stad Gent: Tijdvak van Jacob Van Artevelde, 1336 - 1349*, 3 vols., (Ghent: Ad Hoste, 1874 -85); Vol. I: *1336 - 1339*; Vol. II: *1340 - 1345*; Vol. III: *1345 - 1349*; Alfons Van Werveke, ed., *Gentse stads- en baljuwsrekeningen (1351 - 1364)*, Koninklijke Academie voor Wetenschappen, Letteren en Schone Kunsten van België, Koninklijke Commissie voor Geschiedenis (Brussels, 1970), with an introduction by Hans Van Werveke; David Nicholas and Walter Prevenier, eds., *Gentse stads- en baljuwsrekeningen (1365 - 1376)*, Koninklijke Academie van België, Koninklijke Commissie voor Geschiedenis (Brussels, 1999); Julius Vuylsteke, ed., *De rekeningen der stad Gent: Tijdvak van Philips van Artevelde, 1376 - 1389* (Ghent: Ad. Hoste, 1893). For the fifteenth century (though only to 1460), see Marc Boone, *Geld en macht: de Gentse stadsfinanciën en de Bourgondische staatsvorming (1384-1453)* Verhandelingen der Maatschappij voor Geschiedenis en Oudheidkunde te Gent, vol. XV (Ghent, 1990), pp. 60-67, 163, and Table 11 (sales of *lijf-* and *erfrenten*, but only for the years 1453-1461), available only in a microfiche. This book regrettably pays almost no attention to this form of civic finances. But see also Marc Boone, '*Plus deuil que joie*: Les ventes de rentes par la ville de Gand pendant la période bourguignonne: entre intérêts privés et finances publiques', *Credit Communal: bulletin trimestriel*, 176 (1991-92), 3-24.

[105] For the political events, see David Nicholas, *The Van Arteveldes of Ghent: the Varieties of Vendetta and the Hero in History* (Ithaca, 1988), pp. 19-98; Nicholas, *Medieval Flanders*, pp. 219-24; and Hans Van Werveke, *Jacques Van Artevelde* (Brussels, 1943), pp. 37-110. Jacob Artevelde himself had been assassinated in July 1345.

financial experiment: that virtually all of these *renten* were sold outside Flanders, in the Brabantine drapery towns of Brussels and Leuven.[106] Subsequently, in the fourteenth century, Ghent marketed just two further issues of *lijfrenten*, in far more modest amounts (£2,311 and £1,232 *parisis*): in 1349-50 – just after the overthrow of the weaver-dominated regime – and again in 1355-56. Some of these, according to later payment records, had been sold in Mons (Bergen), Hainaut. But there is no conclusive evidence that, in more normal years, Ghent or other Flemish towns were unduly dependent on external sources in financing civic debts.[107] Indeed, in the more peaceful, post-rebellion years of the 1350s, 1360s, and early 1370s, the revenues from the sale of *erfelijk renten* were responsible, on average, for only 3.65 percent of Ghent's total urban revenues.[108] The later-fourteenth century town accounts indicate that the normal rate of return on these *renten* was then 1/8 or 12.5 percent.[109]

A somewhat different and rather more interesting picture emerges from a study of the civic finances of the small towns, in particular that of Aalst (Alost), in eastern Imperial Flanders, situated mid-way between Ghent and Brussels. The role that *renten* played in its civic finances can be seen in Table 3, for the period 1395-96 (first extant account) to 1549-50.[110] While accounts for some years within this long 150-year era are missing, there are fewer gaps in these than in the Ghent accounts; and, even more important, almost all

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[106] From: De Pauw and Vuylsteke, *De rekeningen der stad Gent: Tijdvak van Jacob Van Artevelde,* vol. III, pp. 21- 22. Payments made on these *lijfrenten* in 1347-48: pp. 190-96.

[107] De Pauw and Vuylsteke, *De rekeningen der stad Gent: Tijdvak van Jacob Van Artevelde,* III, pp. 397-445; A. Van Werveke, *Gentse stads- en baljuwsrekeningen (1351-1364)*, pp. 226-42; 369-41 (account for 1358-59). See also: See also Van Werveke, *De Gentsche stadsfinanciën*, pp. 282-90; Fryde, 'Public Credit', pp. 430-543; Tracy, *Financial Revolution*, pp. 13-15.

[108] See A. Van Werveke, *Gentse stads- en baljuwsrekeningen (1351-1364)*: for the records of the *renten*, see pp. 26, 92, 140, 188, 232, 261, 317, 377, 453, 497, 550, and 659; Nicholas and Prevenier, *Gentse Stads- en Baljuwsrekeningen (1365-1376)*, and Vuylsteke, *De rekeningen der stad Gent: Tijdvak van Philips van Artevelde, 1376 - 1389,* with details given in Table 1. Tracy, *Financial Revolution*, p. 14 states 'between 1346 and 1356;' but clearly the annual issues extended long beyond that year, certainly up to the next Ghent (Artevelde) revolt of 1379 and beyond.

[109] See Van Werveke, *De Gentsche stadsfinanciën*, pp. 166-71; and nn. 95, 107 below.

[110] Sources: Aalst *Stadsrekeningen* (1395-1550) in Algmeen Rijksarchief Brussel, Rekenkamer, doc. nos. 31,412 - 31,553.

of the extant accounts are fully complete. This table provides the following data: (1) quinquennial means of the revenues derived from the annual sales of both *erfelijk renten* and *lijfrenten*; (2) the percentages of total revenues accounted for by the sales of each type of *renten*; (3) the annual civic disbursements on both annuity payments and redemptions; (4) the percentage of total civic total expenditures each year accounted for by these *renten* payments; (5) the total annual surpluses or deficits; (6) annual revenues from the sale of tax-farms for the excise taxes (*assises, accijnzen*) on the consumption of beer, wine, grain, bread, and textiles, and other commodities; and (7) finally, the total expenditures on *renten* (annuities and redemptions) as a percentage of such annual excise tax-farm revenues.

Only rarely – in calamitous years of plague and war, in 1439-40 and 1453-54 – did such *renten* expenditures exceed the revenues from the tax-farms; and for the first half of the sixteenth century they rarely accounted for more than 40 percent of such revenues. On the other hand, both the receipts from and payments made for these *renten* usually accounted for a far higher proportion of total civic revenues and expenditures than in fourteenth-century Ghent. If *erfelike renten* were the predominant form in Ghent, *lijfrenten* were always vastly more important in Aalst (usually by a 50:1 ratio). Finally, the market for such *lijfrenten* was remarkably broad, especially for such a small town. Thus, for example, the Aalst account for 1402-03 records annuity payments to 769 recipients.

The evidence from the town accounts of Ghent and Aalst in Flanders (and from Leuven in Brabant) confirms a dichotomy in the source of the annual payments for the two major kinds of *rentes*, first observed by Bruno Kuske and more recently discussed by James Tracy. Those for *rentes héritables* (*erfelijk renten*) had to be derived from actual real estate or some form of immobile property – in accordance with the three fifteenth-century papal bulls; but those for *rentes viagères* (*lijfrenten*) could and generally did come from the town's excise or consumption taxes, and more generally from the annual sales of the tax-farms (*pachten*) for such *accijnzen*.[111] Note that they were taxes on consumption of products of the land: e.g., wine, beer, grain, bread, meat, herring, wool and linen textiles, charcoal, wood, as indicated in Table 3 below.

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[111] Kuske, *Schuldenwesen der deutschen Städte*, pp. 27-45; Tracy, 'Dual Origins', pp. 4-5. See also n. 54 above.

In the large neighbouring though economically less developed duchy to the east, Brabant, two major textile-manufacturing towns were selling *renten* from the early fourteenth century: Brussels (the capital), from about 1307; and Leuven, from perhaps, 1315. Unfortunately, there are virtually no medieval town accounts available for Brussels. Those for Leuven are available only from 1345, and do not really supply adequate data on municipal finances, until 1356, when evidence for the sales of *lijfrenten* and *erfelijk renten* do become available – and in voluminous detail.[112] Leuven's town government generally sold the former at rates that similarly averaged 12.5 percent; and, as had become standard practice in the Low Countries, financed its annual *renten* payments from the sale of excise-tax farms.

At the higher, comital and then ducal levels of government, the counts of Flanders, certainly from the time of Louis de Male (1346-84), were also raising public finances from the sales of both *lijfrenten* and *erfelijk renten*, which were secured by *aides* and other payments that he received from the towns. This practice was followed by the successor dukes of Burgundy, from 1384 to 1477: in Flanders, the neighbouring county of Hainaut, and the duchy of Brabant.[113] So far as can be ascertained, both the urban and princely *renten* were freely sold to willing buyers, without the elements of coercion found in Italian, and later in French and even Netherlander, public finances. Subsequently, in the course of the fourteenth and fifteenth centuries, most other towns in France, the Low Countries, and Germany came to adopt such *rentes* as an increasingly important, if not the primary, vehicle for public finance.[114]

As noted earlier, most later-medieval northern towns had striven to assert their right to redeem these

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[112] Van Uytven, *Stadsfinanciën*, pp. 196-231; and for some annual lists of *lijfrenten*, see also Tables XIVA and B (1377-78, pp. 209-110), XV (1389, p. 213), XVI (1391, pp. 217-18), XVII (1396 and 1407, p. 221), XVIII (1429-30, p. 223); XIX (1492, p. 225-27). The rates (Table XIII, pp. 199-200) were from 10.00 to 14.29 percent. For the archival accounts from 1345 - 1600: Stadsarchief Leuven, nos. 4986 -5224.

[113] See Fryde, 'Public Credit', pp. 502-05.

[114] Cologne, from 1351; Nürnberg, from 1385; Leiden, from about the 1360s; Amsterdam, by 1404. See Kuske, *Schuldenwesen der deutschen Städten,* p. 55; Parker, 'Emergence of Modern Finance', pp. 567-70; Hocquet, 'City State', pp. 91-92; Tracy, *Financial Revolution*, pp. 13-14, citing in particular Winifried Trusen, 'Zum Rentenkauf im Späten Mittelalter', in Max-Planck-Instituts für Geschichte, ed., *Festschrift für Hermann Heimpel zum 70. Gerburtstag am 19. September 1971*, 3 vols. (Göttingen, 1971-72), vol. II, pp. 140-58.

rentes whenever they wished. In November 1520, Imperial Habsburg edicts (by Emperor Charles V) formally made this principle applicable to town governments in the duchy of Brabant; and in February 1528, to those in the county of Flanders as well. In Habsburg domains east of the Rhine, *Reichspolizei-ordnungen* issued in 1530, 1548, and 1577 provided similar redeemability provisions for various German towns.[115]

Early Modern Public Finance: *Rentes* in Sixteenth-Century France

Much earlier, in September 1522, the French royal chancellor Antoine Duprat established what some historians have claimed to be western Europe's first publicly funded and permanent national debt, and one based on *rentes*. Acting on behalf of king Francis I, he received from a consortium of Paris merchants the sum of £200,000 *tournois* from the sale of *rentes* issued by the *Prévôt des marchands et échevins* (aldermen) of the *Hôtel de Ville* of Paris, which made the annual annuity payments of 8.33 percent (1/12) from its administration of specified royal excise (consumption) taxes and *gabelles.*[116]

But there are several reasons to dispute this claim of primacy, particularly in terms of the definition of such a permanent national debt provided in the introduction to this study. In the first place, it was not strictly speaking national; and its structure indicated that investor confidence in this form of public finance still resided with town and not state governments, in particular the belief that the city of Paris could be compelled to honour its financial obligations, while the crown could not. Second, resistance to the right of redemption of *rentes* remained stronger in France than elsewhere in northern Europe; and not until 1539 did a royal ordinance (Francis I) extend that right throughout the kingdom (to all towns and to the crown itself), but still a very restricted right limited to *rentes* secured on houses, building, and vacant properties. The

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[115] Schnapper, *Les rentes au XVI siècle*, pp. 132-33 (and n. 53); Van der Wee, 'Monetary, Credit, and Banking Systems', p. 304.

[116] For the claim, see Hamilton, 'Origin and Growth of the National Debt', pp. 118-19; and also, with full details, Paul Cawès, 'Les commencements du crédit public en France: les rentes sur l'Hôtel de Ville au XVI^{e} siècle', *Revue d'économie politique*, 9 (1895), 97-123, 825-65; 10 (1896), 407-79. See also Schnapper, *Les rentes au XVIe siècle*, pp. 151-54; Martin Wolfe, *The Fiscal System of Renaissance France*, Yale Studies in Economic History (New Haven, 1972), pp. 91-123; Parker, 'Emergence of Modern Finance', pp. 567-71. In fact, Francis I sold his personal and royal *rentes* to the Paris government, and the Paris government, which contained members of the *Parlemente*, than sold to the public its own municipal *rentes*, whose annual payments were financed by the royal taxes (*aides et gabelles*) assigned for that purpose.

Parlement de Paris, furthermore, limited redemption rights to thirty years from the *rente*'s date of issue, though extending that limit to sixty years in 1548.[117] Third, although these *rentes* were assignable to third parties, the procedures were cumbersome and costly, requiring the presence of both parties (or attorneys) at the offices of licenced notaries public; and consequently, during the sixteenth and early seventeenth centuries, there was virtually no secondary market in these securities, which were certainly not negotiable by modern definitions of the term.[118] That problem, combined with frequent failures of the crown to honour the annual payments on the various *rentes*, meant that when they were marketed, albeit infrequently, they often sold for less than half their face value.[119]

The final reason concerns the ways in which the French government mismanaged this new financial instrument during the sixteenth century, while continuing to rely so heavily on interest-bearing loans, many of them forced loans, imposed when the state itself continued to denounce usury volubly (as late as 1576). As Martin Wolfe has also remarked, Francis I (1515-47) himself used this device only 'sparingly', raising only £725,000 *tournois* (equal to just one year's *gabelles*) during his entire reign. Despite the fact that the annuity rate of 8.33 percent was far lower than current interest rates on short-term debts, the crown evidently feared that such perpetual annuity payments would lead to a most unwelcome permanent reduction in and alienation of royal revenues.[120] The major expansion in the sale of national *rentes* took place instead under Henry II (1547-59), amounting to £6.8 million *tournois* for his twelve-year reign. From 1553, their issues were virtually annual, along with periodic forced loans; and indeed much of the sales in new *rentes* from

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[117] Schnapper, *Les rentes au XVIe siècle*, pp. 62-63, 130-33, p. 281, contending that from 1548, in effect, all *rentes* finally became redeemable at the will of the *débirentier* issuer.

[118] Schnapper, *Les rentes au XIVe siècle*, pp. 284-85. See above, pp. 00 and nn. 00.

[119] Wolfe, *Fiscal System of Renaissance France*, p. 163 (in the 1570s); Tracy, *A Financial Revolution*, pp.109-10.

[120] Julian Dent, *Crisis in Finance: Crown, Financiers, and Society in Seventeenth-Century France* (Newton Abbot, 1973), pp. 46-49; Wolfe, *Fiscal System of Renaissance France*, pp. 91-93, 115-16. Wolfe notes that those who lent money to the crown always faced the danger of being condemned for usury 'by law as well as by public opinion'. As Dent notes (p. 47), interest remained officially forbidden until the Revolution of 1789.

1554, about £3.1 million *tournois*, were forced upon wealthy Parisians, in defiance of Parlement.[121] Henry was also responsible, in 1555, for establishing the infamous 'Grand Parti de Lyon', which converted £3.4 million *tournois* of short-term debts into a consolidated fund, to be repaid at each of the quarterly Lyons Fairs in 41 instalments (at 5 percent *quarterly*); but in November 1557, after the French defeat at St Quentin, the crown temporarily suspended payments. With peace restored in April 1559 (Cateau-Cambrésis), a new 'Petit Parti', totalling £11.7 million *tournois* (at 8 percent), proved to be abortive and the entire scheme collapsed with Henry's accidental death in July 1559.[122]

Not much more successful was the next royal experiment, the so-called Contract of Poissy, of October 1561, by which Charles IX (1560-74) compelled the clergy to pay the crown annually £1.6 million *tournois* from their lands for six years, to repay debts owing on the Grand Parti; and then, over the following ten years, to pay another £1.3 million *tournois* annually, to fund about £7.56 million *tournois* in *rentes*, including arrears in annuity payments (a total of £22.6 million *tournois* over 16 years) – but only small amounts were paid or redeemed. With the outbreak of the Wars of Religion in 1562, which soon led many clergy to default on their annual payments, 'à cause de la misère et calamité des guerres', Charles IX imposed a new series of forced loans and also compelled many wealthy Parisians to purchase new issues of *rentes*, contending that previous loans indicated that 'they were rich enough' to do so.[123]

By 1600, after the terribly destructive Wars of Religion had finally ended, *rentes* accounted for about £157 million *tournois*, over half of the total royal indebtedness of £297 million, with much of that in

[121] *Ibid*., p. 111. Under his successors, Francis II (1559-60) and Charles IX (1560-74), *rentes* amounting to another £25.9 million *tournois* were sold, some of them also compulsory purchases.

[122] Cawès, 'Crédit public en France'(1895), pp. 831-47; Wolfe, *Fiscal System of Renaissance France*, pp. 109-13; Parker, 'Emergence of Modern Finance', pp. 570-72.

[123] Cawès, 'Crédit public en France' (1896), pp. 409-75 (first quotation on p. 463); Wolfe, *Fiscal System of Renaissance France*, pp. 110-15 (second quotation on p. 115); Schnapper, *Les rentes au XVIe siècle*, pp. 151-56; Tracy, *A Financial Revolution*, pp. 109-10. More than a dozen forced loans were imposed from 1547 to 1584. From 1562 to 1571, total sales of *rentes* amounted to £16.850 million *tournois*; and from 1572 to 1586, approximately another £27 million *tournois* in *rentes* were sold.

arrears.[124] In that year, after investigating royal finances, Sully, the justly famed finance minister for Henry IV (1589-1610), cancelled many *rentes* lacking a verifiable claim, ceased payments on many arrears, redeemed some *rentes* with budget surpluses, and forced many other *rentiers* and debt holders of the Grand Parti to accept major reductions in their claims. At about the same time (1601), Sully also succeeded in reducing the annuity payments on *rentes* from the traditional rate of 8.33 percent (1/12) to 6.25 percent (1/16); and in 1634 that rate was further reduced to 5.55 percent (1/18).[125] While the financial history of seventeenth-century France is beyond the scope of this study, a comparison with interest rates on short-term royal loans is instructive: from 1631 to 1657 the annual average rate was 25.88 percent.[126]

Early Modern Public Finance: *Renten* in the Sixteenth-Century Habsburg Netherlands (Holland)

The experience of Renaissance France would seem, therefore, to fortify Tracy's claim that the actual birthplace of a truly effective *national* 'financial revolution' in public finance was instead the Habsburg Netherlands. From at least 1482 (to finance the Utrecht war), and perhaps earlier, the provincial States of Holland (parliament), along with some others in the Habsburg Netherlands, had been sponsoring the issue of such *renten*, backed by specific provincial tax revenues, even if, in the case of Holland, in 1515, the actual *renten* were issued by Amsterdam and five other leading Dutch towns.[127] A report on Holland's finances, presented to Charles V's government for the fiscal years 1521 to 1530, indicated that revenues from the sales of *renten* accounted for just 6.73 percent of the province's total income, which was overwhelmingly

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[124] Schnapper, *Les rentes au XVIe siècle*, pp. 151-56; Wolfe, *Fiscal System of Renaissance France*, pp. 110-15, 233; Cawès, 'Crédit public en France' (1896), pp. 461-79: 'a partir de 1590, on ne paie plus les rentes, si n'est par faveur ou commisération'.

[125] Wolfe, *Fiscal System of Renaissance France*, pp 233-35; Richard Bonney, *The King's Debts : Finance and Politics in France, 1589-1661* (Oxford, 1981), pp. 19, 57-58. In 1604-05, total arrears on *rentes* were estimated to be £608 million *tournois*; and many *rentiers* had not received any payments for 19 years.

[126] See Bonney, *King's Debts*, Table VII, pp. 315-16; and Dent, *Crisis in Finance*, pp. 44-64.By 1648, the total of outstanding royal *rentes* was £19.920 million *tournois*.

[127] See in particular Tracy, *A Financial Revolution*, pp. 28-70; and also, with some new information, James Tracy, *Emperor Charles V, Impresario of War: Campaign Strategy, International Finance, and Domestic Politics* (Cambridge and New York: Cambridge University Press, 2002), pp. 254-63. As Tracy notes, nobody has yet made a complete study of *renten* in the 17 provinces of the Habsburg Netherlands. One referee noted that in the 1520s the Brabant Estates authorized Antwerp to issue a large volume of *renten.*

dominated by 'subsidies' (67.0 percent), i.e., taxes voted by the States. By this era, and evidently from at least the mid fifteenth century, the annuity rate on *losrenten* had fallen to just 6.25 percent (1/16).[128]

A major change took place in December 1542, at the beginning of a major war with France, when Lodewijk van Schore, president of the Council of State, for the Regentess Mary of Hungary, convinced the States General (*Staten Generaal*) of the Habsburg Netherlands to accept new wartime financial expedients (*nieuwe middelen*): a ten-percent national tax on income from real properties (including *renten*) and commercial profits and a one-percent *ad valorem* tax on exports, to permit the various provinces to fund new issues of *renten*, along with traditional excise taxes on consumption (beer, wine, cloth). As Tracy has demonstrated (and as Mary herself had predicted), the provincial States 'took control of the new revenues', allowing them 'to create a new type of long-term debt [in *renten*], resting on secure foundations and capable of vast expansion'. So successful were the new *renten* issues (at 6.25 percent, but subsequently at 8.33 percent), and the tax collections to fund them, that Holland was able to redeem all the *renten* issued in the years 1542-1544 by 1548, much to the relief of those who had been constrained to buy them, as a 'public duty' in time of war. That continuing success evidently encouraged Mary of Hungary, in October 1552, to eliminate any elements of coercion in marketing *renten* within Holland (and also other provinces); of course, outside of Holland, the sale of its *renten* had necessarily always taken place within a fully 'free market', at Bruges, for example. In contrast to France's fiscal misfortunes, there were 'no suspensions of payment on any of the *renten* issued by the States', before the outbreak of the Netherlands Revolt in 1568.[129]

Rentes in Mediterranean Europe: Italy, Aragon, and Habsburg Spain

In view of this historical experience with *rentes*, relatively successful with some northern

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[128] Tracy, *A Financial Revolution*, pp. 30-32. See Table 4, p. 62, for the series of Holland's *renten*, labelled series A to N, secured by the *beden* from 1515 to 1534 (and issued by Amsterdam and five other leading cities). On annuity rates, see above, n. 00.

[129] Tracy, *Charles V*, pp. 263-68; Tracy, *Financial Revolution*, pp. 71-94, 108-138. See also Table 6 (p. 89) for *renten* funded by the States of Holland in 1543, 1544, and 1549; and Table 7 (p. 94), for *renten* funded by the States of Holland, from 1552 to 1565 (15 issues), with interest rates. See also Jan de Vries and Ad van der Woude, *The First Modern Economy: Success, Failure, and Perseverance of the Dutch Economy, 1500 - 1815* (Cambridge, 1997), pp. 93-94. After 1545, the taxes on exports and commercial profits ceased.

governments, one may wonder why Renaissance Italian city states had not resorted to this financial expedient, especially those still depending on short-term floating debts, rather than the *monte* system.[130] The first Italian issues of *rentes*, in the form of life annuities paying 14 percent, are to be found, somewhat surprisingly, in Venice, in 1536, but sold by the mint (*Zecca*) rather than by the civic government. Then, in 1571, during the Venetian war with the Turks, it also issued perpetual but redeemable annuities at 8 percent. Yet this turned out to be only a temporary mode of public finance. From 1577 to 1600, the communal government of Venice spent over ten million ducats to redeem all the outstanding annuities that the *Zecca* had issued in its own name.[131]

The Italian experience is all the more surprising in the light of the late-medieval history of municipal public finances in the towns of the Crown of Aragon, including Catalonia. The *census* (*rente*) had also long been used there as a private financial instrument, under the name of *censal* or *censuale;* and it first came under royal regulation of the Crown of Aragon (Jacme or James I) in 1264. In 1325, in return for their consent in raising royal *aides*, Barcelona and other Catalan towns gained the 'right' to borrow or raise funds, but only with the king's assent, refused only the once, in the later fourteenth century (1363). Though the exact date of the first issue is unknown, Barcelona itself was certainly selling *censals* during a financial crisis in the 1330s, in two forms: the *censal mort*, as a perpetual, hereditary annuity with an annual payment of 7.14 percent (1/14);[132] and the *violari* (*censal vitalicio*), as a life annuity but commonly for two lives, with an

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[130] See above pp. 00 and nn. 00.

[131] See Lane, 'Public Debt and Private Wealth', pp. 317-25; Tracy, *A Financial Revolution*, pp. 12-13, stating that '*lijfrenten* seem not to have played any role in Italian public finance until the Venetian mint began offering life annuities' in 1536. As Tracy also notes, in the 1420s, Florence established the *Monte delle doti* ('bank of dowries'), which resembled life annuities in providing dowries for daughters, for five to fifteen-year periods; if the daughter was not alive on the maturity, to collect principal plus accumulated interest, the funds were divided between the heirs and the state. On this, see Anthony Molho, *Marriage Alliance in Late Medieval Florence* (Cambridge MA, 1994) ; Molho, *Florentine Public Finance*, pp. 138-41.

[132] See Yvan Roustit, 'La consolidation de la dette publique à Barcelone au milieu du XIVe siècle', *Estudios de historia moderna*, 4:2 (1954), 15-156, especially pp. 48-52 (incorrectly ascribing the origins to Venetian public finance, not realizing that the latter was still based on forced loans, or *pretitii*); and Usher, *Early History of Deposit Banking in Mediterranean,* pp. 139-75, 346-60 . Usher makes no mention of the sales of *censals* and *violaris* before 1359, and on p. 151 he incorrectly indicates that its permanent funded debt commenced only in that year.

annual payment that was exactly double, 14.29 percent (1/7). In 1351, Alzira began selling *censals* and *violaris*, as did Valencia from 1355, and both Gandía and Geroa, from 1359.[133] In that same year, in return for the financial support from the towns of Catalonia and Aragon in the war with Castile, Peter III of Aragon reconfirmed their privileges to raise funds by undertaking interest-bearing loans (*usuras e mogubells*), by selling both *censals morts* and *violaris*, and by levying excise or consumption taxes to fund the annual payments.[134] By the 1360s they had become a fundamental feature of Catalan and Aragonese municipal finances. Indeed, in Alzira, the capital value of *censals* issued had soared from a total of £26,750 (Barcelonese) in 1351-75 to one of £386,403 in 1376-1400.[135] With a few exceptions, in 1359 and 1376 (in the case of Perpignan), the *censals* were marketed without any compulsion to buy them; and, as in so many northern towns, these towns also had the right to redeem them at will.[136] They could be sold to third parties, though in a cumbersome fashion, again requiring civic officials and notaries public as agents for such transactions, similar to provisions for real estate sales.[137] By and during the fifteenth century, the public finances of the major towns of Catalonia-Aragon had become based on issues of the *censals,* largely displacing the floating debts of short-term loans.[138] In neighbouring Castile, the issue of similar *censals* were

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[133] Antonio Furió, 'Crédito y endudamiento: el *censal* en la sociedad rural valenciana (siglos XIV-XV)', in Esteban Sarasa Sánchez and Eliseo Serrano Martín, eds., *Señorío y feudalismo en la península Ibérica (ss. XII-XIX)*, 4 vols. (Zaragoza, 1993), Vol. I, pp. 501-34, esp. pp. 515-16. I owe this reference to my graduate student Natalie Oeltjen. See also Mark Meyerson, *The Muslims of Valencia in the Age of Fernando and Isabel: Between Coexistence and Crusade* (Berkeley, 1991), pp. 172-79.

[134] For Barcelona, see Usher, *Early History of Deposit Banking*, pp. 349-53, 357. These rates were in effect in the budget of 1360-61, when the sale of both types of *rentes* accounted for 33.86 percent of Barcelona's revenues, while the annual payment on the *rentes* (£5,274.45 for *censals* and £14,419.53 for the *violaris*) accounted for 36.3 percent of total expenditures. In 1376, the king authorized sales of *rentes* at 1/11 (9.09 percent) and 1/12 (8.33 percent); but by 1394, Barcelona was paying only 6.25 percent.

[135] Furió, 'Crédito y endeudamniento', Table III, p. 521. In 1401-25, Alzira's new issues amounted to a total of only £72,650; but in Cullera, to a sum of £328,282.

[136] Roustit, 'Dette publique', pp. 65-67. The rate of return was1/14 (7.14 per cent).

[137] Roustit, 'Dette publique', pp. 68-72.

[138] See Usher, *Early History of Deposit Banking*, pp. 360-95. For the administrative reforms of public finances in 1412 (with the role of the Bank of Barcelona) see pp. 360-64.

first authorized in the reign of Henry II (1368-1379); and in the fifteenth century, according to Usher, 'they became commercialized and were used as a fiscal resource'; but there is 'no knowledge of the amounts issued or the rates of interest paid'.[139]

For the early-modern kingdom of Spain, the history of its permanent funded debt really begins in 1489, when Ferdinand and Isabella sold a series of hereditary, perpetual, and redeemable *rentes*, known as *juros de heredad*, to finance their war with Granada, which led to the unification of Castile and Aragon in 1492.[140] These issues paid ten percent, while subsequent *juros* yielded between three and seven percent, and were funded by royal excise taxes from the *rentas ordinaris.* From the first continuous records, in 1504, to the end of Ferdinand's reign, in 1516, the Spanish funded national debt rose modestly, from 2.996 million ducats (*escudos* of 375 maravedís*)* to 3.586 million ducats. But then, from the accession of the Habsburg Charles V (Emperor from 1519) to the death of his son Philip II in 1598, it ballooned to 80.040 million ducats.[141] Not only Spaniards but an increasing number of investors across Europe purchased these *juros*, which were readily transferable by sales contracts.

Thus, one might contend that Habsburg Spain was the first to establish a permanent funded national debt, with marketable annuities, except for one crucial feature in its enormous expansion during the sixteenth century: the forced and arbitrary conversion of so many short-term loans called *asientos* into five-percent perpetual but redeemable *juros al quittar*, when Philip II declared 'bankruptcy', or, rather, his financial inability to pay interest on the *asientos:* in 1557, 1575, and 1596. Clearly those coercive measures violated

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[139] Usher, *Early History of Deposit Banking*, pp. 167-68.

[140] Usher, *Early History of Deposit Banking*, p. 168; John H. Elliott, *Imperial Spain, 1469 - 1716* (New York, 1964), p. 186. The word *juro* means 'I swear'.

[141] Van der Wee, 'Monetary, Credit, and Banking Systems', pp. 373-76, Table 28: based on Felipe Ruiz-Martin, 'Credito y banca: comercio y transportes en la Etapa del capitalismo mercantil', *Jornados de metodologia aplicada de las Ceincias Historicas 24-27 April 1973, Santiago de Compostella* (Santiago de Compostella, 1973), p. 14. See also Usher, *Early History of Deposit Banking*, Table 7, p. 169, which shows a rise in the Spanish funded debt from 4.320 million ducats in 1515 to one of 76.540 million ducats in 1598; and Alavaro Castillo, 'Dette flottante et dette consolidée en Espagne de 1557 à 1600', *Annales: Économies, sociétés, civilisations*, 18:4 (July-August 1963), 745-59 (especially graph II, p. 757), which provides a third set of figures: from 5 million ducats in 1515 to 83 million ducats in 1600.

violated one the principal components of the modern 'financial revolution' enunciated in the introduction to this study. Nevertheless no evidence indicates that the Spanish government ever failed to make the required annual payments on these *juros*, though certainly they became an increasingly severe financial burden: consuming 65 percent of the tax revenues from the *rentas ordinaris* by 1543, and 75 percent by 1584.[142]

That the Spanish *juros* did prove to be such a remarkably attractive and successful investment vehicle across Europe also depended, of course, as did the similar success of *renten* issues in the Habsburg Netherlands, on the development of effective secondary financial markets. A physical presence for such a market had been provided by the foundation of the Antwerp *Beurs* (or *Bourse)* in 1531; and commerce in these *juros* and *renten* on the *Beurs* became one of the principal activities of the South German merchant-banking houses, led by the Fuggers, Welsers, Höchstetters, Herwarts, Imhofs, and Tuchers.[143] As Van der Wee has commented, this sixteenth-century 'age of the Fuggers and [then] of the Genoese was one of spectacular growth in public finances'.[144] Early in the next century, in 1608, another *Beurs* for an

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[142] Elliott, *Imperial Spain*, pp. 198-99; Juan Gelabert,, 'Castile: 1504 - 1808', in Richard Bonney, ed., *The Rise of the Fiscal State in Europe, c. 1200-1815* (Oxford, 1999), pp. 207-212 (1,227.4 million maravedís or 3.273 million ducats out of 4.364 million ducats); Gabriel Tortella and Francisco Comín, 'Fiscal and Monetary Institutions in Spain (1600-1900)', in Michael Bordo and Roberto Cortés-Conde, eds., *Transferring Wealth and Power from the Old to the New World: Monetary and Financial Institutions in the 17th Through the 19th Centuries* (Cambridge: Cambridge University Press, 2002), pp. 140-48; Parker, 'Emergence of Modern Finance', pp. 568-70.

[143] Richard Ehrenberg, *Capital & Finance in the Age of the Renaissance: A Study of the Fuggers and Their Connections*, translated from the German by H. M. Lucas (New York, 1928; reprinted New York, 1963), pp. 248-80, noting the trade, on the Antwerp *Beurs* in bonds (including bearer bonds) and annuities (*renten*) of the Habsburg government (guaranteed by the Emperor and then Kings of Spain); the various States in the Low Countries, and of the individual towns, of the Receivers General, and of the King of Portugal.

[144] Van der Wee, 'Monetary, Credit, and Banking Systems', pp. 375-76; see also Herman Van der Wee, 'European Banking in the Middle Ages and Early Modern Period (476-1789)', in Herman Van der Wee and G. Kurgan-Van Hentenrijk, eds., *A History of European Banking*, 2nd edn. (Antwerp, 2000), pp. 152-80; Fernand Braudel, *La Méditerranée et le monde méditerranéen à l'époque de Philippe II*, 2nd rev edn. (Paris, 1966; original edn. 1949); republished as *The Mediterranean and the Mediterranean World in the Age of Philip II*, translated by Sian Reynolds, 2 vols. (London and New York, 1972-73), Vol. 1, pp. 500-15, 528-32; and Elliott, *Imperial Spain*, pp. 198-9, noting that Spanish holders of *juros* vigorously opposed their redemption during the 1552 crisis because 'they saw no safe alternative for their investments except in the

international commerce in both commodities and securities was established in Amsterdam, the capital of the young Dutch Republic of the United Provinces.[145] Such secondary markets in turn depended upon the very recent adoption, first nationally in the Habsburg Low Countries (1537-41), of full-fledged negotiability: complete legal sanctions to protect the property rights of third-party creditors (assignees).[146]

The Medieval Bill of Exchange: The Problems of Usury, Bullionism, and Negotiability

The road to the early-modern establishment of such negotiability lay through the evolution of another vital credit instrument in European economic development, the bill of exchange. Although the bill of exchange was partly based upon the much earlier *lettre de foire* of the Champagne Fairs, technically known as the *instrumentum ex causa cambii*, it also owed its real genesis, according to Raymond de Roover, to the universal mercantile necessity of evading usury laws during the later thirteenth century. In his now famous thesis, the bill of exchange effectively achieved this objective by disguising the interest rate within the exchange rates, which were 'artificially' raised in favour of the 'lender', though in a manner, he conceded, that 'increased both trouble and expense', so that 'the practical result of the usury prohibition, intended to protect the borrower, was to raise the cost of borrowing'.[147]

While the earlier *instrumentum ex causa cambii* was a formal, notarized loan contract, the bill of exchange was simply a holograph document, a letter involving two principals in one city and two financial agents in some foreign city. By this letter, the principal merchant in city A (the *taker* or *prenditore*), having received investment funds or funds for remittance from another principal (the *deliverer* or *datore*), 'drew a

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purchase of land, the price of which would rise sharply if the *juros* were redeemed'. See also pp. 280-81.

[145] See n. 000 below.

[146] See below, pp. 63-66 and nn. 167-71, for the discussion of this legislation.

[147] Quotation in de Roover, *Medici Bank*, p. 13. See his other publications in the bibliographic appendices A and B; and also John Munro, 'Bullionism and the Bill of Exchange in England, 1272-1663: A Study in Monetary Management and Popular Prejudice', in Center for Medieval and Renaissance Studies, UCLA, ed., *The Dawn of Modern Banking* (New Haven and London: 1979), pp. 169-240; republished in John H. Munro, *Bullion Flows and Monetary Policies in England and the Low Countries, 1350 - 1500* (London, Variorum, 1992); Reinhold C. Mueller, 'The Spufford Thesis on Foreign Exchange: the Evidence of Exchange Rates', *The Journal of European Economic History*, 24:1 (Spring 1995), 121-29.

bill upon' his resident *payer* agent in city B abroad, thereby instructing him to make payment on his behalf to the *payee* agent of the merchant from whom he had received the original funds (i.e., the *deliverer*).[148] If the first city was, say, Florence, and the second, say, London, the letter would specify the receipt of funds in florins and stipulate repayment in English sterling, at a specific exchange rate, on a specified date (*usance*), usually three months after the bill had been drawn. For the bill to be valid, the *payee* (*beneficiario)* agent first had to present the bill to the *payer* (*pagatore)* agent, in order to obtain his written assent, in the form of words acknowledging 'acceptance', on the back; and then he had to present it once more, for redemption, on the maturity date. In turn that London agent arranged to remit the proceeds to the original *deliverer* by similarly buying a bill of exchange drawn upon a Florentine merchant banker.

So far as the Church and canon lawyers were concerned, there was nothing inherently usurious about such bills of exchange contracts, so long as the second set of exchange rates was not predetermined, thus permitting the element of risk that exchange rates might subsequently alter adversely for the original *deliverer*. If both sets of rates on the original *cambium* and on the *recambium* had been fixed, in that manner, then the contract was most clearly usurious, and known as *cambio secco* ('dry exchange').[149] Some regarded the bill of exchange simply as an *emptio-venditio* contract, in the purchase and sale of foreign bank balances. Yet even secular authorities regarded any bills of exchange with grave suspicions: as 'dampnable bargaynes groundyt in usurye', as the preamble to a 1489 English parliamentary statute colourfully contended, while strengthening enforcement of the anti-usury laws.[150]

The bill of exchange was, however, not just a loan instrument, an important one to be sure, but also a remittance contract to transfer funds between distant cities that was adopted to overcome other obstacles

[148] See example of bills-of-exchange, from the Datini archives in Prato, involving Italian merchants in Bruges and Barcelona, in 1399-1400: in de Roover, *Money, Banking and Credit in Mediaeval Bruges,* pp. 56, 72.

[149] On this see, see sources by de Roover in Appendixes A and B; and Noonan, *Scholastic Analysis of Usury*, pp. 175-92.

[150] In: Great Britain, Record Commission (T. E. Tomlins, J. Raithby, et al.), eds., *Statutes of the Realm*, 6 vols. (London, 1810-22), Vol. II, p. 514 (3 Henrici VII. c. 6). Genuine 'merchant's exchange' escaped this renewed ban, while 'drye eschaunge' did not.

of this same era: those involved in the physical transport of precious metals in international trade. The risks of losses in transporting precious metals, from robbery or brigandage on overland trading routes, from piracy on the seas, and from government confiscations, grew dramatically with the rise in international warfare and domestic violence, throughout the Mediterranean basin and western Europe, from the 1290s: sustained, chronic, ever more widespread wars that ultimately led into the famous Hundred Years' War (1337-1453).[151] Furthermore, the steeply rising costs of financing such wars, or defence against such warfare, soon produced a combination of monetary and fiscal policies and an economic nationalism that is known as 'bullionism'. Its hallmark was the almost universal ban on the export of both gold and silver bullion, and stipulations that they be delivered instead to the prince's mints. Those who violated such ordinances faced a high risk of confiscations of the metals and very steep fines; and while some could purchase exemption licences, they still incurred higher costs in exporting bullion.

Fuelling that late-medieval bullionist mentality, and further impeding the international flow of precious metals, were coinage debasements. In commencing such debasements in 1296, Philip IV of France had ended a century of monetary stability in western Europe, and inaugurated over two centuries of *guerres monétaires*.[152] He had done so primarily to finance his wars with Flanders and England; and as I have argued elsewhere, late-medieval coinage debasements were more fiscal than monetary in nature. Since so many

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[151] For evidence on these disruptions and my analyses of their consequences, see: John Munro, 'Industrial Transformations in the North-West European Textile Trades, c. 1290 - c. 1340: Economic Progress or Economic Crisis?' in Bruce M. S. Campbell, ed., *Before the Black Death: Studies in the 'Crisis' of the Early Fourteenth Century* (Manchester and New York, 1991), pp. 110 - 48; John Munro, H., 'The Low Countries' Export Trade in Textiles with the Mediterranean Basin, 1200-1600: A Cost-Benefit Analysis of Comparative Advantages in Overland and Maritime Trade Routes', *The International Journal of Maritime History*, 11:2 (Dec. 1999), 1 - 30; John Munro, 'The "New Institutional Economics" and the Changing Fortunes of Fairs in Medieval and Early Modern Europe: the Textile Trades, Warfare, and Transaction Costs', *Vierteljahrschrift für Sozial- und Wirtschaftsgeschichte*, 88:1 (2001), 1 - 47.

[152] See Albert Girard, 'Un phénomène économique: la guerre monétaire, XIVe-XVe siècles', *Annales d'histoire sociale*, 2:3-4 (July 1940), 209-18; and also Armand Grunzweig, 'Les incidences internationales des mutations monétaires de Philippe le Bel', *Le moyen âge*, 59 (1953), 117-72; Raymond Cazelles, 'Quelques reflexions à propos des mutations monétaires de la monnaie royale française (1295-1360)', *Le moyen âge*, 72 (1966), 83-105, and 251-78; Carlo M. Cipolla, *The Monetary Policy of Fourteenth-Century Florence* (Berkeley, 1982); Peter Spufford, *Money and Its Use in Medieval Europe* (Cambridge, 1988), pp. 267 - 396.

debased coins were counterfeits (even of earlier, better versions), and since a chief objective of coinage debasement was to lure bullion away from competing mints, most princes reacted to such debasements by prohibiting the import of most foreign coins, or by compelling their sale to the mint as bullion, and by rigorously enforcing confiscatory bans on bullion exports, to increase supplies of their own coinage.[153]

The most rigorous bullionist legislation was to be found in medieval England, which was later to become the birthplace of modern negotiability. From the *Statutum de Moneta Magnum* in 1282, the importation of all foreign coins – and not just counterfeits – for domestic circulation was strictly prohibited, a ban that remained in force even in the sixteenth century.[154] Similarly, Crown and Parliament had together banned the export of all silver bullion (including all foreign silver coin) and plate from December 1278, then the export of gold bullion from January 1307, and finally, from January 1364, the export of all coins, gold and silver, explicitly including all legal tender English coins (except those under royal licence). That all-inclusive export ban, with continuous re-enactments, remained in force until 1663.[155] In this latter respect,

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[153] See analyses of bullionism and coinage debasements in: John Munro, *Wool, Cloth, and Gold: The Struggle for Bullion in Anglo-Burgundian Trade, 1340-1478* (Brussels and Toronto, 1973); Munro, 'Bullion Flows and Monetary Contraction in Late-Medieval England and the Low Countries', in John F. Richards, ed., *Precious Metals in the Later Medieval and Early Modern Worlds* (Durham, N.C., 1983), pp. 97-158; reprinted in Munro, *Bullion Flows and Monetary Policies;* Munro, 'Bullionism and the Bill of Exchange', pp. 169-240. See also Hans Van Werveke, 'Currency Manipulation in the Middle Ages: The Case of Louis de Male, Count of Flanders', *Transactions of the Royal Historical Society*, 4th ser. 31 (1949), 115-127, reprinted in his *Miscellanea Mediaevalia* (Ghent, 1968), pp. 255-67.

[154] *Statutes of the Realm*, vol. I, p. 219. Earlier, in April 1275, the *Statute of Westminster* (3 Edwardi I, c 15) had banned the importation of all suspected counterfeit or other defective coins, requiring them to be turned over and sold for their bullion contents to the office of the Royal Exchanger. See Munro, 'Bullionism and the Bill of Exchange', pp. 187-90, and Appendix A, pp. 216-19. This rigorous ban was relaxed, and then only temporarily, in May and November 1522, when Henry VIII, seeking an alliance with Emperor Charles V, permitted the circulation of and Habsburg *carolus* coins, Italian ducats, florins, and French *écus* as legal tender. Paul L. Hughes and James F. Larkin, eds., *Tudor Royal Proclamations*, 3 vols. (New Haven and London, 1964-69), vol. I: *The Early Tudors (1485-1553)* (London, 1964), no. 88, p. 136 (25 May 1522); no. 95, p. 141 (24 Nov. 1522); no. 102, p. 145 (6 July 1525); no. 103, p. 146 (8 July 1525); Robert Steele and James Lindsay (Earl of Crawford), eds., *A Bibliography of Royal Proclamations of the Tudor and Stuart Sovereigns, 1485- 1714*, 4 vols. (London, 1910), I, nos. 82, 88, p. 9 (May and November 1522); see also *ibid.*, no. 105, p. 20 (Nov. 1526); no. 1792 (Mar 1539).

[155] Royal proclamation of Dec. 1278, in Thomas Rymer, ed., *Foedera, conventiones, literae, et acta publica*, 12 vols. (London, 1709-12), vol. I:ii, p. 564; *Statutum de Falsa Moneta* of May 1299, in *Statutes of the Realm*, vol. I, pp. 131-35; royal proclamation of Jan. 1307, in Rymer, *Foedera*, vol. I:ii, p. 1007 (repeated in Feb. 1326, in *Ibid*., vol. II.1, p. 619); Statute 38 Edwardi III stat 1 c. 2 (Jan. 1364), in *Statutes*

England seems to have been unique. For other medieval West European states did permit the export of legal-tender coins, reserving their export bans for just bullion (i.e., as demonetized precious metals).[156]

Obviously a major benefit of employing bills-of-exchange, with funds furnished in one currency and repaid in another currency, was in obviating the shipment of so much bullion and specie over long distances, and thus in greatly reducing the risks of high costs of doing so. That significance was not lost upon one of Queen Elizabeth I's councillors, who remarked, though without any historical documentation, that 'marchauntes naturall exchaunge was first divised and used by the trewe dealing marchauntes immediately after that princes did inhibit the cariadge of gould and silver out of their Realmes'.[157] Risks, of course, were by no means fully eliminated, because much bullion and specie still had to be transported in trade with those towns or regions, especially in eastern Europe, not equipped with bills-of-exchange banking facilities, and in settling adverse payments balances.

Furthermore, the bill of exchange itself involved considerable risks of repudiation or non-payment, because, in not being a bond or a formally notarized contract, it had no legal standing in medieval law courts. Thus enforcement of payment claims, when the bill was dishonoured, was often difficult to achieve. Those third parties who accepted such bills in payment for other transactions were at an even greater risk. For, even though bills of exchange and letters obligatory (promissory notes) were often assigned in payment to third parties, they had not yet become a negotiable means of payment; and they would not become fully negotiable until the very dawn of the modern era.

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of the Realm, vol. I, p. 383, and Rymer, *Foedera*, vol. III.ii, p. 728; Statute 15 Carolus II c. 7 (May 1663), in *Statutes of the Realm,* vol. V, p. 452, sec. 9. See also Munro, 'Bullionism and the Bill of Exchange', pp. 187-205, 216-39.

[156] On this see Munro, *Wool, Cloth, and Gold*, pp. 11-64, 181-86; John Munro, 'Billon - Billoen - Billio: From Bullion to Base Coinage', *Belgisch tijdschrift voor filologie en geschiedenis/ Revue belge de philologie et d'histoire*, 52 (1974), 293-305, reprinted, with other studies, in Munro, *Bullion Flows and Monetary Policies* (1994). In continental countries, the bullion export bans usually defined the meaning of bullion (*billon*), as specific demonetized precious metals that had to be delivered to the mints, excluding legal tender coins and certain types of plate and jewellery.

[157] Taverner to Elizabeth I, in 1570: Richard Tawney and Eileen Power, eds., *Tudor Economic Documents*, 3 vols. (London, 1924), vol. III, no. iii.5, p. 362.

As Eric Kerridge has so rightly stated: 'assignability is not negotiability'. A fully negotiable credit instrument is one that is made payable to bearer or payable to order, permitting transfer by written endorsement to third parties, without the consent or knowledge of the original debtor (the principal); and one for which the bearer or assigned holder has the unimpeded legal right to sue the original debtor or earlier assignees, in his own name, for full payment, upon default; and to enforce a legal claim for damages.[158] Bernard Schnapper similarly contended, as indicated earlier, that French *rentes* were not negotiable credit instruments during the sixteenth and seventeenth centuries because they lacked a bearer or order clause, and indeed these other requirements.[159] Furthermore, Julius Kirshner has also refuted the commonplace notion that Florentine *crediti di monte* were negotiable credit instruments, according to modern definitions of the term, even though transferable by assignment (by *cessio juris*), by the seller himself or by his attorneys, at the offices of the *Monte.*[160] Indeed, a transfer of *crediti di monte* carried with it inherent liabilities attached to the original owner or creditor; and Kirshner comments that the modern 'holder-in-due course' doctrine, by which the transferee gains rights superior to those of the transferor 'would have scandalized Florentine

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[158] See Eric Kerridge, *Trade and Banking in Early Modern England* (Manchester, 1988), p. 72: 'To be fully negotiable, a credit instrument must, first, be transferable as by the custom of merchants; and secondly, it must be capable of being sued upon by the holder for the time being'. For these crucial differences, see also: Michael Postan, 'Credit in Medieval Trade', *Economic History Review*, 1st ser. 1 (1928): reprinted in Michael M. Postan, *Medieval Trade and Finance* (Cambridge, 1973), pp. 1-27; Michael Postan, 'Private Financial Instruments in Medieval England', *Vierteljahrschrift für Sozial- und Wirtschaftsgeschichte*, 22 (1930); also reprinted in Postan, *Medieval Trade and Finance,* pp. 28-64; Stanley Bailey, 'Assignment of Debts in England from the Twelfth to the Twentieth Century', *The Law Quarterly Review*, 48 (1932); Frederick Beutel, 'The Development of Negotiable Instruments in Early English Law', *Harvard Law Review*, 51 (1938), 813 - 45; James Milnes Holden, *The History of Negotiable Instruments in English Law* (London, 1955); and n. 00 below.

[159] Schnapper, *Les rentes au XIVe siècle*, pp. 284-85; see above pp. 00 and n. 00.

[160] Julius Kirshner, 'Encumbering Private Claims to Public Debt in Renaissance Florence', in Vito Piergiovanni, ed., *The Growth of the Bank as Institution and the Development of Money-Business Law*, Comparative Studies in Continental and Anglo-American Legal History vol. 12 (Berlin, 1993), pp. 19-75, esp. pp. 26-29. He cites in particular James S. Rogers, 'The Myth of Negotiability', *Boston College Law Review*, 31 (1990), 266-334, to establish these other conditions of modern negotiability, when the credit instrument is: signed by the maker or the drawer of the bill, with an unconditional order or promise to pay a certain sum of money, and made payable either to order, and transferable by endorsement, or payable to bearer, either on demand, or on a specified date, and payable free of or free from any liabilities that may have been attached to the transferer's claim. None of these conditions applied to late-medieval *monte* credits.

jurists'; and that these commercial operations 'never replaced the Roman technique of assignment that was critical to the operations of the secondary market in *monte* credits'. Furthermore the market in *crediti di monte* failed another test required for the modern 'financial revolution', specified above, in the introduction: in that the Florentine government controlled their circulation 'by barring foreigners from acquiring or otherwise holding them' (except during the crisis of the 1420s, when foreigners were allowed to buy them).[161]

For fifteenth-century Genoa, Jacques Heers notes that shares in the public debt (*luoghi*) were traded, sold, mortgaged, and used as collateral, as in Florence. They could be transferred by verbal or written orders, but only at the office of the Procurator, and only if the head of the family holding the *luoghi* had not specified in writing that they be not so alienated (*alienare aut vendere*). Such restrictions were common to protect their viability as security for dowries. Finally, although foreign merchants are recorded as purchasers of *luoghi*, most seem to have been residents actively engaged in Genoese commerce. Tuscans, Venetians, and Catalans were, furthermore, conspicuous by their absence in the *compere* registers.[162]

Coinage, Money Changing, and Deposit Banking: Medieval England and the Low Countries

The first major steps towards achieving modern negotiability took place instead, surprisingly, in supposedly 'backward' fifteenth-century England; and they are related to a third set of state financial impediments, those that the Crown had long imposed upon money-changing and thus deposit banking. As Raymond Bogaert has recently contended, deposit-banking with lending first arose, in ancient Greece, during the early fourth-century BCE, essentially from the agency of money-changing: with professional *trapezites* and *argyropatês* (L. *argentarius*, goldsmiths), who exchanged 'foreign' for domestic civic coins. By the third century BCE, Athenian bankers routinely provided giro transfers, written orders of payment, and, in effect, cheques (documented by 254 BCE).[163] Such arguments to explain the role of money changers in the

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[161] Kirshner, 'Encumbering Private Claims', pp. 58, 29, respectively; see also Molho, *Florentine Public Finance*, pp. 141-52, for this financial crisis and foreign purchases of *monte* credits.

[162] Heers, *Gênes au XVe siècle*, pp. 97-110, 147-55, 180-81.

[163] Raymond Bogaert, 'Banking in the Ancient World', in Herman Van der Wee and G. Kurgan-Van Hentenrijk, eds., *A History of European Banking*, 2nd edn. (Antwerp, 2000), pp. 13-70, esp. pp. 27-31.

origins of medieval Italian deposit- and transfer-banking are of course even more familiar in the many articles and books of Raymond de Roover, whose views have been strongly supported by more recent publications of Reinhold Mueller and Herman Van der Wee.[164] From about the mid twelfth-century in northern Italy – first in Genoa, and then in Lombard towns – money-changers did become private bankers in the same fashion, even if they had to obtain government licences to practise their trade in exchanging foreign for domestic coins and in selling bullion to the mints.

How such money-changers and coin dealers became bankers is a story now too well known to be told here in any detail. Suffice it to say that, because money-changers necessarily had to maintain adequate security to protect their valuable coin and bullion inventories, most also offered the additional service of safeguarding moneys, precious metals, and valuables of their mercantile clients. They also readily discovered that, by maintaining a sufficiently high reserve ratio (usually a third), they could safely lend out the remainder, in short-term interest bearing loans, disguising the interest by some of the means suggested earlier. They could also permit those clients who maintained deposit accounts to make transfer payments, with verbal and then written instructions (and ultimately, therefore, by cheques).[165] Such transfer payments of course greatly economized on the use of scarce coin; and it was often preferable, when so many coins were clipped, counterfeit, or otherwise debased. Certainly by the fourteenth-century, deposit-and-transfer banking had developed as well in Flanders, chiefly thanks to the activities of Italian merchants, though many bankers were in fact indigenous Flemish money changers.[166]

In England, however, from at least 1222, and probably earlier, money-changing and commerce in bullion had been a strictly-enforced crown monopoly, exercised and controlled by a senior crown official

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[164] See the publications on medieval banking and finance in Appendix B, including older ones by Usher, which similarly maintain that deposit banking arose solely from money-changing.

[165] On deposit-banking and usury, see Noonan, *Scholastic Analysis of Usury*, pp. 171-75.

[166] See the publications of Raymond de Roover and of Herman Van der Wee in Appendix B; and also James M. Murray, 'Cloth, Banking, and Finance in Medieval Bruges', in Erik Aerts and John H. Munro, eds., *Textiles of the Low Countries in European Economic History* (Leuven, 1990), pp. 24-31; Erik Aerts, 'Money and Credit: Bruges as a Financial Centre', in Valentin Vermeersch, ed., *Bruges and Europe* (Antwerp, 1992), pp. 57-71.

known as the Royal Exchanger. He was instructed to enforce all the bullionist statutes by employing officials in all towns who were empowered, and aided by the sheriffs, to suppress any private commerce in precious metals, to purchase or confiscate all foreign coins, and to deliver them to the Tower Mint for recoinage. So long as that royal monopoly remained in force, and it remained in force until the Civil War era of the 1640s, England would remain bereft of private deposit banking, certainly in the form practised in Italy.[167]

That the exercise of such princely authority over the coinage indeed did have adverse effects on private deposit banking, even on the continent, can be illustrated in the Low Countries, following their unification under the Burgundian duke Philip the Good in 1433-35.[168] Fearing that the money-changers, especially those acting as deposit-bankers, were a threat to the integrity of the ducal mints and of the money supply, Philip and his successors issued a series of ordinances to terminate such banking: in the years of the unification itself, and again in 1467, 1480, and 1489. Certainly a major part of their concern lay in the normal functions of money-changing, which the authorities feared involved the purchase and then circulation of imported debased or counterfeit coins and most especially the sale of both coin and bullion for export.[169]

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[167] The earliest extant royal proclamation is one by Henry III, in 1222, forbidding anyone to make exchange except at the Royal Exchanges of London and Canterbury. Rogers Ruding, ed., *Annals of the Coinage of Great Britain and Its Dependencies: From the Earliest Period of Authentic History to the Reign of Victoria*, 3 vols. (London, 1840), vol. II, pp. 138-39. A subsequent proclamation of September 1232 similarly forbade anyone to 'exchange new coins for old or make exchanges except at the King's Exchanger'. See Thomas Rymer, ed., *Foedera, conventiones, literae, et acta publica*, 12 vols. (London, 1709-12), vol. I.i, p. 207. See also the 1275 *Statute of Westminster*, in n. 154 above.

[168] With the monetary unification of Flanders, Holland, Zeeland, Hainaut, Brabant, and Namur. See Peter Spufford, 'Coinage, Taxation, and the Estates General of the Burgundian Netherlands', *Anciens pays et assemblées d'états (Standen en Landen)*, 40 (1966), 63-88; Peter Spufford, *Monetary Problems and Policies in the Burgundian Netherlands, 1433 - 1496* (Leiden, 1970); Munro, *Wool, Cloth and Gold*, pp. 93 - 126.

[169] De Roover, *Money, Banking and Credit in Mediaeval Bruges,* pp. 236-46, 331-57, esp. pp. 339-42. See also Herman Van der Wee, *Growth of the Antwerp Market and the European Economy, fourteenth - sixteenth centuries*, 3 vols. (The Hague, 1963), vol. II: *Interpretation*, pp. 85-86, 333-40, 355-58; Van der Wee, 'Monetary, Credit, and Banking Systems', pp. 302, 312, 323-24 (noting similar problems in 15th-century Italy), 361-62; and Van der Wee, 'European Banking in the Middle Ages', pp. 87-90. The difference between the attitudes of late-fifteenth-century England and the Habsburg Low Countries on specie exports is revealed in this rebuke that Archduke Philip's officials delivered to Henry VII's ambassadors, in 1499: 'They [the Archduke's councillors] thynk that theye do very moche for your subjectes to graunt them to conveigh oute of the archdukis landis all money current in thoos parties and also all manere of plate wrought and brought to eny man certen forme and fasshion [unbroken]. For the archdukis subjectes may not have like

But the ordinances also reveal a deep fear of their role as bankers, in decreeing that it was unlawful for anyone 'whether a money-changer or not, to have a bank in order to receive the money of merchants and to make their payments, under the penalty of banishment for three years' (1433).[170] The 1489 ordinance, in again banning *changeurs-bancquiers*, also contended that frequent bank 'failures have wrought utter ruin among all classes of people, but especially among the merchants'.[171] According to not only de Roover, but also Van der Wee, 'the few deposit and clearing-banks once operating in Antwerp and Bergen-op-Zoom had disappeared before the end of the [fifteenth century]'. They both contend that effective banking re-emerged only slowly in the Low Countries, in late sixteenth century Antwerp and seventeenth-century Amsterdam, with the *kassiers*, or 'cash-keepers', who similarly 'combined manual exchange with deposit banking'.[172]

If the Royal Exchangers had indeed prevented the emergence of English deposit-banking before the mid-seventeenth century, a still contentious hypothesis, nevertheless merchant-banking, with bills of exchange and letters obligatory, had long been present; and in later Tudor England, some very rudimentary forms of bank-lending can also be found: undertaken by various merchants, brokers, scriveners (notaries public, who drew up letters obligatory and bonds), and some goldsmiths. As members of an ancient guild of jewellers (chartered in 1327), who also served as illicit precious-metal merchants, the goldsmiths were the most logical ones to become true bankers.[173] But, according to A.D. Richards, their role was the least

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pryvylage to convey money nether plate oute of your realme of England into the archdukis parties, nor all manere of cune [coins]...'. Georg Schanz, ed., *Englische Handelspolitik gegen Ende des Mittelalters*, 2 vols. (Leipzig, 1881), Vol. II: *Zoll-und Handelsstatistik, Urkunden, Beilagen,* doc. no. 8, p. 196. See n. 156.

[170] De Roover, *Money, Banking and Credit in Mediaeval Bruges,* pp. 236-46. The original text of the ordinance of 12 October 1433: 'Item que aucune personne, changeur ne autre, ne puisse tenir en la ville de Bruges, ne ailleurs, table de banc pour recevoir l'argent des marchans et faire leurs paiements sur paine de ban de trois ans', provisions repeated in the ordinance of 13 October 1467. Text in Louis Gilliodts-van Severen, ed., *Inventaire des archives de la ville de Bruges*, 6 vols (Bruges, 1871-78), vol. V, p. 546.

[171] De Roover, *Money, Banking, and Credit*, pp. 339-40, 344.

[172] See Van der Wee, 'Monetary, Credit, and Banking Systems', pp. 323-24; de Roover, *Money, Banking and Credit*, pp. 341, 351; and other sources in Appendix B.

[173] See R. D. Richards, *The Early History of Banking in England* (London, 1929; reissued 1958), pp. 1-2292-131; esp. p. 15. See also J. R. Anonymous, 'The Goldsmith Bankers', in B.L. Anderson and P.L Cottrell, eds., *Money and Banking in England: the Development of the Banking System, 1694-1914* (London,

effective of these four groups until at least the 1630s. Indeed, as late as 1627, the crown was still condemning (and evidently prosecuting) London goldsmiths for illegally 'acting as exchangers and buying and selling bullion, selecting the best money and melting it down [for export]'.[174]

How the London goldsmiths subsequently emerged as full fledged 'modern' bankers is too complex a subject to be considered here. Possibly, the breakdown of royal authority during the Civil War of 1640s, along with Charles I's seizure of mercantile bullion deposits in the Mint, were the key factors; but that remains to be proved. In any event, they had become active as bankers from the Restoration in the 1660s; and by the 1690s, they were indisputably engaged actively in both deposit and bills banking, using four forms of negotiable credit: cheques, promissory notes, bills of exchange, and their own banknotes.[175]

Medieval English Credit Instruments and the Law Merchant (to Burton v Davy, 1436)

Nevertheless, in the preceding several centuries, the absence of Italian-style deposit banks had not prevented medieval English merchants from making transfer payments; and indeed that absence evidently provided a strong incentive to engage in institutional innovations to resolve that problem of supplying negotiable credit instruments, though not successfully before the mid-fifteenth century. The initial remedy, which can be dated to at least the late twelfth century, was to effect 'coinless payments' through assignable or transferable bills that did pass from hand to hand, increasingly in informal holograph documents.[176]

1974), pp. 159-65.

[174] Steele and Crawford, *Royal Proclamations*, vol. I, no. 1512, p. 178 (25 May 1627). The royal proclamation reiterated that 'the exchange of money is a royal prerogative prohibited by Acts and Proclamations', citing statutes back to 9 Ed. III, c. 6, 9, 10 (1335), stipulating again that no one other than the Royal Changer (Henry Earl of Holland) or his deputies were permitted to exchange coins or purchase bullion. The proclamation strictly enjoined the goldsmiths 'not to melt current coin, or to select the weightier pieces .. [or] to intermeddle with foreign money or bullion.' All such provisions were to be enforced in Star Chamber with severe penalties.

[175] See sources by Van der Wee in Appendix B; Richards, *Early History*, pp. 23-91; Daniel Coquillette, 'The Mystery of the New Fashioned Goldsmiths: From Usury to the Bank of England (1622-1694)', in Vito Piergiovanni, ed., *The Growth of the Bank as Institution and the Development of Money-Business Law* (Berlin, 1993), pp. 91-117; Stephen Quinn, 'The Glorious Revolution's Effect on English Private Finance: A Microhistory, 1680-1705', *Journal of Economic History*, 61:3 (Sept. 2001), 593-615.

[176] See Postan, 'Credit in Medieval Trade', pp. 1-27; Postan, 'Private Financial Instruments in Medieval England', pp. 28-64 ; Holden, *History of Negotiable Instruments*; Munro, 'The International Law

The use of such transferable bills or credit notes posed, however, an obvious and very major problem, one not easily resolved: namely, that third parties receiving such bills had no readily available, low-cost means of enforcing payment in cases of default. To be sure, English merchants were able to transfer formal, notarized debts, those in particular known as 'recognizances' (*reconisaunce enroulee*) that had been registered in the Rolls of a designated mayor's court, according to the provisions of a 1282 statute (Acton Burnell).[177] But such debt assignments necessarily meant that the two parties had to draw up an entirely new notarized, sealed, and enrolled recognizance, at some considerable cost. Subsequently, if the original debtor defaulted, that third-party creditor could file suit in a Common Law court only if fully armed with a duly notarized and unrevoked power of attorney to justify his claim. He could then hope for success, but at very considerable cost in time – for long delays were commonplace -- and money.

According to the best known authority on this subject, Michael Postan, English Common Law courts became 'increasingly hostile' to the assignment of such debts during the later Middle Ages. They generally recognized the validity of only those debt transfers that involved 'a common interest' between assignor and assignee, generally limited to assignments that satisfied 'a pre-existing debt' between them.[178] Therefore, he implicitly argued, rising transaction costs as well as rising legal costs forced most merchants to resort instead to such low-cost holograph documents as the letter obligatory (promissory note) and the bill of exchange, neither of which had any standing whatsoever in Common Law courts.[179]

Merchant', pp. 49 - 80; Munro, 'English "Backwardness" and Financial Innovations', pp. 105-67.

[177] *Statutes of the Realm*, vol. I, pp. 53-4 (11 Edward I: 12 Oct. 1283). The 1282 Statute of Acton Burnell (or *Statutum de Mercatoribus*) gave creditors the power to compel debtors to register their loans as bonds before the mayors of London, York, Bristol, other 'good towns', and fair courts.

[178] See Postan, 'Financial Instruments', pp. 40-54, especially p. 43; Holden, *Negotiable Instruments*, pp. 13-14; William S. Holdsworth, *A History of English Law*, 16 vols. (London, 1903 - 66), vol. V, pp. 534-45.

[179] See Postan, 'Financial Instruments', pp. 33-5, 38-40, 43, 47-54, contending that Common Law courts and Parliament ' made the emergence of fully negotiable paper impossible', so that 'the transfer of obligations was fraught with cumbersome formalities'. But for a more modified view, see Pamela Nightingale, 'Monetary Contraction and Mercantile Credit in Later Medieval England', *Economic History Review*, 2nd ser., 42 (November 1990), 560-67, contending that recognizances continued to play an important, if diminishing role, in later medieval English commercial and financial transactions.

Nevertheless, a legal alternative to such courts had evolved during the later medieval era, though rather slowly, to resolve these financial problems, in the international law-merchant, as expounded in the treatise *Lex Mercatoria* (c. 1280). According to the legal historian J.H. Baker, it was 'not so much a corpus of mercantile practice or commercial law as an expeditious procedure especially adapted for the needs of men who could not tarry for the common law'. It differed from common law in its far speedier process, with far lower transaction costs, especially in its denial of the time-consuming common-law practice of 'wager of law'.[180] Shortly after this treatise was written, in 1285, Edward I initiated just such a remedy for legal delays by establishing a law-merchant court in London composed of foreign merchants specifically empowered to settle their own commercial disputes. Subsequently, in 1303, in issuing *Carta Mercatoria,* to regulate English relations with the Hanse and other foreign merchants, Edward further stipulated that all merchants were permitted to receive 'speedy justice' by law-merchant (*sine dilatione, secundum legem mercatoriam*); and that, in any dispute between foreign and domestic merchants, half of the jury had to consist of foreign merchants.[181] Finally, in 1353, his grandson Edward III fully incorporated law-merchant into statutory law, with Parliament's Ordinance of the Staples. It established fifteen Staple Courts, in English port towns, to settle all disputes among merchants, domestic and foreign, conducting their commerce there; and it stipulated that they were to do so solely 'by the Law Merchant... and not by the Common Law of the Land', without any interference from royal justices or other legal officers.[182]

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[180] J.H. Baker, 'The Law Merchant and the Common Law Before 1700', *Cambridge Law Journal*, 38 (1979), pp. 295-322, reprinted in J.H. Baker, *The Legal Profession and the Common Law: Historical Essays* (London, 1986), pp. 341-68, citing *Lex Mercatoria*, in Francis B. Bickley, ed., *The Little Red Book of Bristol*, 2 vols. (Bristol, 1900), vol. I, pp. 57-8l; and Paul Teetor, 'England's Earliest Treatise on the Law Merchant', *American Journal of Legal History*, 6 (1962), 182-31.

[181] Texts in: N.S.B. Gras, *The Early English Customs System: A Documentary Study of the Institutional and Economic History of the Customs from the Thirteenth to the Sixteenth Century*, Harvard Economic Studies XVIII (Cambridge, Mass., 1918), pp. 260-1; H. Thomas Riley, ed., *Munimenta Gildhallae Londoniensis: Liber Albus, Liber Custumarum et Liber Horn* 2 vols. (London, 1859-62), II.i: *Liber Custumarum*, pp. 207-08; Rymer, *Foedera,* vol. II.ii, pp. 747-48 (reconfirmation by Edward II, 8 August 1328).

[182] 27 Edwardi III stat. 2, in *Statutes of the Realm*, vol. I, pp. 332-43. Each court was to be conducted by the town's Staple Mayor, 'having Knowledge of the Law-Merchant to govern the Staple', with the aid of two constables and a jury composed of domestic and/or foreign merchants, depending on the case. The

The subsequent role of these Staple or law-merchant courts in dealing with disputes over bills of exchange and other credit instruments has been discussed in detail elsewhere; and only the culminating legal case on issues of negotiability should be considered here: Burton v Davy, adjudicated by the London Mayor's law-merchant court between March and November 1436.[183] The dispute concerned a dishonoured bearer bill of exchange, which involved five parties in Anglo-Flemish trade. In Bruges, the two principals were: Thomas Hanworth, the 'deliverer'; and John Audley, the 'taker', who had received from him funds in Flemish pounds *groot* for the purchase of Flemish linens. Their agents in London were: Elias Davy, the payer, on whom Audley had drawn the bill for payment, for £30 sterling; John Burton, the payee designated by Hanworth; and John Walden, the 'bearer' to whom Burton had sold or transferred the bill. When Davy refused to redeem the bill that he had evidently 'accepted', Walden himself brought the suit before the London Mayor's court; but to do so, lacking any precedent for legal standing in court, he had to ask Burton to act with him as plaintiff. After hearing all the witnesses, and then ruling that his court and not common law courts had exclusive jurisdiction, the mayor, John Mitchell, issued his verdict in favour of Burton and also of 'John Walden, the bearer of the same letter [of exchange]', who 'is held, reputed, and admitted in place of the said supplicant, according to the Law Merchant'. Davy was required to pay the full amount of the bill plus 20s in damages, 'according to the Law Merchant and the custom aforesaid... and to the force, form and effect of the said letter'.[184]

This landmark case, if not yet fully establishing the full legal conditions and sanctions for modern negotiability, nevertheless provided the vital legal precedent.[185] Certainly no English law-merchant court,

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Staple courts were empowered to seize the goods and chattels of defaulting debtors.

[183] See in particular, Postan, 'Private Financial Instruments', pp. 33-54; Nightingale, 'Monetary Contraction and Mercantile Credit', pp. 560-67; Munro, 'Bullionism and the Bill of Exchange', pp. 169-239; Munro, 'The International Law Merchant', pp. 49-80; Munro, 'English Backwardness', pp. 105-67;

[184] For the complete texts, see Hubert Hall, ed., *Select Cases Concerning the Law Merchant*, 3 vols. (London, 1908-32), vol. III: *Central Courts, Supplementary, AD. 1251 - 1779*, Selden Society Publications Vol. 49, 1932 (London, 1932), pp. 117-19 (Latin and French, with English translations).

[185] For a contrary view, denying that this case had any real significance in English law, see James Steven Rogers, *The Early History of the Law of Bills and Notes: A Study of the Origins of Anglo-American*

or any other court, subsequently denied the right of any bearer holding an accepted bill of exchange on its maturity to sue the *acceptor* (the payer), or even the *drawer*, for payment and damages. English commercial records for late-fifteenth and sixteenth century trade fully attest that bearer bills had become commonplace.[186]

The still common argument that England did not establish the legal conditions for negotiability until the beginning of the eighteenth century has been used entirely out of context. To be sure, in the seventeenth century, Chief Justice Edward Coke did give Common Law courts complete jurisdiction over commercial cases. Nevertheless, in 1666, the Common Law courts did agree that 'the law of merchants is the law of the land', and therefore that endorsed and bearer bills of exchange were fully 'transferable within the custom of merchants'.[187] Astoundingly, however, in 1703, Chief Justice Holt issued a decision that in effect rejected such legal sanctions for the negotiability of promissory notes (letters obligatory) -- the right of the bearer or endorsee of such bills to sue the debtor for non-payment -- on the specious grounds that they were not bills of exchange (as in Burton v Davy). The next year, Parliament remedied that deficiency in the Promissory Notes Act: to make all such bills fully negotiable, whether to bearer or to order by endorsement, 'according to the custom of merchants, as is now used upon Bills of Exchange'.[188] Thus, finally, the legal principles of

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Commercial Law (Cambridge, 1995), pp. xi-xiv, 1-11, 44-68. In my view he seriously misinterpreted the reported testimony and the circumstances of this case. See my rebuttal in Munro, 'English Backwardness', pp. 105-67.

[186] Alison Hanham, *The Celys and Their World: An English Merchant Family of the Fifteenth Century* (Cambridge, 1985), pp. 187-202: with bills or drafts drawn on the Bruges *wisselaers* Collard De May and John Newenton, in 1477-79. See also the evidence in Alison Hanham, ed., *The Cely Letters, 1472 - 1488*, The Early English Text Society (London, 1975), passim; and Alison Hanham, 'Foreign Exchange and the English Wool Merchant in the Late Fifteenth Century', *Bulletin of the Institute of Historical Research of the University of London*, 46 (1973), pp. 160 - 75.

[187] Holden, *Negotiable Instruments*, pp. 33-6; Beutel, 'Negotiable Instruments', pp. 833-34; Kerridge, *Trade and Banking*, pp. 71-2; Munro, 'English "Backwardness" and Financial Innovations', pp. 150-67. In 1648, Coke had transferred the jurisdiction of Admiralty Courts, successors to law-merchant courts, to Common Law Courts. But in 1628, he had stated that the Law Merchant 'is part of the lawes of this realme'. In Woodward vs. Rowe (1666), the court declared that 'the law of merchants is the law of the land, and the custome is good enough generally for any man, without naming him merchant'; and in Williams vs. Williams (1693) it ruled that the customs of Law Merchant did not have to be detailed, for 'tis sufficient to say that such a person *secundum usum et consuetudinem mercatorum* drew the bill'.

[188] 'An Act for Giving Like Remedy Upon Promissory Notes as is Now Used Upon Bills of Exchange...' 3 & 4 Anne c. 8 (1704), in *Statutes of the Realm*, vol. VIII, pp. 355-56.

Burton v Davy had become enshrined in national legislation, for all commercial bills.

The Establishment of Modern Negotiability in the Habsburg Netherlands, 1507 - 1541

The likely influence of Burton v Davy may also be seen, almost two centuries earlier, in the very first European legislation to establish the complete judicial foundations for modern negotiability: by the *Staten Generaal* of the Habsburg Netherlands, in 1537 - 1541. The route, however, was circuitous, possibly via Lübeck, still the *chef ville* of the Hanseatic League, whose merchants traded extensively with London, Bruges, and Antwerp. In May 1499, its law-merchant court rendered a verdict concerning the rights of the bearer in a disputed bill that was virtually identical to Burton v Davy; and in March 1502, it reconfirmed the verdict in a similar case.[189] Just five years later, in 1507, a law merchant court in Antwerp adjudicated a case involving a dishonoured bearer bill (letter obligatory), issuing a verdict that, in Van der Wee's words, 'granted the bearer of writings obligatory the same rights as the original creditor [payee] with regard to the prosecution of an insolvent debtor'. Previously, Antwerp merchants seeking to enforce payments on debts assigned to third parties had been obligated, in their law suits, 'to obtain an explicit authority from the original creditor', revocable at any time.[190] While Burton v Davy is not cited, its provisions were undoubtedly well known to the plaintiff, an English cloth merchant, participating in what had now become the most important component of Antwerp's international commerce.[191] Possibly the current inhibitions on

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[189] For the 1499 case, see Pierre Jeannin, 'De l'arithmétique commerciale à la pratique bancaire: l'escompte aux XVIe - XVIIe siècles', in Puncuh and Felloni, *Banchi pubblici, banchi privati*, vol. I, pp. 95 - 116, citing Wilhelm Ebel, *Forschungen zur Geschichte des lübischen Rechts*, I: *Dreizehn Stücke zum Prozess-und Privatrecht* (Lübeck, 1950), p. 135. For the 1502 case, See Michael North, 'Banking and Credit in Northern Germany in the Fifteenth and Sixteenth Centuries', in Puncuh and Felloni, *Banchi pubblici, banchi privati,* vol. II, pp. 809 - 26, reprinted in Michael North, *From the North Sea to the Baltic: Essays in Commercial, Monetary and Agrarian History, 1500 - 1800* (Aldershot, 1996), citing documents in Wilhelm Ebel, ed., *Lübecker Ratsurteile*, Vols. I and II (Göttingen, 1955-56).

[190] See the publications of Herman Van der Wee in Appendix B. In his earlier publications, he was evidently unaware of the earlier precedents from the Lübeck and London law-merchant courts.

[191] Van der Wee, *Antwerp Market*, vol. II, pp. 45-49, 67-69, 73-83, 119-36 183-86; Munro, 'English "Backwardness" and Financial Innovations', pp. 105-67; and various studies in Munro, *Textiles, Towns, and Trade* (1994). Subsequently, in the next century, a London-based merchant of Flemish origin, produced a famous compilation of Law-Merchant: Gerard de Malynes, *Consuetudo vel Lex Mercatoria or the Ancient Law Merchant* (London, 1622).

deposit-and transfer- banking in the Low Countries also made such a legal decision on negotiable transfers all the more welcome in this international mercantile community.

Subsequently, in 1527, in neighbouring Flanders, the municipal court of Bruges rendered an almost identical decision in stating that 'the bearer had all the rights of a principal' in suing defaulting debtors to claim payment on commercial bills.[192] A decade later, in March 1537, such decisions were codified into national legislation by the *Staten Generaal* (with supplements in October 1541). In essence, these decrees permitted the bearer to sue not only the original debtor, but – unlike all the earlier legal precedents – any and all prior assignors of the note as well, for the full payment, with full judicial procedures to enforce such payments across the Netherlands.[193] This legislation meant that all commercial paper, whether made out to bearer or transferred by written assignment (endorsement), was fully negotiable and convertible into other assets, without the costly participation or even knowledge of the original principals.

Usury, Discounting, and Negotiablity in the Low Countries and England, 1541 - 1600

An equally significant feature of this complex legislation was a companion ordinance of the 1541 *Staten Generaal* that permitted interest payments up to 12 per cent per annum on all debts and commercial bills -- so that 'usury' now changed its meaning to indicate interest payments in excess of that limit.[194] A few years later, in 1545, Henry VIII's Parliament enacted similar 'usury' legislation for England, though with just a 10 percent limit. Whether the very recent spread of Calvinism had been responsible for undermining faith in the usury doctrine in either country seems doubtful. John Calvin (1509-1564) himself, publishing the *Institutes of the Christian Religion* just in 1536, had been rather ambiguous on usury, stating that 'it is a very rare thing for a man to be honest and at the same time a usurer', while also permitting a modest return,

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[192] A. P. Usher, *Early History of Deposit Banking*, pp. 98-9, citing a document in Louis Gilliodts-Van Severen, ed., *Coutume de la ville de Bruges*, Commission Royale d'Histoire (Brussels, 1875), vol. II, no. 127, p. 318.

[193] See Van der Wee's publications in Appendix B. For the text of the March 1537 ordinance, see C. Laurent, M. J. Lameere, and H. Simont, eds., *Recueil des ordonnances des Pays Bas, deuxième série, 1506 - 1700*, Commission Royale d'Histoire, Vol. IV (Brussels, 1907), pp. 15-17, and 34-35.

[194] Van der Wee, *Growth of the Antwerp Market,* vol. II, p. 344: 31 October 1541 decree (text).

commanding that 'no one take usury or profit above five per cent', though only on investment loans, and certainly not on charitable loans to the poor.[195] Many of his followers, along with Anabaptists and Lutherans, were as hostile to usury as were any Catholics; and subsequently an English Puritan divine commented that 'Calvin deals with usurie as the apothecarie doth with poyson'.[196] Indeed, England's Parliament repealed Henry VIII's statute in 1552 (i.e., before Mary, a Catholic, came to the throne), 'forasmuche as Usurie is by the worde of God utterly prohibited, as a vyce moste odyous and detestable'.[197] Finally, in 1571, after almost two decades, Queen Elizabeth I (1558-1601) did have Parliament restore her father's statute, though in an oblique fashion, repeating some language of the 1552 statute: 'forasmuch as all Usurie being forbydden by the lawe of God', all contracts specifying interest rates above 10 percent 'shalbe utterlye voyde'.[198]

This usury legislation, even so restricted, obviously had a great significance for the history of modern financial institutions. Effective financial negotiability requires the discounting of credit instruments. Thus, anyone selling and transferring a financial claim, whether in a bill of exchange or in a promissory note, before the stipulated date of maturity, necessarily had to accept a payment for less than its face value, to compensate for the foregone interest to be earned between the date of sale and maturity. To do so, to discount such bills openly, would therefore have rendered both the buyer and seller subject to prosecution under the previously existing usury laws; and it would have at least rendered the transaction invalid and unenforceable in law courts. The subsequent history of discounting and the endorsement of bills in the Low Countries has

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[195] In a letter to Sachinus in 1545, Calvin also stated: 'I do not consider that usury is wholly forbidden among us, except it be repugnant to justice and charity'. See Georgia Harkness, *John Calvin: The Man and His Ethics* (New York, 1958), pp. 201-10.

[196] Cited in Tawney, Richard, *Religion and the Rise of Capitalism: A Historical Study* (London, 1926), p. 94; see also pp. 61-115; Noonan, *Scholastic Analysis of Usury*, pp. 365-67, noting Calvin's dictum that all habitual usurers be expelled from the church. Roland Bainton, *The Reformation of the Sixteenth Century* (Boston, 1952), pp. 247-50, noting few differences between Luther and Calvin.

[197] Statute 37 Henrici VIII, c. 9 (1545) and Statute 5-6 Edwardi VI c. 20, in *Statutes of the Realm*, vol. III, p. 996; vol. IV:1, p. 155.

[198] 13 Elizabeth I, c. 8 (1571): in *Statutes of the Realm*, vol. IV:1, p. 542. Subsequently, with a gradual fall in the real rate of interest, the 'usury ceiling' was lowered to to 8 per cent in 1623, to 6 per cent in 1660, and finally to 5 per cent in 1713, remaining at that low level until 1854. Richards, *Early History of Banking in England*, pp. 19-20; and statute 17-18 Victoria c. 90 (1854), finally abolishing the usury laws.

already been given, in several publications by Herman Van der Wee, who discovered the first fully documented example of true discounting anywhere in Europe (dated 1536), once again, in an English merchant's letter obligatory drawn on the Antwerp market.[199] Nevertheless the evolution of this financial development was slower than might be expected, becoming widespread only after formal endorsement had become customary, in the later sixteenth, early seventeenth centuries, in the Netherlands, south and north.[200] Discounting certainly became an important component of English finance by the seventeenth century.

The 'Financial Revolution' in Seventeenth- and Eighteenth-Century Holland and England

The seventeenth century thus bring us back to Peter Dickson's 'financial revolution' in England, following the Glorious Revolution of 1688-89, which brought to the throne William III, the Dutch Prince of Orange. Since England then 'had no system of long-term borrowing to match those of its neighbours', did William import the 'financial revolution' from Holland? [201] Obviously there were strong connections; but initially, the new Dutch Republic, in its infancy following the Union of Utrecht in 1579, had not provided such an admirable model, certainly not before it won its independence from Spain in the 1609 Truce. For wartime exigencies had forced its government to resume the old, bad habits of compulsory purchases of *renten*, while frequently suspending annuity payments. But such practices seem to have ceased after the Truce (and were not resumed when war resumed in 1621), when *losrenten* were again sold at the traditional rate of 6.25 percent, and *lijfrenten* at 12.5 percent. By the mid seventeenth century (1655), interest rates had been reduced to five and then four percent; and, according to Marjolein' t Hart, the Dutch Republic could then 'borrow more cheaply than any other government – except perhaps certain city states – on bonds that were bought on a voluntary basis', and which were 'held by a large group of domestic investors'. Many

[199] Van der Wee, 'European Banking', pp. 185-95; Van der Wee, 'Credit and Banking Systems', pp. 329-31; Van der Wee, *Antwerp Market*, vol. II, pp. 349-55 (from the Kitson papers at Cambridge).

[200] Van der Wee, 'Credit and Banking', pp. 327-29. Many of these legal provisions were encoded in the Antwerp *Costumyn* of 1608.

[201] Dickson, *Financial Revolution*, p. 42.

English observers were praising the organisation of Dutch finances as the one to be emulated.[202] The history of seventeenth-century Dutch finances is too complex to be considered here; but two features do stand out. The first was the extent to which the Amsterdam *Beurs* was being utilized as a secondary financial market for commerce in not only Dutch *losrenten* (and debentures called *obligatiën*) but also in other European *rentes* and public debt certificates.[203] The second was the marked shift in Dutch public finances to *losrenten*, after the Grand Pensionary, Johan de Witt, in using an early form of probability theory, demonstrated in 1671 that the sale of *lijfrenten* could be very costly for the government, without taking account of the age of the designated nominee, especially if the one so named was an infant.[204] That certainly had an influence on England's subsequent decision to shift entirely from life or long term annuities to perpetual annuities, while

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[202] Hart, 'The Devil or the Dutch', pp. 286-87. For the finances and the structure of public debt in seventeenth-century Holland, see also Tracy, *Financial Revolution*, pp. 193-217; De Vries and van der Woude, *The First Modern Economy*, pp. 94-122; James Riley, *International Government Finance and the Amsterdam Capital Market, 1740-1815* (Cambridge, 1980), pp. 68-82; Marjolein 't, Hart, 'The Emergence and Consolidation of the "Tax State": II. The Seventeenth Century', in Richard Bonney, ed., *Economic Systems and State Finance*, European Science Foundation (Oxford: Clarendon Press, 1995), pp. 281-94; Marjolein 't Hart, 'The Merits of a Financial Revolution: Public Finance, 1550 - 1700', in Marjolein 't Hart, Joost Junker, and Jan Luiten van Zanden, eds., *A Financial History of the Netherlands* (Cambridge, 1997), pp. 11-36; Marjolein 't Hart, 'The United Provinces, 1579-1806', in Richard Bonney, ed., *The Rise of the Fiscal State in Europe, c. 1200-1815* (Oxford, 1999), pp. 309-326.

[203] Riley, *Amsterdam Capital Market*, pp. 74-110; Violet Barbour, *Capitalism in Amsterdam in the 17th Century* (Ann Arbor, 1963), pp. 81-84; Van der Wee, 'Monetary, Credit, and Banking Systems', pp. 344-47; Ehrenberg, *Capital and Finance*, p. 359-62; Poitras, *Early History of Financial Economics,* pp. 278-79; Larry Neal, *The Rise of Financial Capitalism: International Capital Markets in the Age of Reason* (Cambridge and New York, 1990), pp. 16-19, 26-30,36-43, 141-65; Pit Dehing and Marjolein 't Hart, 'Linking the Fortunes: Currency and Banking, 1550 - 1800', in Marjolein 't Hart, Joost Junker, and Jan Luiten van Zanden, eds., *A Financial History of the Netherlands* (Cambridge and New York: Cambridge University Press, 1997), pp. 52-55; Sidney Homer and Richard Sylla, *A History of Interest Rates*, 3rd rev. edn (New Brunswick, 1991), pp. 147-63. Founded in 1608, the *Beurs* was trading 360 commodities by 1639; but specific evidence for trading in government *renten* is unavailable until financial crisis of 1672-73. The first extant 'stock exchange list', from 1747, lists 25 different kinds of home State and Provincial bonds, 3 home shares, 3 English shares, 4 English government securities.

[204] Johan de Witt, *Waerdije van lijfrenten naer proportie van losrenten* (The Hague, 1671). He advocated that *lijfrenten* be sold instead at 7.143 percent (1/14), with higher rates for older buyers and lower rates for children. See Riley, *Amsterdam Capital Market*, pp. 74-75, 110; and n. 000 above; Tracy, *Financial Revolution*, pp.206-08.

France's public debt in the eighteenth century continued to be heavily based on *rentes viagères*.[205] Nevertheless, Hart has warned against exaggerating the Dutch role in specific features of England's financial revolution, pointing out in particular the signal contribution of the Bank of England, in contrast to the absence of any such role played in Holland by the *Wisselbank van Amsterdam* (while also noting that the Dutch debt, largely borne by Holland, was more provincial than truly national).[206]

There is no evidence, moreover, that William III himself exerted any personal influence in establishing England's 'financial revolution'. What he did do, however, from 1689, was to burden England with his own very costly wars with Louis XIV (from the French invasion of the United Provinces in 1672), which necessitated the establishment of a permanent funded debt. It began in January 1693, with the so-called Million Pound Loan, which (apart from a curious ten percent tontine provision) was in fact a self-liquidating lifetime annuity, but at the astoundingly high rate of 14 percent, funded by additional excise taxes on beer, vinegar, cider, and brandy.[207] Subsequent borrowing was also funded from excise and customs duties. In the following year (or from 1694 to 1697), the directors of the new Bank of England provided the true foundations for the 'financial revolution' in furnishing the government with a 'loan' of £1.2 million, at the then attractive rate of 8 percent, in order to secure their 'monopoly' bank charter, raising the funds by

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[205] In 1789, the French public debt was about 3.5 billion *livres tournois*: 1 billion in short term floating debt, 2 billion in *rentes;* and 0.5 billion in capital invested in royal offices. See Philip T. Hoffman, Gilles Postel-Vinay, and Jean-Laurent Rosenthal, *Priceless Markets: The Political Economy of Credit in Paris, 1660-1870* (Chicago, 2000), p. 71. David Weir, 'Tontines, Public Finance, and Revolution in France and England, 1688 - 1789', *Journal of Economic History*, 49:1 (March 1989), 95-124; F. Velde and David Weir, 'The Financial Market and Government Debt Policy in France, 1746 - 1793', *Journal of Economic History*, 52:1 (1992), 1-39; Homer and Sylla, *Interest Rates*, pp. 169-73 (and Table 15, p. 172); and the previous note.

[206] Hart, 'The Devil or the Dutch', pp. 46-49.

[207] In January 1693, £108,100 was raised by a tontine loan of 10 percent (7 percent after 1700) and £773,394, by the 14 percent single-life annuities; in February 1694, the remaining £118,506 was raised by selling the same annuities. In March a further £1.0 million was raised by the sale of £10 lottery tickets. For this and the following see Dickson, *Financial Revolution in England*, pp. 39-245, 522-33; Peter G.M. Dickson and John Sperling, 'War Finance, 1689-1714', in J.S. Bromley, ed., *The New Cambridge Modern History* (Cambridge, 1970), vol. VI: *The Rise of Great Britain and Russia, 1699-1715-25* (Cambridge: Cambridge University Press, 1970), pp. 284-315; Alice Claire Carter, *The English Public Debt in the Eighteenth Century* (London, 1968); Neal, *Rise of Financial Capitalism*, pp. 14-19.

selling Bank stock. Though redeemable on one year's notice from 1706, it was in fact a perpetual loan. Similar 8-percent perpetual 'loans', to secure monopoly charters, followed in 1698 and 1709, from the East India Company and then the merged New East India Company. From 1704 to 1710 , the Exchequer also issued more annuities, though irredeemable: 'long annuities' for 99 years (from 6.6 to 6.25 percent) and 'short annuities' for 32-year years (at 9.0 per cent), along with a series of highly popular lottery loans (to 1714). Then, from 1711, the newly formed South Sea Company bought up £9.47 million in short term floating debts and converted them into so-called 'perpetual stock' with a 5 percent dividend; and subsequently it converted £13.99 million in other loans and annuities into more 5 percent perpetual stock, just before its collapse in the famous 1721 'Bubble'. Subsequent government issues were in redeemable 'stock', many with popular lottery provisions, with lower rates of interest (5.0, 4.0, 3.5, 3.0, but again 4.0 percent), while also redeeming £6.5 million in South Sea stock and annuities.

Finally, in 1749-52, the Chancellor of the Exchequer, Sir Henry Pelham, commenced his famous conversion of all outstanding debt and annuity issues – those not held by the Bank of England, the East India Co, and the reconstituted South Sea Co ('The Three Sisters') – into the Consolidated Stock of the Nation, popularly known as Consols. Those holding the new Consols, which were irredeemable until 1757, received 3.5 percent from Christmas 1750 and then 3.0 percent from Christmas 1757, at which time the 4.0 percent South Sea Stock was also included in this conversion. They were also fully transferable and negotiable, marketed on both the London Stock Exchange and the Amsterdam *Beurs*. Indeed they were, along with Bank of England and East India Company stock, the major securities traded on the London Stock Exchange in the later eighteenth and early nineteenth centuries; and they are traded on the LSE to this very day. Though the Consols were both perpetual *yet* redeemable annuities, and thus in no way different from the current Dutch *losrenten*, their instant and long-enduring popular success was evidently based on the firmly held public belief, at home and abroad, that the government would not exercise its redemption option. In fact, these Consols were not called until 1888, with Goschen's 'Conversion' into 2.75 percent Consols.[208]

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[208] See Dickson, *Financial Revolution*, pp. 486-520; Poitras, *Early History of Financial Economics,*pp. 281-87; Ranald Michie, *The London Stock Exchange: a History* (Oxford and New York,

What were the contributions of this 'financial revolution', especially in Holland and England? First, and most obviously, it provided a remarkably stable and continuously effective form of public finance, with a very significant reduction in the cost of government borrowing – in England, from 14 percent in 1693 to 3 percent in 1757. Certainly, from its very inception, those public finances based on *rentes* had always been much cheaper to maintain than interest bearing loans; and for reasons noted, perpetual *rentes* were also much cheaper than were life *rentes*. The obvious response to the oft expressed concern that the former meant a permanent alienation of government revenues was, of course, to cite the government's prerogative to redeem them at par. That observation highlights another advantage that so many western governments found in issuing *rentes* rather than bonds with stipulated redemption dates: that they were relieved of any obligation to redeem such debts and thus of the burden in refinancing bond issues; but they could redeem *rentes* when interest rate changes or other circumstances made it advantageous to do so.

Second, despite such seemingly low yields, much of the public — not just the affluent but even those of very modest means – came to consider such *rentes* or annuities a remarkably attractive form of investment, readily available and readily negotiable. That Consols, or *rentes* in general, were so much more marketable, with far lower transaction costs, may explain why so many preferred holding them to much higher interest bearing loans, bonds, or debentures. Indeed, for that reason, Consols and other negotiable annuities provided perhaps the most important form of collateral for short-term borrowing, especially for merchants and industrialists during the 'Industrial Revolution' era (and after), certainly when bonds and debentures often traded at very high discounts. Some investors, with mixed portfolios, may have found the fixed maturity dates of bonds and debentures to be an attractive feature, but certainly not when interest rates were falling (so long as governments seemed reluctant to redeem *rentes*), as they were in the eighteenth century.[209]

1999). Goschen converted them into 2.75 Consols, with the provision that, in 1903, the rate be further reduced to 2.50 percent. Furthermore, from 1923, the new Goschen Consols were to be redeemable at par. See C. Knick Harley, 'Goschen's Conversion of the National Debt and the Yield on Consols', *Economic History Review*, 2nd ser. 29:1 (Feb 1976), 101-06. They continue to trade on the LSE as 2.5 percent Consols, with a value of £53.32 on 14 March 2003.

[209] Long term interest rates consistently had a downward trend. See Homer and Sylla, *History of Interest Rates*, pp.89-143, especially Table 11 (pp. 137-38), and Chart 2 (p. 140).

In view of these manifest advantages provided by the modern 'financial revolution', one may well contend that it really had nothing to do with circumventing the usury problem. Nevertheless, as Tawney has demonstrated, the 'soul-corrupting' taint of usury had still remained strong within recent English memory, as 'clerical conservatism continued to repeat such [anti-usury] doctrines down to the eve of the Civil War';[210] and even in Holland, the Calvinist synod (1581) had decreed that no banker should ever be admitted to communion service.[211] Whatever the views held in the 1690s, the English 'financial revolution' marked the culmination of an institutional evolution in European public finance that owed its fundamental origins, via the Netherlands, to that financial innovation of thirteenth-century French and Flemish towns: in their resort to *rentes*, as an attractive and morally acceptable alternative to interest-bearing loans, at the very time that the western Church was engaged in a resuscitated and harshly vigorous campaign against usury. It would be foolish to deny the connection and maintain that these events were pure coincidence; and it would also be foolish to deny that the usury doctrine was an impediment. And yet, by the very responses it provoked or innovations that it encouraged, it was one that promoted rather than retarded European economic progress. The centuries-long evolution of the European 'financial revolution' provides another example of a socio-economic institution that, as Schumpeter contended, is one 'of a large group of surviving features from earlier ages that play such an important part in every concrete social situation....' and is thus 'an element that stems from the living conditions, not of the present, but of the past', a form of historical path-dependency.[212]

The 'financial revolution' also involved other important forms of negotiable credit, particularly discountable Exchequer Bills, which the Bank of England introduced in 1696; and governments of this and subsequent eras also relied heavily upon negotiable bills of exchange in transmitting funds and effecting

[210] Thomas Wilson, *A Discourse Upon Usury By Way of Dialogue and Orations* [1572], with an historical introduction by Richard H. Tawney (New York, 1925), pp. 106-34, esp. p. 117; Tawny, *Religion and the Rise of Capitalism*, pp. 91-115, 132-39, 178-89. See also Coquillette, 'From Usury to the Bank of England', citing a statement of Sir Francis Bacon (1561-1626), that 'Usury is the certainest Meanes of Gaine, though one of the worst'; and also John Blaxton, *The English Usurer* (1634), pp . 94-99.

[211] Parker, 'Emergence of Modern Finance', p. 538. See n. 00 above.

[212] Joseph Schumpeter, *Imperialism and Social Classes: Two Essays* (New York, 1955), p.65.

payments abroad. As this study has also sought to demonstrate, the origins of this vital credit instrument similarly began in the thirteenth century, not only as a means of circumventing the usury ban but also the various state impediments imposed from that era on bullion flows and international payments; and England's major contribution to the origins of full-fledged negotiability in the fifteenth century may be seen as a mercantile response to state monetary restrictions that had prevented the development of deposit banking there. To this very day, bills of exchange, as international acceptances, remain a fundamental instrument of international commerce and finance; but annuities have largely disappeared from European public finance, as governments have again largely reverted to shorter-term loans and bonds, for reasons that lie well beyond the scope of this study--- and they are indeed the concern of contemporary historians, not of medievalists.

Publications on the Medieval and Early Modern Usury Doctrine

The classic monograph has long been John T. Noonan, *The Scholastic Analysis of Usury* (Cambridge, Mass. 1957), which has been accused of being outdated, while containing some significant errors, and thus one is cautioned in using this source; but no other publication adequately covers this topic up from early medieval to modern times. For some important corrections and additions to Noonan's discussion of usury, while perhaps overemphasizing the role of Aristotle, see the various publications of Odd Langholm, in chronological order: *Price and Value in the Aristotelian Tradition: A Study in Scholastic Economic Sources* (Bergen and Oslo; and New York, 1979); *Wealth and Money in the Aristotelian Tradition: A Study in Scholastic Economic Sources* (Bergen 1983); *The Aristotelian Analysis of Usury* (Bergen and Oslo; and New York, 1984); 'Scholastic Economics', in S. T. Lowry, ed., *Pre-Classical Economic Thought* (Boston-Dordrecht-Lancaster, 1987); *Economics in the Medieval Schools: Wealth, Exchange, Value, Money and Usury According to the Paris Theological Tradition, 1200 - 1350*, Studien und Texte zur Geistesgeschichte des Mittelalters, vol. 19 (Leiden and New York, 1992); *The Legacy of Scholasticism in Economic Thought: Antecedents of Choice and Power* (Cambridge and New York, 1998). See also the valuable studies by Raymond de Roover, 'Scholastic Economics: Survival and Lasting Influence from the Sixteenth Century to Adam Smith', *Quarterly Journal of Economics*, 69 (1955), 161-90; reprinted in Julius Kirshner, ed., *Business, Banking, and Economic Thought in late Medieval and Early Modern Europe: Selected Studies of Raymond de Roover* (Chicago, 1974); 'Les doctrines économiques des scolastiques: à propos du traité sur l'usure d'Alexandre Lombard', *Revue d'histoire ecclésiastique*, 59 (1964), 854 - 66; *San Bernardino of Siena and San'Antonino of Florence: Two Great Economic Thinkers of the Middle Ages* (Kress Library of Business and Economics no. 19, Boston, 1967), especially section VIII 'What Was Usury?' pp. 27-33; *La pensée économique des scolastiques: doctrines et méthodes* (Montreal and Paris, 1971). Also important, for particular insights, are: Richard Tawney, *Religion and the Rise of Capitalism* (London, 1926), chapter 1, 'The Medieval Background', pp. 11-60; T.P. McLaughlin, 'The Teaching of the Canonists on Usury (XII, XIII and XIV Centuries)', *Medieaval Studies*, 1 (1939), 81-147; 2 (1940), 1-22; Bernard W. Dempsey, S.

J., *Interest and Usury* (London, 1948), especially chapter VIII, 'Value and Usury', pp. 148 - 85; Benjamin Nelson, *The Idea of Usury* (Princeton, 1949); Bernard W. Dempsey, 'An Analysis of St. Thomas Aquinas on Usury', in St. Thomas Aquinas, *Summa Theologica*, Vol. III (New York, 1952); Marjorie Grice-Hutchinson, *The School of Salamanca: Readings in Spanish Monetary Theory, 1544 - 1605* (Oxford, 1952); Jacques Le Goff, 'The Usurer and Purgatory', in Fredi Chiappelli, Center for Medieval and Renaissance Studies, UCLA, ed., *The Dawn of Modern Banking* (New Haven, 1979), pp. 25-52; Jacques Le Goff, *Time, Work, and Culture in the Middle Ages,* trans. Arthur Goldhammer (Chicago, 1980), especially 'Merchant's Time and Church's Time in the Middle Ages', pp. 29-42; and 'Licit and Illicit Trades in the Medieval West', pp. 58 - 70; Jacques Le Goff, *Your Money or Your Life: Economy and Religion in the Middle Ages*, trans. by Patricia Ranum (New York, 1988); Norman L. Jones, *God and the Moneylenders: Usury and Law in Early Modern England* (Oxford, 1989); James A. Brundage, 'Usury', in Joseph R. Strayer, et al, eds., in Joseph R. Strayer, et al, eds., *Dictionary of the Middle Ages*, 13 vols. (New York, 1982-89), Vol. XII (1989), pp. 335-39.

For other views that either discount the importance of the usury doctrine, or provide very differing socio-economic interpretations of its evolution, with, in my view, an undue emphasis on consumption loans, see in particular: John Gilchrist, *The Church and Economic Activity in the Middle Ages* (New York, 1969), chapters 4-6, pp. 48-121, but especially pp. 62-75. For recent views of more theoretically oriented economists to explain usury prohibitions – many of them stressing the importance of consumption, consumption loans, and 'consumption smoothing', see the following: Robert B. Ekelund, Robert F. Hébert, and Robert D. Tollison, 'An Economic Model of the Medieval Church: Usury as a Form of Rent Seeking', *Journal of Law, Economics, and Organization*, 5:1 (Spring 1989), 307-31; Robert B. Ekelund, Robert F. Hébert, Robert D. Tollison, Gary M. Anderson, Audrey B. Davidson, *Sacred Trust: The Medieval Church as an Economic Firm* (New York and Oxford, 1996), pp. 113-30; Edward L. Glaeser and Jose Scheinkman, 'Neither a Borrower Nor a Lender Be: An Economic Analysis of Interest Restrictions and Usury Laws', *Journal of Law and Economics*, 41:1 (1998), 1-36; Clyde G. Reed and Cliff T. Bekar, 'Religious Prohibitions

Against Usury', Department of Economics Working Papers, Simon Fraser University (July 2001). That the medieval Church had truly great concerns about the plight of the poor who depended upon and who often seemed to be 'victimized' by so-called 'consumption loans' cannot, of course, be denied; nevertheless, the usury ban applied to all loans, and much more ecclesiastical literature was devoted to investment loans.

Appendix B: Publications on Banking and Finance

See in particular the publications on medieval banking and finance by Raymond de Roover (in chronological order of publication): 'Money, Banking, and Credit in Medieval Bruges', *Journal of Economic History*, 2 (1942), supplement, pp. 52-65; 'What is Dry Exchange? A Contribution to the Study of English Mercantilism', *Journal of Political Economy*, 52 (1944), 250-66, reprinted in Julius Kirshner, ed., *Business, Banking, and Economic Thought in late Medieval and Early Modern Europe: Selected Studies of Raymond de Roover* (University of Chicago Press, 1974), pp. 183-99; 'Le contrat de change depuis la fin du treizième siècle jusqu'au début du dix-septième', *Revue belge de philologie et d'histoire*, 25 (1946-47), 111-28; *Money, Banking, and Credit in Mediaeval Bruges: Italian Merchant-Bankers, Lombards, and Money Changers* (Cambridge, Mass., 1948); *L'evolution de la lettre de change, XIVe-XVIIIe siècles* (Paris, S.E.V.P.E.N., 1953); 'New Interpretations of the History of Banking', *Journal of World History*, 2 (1954), 38-76; reprinted in Kirshner, *Business, Banking, and Economic Thought,* pp. 200 - 38; 'Cambium ad Venetias: Contributions to the History of Foreign Exchange', in *Studi in onore di Armando Sapori* (Milan, 1957), pp. 631-48, reprinted in Kirshner, *Business, Banking, and Economic Thought*, pp. 239-59; 'La balance commerciale entre les Pays-Bas et l'Italie au quinzième siècle', *Revue belge de philologie et d'histoire*, 37 (1959), 374-86; *The Rise and Decline of the Medici Bank, 1397-1494* (Cambridge, Mass., 1963); *The Bruges Money Market Around 1400 (with a Statistical Supplement, by Hyman Sardy*) (Brussels, 1968); 'Early Banking Before 1500 and the Development of Capitalism', *Review of the History of Banking*, 4 (1971), 1-16.

Equally important are those of Herman Van der Wee, in particular, in chronological order: *Growth of the Antwerp Market and the European Economy, fourteenth - sixteenth centuries*, 3 vols. (The Hague, 1963), Vol. II: 333-68; 'Anvers et les innovations de la technique financière aux XVIe et XVIIe siècles', *Annales: E.S.C.*, 22 (1967), 1067-89, republished as 'Antwerp and the New Financial Methods of the 16th and 17th Centuries', in Herman Van der Wee, *The Low Countries in the Early Modern World* , trans. by Lizabeth Fackelman, Variorum Series (Aldershot, 1993), pp. 145-66; 'Monetary, Credit, and Banking Systems', in E.E. Rich and Charles Wilson, eds., *The Cambridge Economic History of Europe*, Vol. V: *The Economic Organization of Early Modern Europe* (Cambridge, 1977), pp. 290-392; 'The Medieval and Early-Modern Origins of European Banking', in Dino Puncuh and Giuseppe Felloni, eds., *Banchi pubblici, banchi privati e monti di pietà nell'Europa preindustriale: Amministrazione, tecniche operative e ruoli economici*, Atti della società Ligure di storia patria, new series, vol. 31, 2 vols. (Genoa, 1991), vol. II, pp. 1157 - 73; 'European Banking in the Middle Ages and Early Modern Period (476-1789)', in Herman Van der Wee and G. Kurgan-Van Hentenrijk, eds., *A History of European Banking*, 2nd edn. (Antwerp, 2000), pp. 152-80. For other important studies on medieval and early modern banking, see: Abbott P. Usher, 'The Origins of Banking: the Primitive Bank of Deposit: 1200-1600', *The Economic History Review*, 1st ser., 4 (1939), 399-428; reprinted in F.C. Lane and J.C. Riemersma, ed., *Enterprise and Secular Change* (London, 1952), pp. 262-91; and Usher, *The Early History of Deposit Banking in Mediterranean Europe*, vol. I: *The Structure and Functions of the Early Credit System: Banking in Catalonia: 1240-1723*, Harvard Economic Studies, vol. 75 (Cambridge, Mass., 1943; reissued New York, 1967), esp. pp. 237-300; Frederic C. Lane, 'Venetian Bankers, 1496 - 1533', *Journal of Political Economy*, 45 (1937), 187-206; reprinted in his *Venice and History: The Collected Papers of Frederic C. Lane* (Baltimore, 1966), pp. 69 - 86; Jacques Le Goff, *Merchands et banquiers du moyen âge* (Paris, 1956); Charles de la Roncière, *Un changeur florentin du Trecento: Lippo di Fee del Sega, 1285 env. - 1363 env.* (Paris, 1973); Marco Spallanzani, 'A Note on Florentine Banking in the Renaissance: Orders of Payment and Cheques', *Journal of European Economic History*, 7 (Spring 1978), 145 - 68; Robert Lopez, 'The Dawn of Medieval Banking', and Thomas Blomquist, 'The Dawn of Banking in an Italian Commune: Thirteenth Century Lucca', both in Fredi Chiappelli, Center for Medieval and Renaissance Studies, UCLA, ed., *The Dawn of Modern Banking* (New Haven and London, 1979), pp. 1-23, 53-75; Thomas Blomquist, ‘The Early History of European Banking: Merchants, Bankers, and Lombards of XIIIth-Century Lucca in the County of Champagne’, *Journal of European Economic History*, 14 (Winter 1985), 521 - 36; Richard Goldthwaite, ‘The Medici Bank and the World of Florentine Capitalism’, *Past and Present*, no. 114 (Feb. 1987), 3 - 31; Goldthwaite, ‘Local Banking in Renaissance Florence’, pp. 5 -55; Edward English, *Enterprise and Liability in Sienese Banking, 1230 - 1350* (Cambridge, Mass., 1988). The best and most recent study on medieval Italian banking is: Reinhold Mueller,*Money and Banking in Medieval and Renaissance Venice*, vol. II: *The Venetian Money Market, Banks, Panics, and the Public Debt, 1200 - 1500* (Baltimore and London, 1997). See also his earlier study: Reinhold Mueller, ‘The Role of Bank Money in Venice, 1300-1500', *Studi Veneziani*, new series, 3 (1979), pp. 47-96.

Table 1. Ghent's Civic Revenues and Expenditures:

Loans, Erfelijk Renten, and Lijfrenten, 1314-15 to 1389-90

quinquennial means in ponden payement

£40 payement = £12 parisis = £1 groot Flemish = 240d groot Flemish

Years 15 Aug	Loans in £ payement	Renten: Erfelijk Sales in £ payement	Renten: Lijfrenten Sales in £ payement	Total Debt Receipts in £ payement	Total Revenues in £ payement	Debts as % of Total Revenues	Debt Repayments in £ payement
1316-20	6,478.50			6,478.50	77,168.73	8.40%	54,967.50
1321-25					52,929.98		19,829.81
1326-30	4,916.94	2,701.11		7,618.05	66,492.81	11.46%	12,487.34
1331-35		2,819.00		2,819.00	82,603.77	3.41%	8,884.82
1336-40	42,140.04	2,214.93		44,354.97	101,197.46	43.83%	8,870.54
1341-45	12,827.54	1,129.04		13,956.58	98,280.97	14.20%	10,508.68
1346-50	18,318.33	2,222.65	23,660.11	44,200.97	160,391.84	27.56%	17,499.36
1351-55		3,035.70		3,035.70	62,049.60	4.89%	
1356-60	283.33	2,690.09	1,338.35	4,311.78	55,086.08	7.83%	2,886.56
1361-65	283.17	3,577.40		3,872.74	121,033.04	3.20%	8,429.39

Years 15 Aug	Loans in £ payement	Renten: Erfelijk Sales in £ payement	Renten: Lijfrenten Sales in £ payement	Total Debt Receipts in £ payement	Total Revenues in £ payement	Debts as % of Total Revenues	Debt Repayments in £ payement
1366-70	561.20	2,712.99		3,274.19	98,014.99	3.34%	43,822.96
1371-75	507.67	2,925.13		3,432.79	83,793.74	4.10%	20,027.40
1376-80	295.00	2,773.75		3,068.75	103,790.15	2.96%	5,470.81
1381-85	4,391.75	540.00		4,931.75	89,977.67	5.48%	5,300.00
1386-90	2,346.00	4,834.00		7,180.00	84,787.67	8.47%	3,865.50

Table 1: Ghent's Civic Revenues and Expenditures:

Loans, Erfelijk Renten, and Lijfrenten, 1314-15 to 1389-90
quinquennial means in ponden payement:

£40 payement = £12 parisis = £1 groot Flemish = 240d groot Flemish

Years 15 Aug	Renten: Erfelijk Renten in £ payement	Renten: Payments* Lijfrenten in £ payement	Total debt Payments £ payement	Total Expenditures £ payement	Deficit or Surplus £ payement	Debt Payments as % Total Expenditures
1316-20			54,967.50	76,519.23	649.50	71.83%
1321-25			19,829.81	53,305.17	-375.19	37.20%
1326-30	158.00		12,645.34	63,661.82	2,830.98	19.86%
1331-35	6,533.73		15,418.54	81,958.89	644.88	18.81%
1336-40	121.25		8,991.79	105,886.84	-4,689.38	8.49%
1341-45	0.00		10,508.68	91,118.47	7,162.49	11.53%
1346-50	4,276.01		21,775.38	163,182.09	-2,790.26	13.34%
1351-55		1,238.01	1,238.01	55,997.21	6,052.60	2.21%
1356-60		240.00	6,980.67	54,195.13	891.41	12.88%
1361-65			51,929.39	123,106.31	-2,072.46	42.18%

Years 15 Aug	Erfelijk Renten in £ payement	Lijfrenten in £ payement	Total debt Payments £ payement	Total Expenditures £ payement	Deficit or Surplus £ payement	Debt Payments as % Total Expenditures
1366-70			43,822.96	98,896.20	-880.21	44.31%
1371-75			20,027.40	83,523.68	270.74	23.98%
1376-80	17.76		5,488.57	115,669.92	2,530.11	4.75%
1381-85			5,300.00	120,916.67	-30,939.00	4.38%
1386-90			3,865.50	88,068.33	-3,280.67	4.39%

* Debt payments: the sum of annual annuity payments, redemptions of *renten*, and repayments of bonded loans. The accounts rarely distinguished clearly between such payments, grouping all under the expenditure accounts entitled *van schulde ende van renten.*

Many of the town accounts of *stadsrekeningen* for fourteenth-century Ghent are missing; many of these still surviving are fragmentary; and in some cases the town treasurer failed to fill in the total sum of receipts and or expenditures. With so many lacunae, these quinquennial means should be used with some considerable reservation. As an alternative, Table 2 provides extant data for individual years from 1352 to 1373, relatively peaceful years.

Sources:

Jules Vuylsteke, ed., *Gentsche stads- en baljuwsrekeningen, 1280 - 1336/ Comptes de la ville de Gand, 1280 - 1336*, in the series *Oorkondenboek der stad Gent*, eerste afdeeling: *Rekeningen [Cartulaire de la ville de Gand*, première série: *Comptes*] (Gent: F. Meyer-Van Loo, 1900). The accounts begin, in fact, only in 1314-15; and many are fragmentary.

Napoleon De Pauw and Julius Vuylsteke, eds., *De rekeningen der stad Gent: Tijdvak van Jacob Van Artevelde, 1336 - 1349*, 3 vols., (Ghent: Ad

Hoste, 1874 -85); Vol. I: *1336 - 1339*; Vol. II: *1340 - 1345*; Vol. III: *1345 - 1349*

Alfons Van Werveke, ed., *Gentse stads- en baljuwsrekeningen (1351 - 1364)*, Koninklijke Academie voor Wetenschappen, Letteren en Schone Kunsten van België, Koninklijke Commissie voor Geschiedenis (Brussels, 1970), with an introduction by Hans Van Werveke.

David Nicholas and Walter Prevenier, eds., *Gentse stads- en baljuwsrekeningen (1365 - 1376)*, Koninklijke Academie van België, Koninklijke Commissie voor Geschiedenis (Brussels, 1999).

Julius Vuylsteke, ed., *De rekeningen der stad Gent: Tijdvak van Philips van Artevelde, 1376 - 1389* (Ghent, 1893).

The manuscript sources may be found in: Stadsarchief Gent, Stadsrekeningen, series 400 (continuing into the early-modern era)..

Table 2.

Ghent: Revenues from the Sales of Erfelijk Renten and Lijfrenten
1352 - 1373

in ponden payement: £40 payement = £12 parisis = £1 groot Flemish

Years **15 Aug.**	**Page**	**Renten:** **£ payement**	**Total Revenues** **£ payement**	**Renten as %** **of Total**
1352-53	26	[3,065.558]	n.a.	
1353-54	92	3,035.700	62,049.600	4.89%
1354-55	140	2,930.188	65,517.875	4.47%
1355-56	188	[2,762.279]	n.a.	
Jul-Aug 1356	232	4,015.054	37,066.321	10.83%
1356-57	261	[2,348.938]	n.a.	
1357-58	317	2,343.167	89,168.779	2.63%
1358-59	377	2,380.000	39,023.133	6.10%
1360-61	453	6,247.942	138,719.171	4.50%
1361-62	497	3,340.833	103,346.908	3.23%
1362-63	550	2,380.083	67,790.200	3.51%
1364-65	659	2,068.167	63,904.258	3.24%
1365-66	7	3,077.129	95,417.163	3.22%
1366-67	34	2,568.113	99,814.221	2.57%
1367-68	58	2,547.667	94,592.063	2.69%
1368-69	85	2,606.054	109,102.738	2.39%
1369-70	102	2,766.000	91,148.758	3.03%
1372-73	127	2,925.125	83,793.738	3.49%

Total	45,231.220	1,240,454.925	3.65%

Sources:

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Table 3.

Aalst Civic Revenues and Expenditures:
the Role of Hereditary and Life-Rents (Erfelijk Renten and Lijfrenten)
In Decennial Means, 1391-1400 to 1541-50

Values in livres parisis: £12 ponden parijs = £1 pond groot Flemish = £3.333 pond payement = 240d groot Flemish

Years	Erfelijk Renten £ parisis	Lijfrenten £ parisis	Total Renten £ parisis	Total Revenues £ parisis	Renten sales as % of Total Revenues	Renten: Erfelijk Annuity Payments £ parisis	Renten: Lijfrenten Annuity Payments £ parisis
1391-1400[a]	57.271	1,029.55	1,086.82	6,451.54	16.85%	21.450	3,437.60
1401-10	60.846	1,917.31	1,978.15	8,616.94	22.96%	10.665	5,091.51
1411-20	62.263	1,511.74	1,574.00	9,553.61	16.48%	24.867	5,191.00
1421-30	62.583	1,348.02	1,410.60	9,608.01	14.68%	29.659	5,256.32
1431-40	64.562	2,218.92	2,283.48	9,347.05	24.43%	27.401	5,870.38
1441-50	62.078	169.00	231.08	9,081.30	2.54%	24.342	5,180.49
1451-60	60.964	376.97	437.93	8,211.64	5.33%	24.342	4,100.70
1461-70	60.192	406.11	466.30	10,074.68	4.62%	24.342	3,169.99
1471-80	58.583	2,045.54	2,104.12	12,638.23	15.76%	24.342	2,513.03
1481-90	9.349	2,612.86	2,622.21	12,685.61	20.39%	24.342	2,510.34
1491-1500	41.679	312.00	353.68	12,076.95	2.85%	24.342	4,071.70

Years	Erfelijk Renten £ parisis	Lijfrenten £ parisis	Total Renten £ parisis	Total Revenues £ parisis	Renten sales as % of Total Revenues	Renten: Erfelijk Annuity Payments £ parisis	Renten: Lijfrenten Annuity Payments £ parisis
1501-10	41.679	128.00	169.68	11,371.61	1.44%	24.342	3,727.63
1511-20	41.679	0.00	41.68	10,965.36	0.38%	218.627	2,906.98
1521-30	41.579	1,786.50	1,828.08	12,662.47	14.16%	308.847	3,095.78
1531-40	41.429	709.40	750.83	12,769.85	5.70%	296.380	3,806.18
1541-50	41.429	2,030.10	2,071.53	16246.733	12.16%	428.010	3,725.59
Source:	Algemeen Rijksarchief Brussel, Rekenkamer, registers nos. 31,412 (1395) to 31,552 (1550)						

Table 3. **Aalst Civic Revenues and Expenditures: the Role of Hereditary and Life-Rents (Erfelijkrenten and Lijfrenten) In Decennial Means, 1391-1400 to 1541-50**

Years	Additional Renten Payments £ parisis	Total Lijfrenten Payments in £ parisis	Total Annuity Payments £ parisis	Total Exp-enditures £ parisis	Renten Payments as % of Total	Surplus or Deficit £ parisis	Total[b] Assise Farm Revenues £ parisis	Renten Payments as % of Total Assises
1391-1400		3,437.60	3,459.05	6,435.40	53.75%	16.15	4,754.13	72.76%
1401-10		5,091.51	5,102.18	8,990.78	56.75%	-423.16	5,809.83	87.82%
1411-20		5,191.00	5,215.87	9,659.13	54.00%	-105.52	6,712.66	77.70%
1421-30		5,256.32	5,285.98	9,720.38	54.38%	-112.37	6,441.26	82.06%
1431-40		5,870.38	5,897.78	9,348.65	63.09%	-1.61	6,407.36	92.05%
1441-50		5,180.49	5,204.83	9,131.97	57.00%	-50.66	7,724.07	67.38%
1451-60		4,100.70	4,125.04	8,265.56	49.91%	-53.92	6,375.01	64.71%
1461-70		3,169.99	3,194.33	10,224.63	31.47%	-149.96	8,206.72	39.18%
1471-80	1,384.71	3,897.74	3,922.08	13,362.93	29.03%	-724.70	8,999.73	43.58%
1481-90	1,370.29	3,880.63	3,904.97	14,897.56	27.30%	-2,211.95	8,270.63	47.40%
1491-1500		4,071.70	4,096.04	13,219.85	31.12%	-1,142.91	10,138.45	40.40%

Years	Additional Renten Payments £ parisis	Total Lijfrenten Payments in £ parisis	Total Annuity Payments £ parisis	Total Exp-enditures £ parisis	Renten Payments as % of Total	Surplus or Deficit £ parisis	Total[b] Assise Farm Revenues £ parisis	Renten Payments as % of Total Assises
1501-10		3,727.63	3,751.98	11,871.39	31.69%	-499.78	9,397.40	39.95%
1511-20		2,906.98	3,125.60	11,460.39	27.31%	-495.04	9,296.25	33.67%
1521-30	197.98	3,293.75	3,602.60	14,243.26	25.45%	-1,580.79	9,577.50	38.09%
1531-40	7.60	3,813.78	4,110.15	14,247.08	29.07%	-1,477.23	10,007.00	41.36%
1541-50	78.90	3,804.49	4,232.50	19,600.67	21.75%	-3,353.93	12,434.64	34.14%

a. Mean of 1396 and 1500

b. Assise Revenues: the total revenues derived from the annual sale of excise-tax farms, for the taxes levied on the consumption of wine, beer, grain, bread, meat, herring, wool and linen textiles, charcoal, wood, and other such commodities. (*Assise* = *Accijnzen*)

Source: Algemeen Rijksarchief Brussel, Rekenkamer, registers nos. 31,412 (1395) to 31,552 (1550)

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Nonetheless, professional lawyers suddenly reappeared in Western Europe seven hundred years later during the 1230s when church councils and public authorities began to impose a body of ethical obligations on those who practiced law. James Brundageâ€™s The Medieval Origins of the Legal Profession traces the history of legal practice from its genesis in ancient Rome to its rebirth in the early Middle Ages and eventual resurgence in the courts of the medieval church. By the end of the eleventh century, Brundage argues, renewed interest in Roman law combined with the rise of canon law of the Western Finance: Bills of exchange and paper money. Next: Annuities in Late Medieval Hanse Towns. Previous: The International Payments Mechanism in the Se Have you read this? Please log in to set a read status.Â Your reading intentions are private to you and will not be shown to other users. What are reading intentions? Setting up reading intentions help you organise your course reading. It makes it easy to scan through your lists and keep track of progress. Here's an example of what they look like: Your reading intentions are also stored in your profile for future reference. How do I set a reading intention. To set a reading intention, click through to any list item, and look for the panel on the left hand side [9] Munro, John H "The Late-Medieval Origins of the Modern Financial Revolution: Overcoming Impediments from Church and State." International History Review. [10] North, Douglass C., and Barry R. Weingast "Constitutions and Commitment: The Evolution of Institutions Governing Public Choice in Seventeenth-Century England."Â Bank Branch Expansion and Poverty Reduction: A Comment Arvind Panagariya * August, 2006 * The author is a Professor of Economics & Bhagwati Professor of Indian Political Economy at Columbia University. More information. Book Title: Other People s Money: Debt Denomination and Financial Instability in. Publisher: The University of Chicago Press, Chicago and London.