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

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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 negotiability; 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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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’. 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 Armstrong, 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.

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 \textit{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...’.” 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.\footnote{James D. Tracy, \textit{A Financial Revolution in the Habsburg Netherlands: Renten and Renteniers in the County of Holland, 1515 - 1565} (Berkeley-London, 1985). See below, pp. 00.}

That all of these national debts were based on the sale of annuities or \textit{rentes} is the most striking feature to be observed, simply because they were \textit{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 \textit{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.

\textbf{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
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

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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For Aristotle had clearly stated that:  

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 \((\tau\omicron\sigma_\zeta)\), 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. 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).

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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‘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:

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.
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).

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). 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).

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*).\(^{21}\)

\(^{19}\) 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.


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.

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. 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.

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. The problem was that this claim to

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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).

See Langholm and Noonan in sources cited in Appendix A.

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

\(^{27}\) 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.

first judged fully acceptable by the Church only in 1642.\textsuperscript{30}

There were, of course, various illicit ways of circumventing the usury ban, i.e., for the \textit{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 \textit{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’.\textsuperscript{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.\textsuperscript{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


\textsuperscript{31} Based upon Gregory IX’s decretal \textit{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, \textit{Scholastic Analysis of Usury}, pp. 90-93. Furthermore, de Roover, \textit{San Bernardino}, pp. 29-30, notes that most fifteenth-century theologians remained suspicious of \textit{emptio-venditio} contracts with prices higher for future goods than for current goods, as contracts \textit{in fraudem usurarum}.

\textsuperscript{32} See for example, Carlos Wyffels, ‘L’usure en Flandre au XIII\textsuperscript{e} siècle’, \textit{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 (\textit{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’?\footnote{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 (\textit{quoad deum})’.\footnote{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 \textit{riba}).\footnote{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.\footnote{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


\footnote{34}{Cited in Julius Kirshner, ‘Storm over the \textit{Monte Comune}: Genesis of the Moral Controversy over the Public Debt of Florence’, \textit{Archivum Fratrum Praedicatorum}, 53 (1983), p. 256; and in Kirshner, ‘Reading Bernardino’s Sermon’, p. 589: Bernardino was repeating Pantaleoni. See below n. 00.}


has also noted that the records of fifteenth-century Venetian bank deposit accounts do not mention interest, even though it was certainly paid.\footnote{Richard Goldthwaite, ‘Local Banking in Renaissance Florence’, \textit{Journal of European Economic History}, 14:1 (Spring 1985), 13-16, 31-37, noting also that interest paid on time deposits was always \textit{a discrezione}; Mueller, \textit{Money and Banking}, p. 13. See also Raymond de Roover, \textit{The Rise and Decline of the Medici Bank, 1397-1494} (Cambridge, Mass., 1963), pp. 77-141.} 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’.\footnote{Goldthwaite, ‘Local Banking’, pp. 13, 32.}

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.\footnote{Lawrence Stone, \textit{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., \textit{The Fontana Economic History of Europe, Vol. II: The Sixteenth and Seventeenth Centuries} (London, 1974), p. 539.}

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.

\textbf{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.\footnote{See Philip Jones, \textit{The Italian City-State: From Commune to Signoria} (Oxford, 1997), pp. 382-401.} But such loans were generally short term and \textit{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
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.\footnote{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).}

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.\footnote{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.} 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.\footnote{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).} 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...
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

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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-
16 secolo* (Venice, 1961); Gino Luzzatto, *Il debito pubblico della Repubblica di Venezia, 1200 - 1500*
(Milan, 1963), with appendix by Frederic C. 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
and Lane and Mueller also agree, that Venice had a genuine permanently funded public debt before 1262-64.

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.

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
74; Anthony Molho, ‘The State and Public Finance: a Hypothesis Based on the History of Late Medieval
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). 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.

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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Jacques Heers, Gênes au XVe siècle: activité économique et problèmes sociaux, Université de Paris, Faculté des Lettres (Paris, 1961), p. 110; see also pp. 97-190. The fundamental 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.

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. 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.

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.


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

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Dominicans, were representing them as parasites who were sucking the lifeblood of the state’. 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’. 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). 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. 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.


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


\(^{59}\) 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.

the ancient Greek world has no real foundation.  

**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. 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.

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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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. 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.

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.


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).

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
Revolution, 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
evolution, des origines au XVIII siècle (Paris, 1947); in English translation (by Joan Vickers), as The French
Communes in the Middle Ages, Europe in the Middle Ages Selected Studies vol. 6 (Amsterdam-New York,
prêts proprement dits’. 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’. 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’. 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. 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’.

The continuous risks of debt repudiation for ‘usurious’ lenders was demonstrated during the financial crises that the Flemish towns experienced during the 1290s. 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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69 Desportes, Reims, p. 126.


d’usure’, commanding the investigation and punishment of civic ‘administrateurs par lesquels la commune aura estre dommage’ by such usuries.\textsuperscript{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’.\textsuperscript{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’ (\textit{per usurariam pravitatem de solvendis}) owed to the prominent Arras financiers Robert and Baldwin Crespin ‘beyond the principal sums owed to them’.\textsuperscript{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.\textsuperscript{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 \textit{rentes}, many more might have preferred to hold a balanced investment portfolio, containing both long-term or perpetual \textit{rentes} with low yields and riskier, and thus high-interest bearing short term loans, with specific redemption dates.\textsuperscript{78}

\textsuperscript{74} Bigwood, \textit{Régime juridique}, vol. II, doc. no. 17, pp. 299-300.

\textsuperscript{75} \textit{Ibid.}, vol. II, doc. no. 19, pp. 303-04 (26 Feb 1294): ‘plures pecuniarum quantitates extorquere nitantur per usurariam pravitatem’.

\textsuperscript{76} \textit{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.

\textsuperscript{77} Bigwood, \textit{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., \textit{The Cambridge Economic History of Europe}, Vol. III: \textit{Economic Organization in the Middle Ages} (Cambridge, 1963), p. 495.

\textsuperscript{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 renge 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. 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. 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. 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).

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]’. 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 re deditibus per petuis et ad vi tam (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.

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).

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.’

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 Leonardus 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.


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 hérétibles*. 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 crè directed, 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.  

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). 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

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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 hérétibles* 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 lícita 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).
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.

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. 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.

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*. 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.

for their lifetime. In 1235, the commune of Auxerre also issued *rentes viagères*, many of which were purchased by Rheims financiers. 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. Subsequently, many other northern French towns began issuing *rentes* from just after the mid-century: Roye, in 1260; Calais, in 1263; Saint-Riquier, in 1268; and Saint-Omer, in 1271.

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 hérétibles*), 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 hérétibles*, 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.

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.


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 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

98 Ordinance of 1 July 1288: ‘le 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 coercive powers to ensure that the town governments made their annual payments.


101 In the account for Sept 1297 to Dec 1298, the total payments made to holders of *rentes viagères* or *lijffrenten* (*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

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.


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. Such circumstances may explain the other remarkable feature of this

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financial experiment: that virtually all of these *renten* were sold outside Flanders, in the Brabantine drapery towns of Brussels and Leuven.\footnote{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.} 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.\footnote{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.} 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.\footnote{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.} The later-fourteenth century town accounts indicate that the normal rate of return on these *renten* was then 1/8 or 12.5 percent.\footnote{See Van Werveke, *De Gentsche stadsfinanciën*, pp. 166-71; and nn. 95, 107 below.}

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.\footnote{Sources: Aalst *Stadsrekeningen* (1395-1550) in Algemeen Rijksarchief Brussel, Rekenkamer, doc. nos. 31,412 – 31,553.} 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...
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 (*assisés, 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 *erfelijk 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*.

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.


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

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

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.\footnote{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.} 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.\footnote{Schnapper, *Les rentes au XIVe siècle*, pp. 284-85. See above, pp. 00 and nn. 00.} 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.\footnote{Wolfe, *Fiscal System of Renaissance France*, p. 163 (in the 1570s); Tracy, *A Financial Revolution*, pp.109-10.}

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.\footnote{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.} 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
1554, about £3.1 million tournois, were forced upon wealthy Parisians, in defiance of Parlement.\textsuperscript{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.\textsuperscript{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.\textsuperscript{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

\textsuperscript{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.


\textsuperscript{123} Cawès, ‘Crédit public en France’ (1896), pp. 409-75 (first quotation on p. 463); Wolfe, \textit{Fiscal System of Renaissance France}, pp. 110-15 (second quotation on p. 115); Schnapper, \textit{Les rentes au XVle siècle}, pp. 151-56; Tracy, \textit{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.
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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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.

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. 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.

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); 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 ‘liffrenten 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 pretiti); and Usher, Early History of Deposit Banking in Mediterranea, 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. 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. 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. 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. 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. 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. In neighbouring Castile, the issue of similar *censals* were


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 endeudamiento’, 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 was 1/14 (7.14 per cent).


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’.  

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. 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. 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


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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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.

international commerce in both commodities and securities was established in Amsterdam, the capital of the young Dutch Republic of the United Provinces.\textsuperscript{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).\textsuperscript{146}

\textbf{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 \textit{lettre de foire} of the Champagne Fairs, technically known as the \textit{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’.\textsuperscript{147}

While the earlier \textit{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 \textit{taker} or \textit{prenditore}), having received investment funds or funds for remittance from another principal (the \textit{deliverer} or \textit{datore}), ‘drew a

\textsuperscript{145} See n. 000 below.

\textsuperscript{146} See below, pp. 63-66 and nn. 167-71, for the discussion of this legislation.

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 bargaines 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

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\(^{149}\) On this see, see sources by de Roover in Appendixes A and B; and Noonan, *Scholastic Analysis of Usury*, pp. 175-92.

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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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,


\[^{154}\] 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).

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).\textsuperscript{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 cariage of gould and silver out of their Realmes’.\textsuperscript{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.

\textsuperscript{156} On this see Munro, \textit{Wool, Cloth, and Gold}, pp. 11-64, 181-86; John Munro, ‘Billon - Billoen - Billio: From Bullion to Base Coinage’, \textit{Belgisch tijdschrift voor filologie en geschiedenis/ Revue belge de philologie et d'histoire}, 52 (1974), 293-305, reprinted, with other studies, in Munro, \textit{Bullion Flows and Monetary Policies} (1994). In continental countries, the bullion export bans usually defined the meaning of bullion (\textit{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.

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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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 \textit{monte} credits’. Furthermore the market in \textit{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).\footnote{Kirshner, ‘Encumbering Private Claims’, pp. 58, 29, respectively; see also Molho, \textit{Florentine Public Finance}, pp. 141-52, for this financial crisis and foreign purchases of \textit{monte} credits.}

For fifteenth-century Genoa, Jacques Heers notes that shares in the public debt (\textit{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 \textit{luoghi} had not specified in writing that they be not so alienated (\textit{alienare aut vendere}). Such restrictions were common to protect their viability as security for dowries. Finally, although foreign merchants are recorded as purchasers of \textit{luoghi}, most seem to have been residents actively engaged in Genoese commerce. Tuscans, Venetians, and Catalans were, furthermore, conspicuous by their absence in the \textit{compere} registers.\footnote{Heers, \textit{Gênes au XVe siècle}, pp. 97-110, 147-55, 180-81.}

\textbf{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 \textit{trapezites} and \textit{argyropatès} (L. \textit{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).\footnote{Raymond Bogaert, ‘Banking in the Ancient World’, in Herman Van der Wee and G. Kurgan-Van Hentenrijk, eds., \textit{A History of European Banking}, 2nd edn. (Antwerp, 2000), pp. 13-70, esp. pp. 27-31.} Such arguments to explain the role of money changers in the
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, counterfeited, 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

\(^{164}\) 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.

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.\footnote{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., \textit{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., \textit{Foedera, conventiones, literae, et acta publica}, 12 vols. (London, 1709-12), vol. I.i, p. 207. See also the 1275 \textit{Statute of Westminster}, in n. 154 above.}

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.\footnote{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’, \textit{Anciens pays et assemblées d’états (Standen en Landen)}, 40 (1966), 63-88; Peter Spufford, \textit{Monetary Problems and Policies in the Burgundian Netherlands, 1433 - 1496} (Leiden, 1970); Munro, \textit{Wool, Cloth and Gold}, pp. 93 - 126.} 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.\footnote{De Roover, \textit{Money, Banking and Credit in Mediaeval Bruges}, pp. 236-46, 331-57, esp. pp. 339-42. See also Herman Van der Wee, \textit{Growth of the Antwerp Market and the European Economy, fourteenth -sixteenth centuries}, 3 vols. (The Hague, 1963), vol. II: \textit{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 conveye 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). 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’. 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’. 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. But, according to A.D. Richards, their role was the least

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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.

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].’

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.

**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.

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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.


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). 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. 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.

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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.


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’.\(^\text{180}\) 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.\(^\text{181}\) 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.\(^\text{182}\)


\(^{182}\) 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. 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’.

This landmark case, if not yet fully establishing the full legal conditions and sanctions for modern negotiability, nevertheless provided the vital legal precedent. Certainly no English law-merchant court, Staple courts were empowered to seize the goods and chattels of defaulting debtors.

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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.  

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’. 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’. Thus, finally, the legal principles of

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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’.

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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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.

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. 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. 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 Negotiability 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. 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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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.

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.


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.

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 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.

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
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. 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. 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? 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

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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.\textsuperscript{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 \textit{Beurs} was being utilized as a secondary financial market for commerce in not only Dutch \textit{losrenten} (and debentures called \textit{obligatiën}) but also in other European \textit{rentes} and public debt certificates.\textsuperscript{203} The second was the marked shift in Dutch public finances to \textit{losrenten}, after the Grand Pensionary, Johan de Witt, in using an early form of probability theory, demonstrated in 1671 that the sale of \textit{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.\textsuperscript{204} That certainly had an influence on England’s subsequent decision to shift entirely from life or long term annuities to perpetual annuities, while


\textsuperscript{204} Johan de Witt, \textit{Waerdije van lijfrenten naer proportie van losrenten} (The Hague, 1671). He advocated that \textit{lijfrenten} be sold instead at 7.143 percent (1/14), with higher rates for older buyers and lower rates for children. See Riley, \textit{Amsterdam Capital Market}, pp. 74-75, 110; and n. 000 above; Tracy, \textit{Financial Revolution}, pp.206-08.
France’s public debt in the eighteenth century continued to be heavily based on rentes viagères. 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).

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. 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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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

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’, and even in Holland, the Calvinist synod (1581) had decreed that no banker should ever be admitted to communion service. 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.

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

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211 Parker, ‘Emergence of Modern Finance’, p. 538. See n. 00 above.

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


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


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,

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

<table>
<thead>
<tr>
<th>Years</th>
<th>Loans in £ payement</th>
<th>Erfelijk Sales in £ payement</th>
<th>Lijfrenten Sales in £ payement</th>
<th>Total Debt Receipts in £ payement</th>
<th>Total Revenues in £ payement</th>
<th>Debts as % of Total Revenues</th>
<th>Debt Repayments in £ payement</th>
</tr>
</thead>
<tbody>
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<td>1316-20</td>
<td>6,478.50</td>
<td>6,478.50</td>
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<td>77,168.73</td>
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<td>8.40%</td>
<td>54,967.50</td>
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<td>1321-25</td>
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<td>52,929.98</td>
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<td></td>
<td>19,829.81</td>
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<tr>
<td>1326-30</td>
<td>4,916.94</td>
<td>2,701.11</td>
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<td>7,618.05</td>
<td>66,492.81</td>
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<td>82,603.77</td>
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<tr>
<td>1336-40</td>
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<td>44,354.97</td>
<td>101,197.46</td>
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<tr>
<td>1341-45</td>
<td>12,827.54</td>
<td>1,129.04</td>
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<td>13,956.58</td>
<td>98,280.97</td>
<td>14.20%</td>
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<tr>
<td>1346-50</td>
<td>18,318.33</td>
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<td>23,660.11</td>
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<td>160,391.84</td>
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<td>3,035.70</td>
<td>62,049.60</td>
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<tr>
<td>1356-60</td>
<td>283.33</td>
<td>2,690.09</td>
<td>1,338.35</td>
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<td>3,872.74</td>
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<td>Years</td>
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<td>Renten: Lijfrenten Sales in £ payment</td>
<td>Total Debt Receipts in £ payment</td>
<td>Total Revenues in £ payment</td>
<td>Debts as % of Total Revenues</td>
<td>Debt Repayments in £ payment</td>
</tr>
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<td>295.00</td>
<td>2,773.75</td>
<td>3,068.75</td>
<td>103,790.15</td>
<td>2.96%</td>
<td>5,470.81</td>
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<tr>
<td>1381-85</td>
<td>4,391.75</td>
<td>540.00</td>
<td>4,931.75</td>
<td>89,977.67</td>
<td>5.48%</td>
<td>5,300.00</td>
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<td>1386-90</td>
<td>2,346.00</td>
<td>4,834.00</td>
<td>7,180.00</td>
<td>84,787.67</td>
<td>8.47%</td>
<td>3,865.50</td>
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</table>
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

<table>
<thead>
<tr>
<th>Years</th>
<th>Erfelijk Renten</th>
<th>Lijfrenten</th>
<th>Total debt Payments</th>
<th>Total Expenditures</th>
<th>Deficit or Surplus</th>
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<td>1316-20</td>
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<td>1321-25</td>
<td>19,829.81</td>
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<td>1,238.01</td>
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<td>Lijfrenten in £ payment</td>
<td>Total debt Payments £</td>
<td>Total Expenditures £</td>
<td>Deficit or Surplus £</td>
<td>Debt Payments as % Total Expenditures</td>
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<td>270.74</td>
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<td>1376-80</td>
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<td>2,530.11</td>
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<td>-30,939.00</td>
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<tr>
<td>1386-90</td>
<td>3,865.50</td>
<td>88,068.33</td>
<td>-3,280.67</td>
<td>4.39%</td>
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</tr>
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</table>

* 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., (Gent: Ad


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

<table>
<thead>
<tr>
<th>Years</th>
<th>Page</th>
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<th>Total Revenues £ payement</th>
<th>Renten as % of Total</th>
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<td>1355-56</td>
<td>188</td>
<td>[2,762.279]</td>
<td>n.a.</td>
<td></td>
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<tr>
<td>1356</td>
<td>232</td>
<td>4,015.054</td>
<td>37,066.321</td>
<td>10.83%</td>
</tr>
<tr>
<td>1357-58</td>
<td>317</td>
<td>2,343.167</td>
<td>89,168.779</td>
<td>2.63%</td>
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<tr>
<td>1358-59</td>
<td>377</td>
<td>2,380.000</td>
<td>39,023.133</td>
<td>6.10%</td>
</tr>
<tr>
<td>1360-61</td>
<td>453</td>
<td>6,247.942</td>
<td>138,719.171</td>
<td>4.50%</td>
</tr>
<tr>
<td>1361-62</td>
<td>497</td>
<td>3,340.833</td>
<td>103,346.908</td>
<td>3.23%</td>
</tr>
<tr>
<td>1362-63</td>
<td>550</td>
<td>2,380.083</td>
<td>67,790.200</td>
<td>3.51%</td>
</tr>
<tr>
<td>1364-65</td>
<td>659</td>
<td>2,068.167</td>
<td>63,904.258</td>
<td>3.24%</td>
</tr>
<tr>
<td>1365-66</td>
<td>7</td>
<td>3,077.129</td>
<td>95,417.163</td>
<td>3.22%</td>
</tr>
<tr>
<td>1366-67</td>
<td>34</td>
<td>2,568.113</td>
<td>99,814.221</td>
<td>2.57%</td>
</tr>
<tr>
<td>1367-68</td>
<td>58</td>
<td>2,547.667</td>
<td>94,592.063</td>
<td>2.69%</td>
</tr>
<tr>
<td>1368-69</td>
<td>85</td>
<td>2,606.054</td>
<td>109,102.738</td>
<td>2.39%</td>
</tr>
<tr>
<td>1369-70</td>
<td>102</td>
<td>2,766.000</td>
<td>91,148.758</td>
<td>3.03%</td>
</tr>
<tr>
<td>1372-73</td>
<td>127</td>
<td>2,925.125</td>
<td>83,793.738</td>
<td>3.49%</td>
</tr>
</tbody>
</table>
Sources:


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

<table>
<thead>
<tr>
<th>Years</th>
<th>Erfelijk Renten Revenues as % of Total Revenues (Erfelijk Renten)</th>
<th>Lijfrenten Sales (Lijfrenten)</th>
<th>Total Revenues (Erfelijk Renten + Lijfrenten)</th>
<th>Renten: Erfelijk Renten Annuity Payments</th>
<th>Renten: Lijfrenten Annuity Payments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1391-1400</td>
<td>16.85%</td>
<td>1,086.82</td>
<td>6,451.54</td>
<td>21.450</td>
<td>3,437.60</td>
</tr>
<tr>
<td>1401-10</td>
<td>22.96%</td>
<td>1,978.15</td>
<td>8,616.94</td>
<td>10.665</td>
<td>5,091.51</td>
</tr>
<tr>
<td>1411-20</td>
<td>16.48%</td>
<td>1,574.00</td>
<td>9,553.61</td>
<td>24.867</td>
<td>5,191.00</td>
</tr>
<tr>
<td>1421-30</td>
<td>14.68%</td>
<td>1,410.60</td>
<td>9,608.01</td>
<td>29.659</td>
<td>5,256.32</td>
</tr>
<tr>
<td>1431-40</td>
<td>24.43%</td>
<td>2,283.48</td>
<td>9,347.05</td>
<td>27.401</td>
<td>5,870.38</td>
</tr>
<tr>
<td>1441-50</td>
<td>2.54%</td>
<td>231.08</td>
<td>9,081.30</td>
<td>24.342</td>
<td>5,180.49</td>
</tr>
<tr>
<td>1451-60</td>
<td>5.33%</td>
<td>437.93</td>
<td>8,211.64</td>
<td>24.342</td>
<td>4,100.70</td>
</tr>
<tr>
<td>1461-70</td>
<td>4.62%</td>
<td>466.30</td>
<td>10,074.68</td>
<td>24.342</td>
<td>3,169.99</td>
</tr>
<tr>
<td>1471-80</td>
<td>15.76%</td>
<td>2,104.12</td>
<td>12,638.23</td>
<td>24.342</td>
<td>2,513.03</td>
</tr>
<tr>
<td>1481-90</td>
<td>20.39%</td>
<td>2,622.21</td>
<td>12,685.61</td>
<td>24.342</td>
<td>2,510.34</td>
</tr>
<tr>
<td>1491-1500</td>
<td>2.85%</td>
<td>353.68</td>
<td>12,076.95</td>
<td>24.342</td>
<td>4,071.70</td>
</tr>
<tr>
<td>Years</td>
<td>Erfelijk Renten</td>
<td>Lijfrenten Renten</td>
<td>Total Renten</td>
<td>Renten Revenues as % of Total Revenues</td>
<td>Renten: Erfelijk Annuity Payments</td>
</tr>
<tr>
<td>-------</td>
<td>----------------</td>
<td>-------------------</td>
<td>--------------</td>
<td>---------------------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>1501-10</td>
<td>41.679</td>
<td>128.00</td>
<td>169.68</td>
<td>11,371.61</td>
<td>1.44%</td>
</tr>
<tr>
<td>1511-20</td>
<td>41.679</td>
<td>0.00</td>
<td>41.68</td>
<td>10,965.36</td>
<td>0.38%</td>
</tr>
<tr>
<td>1521-30</td>
<td>41.579</td>
<td>1,786.50</td>
<td>1,828.08</td>
<td>12,662.47</td>
<td>14.16%</td>
</tr>
<tr>
<td>1531-40</td>
<td>41.429</td>
<td>709.40</td>
<td>750.83</td>
<td>12,769.85</td>
<td>5.70%</td>
</tr>
<tr>
<td>1541-50</td>
<td>41.429</td>
<td>2,030.10</td>
<td>2,071.53</td>
<td>16,246.733</td>
<td>12.16%</td>
</tr>
</tbody>
</table>

**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

<table>
<thead>
<tr>
<th>Years</th>
<th>Additional Renten Payments £ parisis</th>
<th>Total Lijfrenten Payments in £ parisis</th>
<th>Total Annuity Payments £ parisis</th>
<th>Total Expenditures £ parisis</th>
<th>Renten Payments as % of Total</th>
<th>Surplus or Deficit £ parisis</th>
<th>Total(^{a}) Assise Farm Revenues £ parisis</th>
<th>Renten Payments as % of Total Assises</th>
</tr>
</thead>
<tbody>
<tr>
<td>1391-1400</td>
<td>3,437.60</td>
<td>3,459.05</td>
<td>6,435.40</td>
<td>53.75%</td>
<td>16.15</td>
<td>4,754.13</td>
<td>72.76%</td>
<td></td>
</tr>
<tr>
<td>1401-10</td>
<td>5,091.51</td>
<td>5,102.18</td>
<td>8,990.78</td>
<td>56.75%</td>
<td>-423.16</td>
<td>5,809.83</td>
<td>87.82%</td>
<td></td>
</tr>
<tr>
<td>1411-20</td>
<td>5,191.00</td>
<td>5,215.87</td>
<td>9,659.13</td>
<td>54.00%</td>
<td>-105.52</td>
<td>6,712.66</td>
<td>77.70%</td>
<td></td>
</tr>
<tr>
<td>1421-30</td>
<td>5,256.32</td>
<td>5,285.98</td>
<td>9,720.38</td>
<td>54.38%</td>
<td>-112.37</td>
<td>6,441.26</td>
<td>82.06%</td>
<td></td>
</tr>
<tr>
<td>1431-40</td>
<td>5,870.38</td>
<td>5,897.78</td>
<td>9,348.65</td>
<td>63.09%</td>
<td>-16.11</td>
<td>6,407.36</td>
<td>92.05%</td>
<td></td>
</tr>
<tr>
<td>1441-50</td>
<td>5,180.49</td>
<td>5,204.83</td>
<td>9,131.97</td>
<td>57.00%</td>
<td>-50.66</td>
<td>7,724.07</td>
<td>67.38%</td>
<td></td>
</tr>
<tr>
<td>1451-60</td>
<td>4,100.70</td>
<td>4,125.04</td>
<td>8,265.56</td>
<td>49.91%</td>
<td>-53.92</td>
<td>6,375.01</td>
<td>64.71%</td>
<td></td>
</tr>
<tr>
<td>1461-70</td>
<td>3,169.99</td>
<td>3,194.33</td>
<td>10,224.63</td>
<td>31.47%</td>
<td>-149.96</td>
<td>8,206.72</td>
<td>39.18%</td>
<td></td>
</tr>
<tr>
<td>1471-80</td>
<td>1,384.71</td>
<td>3,897.74</td>
<td>3,922.08</td>
<td>13,362.93</td>
<td>29.03%</td>
<td>8,999.73</td>
<td>43.58%</td>
<td></td>
</tr>
<tr>
<td>1481-90</td>
<td>1,370.29</td>
<td>3,880.63</td>
<td>3,904.97</td>
<td>14,897.56</td>
<td>27.30%</td>
<td>8,270.63</td>
<td>47.40%</td>
<td></td>
</tr>
<tr>
<td>1491-1500</td>
<td>4,071.70</td>
<td>4,096.04</td>
<td>13,219.85</td>
<td>31.12%</td>
<td>-1,142.91</td>
<td>10,138.45</td>
<td>40.40%</td>
<td></td>
</tr>
<tr>
<td>Years</td>
<td>Additional Renten Payments £ parisis</td>
<td>Total Lijfrenten Payments in £ parisis</td>
<td>Total Annuity Payments £ parisis</td>
<td>Total Expenditures £ parisis</td>
<td>Renten Payments as % of Total</td>
<td>Surplus or Deficit £ parisis</td>
<td>Total Assise Farm Revenues £ parisis</td>
<td>Renten Payments as % of Total Assises</td>
</tr>
<tr>
<td>---------</td>
<td>-------------------------------------</td>
<td>----------------------------------------</td>
<td>---------------------------------</td>
<td>----------------------------</td>
<td>------------------------------</td>
<td>-------------------------------</td>
<td>-------------------------------------</td>
<td>-------------------------------------</td>
</tr>
<tr>
<td>1501-10</td>
<td>3,727.63</td>
<td>3,751.98</td>
<td>11,871.39</td>
<td>31.69%</td>
<td>-499.78</td>
<td>9,397.40</td>
<td>39.95%</td>
<td></td>
</tr>
<tr>
<td>1511-20</td>
<td>2,906.98</td>
<td>3,125.60</td>
<td>11,460.39</td>
<td>27.31%</td>
<td>-495.04</td>
<td>9,296.25</td>
<td>33.67%</td>
<td></td>
</tr>
<tr>
<td>1521-30</td>
<td>197.98</td>
<td>3,293.75</td>
<td>14,243.26</td>
<td>25.45%</td>
<td>-1,580.79</td>
<td>9,577.50</td>
<td>38.09%</td>
<td></td>
</tr>
<tr>
<td>1531-40</td>
<td>7.60</td>
<td>3,813.78</td>
<td>14,247.08</td>
<td>29.07%</td>
<td>-1,477.23</td>
<td>10,007.00</td>
<td>41.36%</td>
<td></td>
</tr>
<tr>
<td>1541-50</td>
<td>78.90</td>
<td>3,804.49</td>
<td>19,600.67</td>
<td>21.75%</td>
<td>-3,353.93</td>
<td>12,434.64</td>
<td>34.14%</td>
<td></td>
</tr>
</tbody>
</table>

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 Brundage’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.