A CRISIS OF CREDIT IN THE FIFTEENTH CENTURY, OR OF HISTORICAL INTERPRETATION?

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Introduction

In his Howard Linecar Lecture for 2009, published in this journal, and in his recent book, *Money in the Medieval English Economy: 973–1489,* Professor J.L. Bolton has raised questions about the money supply of fifteenth-century England which have led him to dispute that the century experienced either a shortage of money or a crisis of credit. He believes that although lack of silver coin might have caused temporary difficulties, English society found its way round the problem by creating viable forms of 'paper money', and consequently it 'was not in the main a society held back by an inadequate money supply'.[1] This is a surprising conclusion considering that even at its highest in the early fourteenth century, the medieval English currency was scarcely adequate for the size of the economy, while in the course of the next century it plunged critically. At its nadir in the 1440s the mint's combined output of gold and silver coin was only about five per cent of that struck in the 1420s, and according to Martin Allen's estimates, the silver coin, which was the currency in everyday use, fell from *c.*56 pence per head in 1351, to *c.*13 pence in 1422, and by 1470 had risen only to *c.*33.6 pence.[2] If the money supply was adequate for the needs of the economy one has to ask why the government should pass twenty-seven measures between 1390 and 1465 to conserve and increase the supply of bullion, and why falling prices, wages and rents were so widespread from the 1440s to the 1460s that John Hatcher has described the period as 'the great slump'.[3]

Bolton allows that 'shortages of coin due to bullion famines should be factored into any models of the fifteenth-century economy, to a much greater extent than they have been so far', and he also concedes that 'at times credit may have been squeezed by the bullion famines'.[4] Nonetheless, he asserts that any crisis of credit 'has been much exaggerated', on the grounds, for which he claims M.M. Postan's authority, that transferable credit instruments became a form of paper money which 'did more than make up for shortage of coin. They also offered ways of payment without coin having to change hands'.[5] I have raised two principal objections to this claim. Firstly, credit instruments were not a simple alternative to cash because even when they became legally assignable there were hazards in giving and accepting them. Moreover, because the proportion of credit was apparently high in relation to the uncertain supply of coin, even in normal circumstances, they carried a significant risk of default.[6] Secondly, any circumstances which further threatened to reduce the supply of coin would increase creditors' fears of default and would lead them to reduce their loans or credit. Therefore, rather than compensating for a lack of coin, assignable instruments, like all other forms of credit, would diminish with it. I have concluded in the light of publications by Munro, Day, and Spufford, and from extensive evidence of debt, that the decisions of creditors in

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[1] Bolton 2011a, 162; Bolton 2012, 73–4.

[2] Allen 2001, 607. At its highest total, *c.*1310, it is doubtful if the currency exceeded 100 pence a head, and much of this would not be in general circulation.

[3] Munro 1979, 192–208 and Appendices B, C and D; Hatcher 1996, 237–72.

[4] Bolton 2011a, 151–2.

[5] Bolton 2011a, 157, 162.

[6] Nightingale 1990, passim; Nightingale 2004, 64–6. Although Bolton claims (2011a, 156) that in 1995 I made 'an important admission … that the assignable bond could at least mitigate the shortage of credit caused by lack of coin', I was referring to what was *needed*, and I went on to say that what was in fact *available* was 'a poor substitute for specie': Nightingale 1995, 476.

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medieval England were influenced by their perception of the amount of silver coin in circulation.[7] This was because, as silver was the coin in everyday use, its circulation determined liquidity in the economy, and it therefore both influenced the giving of credit, and its ease of repayment.

Private financial instruments as a supplement to the money supply?

Postan's work, in fact, makes the first challenge to Bolton's views, because his articles on credit do not claim what Bolton says they do. In his 'Private financial instruments in medieval England', published in 1930, Postan surveyed the credit instruments in use in the fifteenth century. The obligation, or formal bond, had by then largely taken the place of the notched tally as the most commonly used instrument of credit, and there were other bonds in use which fell into the category of informal promissory notes.[8] From the thirteenth century Italians had also used bills of exchange to transfer funds between their branches in different countries, and as English merchants won the greater share of their country's wool exports in the second half of the fourteenth century, they, too, used them to transmit the proceeds of their sales from Europe.[9] The Calais staple also issued transferable debentures in the fifteenth century.[10]

There is evidence, as Postan showed, that creditors in fifteenth-century London were assigning these instruments to third parties in order to settle other, unrelated debts.[11] Although the common law courts did not recognize the legality of assignment, mercantile law did, and as both the staple courts in large towns, and the London mayor's court, used mercantile law, assignments gained in Postan's view sufficient legal recognition in the fifteenth century to make them 'legally secure', despite the 'formalities and limitations which must have impeded the free circulation of the instruments'.[12] Numerous cases in Chancery show these impediments were very real and included appeals made by debtors against assignments. It was also common for creditors to ask the debtor to give formal consent to a transfer.[13] In addition, the assignee could demand, and obtain, guarantees about repayment from the assignor himself, 'in case' said one assignee, revealingly, 'any of the debtors refused to acknowledge that they were debtors, or that they owed the sums claimed, or in case any of the debts were found not to be true'.[14]

These limitations, though, did not necessarily apply to the informal promissory notes, or bills obligatory, which were devised solely for mercantile convenience, and thus were extra-legal instruments. These normally changed hands without any of the formalities which applied to bonds, and so there was no legal impediment to their assignment.[15] Postan commented on them, 'A financial instrument which could pass hands so many times, and apparently without any formalities or additional documents, almost deserves the name of "currency"'.[16] This sentence has apparently suggested to Bolton that Postan believed these bills did indeed acquire such a status.[17] However, Postan rejected this notion on the grounds that although assignment was not subject to legal restrictions, their negotiability, like that of all other credit instruments, was 'determined by the commercial and financial circumstances of each particular case' and was 'very largely a matter between the assignor and the assignee'.[18] Their circulation depended on whether the 'drawer were generally known as a trustworthy and reliable debtor likely to honour

7 Munro 1973, 93–126; Day 1987, 16–18, 43–4, 141–61; Spufford 1988, 339–62; Nightingale 1997, 640–7; Nightingale 2004, 59–62; Munro 2003, 216–17.
8 Postan 1973, 29–40.
9 Postan 1973, 54–7.
10 Postan 1973, 50.
11 Postan 1973, 41.
12 Postan 1973, 42, 49.
13 Postan 1973, 44–6.
14 Thomas 1943, 166; Nightingale 1995, 476.
15 Postan, 1973, 49.
16 Postan, 1973, 49.
17 Bolton 2011a, 157, 162.
18 Postan 1973, 49.

his obligations.'[19] These practical restrictions meant that transferable bills and bonds were in his view, 'far removed from the modern view of negotiable instruments', that the bond 'never was a negotiable paper', while the bill of exchange, although freely transferable, 'did not become fully negotiable till late in the modern era.'[20] Postan concluded that all these limitations in the fifteenth century 'made the emergence of fully negotiable paper impossible'.[21]

This means that none of the financial instruments available in the late middle ages can be compared with the modern negotiable bill which is backed by governments, or by accepting firms of huge capital and international repute, which effectively act as guarantor for the debtor. The only possible exception was the debenture of the Calais staple, because it was secured by the wool customs which the staplers themselves collected. However, its circulation was limited by the fact that it was only legal tender for payments to the staple. [22] This means that the use of unsecured bonds and bills was not at all comparable with that of contemporary gold and silver English coins of fixed weight and fineness. While Bolton glosses over this distinction, and stresses the primary importance of legal protection for assignability, Postan put most emphasis on confidence in the debtor's ability to repay what he owed.[23] Bolton cannot, therefore, claim Postan's authority for his own assertion that 'viable forms of paper money' were more than making up for a shortage of coin.[24]

In fact there is no means of knowing how extensive the market for bills was in fifteenth-century England. Critics of Bolton's views do not deny that bills were assignable, but, like Postan, they cannot accept that they were fully negotiable. At best, therefore, they could contribute to velocity, but not to the money supply itself, because, as merely personal credit, they carried no guarantee of repayment.[25] Moreover, the evidence indicates they were used chiefly in overseas trade to transfer funds, and they did not circulate outside London.[26] The early fifteenth-century cases about assignment of debt which are recorded in London's Plea and Memoranda Rolls invariably involved Italian merchants.[27] The debentures of the Calais staple were also popular with exporting merchants because they assisted the transfer of funds from the sales of wool exporters in Calais to the importers who needed to pay for their purchases of linen in the Low Countries.[28] Similarly, the London clients who feature in the Borromei's ledgers were almost all engaged in trade which required them to transfer funds to and from the wool and cloth markets of the Low Countries. Bolton, though, found no evidence in the ledgers that their bills of exchange were transferred within England, and he acknowledges that assignment features little in the numerous cases involving bonds heard in the Court of Common Pleas.[29]

There is also no evidence that Londoners used credit instruments to make payments to provincial customers.[30] Although exporting merchants like the Celys, and the factors of the Medici's London branch, normally used bills of exchange in their overseas business, they always bought their wool in England with coin.[31] The amount and quality of wool they could buy in local markets depended on the size of the down payment in coin they could offer the growers, who then awaited subsequent instalments of cash. The Medici paid £215 in coin, half the total price, as the down payment for one purchase of Cotswold wool in 1473.[32] Coin therefore continued to be vital for merchants' transactions, even for modest provincial wool-dealers

[19] Postan 1973, 51.
[20] Postan 1973, 42, 49, 62.
[21] Postan 1973, 42.
[22] Postan 1973, 50–1.
[23] Bolton 2011a, 156; Bolton 2012, 73–4; Postan 1973, 42–54.
[24] Bolton 2011a, 157, 162.
[25] Munro 1979, 214–15.
[26] Postan 1973, 58–64; Bolton 2011a, 157–8.
[27] Thomas 1943, 236–7, 244, 250, 260, 261.
[28] Postan 1973, 50.
[29] Bolton 2011a, 158–9. The only exception was three bills sent by its Southampton agents to London: Bolton 2011b, 65; Bolton 2012, 300 n.67.
[30] Spufford 2008, 33, 42–3.
[31] Holmes 1996, 279–80.
[32] Holmes 1996, 280.

like John Heritage.[33] Payments by bank transfers were confined to account-holders in London's four or five Italian banks. Even in financially sophisticated Venice little more than ten per cent of the adult male population *c.*1500 had current bank accounts, and in Spufford's view international trade still relied predominantly on merchants transporting bags of coin.[34]

Edward I prohibited bills of exchange in 1283 on the grounds that they were depriving the mints of bullion, and for the same reason, from the late fourteenth century English mercantile opinion, which supported its government's insistence on sound money, became progressively more hostile towards alien merchants using bills in England.[35] In 1376 a committee of mint officials, which included prominent merchants, recommended that no payments for merchandise should be allowed outside Flanders by letters or bills of exchange.[36] Parliamentary opposition to them sharpened as the supply of bullion diminished in the fifteenth century, and it forced the Staplers in 1429 to demand payment in bullion for at least part of the wool they sold in Calais, while restrictions were imposed generally on credit given to aliens in England.[37] The same year the influential London Grocers' Company protested against Italians' assigning grocers' bills, on the grounds that they thereby incurred 'great shame and slander'.[38] The grocers' objection, presumably, was that assignment suggested their credit was unreliable, thus injuring their financial reputation and that of their livery company. In 1436 the polemical *Libelle of Englyshe Polycye* attacked bills of exchange as the means by which Italians profited at the expense both of the English money supply, and the English producers of the goods they bought.[39]

There was more than xenophobia behind these repeated attacks on bills of exchange. Supplies of bullion in England and Europe diminished particularly *c.*1395–1415, and again *c.*1440–60, at a faster rate than the decline in the demand for money, or the fall of the English population. In 1445 a petition to parliament complained about the shortage of coin for domestic trade.[40] The crucial question is whether in these circumstances medieval people accepted bills and bonds as a substitute for coin when they were, in fact, only unsecured instruments of credit which bore the risk that the debtor might abscond, as a prominent Spanish merchant did in 1458, leaving huge debts behind him in London.[41] Even bills of exchange were exposed to the danger that Italian banks would have inadequate funds to honour them, as had happened in the fourteenth century.[42] That danger intensified in the fifteenth century, as the supply of bullion fell, mints closed throughout Europe, and numerous European private banks collapsed, including some in Venice.[43]

Furthermore, growing political instability in fifteenth-century England can only have increased creditors' nervousness about accepting paper promises of future payment.[44] Bills of exchange were particularly affected by any warfare that disrupted the export and import trades, such as the war with the Duke of Burgundy, and the trade embargo he imposed in 1435–39. The renewal of England's war with France, in 1449, and subsequent conflicts with the Hansards, took a similar toll on trade and mercantile confidence. Political conflicts at home also raised fears of lawlessness, and questioned the ability of governments to enforce debts. From the 1440s the weak and incompetent government of Henry VI permitted increased corruption and faction which contributed to Cade's rebellion in 1450, and anti-alien riots in London. Continued misrule ended in civil war, and Henry's deposition in 1461. Similarly,

33 Dyer 2012, 93–7, 106, 157.
34 Day 1987, 142; Spufford 2008, 32–3, 41–7.
35 Munro 1979, 198–9, 213–14.
36 Munro 1979, 201–3.
37 Childs 1991, 70.
38 Kingdon 1886, II, 191; Thomas 1943, 236.
39 Warner 1926, lines 396–455.
40 Day 1987, 58–60; Nightingale 1995, 258; Nightingale 1997, 637, 639–40; Nightingale 2010, 12–13; Bolton 2011a, 150; Allen 2007, 192–4; Allen 2012, 178–9.
41 Bolton 2012, 214; Childs 1991, 73–4.
42 Nightingale 2013, 491–2.
43 Spufford 2008, 37–9.
44 Nightingale 1997, 633–4.

other crises like the famine of 1438–39, or epidemics, which threatened the survival of debtors and creditors alike, also reduced confidence that debts would be repaid.

Gilbert Maghfeld and a decline in the availability of credit

I have illustrated what effect both shortages of coin, and political instability had in undermining the confidence that was essential to credit, by analysing the accounts of Gilbert Maghfeld which cover the years 1390–95. Maghfeld exported and imported various goods, and distributed them to the provinces. He also had an extensive retail trade in the City which explains why much of the credit he gave was informal, and often included relatively small sums.[45] Occasionally he accepted pledges of silver as security for credit, but he also used the normal range of credit instruments available at the time, including five recognisances of debt which he registered in the Westminster staple. His book records only one example of the assignment of debt, and that was more in the nature of a repayment, when Maghfeld accepted in June 1393 a tally from two skinners in part payment of their debt to him of £100.[46]

So extensive was the use of credit in trade that most merchants bequeathed at their deaths a large number of unpaid debts due to them which they classified as 'desperate', indicating they had little hope of recovering them. Whereas some might be content to let the debts continue unpaid for some time, this could only be true if they had adequate amounts of capital, and had either some hope of repayment, or, more likely, realised that they had nothing to gain from proceeding against the debtor.[47] The great majority of merchants held only modest amounts of cash, which were often insufficient to cover their own debts to others, and so they had to rely on a steady flow of repayments in coin from their retail trade to give the new credit that customers needed. Even in prosperous times their survival in business was usually a difficult balancing act.[48]

The mint's falling output of silver coin, combined with political events which interfered with London's wool exports, and Richard II's huge financial levies on the City's merchants, reduced the ability of Maghfeld's customers to repay the credit he had advanced them. Despite the various ways open to him for recording, and for enforcing debts, he responded by reducing the credit he gave over five years by 97 per cent, and in 1394 he more or less abandoned trade. Even in normal trading conditions his accounts show that his retail trade in the city had a 12 per cent risk of default, whereas the credit he registered under statute staple, which usually involved much higher sums, had a 20 per cent risk of default.[49] When he abandoned trade he chose to employ his remaining capital in large loans to prominent people, both because of the good security they offered, and the high interest rates they could pay. Since it is unlikely that Maghfeld was alone in pursuing this policy, the effect of lending to a few people of high worth, instead of to a large number of London and provincial merchants, depressed commercial activity.[50] As London was the centre of the kingdom's trade and credit, the result was a spreading commercial recession throughout England which affected output and employment in the cloth industry, caused prices and wages to fall, made rents harder to collect, and depressed the land market, leading to the first of the fifteenth-century depressions.[51] That effect is visible in the statute merchant and staple certificates for the whole kingdom. They fell from 147, worth £8,218, for debts recorded in 1391, to 83, worth £4,690, for debts recorded in 1395. Five prominent exporters in the London Grocers Company became bankrupt in 1397, the year that Maghfeld died, when he, too, was facing bankruptcy.[52] The next decade witnessed an even greater decline in the certificates of debt.[53]

45 Nightingale 2004, 60.
46 TNA: PRO, E 101/509/19, f. 39v.
47 Bolton 2011a, 160.
48 Childs 1991, 69; Postan 1973, 21–3.
49 Nightingale 2004, 63–4.
50 Nightingale 2004, 56–68.
51 Nightingale 2004, 67–8; Day 1978, *passim*.
52 Nightingale 1995, 341–2; 2004, 68.
53 Nightingale 2010, 12–13, 14 (fig. 2).

Statute staple and merchant certificates as evidence of the availability of credit

The debate about the relationship of credit to the money supply can only be determined by evidence, and Bolton admits that his argument about paper money is speculative and the evidence for it 'both sparse and obscure'.[54] My conclusions, by contrast, are drawn from an analysis of 36,595 debts recorded on the statute staple and merchant certificates in the National Archives.[55] It is this evidence which Bolton now claims is 'not as solid as it might seem'.[56] However, his judgment is based on major errors of fact, derived chiefly from Postan's minimal investigation of this source, and from his unsubstantiated speculations about it. Bolton confidently repeats these speculative views uncritically, without apparently studying the evidence itself.

The certificates were created by a system established in 1283 by Edward I's statute of Acton Burnell, which was amended by the Statute of Merchants of 1285. These statutes established registries in London and other leading towns to record recognizances of debt which had the legal advantage of giving the creditor an automatic judgment against his defaulting debtor. Although Acton Burnell stated that the parties should be merchants, in practice the certificates show that anyone could use the system apart from in the years 1311–*c.*1330, following the Ordainers' decree that only merchants could do so. The statute staple legislation of 1353 created new registries, but, contrary to what Bolton states, it did not extend the registration of debts 'beyond London to the courts at Newcastle upon Tyne, York, Lincoln, Norwich, Westminster, Canterbury, Chichester, Winchester, Exeter and Bristol', for the reason that there had been statute merchant registries in almost all these towns for many years, and these continued to exist alongside the new staple registries.[57] The major exception was Westminster which, for political reasons, was given a staple court and registry instead of London, although the city continued to have its own statute merchant registry. Together the two systems produced certificates of debt from every part of the kingdom over the entire period 1284–1529.

The local registries originally recorded the debts on rolls. When the debtors defaulted, the registries sent certificates recording their details to Chancery to initiate enforcement. Whereas few of the original local rolls survive, the certificates remained in Chancery's keeping. The clerks filed them in bundles according to the date when they received them, but as this could be many months, and not infrequently, years, after the date when the debt was due for repayment, the economic circumstances in which the debts were first registered can only be revealed by rearranging them by a computer, according to that date.[58] To be certain of including all the certificates registered in any year requires the collection to be studied as a whole. Its bulk has the virtue of presenting a sample of recorded debt, selected only by the unpaid creditors, which covers all regions, and almost two-and-a-half centuries. The problem for the historian has been to discover how representative the unpaid debts are of the number and value of those which were originally registered, and to deduce what factors influenced the rate of default. Alice Beardwood first carried out such an exercise in 1939 for her edition of the *Coventry Statute Merchant Roll* of 1392–1416. This showed that in two decades of differing economic circumstances, the percentage of Coventry debts which produced certificates of non-payment was 21.7 in the 1392–99 and 19.3 in 1400–09.[59]

London has most surviving original rolls, all of which record debts, popularly called 'statutes' registered under statute merchant. I have matched 2,671 debts recorded on nine London rolls between 1291 and 1315, with the certificates of non-payment, and this has revealed a consistent default rate matching that of the Coventry roll. This was despite the very

[54] Bolton 2012, 74.

[55] TNA: PRO, Classes C 241 and C 152. In addition Class C 131 contains 1,265 certificates relating to debts registered on the Close Rolls which have not been included in this analysis because they come from a different source, and do not reflect the same geographical pattern.

[56] Bolton 2011a, 153.

[57] Bolton 2011a, 153.

[58] The date of registration appears on all certificates from 1330, except for those issued by Lostwithiel. Before then they have to be analysed by the date of repayment which was usually within six months of registration.

[59] Beardwood 1939, 939; Nightingale 1990, 566, Table 2.

different economic circumstances in which the rolls were compiled. These included years of warfare against France from 1294 to 1298 which severely disrupted the wool trade, and, therefore reduced the output of the mints, and also imposed heavy taxation on the kingdom. The figures for defaults are 19.3% in 1291–92, 18.8% for 1293–94, 20.1% for 1295–96, and 22% for 1298–99. From 1304 to 1309 the output of the mints soared, and remained good to 1315, but the default rate was unchanged at 22 per cent for 1309–10, 22.9% for 1310–11, 20.8% for 1315–17, and 20.3% for 1315–16. Overall, the mean rate of default was 20.7 per cent, compared with a mean of 20.5 per cent for Coventry's rolls for 1392–1409, and 20 per cent for Maghfeld's own statutes of the 1390s.[60] What may seem a surprising consistency is explicable by creditors reacting very swiftly to threatening circumstances by refusing to give credit. Contrarily, much improved prospects encouraged the expansion of credit. This supposition is borne out by the varying numbers of debts recorded on the London rolls. The two between 1291 and 1294 record between 265 and 195 debts, whereas those for the difficult years, 1295–96 and 1298–99, show a reduction to 137 and 166 debts respectively. Those for 1295–96 are worth less than half of those on the earlier rolls. After the restoration of peace, and the huge increase in the output of the mints, the numbers of recorded debts expanded spectacularly in 1309–10 to 845.[61]

This is evidence which most economic historians would take seriously, but Bolton dismisses it with the sentence 'What proportion of debts registered they (the certificates) represent simply cannot be known, whatever statistical methods are applied to the evidence'.[62] Similarly, he maintains that since the 'totality of the credit market can never be satisfactorily measured', any conclusions drawn from the statute merchant certificates 'may be misleading'.[63] These strictures, of course, apply to most statistics that medieval historians have to use, and to none more so than to his own claims about negotiable bonds, since he cites no sample of them to prove his assertion that their increased use more than compensated for falling supplies of coin. They also apply to the sample of 67 English merchants' accounts he has selected from the Borromei's London register for 1436–39 to show 'reality' in the 'actual workings of the credit and exchange markets' compared with the 'secondary evidence' of the certificates.[64]

Credit or penal bonds?

Several other scholars have used the statute merchant and staple certificates, but all have done so selectively to study particular towns, or for limited periods, and these limitations have given rise to divergent views on their suitability as a sample of late medieval credit. So forbidding has been the task of analysing the certificates as a whole, that no-one has questioned Postan's views, or the very limited evidence on which he based them. He investigated only some of the surviving rolls of London's statute merchant registry, and although he recognized that non-merchants used them, he concluded that the first three (1285–93) show over three-quarters of the entries recording debts between merchants.[65] He based this claim on the fact that the sums involved were relatively small and not in round figures. However, McNall's investigation of those enrolled between 1291 and 1307, led him to conclude that the great majority show non-mercantile creditors. This supports my own assessment that only about 28 per cent of them were mercantile in that period.[66]

[60] Nightingale 2004, 56–68; Nightingale 2010, 2, n.11. The City's first recognisance roll, which was compiled under the Acton Burnell legislation, produced fewer certificates of default because mayors could sell the debtor's goods and property in his absence, whereas under Statute Merchant, if the debtor was not present, the mayor had to send a certificate to Chancery. Few debtors chose to await imprisonment.

[61] Corporation of London Record Office: London Recognisance Rolls, I–IX.

[62] Bolton 2011a, 153.

[63] Bolton 2011a, 162.

[64] Bolton 2011b, 54–6, 58.

[65] Postan 1973, 38.

[66] McNall 2002, 76. His assessment that only *c.*20 per cent were mercantile should most likely be increased to a figure nearer the average of 28 per cent, because he was unable to search for relevant certificates beyond the Chancery bundle for 1307. Many more relating to the debts recorded on the London recognisance rolls in his period were sent to Chancery in the reign of Edward II, and the last of them in 1397.

Postan, though, used his criterion of odd sums for mercantile credit to claim that their greater presence in the early rolls, in contrast with the larger, rounded, sums of the later ones, shows that the latter ceased to record mercantile credit. In fact the relatively few odd sums in the early rolls mostly arise from the common use of the mark, worth 13*s.* 4*d.*, and its fractions. Although it is likely that many sums were rounded up to include interest, and despite larger mercantile debts becoming more common as English trade expanded in the fourteenth century, Postan decided, without any supporting evidence, that round sums in statute merchant and staple records most likely referred to penal bonds. The latter were penalties for default which could be used to enforce transactions, and were often twice the value of any debt involved.[67] There are a few certificates in most decades which do appear to represent penal bonds, but these were predominantly issued by statute merchant registries. This was because lawyers who used penal bonds to enforce family settlements, or land transfers, could not record them in the later staple registries since they used the law merchant and had no competence in pleas of land.[68] However, from their creation in 1353, staples attracted mercantile business away from statute merchant registries because they offered merchants a cheaper and more effective system of registering and enforcing debts.[69] In 1370 staple registries were issuing 40 per cent of the certificates, but by the 1390s their proportion had risen to more than 70 per cent.

This tendency for a distinction to arise between the types of debt recorded by the statute merchant, and the staple registries, became most obvious in London where merchants increasingly resorted to the staple at Westminster to register their trading credit, while continuing to record other kinds of monetary transactions on the city's statute merchant rolls. Postan only considered the latter, and ignored the certificates of debt produced by the Westminster staple.[70] If merchants had no nearby staple then they would register both mercantile credit, and settlements involving penal bonds, on the same statute merchant roll. Alice Beardwood noted the penal bonds on the Coventry statute merchant roll, but contrary to what Bolton claims, she did not say that only fifteen of the 288 Coventry recognisances actually involved debt. She merely observed that only fifteen recognisances record odd sums, and then referred to Postan's views that round numbers suggested the debts were not commercial.[71] However, she then went on to say that she had found only three out of eighteen Coventry cases on the plea rolls at the end of the fourteenth century which were definitely penal bonds. Moreover, she noted that many of the other debtors and creditors named on the rolls belonged to the trades and crafts of the city, and that they reveal business connexions with twenty-two counties.[72]

By contrast, Bolton states unequivocally that 'by the late fourteenth century the statute staple recognisance had become the preserve of non-merchants who used them to register loans and penal bonds rather than straightforward commercial debts'.[73] Although the most cursory examination of the certificates disproves this rash claim, he maintains that 'Doubts continue about the use of these certificates of debt as a measure of the amount of commercial credit', and he refers to the work of other scholars to prove his case. He cites Maryanne Kowaleski's analysis of the Exeter certificates for the ten years 1377–87. She thought they confirmed Postan's views about their diminishing commercial character because she identified only 32.3 per cent of the creditors in those years as merchants.[74] However, my analysis of the 207 statute merchant certificates recorded for Exeter creditors between 1300 and 1309 indicates that only 28.5 per cent of them then had mercantile interests, which suggests that in the intervening period there was an actual increase in the mercantile use of the statutory bonds in keeping with the growth of the city's commercial class.

[67] Postan 1973, 38–9.
[68] Rich 1934, 36–7.
[69] Nightingale 1995, 565.
[70] No original roll of staple debts has survived.
[71] Beardwood 1939, xx–xxi; Bolton 2011a, 153; Bolton 2012, 278.
[72] Beardwood 1939, xx–xxiii, xxv–xxvi.
[73] Bolton 2011a, 153; Bolton 2011b, 54–5.
[74] Kowaleski 1995, 213. The difficulty in distinguishing mercantile creditors is illustrated by the fact that some Devon knightly families like that of Guy Brian, had wide-ranging mercantile interests (see Nightingale 2000, 52–55, 57–8).

Bolton's unwarrantable assumption that most debts where the creditors cannot be proved to be merchants must be long-term loans, or penal bonds, seems to be the foundation of his claim that my figures, which show credit falling steeply in the fifteenth-century recessions, are 'surely uncertain evidence on which to build a model linking the availability of credit to changes in the money supply'.[75] In fact there are very few certificates which reveal the characteristics of penal bonds. Normally these appear in pairs bearing identical information, apart from recording two different debts, the higher one of which was the penalty which was invoked if the lower sum was not repaid.[76] There are, though, in most decades, some individual certificates for round sums of 1,000 marks, or, more commonly, £1,000, which are outside the normal range of debts, and because it is possible that these were penal bonds I have excluded them from my totals. These types of certificate, though, never amount to more than 3.2 per cent of the total for any decade, and average only 1.25 per cent of the total overall. Those for £1,000 or more amount to only 0.82 per cent of the total. This is hardly surprising because the purpose of penal bonds was to deter defaults, and since debtors knew the penalties were enforced, they would do everything possible to avoid paying them.

Bolton also confuses the two quite separate issues of penal bonds and non-commercial loans.[77] Whereas penal bonds were used as deterrents against default for any kind of debt, it is certainly not true that certificates recording transactions between apparently non-mercantile parties usually record penal bonds or non-commercial loans. In fact many creditors who describe themselves in certificates as clergy, knights, or gentry, can be observed in others actively trading in wool, lead, or tin.[78] More importantly, distinguishing between mercantile credit and loans given for other purposes is irrelevant to the question of what circumstances encouraged or discouraged the lending of money in general. The various purposes for which money was borrowed, or credit extended, do not alter the fact that whether mercantile or not, such transactions required one party to have money to invest, or to lend short-term, and the other party to find the cash, or goods, within a specified time to repay what he had borrowed. Both kinds of credit depended on how confident the creditor was that he would be repaid. His perception of the sluggishness, or otherwise, of the coin in circulation, naturally played a significant part in his calculations.

The certificates also prove the error of Postan's claims, repeated by Bolton, that in the fifteenth century, statute merchant and staple recognisances increasingly recorded long-term investments of more than a year's duration, rather than short-term credit.[79] Sampling five years' certificates in every decade shows that this is not true. The proportion which specified repayment in less than one year dropped only slightly from 69.2% for 1284–1399 to 61% for 1400–1524, and this seems to reflect, if anything, an increased difficulty in meeting short terms of repayment rather than any decisive shift to long-term investment. Throughout the period 1284–1524, a mean of 96.1 per cent of the recorded debts had a repayment term of under two years, and this did not change significantly in any decade. Moreover, it is close to the 94.5 per cent of debts registered by the London scrivener, William Styfford, in 1457–59 in which credit was given for up to two years.[80] The Borromei bank in London gave similar terms, and credit given for one to two years is commonly recorded in the London Plea and Memoranda rolls.[81]

Furthermore, Postan's and Bolton's claims that the recognisance of debt ceased to be popular because it lost all its former advantages while it 'retained most of its defects' are also mistaken. The recognisance's automatic remedy against a defaulting debtor was, Postan believed, eroded by the encroaching jurisdiction of Chancery. Far from Chancery's interfering to restrict the execution of the certificates, the opposite happened, with a spectacular rise in their number

[75] Bolton 2012, 278.
[76] One example is TNA: PRO, C 241/206/49–50.
[77] Bolton 2011a, 154.
[78] Bolton 2012, 278; Nightingale 2000, *passim*; Nightingale 2008, *passim*; Nightingale 2010, 9.
[79] Postan 1973, 39; Bolton 2011a, 155.
[80] Childs 1991, 90.
[81] Bolton 2011a, 158; Bolton 2011b, 58; Thomas 1932, *passim*.

and enforcement under Henry VII and Henry VIII.[82] Bolton considers that the greatest disadvantage of recognisances was that because they were enrolled they could not be assigned.[83] However, in the late 1450s numerous country wool merchants, and 69 London merchants, preferred to record their credit in two scriveners' registers in London rather than accept assignable bills, even though most of the credit they gave was for the export trade, and 84 per cent of the debtors, and 30 per cent of the creditors in William Styfford's ledger were Italians who were accustomed to use such bills. The scriveners' registers also show that the creditors, who were lending sums up to £800, normally demanded repayment in silver. They scarcely mention barter, and only occasionally payment by bills of exchange.[84] This suggests a disinclination to accept bills, and, also, that the assignability of debts counted for little in England compared with merchants' need for, and use of, payments in coin. Furthermore, by recording credit with scriveners, or in statute staple registries, creditors gained copies of the enrolment which they could, and did, use as security for repayment of their own debts.[85] The criticisms which have been levelled since the 1930s at the suitability of the certificates to serve as a sample of credit have, therefore, no foundation, and the charge that the system lost popularity, or effectiveness, is disproved by the fact that after a long decline in the fifteenth century they steadily increase in numbers from 1495 to the end of the series in 1530.[86]

Continuity and representativeness of the certificates

The essential continuity of the certificates, and their value as evidence of credit, whether registered under statute merchant or statute staple, is visible in the social classes and geographical range of the debtors and creditors who used them, and in the modal values of their debts. The credit registered in the years 1300–49 show that knights and other gentry then accounted for 6.4 per cent of the creditors, clergy for 25 per cent, and merchants, and trades with a mercantile element, for 28 per cent.[87] These proportions did not change greatly in later periods, apart from falling numbers of clerical creditors in the fifteenth century. Between 1285 and 1309 the modal value of the certificates was under £5, but when the system was restricted to merchants, their modal value rose to between £20 to £50. It remained at that figure thereafter, in keeping with the expansion of English trade, although throughout the whole period at least a quarter of the debts were for under £20. This range is very similar to those in the two London scriveners' books of the 1450s, and in the Borromei's accounts.[88] About 73 per cent of the parties identified in the fifteenth-century certificates belonged to the social classes below the richer gentry, thus contradicting Bolton's supposition that only wealthy creditors would 'take the extreme step' of enforcing debts using this system.[89] In fact creditors calling themselves husbandmen did just that.[90] Moreover, despite the increasing concentration of credit in London, in the certificates of 1520–29 thirty counties had creditors, and all but two had debtors.

It is this strong element of continuity which makes the certificates a valuable sample for examining how monetary, political, social and economic changes affected credit over nearly two and a half centuries. The continuity is evident as much in statute staple, as in statute merchant, certificates, and it means that there is no foundation for Bolton's comments, that because no staple rolls have survived, conclusions drawn from the staple certificates are uncertain.[91] He has also questioned how representative they are of credit recorded elsewhere.[92] Their modal value is, of course, considerably higher than those of debts recorded in manorial or

[82] Nightingale 2008, 10–11, Table I, 24–8.
[83] Postan 1973, 39–40; Bolton 2011a, 154–5.
[84] Childs 1991, 83–4.
[85] Thomas 1932, 292.
[86] Nightingale 2010, 4, Figure 2; Challis 1992, Appendix I.
[87] Most of the others are not socially identifiable.
[88] Childs 1991, 82–3.
[89] Bolton 2011a, 154.
[90] TNA: PRO, C 241/257/19; 279/32, 65; 283/65.
[91] Bolton 2011a, 154.
[92] Bolton 2012, 278–9.

local borough courts, but the main purpose in comparing them is to discover whether they reveal similar chronological trends of expansion and contraction. I have compared their trends with those of the outlawries for smaller debts listed on the Patent Rolls, with the debt-cases which came before the common law courts of King's Bench and Common Pleas, the London mayor's court, and rural manorial courts, as well as with those recorded in towns like Colchester, Exeter, and Coventry. Before the certificates can be dismissed as unrepresentative critics have to explain why all these disparate sources reveal similar trends.[93]

One might expect the greatest disparity to be visible in debts recorded in manorial courts because people in villages who had crops and animals to barter had far more opportunities than townsmen to substitute food, goods and services for loans of cash. However, court rolls show that villagers had as commercial an outlook as townsmen in their dealings with each other, and peasants' use of a range of markets required them to use coin and credit extensively beyond their village.[94] Loans of cash were common, but were likely to bear interest, while creditors often required security for them, and were ready to foreclose on debts, forcing land sales. They also withdrew credit altogether in times of economic hardship, when they feared they would not be repaid. [95] It is therefore not surprising that, when the supply of coin diminished, the average number of debt cases per court in Writtle fell steadily from 2.38 in 1400–09 to 0.55 in 1480–89, and, significantly, there was no increase in cases involving labour and services to compensate for the fall in cash loans.[96] Despite Havering's favoured access to the London market the number of actions for debt dropped there sharply between 1405–06 and 1444–45, only to recover in the late 1460s as coin became more widely available. Rich Londoners then bought up large units of land, new immigrants came to farm it, and money-lending increased.[97] Credit in Oakington, near Cambridge remained high in the decades after the Black Death when the output of silver was high, despite the huge loss of population, but the number of its debt cases, like those in Willingham, fell in the 1390s with the declining output of silver. They plunged by 48 per cent in the first decade of the new century, and all but disappeared with the onset of the mid-century recession. Swaffham's cases also declined, albeit in a more protracted fashion.[98] This was because major changes in the money-supply did not necessarily affect the economies of every village or region identically, any more than they do today.[99] Much depended on the market opportunities available to them and whether the demand for their specialized products in the home or overseas markets could provide them with coin.[100]

Conclusions: credit and the money supply

Bolton's argument in favour of credit's easing the slump, rather than itself diminishing in accordance with the output of the mints, is that in the fifteenth century it 'was not limited by contractions in the English money supply'.[101] This, of course, was always true, to a limited extent, of credit in England's foreign trade, because sales of wool and cloth in Bruges and Venice were paid for in local currencies in Flanders and Italy, and Italian banking services assisted their transfer to London by bills of exchange, as well as through short-term loans given to English merchants in Europe. The Borromei's accounts in 1437–38 show this happening, and Bolton calculates that transferring funds in this way accounts for about 40 per cent

[93] Nightingale 1997, 640; Nightingale 2010, 9–10, 12–13, 15, 17–20.
[94] Schofield 2003, 146–9.
[95] Schofield 2003, 137–45, 148; Schofield 2008, 54–61.
[96] Clark 1981, 251 (table 8.2), 254 (table 8.6)
[97] McIntosh 1986, 192–3 (table 10), 221–31.
[98] Briggs 2008, 9 (table 3).
[99] Bolton 2012, 264, asserts quite wrongly that historians who explain the recession of the 1440s to the 1460s primarily by the bullion famine, posit that a shortage of coin affects transactions and prices 'on a nationwide basis and not just regionally' (cf. Nightingale 2010, 9–10, 12, 14–15, 17–18, 19–20).
[100] Nightingale 2010, 17–18.
[101] Bolton 2011a, 158.

of the transactions he analysed from his sample of 64 English clients of the firm.[102] However these loans were repaid in sterling, and therefore depended ultimately on the English money supply.[103] The Borromei in Bruges borrowed from Venice and Barcelona to finance the purchase of English wool and cloth for export to Italy, but this arrangement came increasingly under pressure from falling supplies of bullion.[104] The silver and gold from the Balkans which supplied Venice were diminishing from the 1420s, and mints began to close throughout Europe from the 1430s.[105] The Bruges branch of the Borromei was making substantial losses from 1437, partly because of the Burgundian embargo on English trade which followed intense competition between their mints for limited supplies of bullion.[106] The profits of the London branch fell by a third in 1438, and both ceased trading by 1441.[107] These developments mark the onset of the second great depression to assail fifteenth-century Europe, and they indicate how the trade and credit of European, as well as English merchants, was affected by falling supplies of bullion and by the political conflicts these could engender.

In these circumstances it is hard to see how Italian money can have maintained the supply of England's domestic credit in the fifteenth century. The value of the Borromei's exports from England far exceeded the profits they made from their imports, and they contributed to the Italians' overall adverse trade balance with England which Bolton has analysed.[108] Their increasing inability to finance their English trade is shown by the Italians' insistence from the 1430s on ever longer terms of repayment for their purchases of wool and cloth. The *Libelle of Englyshe Polycye* described *c.*1436–38 how Italians bought wool in England on long-term credit, profited from its sale in Venice, and then transferred the proceeds by bills to Flanders, to lend it again, in interest-bearing bills, to Englishmen to buy Flemish goods.[109] Only when their English debtors repaid them in instalments of sterling could the Italians finally pay the wool-growers whom they had kept waiting for their money for up to two years.[110] One Londoner who sold the Borromei wool worth over £727 in 1438 was still owed over £527 in 1440.[111] The practice prompted English legislation in 1437 forbidding more than six months' credit to aliens.[112] Nonetheless, the two London scriveners' registers, and the prosecutions in the Exchequer, show that Italians were still acquiring illegal credit for up to five years on their purchases of wool, cloth, pewter and tin in the late 1450s.[113]

Any bullion which Italians, or other aliens, did bring to England had, of course, to be exchanged at the London mint. This means that it was recorded in the figures of mint output, and cannot, therefore, be counted as additional to that output when assessing the relationship of credit to the money supply. The small *soldini* which were illicitly imported by Venetian galleys in the early fifteenth century were the only foreign coins to evade to any significant degree the ban on the circulation of foreign coin.[114] These tiny coins, worth less than a halfpenny, were welcomed by English people because they met a desperate need for small change. Despite their usefulness, the government still ordered them to the mint in 1415 and put pressure on the Venetian senate to ban their export.[115] Apart from these, and Burgundian silver double patards, which were accepted at the end of the century as having the same value as groats, foreign coins had little part to play in the circulation of fifteenth-century England.[116]

[102] Bolton 2011b, 61–6, 68.
[103] Bolton 2011b, 62–4.
[104] Bolton 2011b, 68.
[105] Spufford 1988, 356–60.
[106] Munro 1973, 68–9, 81–2, 134–5; Bolton 2012, 246, 248.
[107] Bruscoli and Bolton 2001, *passim*.
[108] Bolton 1980, 313–14.
[109] Warner 1926, lines 396–455.
[110] Bolton 2011b, 59–61.
[111] Bolton 2011b, 55–6, 58.
[112] Bolton 2011a, 150.
[113] Childs 1991, 68–98.
[114] Daubney 2009, 187–8, 193.
[115] Childs 1991, 363.
[116] Allen 2012, 365–6.

Moreover, any gold that the aliens brought to the mint would not have affected the level of credit employed in the wider domestic economy. This was because the retail trade, as Bolton acknowledges, could not function without an adequate supply of silver coin, since even the smallest gold coin was worth about three to four days' labour of a skilled man, and so had too great a value for everyday exchanges.[117] A retail trade constricted by lack of silver reduced demand in the domestic economy, and stemmed the cash-flow of exporters who depended on receipts from their distributive and retail trade to help finance their overseas investments.[118] The certificates illustrate the effect on credit of a money supply too heavily dominated by gold. Even though their average value is high, and the credit they represent was therefore most easily repaid in gold coin, their number fell strikingly when the amount of silver coin in circulation fell after 1400. They indicate that the credit produced by an overwhelmingly silver coinage in the 1340s was four-and-a half times greater in value than that of the predominantly gold coinage of roughly the same value in the 1410s.[119] Even if one adjusts the calculations to take into account the probable loss of 50 per cent of the population in the interval the credit represented by the certificates had fallen by two-thirds.[120]

Bolton bases most of his speculations about the impact of negotiable bonds on the credit market in fifteenth-century England on what Eric Kerridge wrote about trade and banking in the seventeenth century, even though he admits that much changed between the two periods in both monetary and economic terms.[121] However, Barry Supple showed in 1959 in his book *Commercial Crisis and Change in England, 1600–1642,* how a society which commonly used negotiable credit instruments, could still suffer a devastating financial crisis, leading to recession and mass unemployment in the cloth industry, when the amount of coin available for daily transactions was much reduced. Even the issuing of token coins, which was another form of credit, did nothing to alleviate the situation, because they, too, depended for their acceptance on confidence that they could be redeemed.[122]

In summary, Bolton's supposition that negotiable bonds more than made up for any shortages of coin and credit in the fifteenth century is not supported by any statistics, and it fits ill with those which Hatcher assembled showing a long-lasting economic slump from the 1440s. Although Bolton claims Postan's authority for his assertion that negotiable bonds served as a form of paper money, Postan stressed that although they were legally assignable, they could not be accorded the same status as gold and silver coin because they gave no guarantee of payment. Transferable instruments of credit had long been used in overseas trade, but they had only a limited circulation in fifteenth-century London, and none in the provinces. Even leading London merchants were hostile to their use on the grounds that they deprived the mints of bullion, and they opposed their assignment because they believed it impugned their personal credit-worthiness. The scriveners' registers, and statute staple certificates, show that many English merchants in London, like their fellows in the provinces, preferred to register debts rather than accept transferable instruments of unsecured credit, because they wanted payment in coin, and were prepared to wait years for it, if necessary. Far from losing popularity for the reasons Postan and Bolton have asserted, the rising number of statute merchant and staple certificates from the end of the fifteenth century shows the increased use of registered debts.

Bolton's attack on the use of the certificates as evidence of credit is based on an uncritical adoption of Postan's views which are contradicted by the documents themselves. Postan was mistaken in his judgments because he did not study the certificates, and did not grasp the effect the Westminster staple had on the business of London's statute merchant registry. Both Postan and Bolton have unnecessarily sought to distinguish mercantile creditors from others, despite knowing that landed gentry and clergy were heavily involved in England's wool trade and in the credit associated with it. All forms of lending, whether recorded through assignable

117 Bolton 2011a, 149–52.
118 Nightingale 1997, 635–6, 641–6.
119 Nightingale 2010, 14–15.
120 Nightingale 2010, 14–15.
121 Bolton 2011a, 162.
122 Supple 1959, 173–8.

instruments or registered credit, were equally affected by changes in the supply of silver coin because creditors would not lend if they feared they would not be repaid. Accordingly the certificates almost certainly illustrate the trends that all forms of credit would follow. When the supply of silver coin recovered at the end of the fifteenth century they show how credit expanded with it.

It is therefore regrettable that Postan's mistaken assumptions are still being used to discredit the evidential value of the statute merchant and staple certificates. These offer a unique sample of credit transactions over nearly two and a half centuries, which, when analysed correctly, can indicate the quantitative changes in the volume of credit in relation to the money supply. They also illustrate how the uncertainties of that money-supply bred caution in the attitude of medieval Englishmen to credit. They were reluctant to accept as the equivalent of sound money the kind of innovatory, transferable instruments of credit which contributed in the hands of their descendants, to the global financial crisis that began in 2008. That crisis showed that the fundamental rules governing credit have changed little over the centuries, and that historians, no more than bankers, cannot afford to ignore them.

REFERENCES

Manuscripts

The National Archives: Public Record Office
C 241 and C 152: Certificates of Statute Merchant and Staple.
E 101/509/19: Account book of Gilbert Maghfeld.
Corporation of London Record Office:
City Recognisance Rolls

Printed Works

Allen, M., 2001. 'The volume of the English currency, 1158–1470', *EcHR* 54, 595–611.
Allen, M., 2007. 'The proportions of the denominations in English mint outputs, 1351–1485', *BNJ* 77, 190–209.
Allen, M., 2012. *Mints and Money in Medieval England* (Cambridge).
Beardwood, A., 1939. *The Statute Merchant Roll of Coventry, 1392–1416* (London).
Bolton, J.L., 1980. *The Medieval English Economy, 1150–1500* (London).
Bolton, J.L., 2011a. 'Was there a 'Crisis of Credit' in fifteenth-century England?', *BNJ* 81, 144–64.
Bolton, J.L., 2011b. 'London merchants and the Borromei Bank in the 1430s: The role of local credit networks', in H. Kleineke (ed.), *Parliament, Personalities and Power: Papers Presented to Linda S. Clark. The Fifteenth Century X* (Woodbridge), 53–71.
Bolton, J.L., 2012. *Money in the Medieval English Economy: 973–1489* (Manchester).
Briggs, C., 2008. 'The availability of credit in the English countryside, 1400–1480', *Agricultural History Review* 56, 1–24.
Briggs, C., 2009. *Credit and Village Society in Fourteenth-Century England* (Oxford).
Bruscoli, F.G. and Bolton, J.L., 2001. 'The Borromei Bank Research Project: The Ledger of Filippo Borromei & Co. of Bruges, 1438', online at *www.queenmaryhistoricalresearch.org*.
Challis, C.E. (ed.), *A New History of the Royal Mint* (Cambridge).
Childs, W., 1991. ' "To oure losse and hindraunce" ': English credit to alien merchants in the mid-fifteenth century', in J. Kermode (ed.), *Enterprise and Individuals in Fifteenth-Century England* (Stroud), 68–98.
Clark, E., 1981. 'Debt litigation in a late medieval English vill', J.A. Raftis (ed.) *Pathways to Medieval Peasants* (Toronto), 247–79.
Daubney, A., 2009. 'The circulation and prohibition of Venetian soldini in late medieval England', *BNJ* 79, 186–98.
Day, J., 1978. 'The great bullion famine of the fifteenth century', *Past and Present* 79, 3–54, reprinted in idem, *The Medieval Market Economy* (Oxford), 1–54.
Day, J., 1987. *The Medieval Market Economy* (Oxford).
Hatcher, J., 1996. 'The great slump of the mid-fifteenth century' in R. Britnell and J. Hatcher (eds.), *Progress and Problems in Medieval England: Essays in Honour of Edward Miller* (Cambridge), 237–72.
Holmes, G., 1996. 'Lorenzo de' Medici's London branch', in R. Britnell and J. Hatcher (eds.), *Progress and Problems in Medieval England: Essays in Honour of Edward Miller* (Cambridge), 273–85.
Kingdon, J.A., 1883–86. *A Facsimile of the First Volume of Manuscript Archives of the Worshipful Company of Grocers of the City of London, A.D. 1345–1463*, 2 vols (London).
Kowalesky, M., 1995. *Local Markets and Regional Trade in Medieval Exeter* (Cambridge).
McIntosh, M.K., 1986. *Autonomy and Community: The Royal Manor of Havering, 1200–1500* (Cambridge).
McNall, C., 2002. 'The business of statutory debt registries, 1283–1307', in P.R. Schofield and N.J. Mayhew (eds.), *Credit and Debt in Medieval England, c.1180–c.1350* (Oxford), 68–88.

Munro, J.H.A., 1973. *Wool, Cloth, and Gold: The Struggle for Bullion in Anglo-Burgundian Trade, 1340–1478* (Brussels and Toronto).

Munro, J.H.A., 1979. 'Bullionism and the bill of exchange in England, 1272–1663: A study in monetary management and popular prejudice', in F. Chiapelli (ed.), *The Dawn of Modern Banking* (New Haven and London), 169–239; reprinted in idem, *Bullion Flows and Monetary Policies in England and the Low Countries, 1350–1500* (Variorum, 1992), IV.

Munro, J.H., 2003. 'Wage stickiness, monetary changes, and real incomes in late-medieval England and the Low Countries, 1300–1500: did money matter?', *Research in Economic History* 21, 185–297.

Nightingale, P., 1990. 'Monetary contraction and mercantile credit in later medieval England', *EcHR* 43, 560–75; reprinted in eadem, *Trade, Money and Power in Medieval England* (Aldershot, 2007), XVI.

Nightingale, P., 1995. *A Medieval Mercantile Community: The Grocers' Company and the Politics and Trade of London, 1000–1485* (London and New Haven).

Nightingale, P., 1997. 'England and the European depression of the mid-fifteenth century', *Journal of European Economic History* 26, 631–56; reprinted in eadem, *Trade, Money and Power in Medieval England*, XVII.

Nightingale, P., 2000. 'Knights and merchants: Trade, politics and the gentry in late medieval England', *Past and Present* 169, 36–62; reprinted in eadem, *Trade, Money and Power in Medieval England*, XII.

Nightingale, P., 2004. 'Money and credit in the economy of late medieval England', in D. Wood (ed.), *Medieval Money Matters* (Oxford), 57–71; reprinted in eadem, *Trade, Money and Power in Medieval England*, XV.

Nightingale, P., 2008. 'The intervention of the crown and the effectiveness of the sheriff in the execution of judicial writs, c. 1355–1530', *EHR* CXXIII, no. 500, 1–34.

Nightingale, P., 2010. 'Gold, credit, and mortality: distinguishing deflationary pressures on the late medieval English economy', *EcHR* 63, 1–23.

Nightingale, P., 2013. 'Alien finance and the development of the English economy, 1285–1311', *EcHR* 66, 477–96.

Postan, M.M., 1973. *Medieval Trade and Finance* (Cambridge).

Reinhart, C.M. and Rogoff, K.S., 2011. *This Time is Different* (Princeton).

Rich, E.E., 1934. *The Staple Court Books of Bristol*, Bristol Record Society 4 (Bristol).

Schofield, P., 2003. *Peasant and Community in Medieval England, 1200–1500* (Basingstoke).

Schofield, P., 2008. 'The social economy of the medieval village in the early fourteenth century', *EcHR* 61, 38–61.

Spufford, P., 2008. *How Rarely did Medieval Merchants use Coin?* (Utrecht).

Supple, B., 1959. *Commercial Crisis and Change in England, 1600–1642* (Cambridge).

Thomas, A.H. (ed.), 1932. *Calendar of Plea and Memoranda Rolls preserved among the Archives of the Corporation of the City of London at the Guildhall, 1381–1412* (Cambridge).

Thomas, A.H. (ed.), 1943. *Calendar of Plea and Memoranda Rolls preserved among the Archives of the Corporation of the City of London at the Guildhall, 1413–37* (London).

Warner, G. (ed.), 1926. *The Libelle of Englyshe Polycye* (Oxford).

Money and credit growth after economic and financial crises â€“ a historical global perspective. Patterns in average money and credit growth around the time of past economic and nancial crises represent a useful benchmark for the assessment of current and future developments in money, credit and output.Â severe in the case of recessions accompanied by a banking crisis, which are often characterised by a decline in total bank assets and a decrease in the size of banksâ€™ loan portfolios (in real terms).11 Second, in order to limit the share of non-performing loans (which tends to increase during recessions), and given asymmetric information problems such as adverse. This article explores some of the methods used to raise credit in an important trading region of late medieval England during a decline in overseas trade and an international bullion famine.Â 3 Miskimin, H. A., â€œMonetary Movements and Market Structure: Forces for Contraction in Fourteenth and Fifteenth Century England,â€ Journal of Economic History 24 (1964): 470â€“90; Lopez, R. S., Miskimin, H. A., and Udovitch, A. L., â€œEngland to Egypt, 1350â€“1500: Long-Term Trends and Long-Distance Trade,â€ in Studies in the Economic History of the Middle East, ed.