# Pledging and Credit Markets in Medieval England

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Abstract: How can credit markets function in weakly institutionalized economies? We study rural credit markets in medieval England. Combining archival evidence from manorial court records with a model we examine the role played by personal sureties or pledges in enforcing contracts and overcoming asymmetric information. Pledging (1) widened the circle of individuals to whom a lender could extend credit thus augmenting the limited institutional capacity of courts, and (2) generated information on the quality of borrowers thereby alleviating the problem of adverse selection. We find that informal private-order arrangements could complement, as well as substitute for, formal, public, institutions.

Keywords: credit markets, intermediaries, pledging, courts, formal and informal institutions

#### 1. Introduction

Theoretical and empirical work in growth theory and development economics has demonstrated that effective credit markets are an important prerequisite for growth, and that credit market imperfections can play a crucial role in perpetuating poverty. Similarly, many historical studies of long-run economic growth stress the central role of credit markets. Although the study of rural credit in pre-industrial Europe was neglected for many years, in the last two decades a growing number of studies have argued for the importance and high degree of development of rural credit markets in many parts of Europe in this period. Recent writing on medieval England shares several of the conclusions of this wider body of recent research. As such, it is clear from work on credit markets in England between c.1250 and c.1450 that a sizeable proportion of the rural population participated in these markets both as lenders and as borrowers; that the availability of credit was generally good; and that credit was sometimes used for investment as well as consumption. These credit markets also witnessed the interaction of lenders and borrowers resident in different communities.

The history of rural credit markets in the preindustrial European countryside has thus in recent years been retold largely as a success story, with medieval England playing a leading role in that story. Nonetheless, questions remain. In particular, it is clear that the regions of Europe in which credit markets developed most successfully tended to be those in which particular types of formal institution were present. For instance, in the comparatively urbanized Low Countries, formal debt registries emerged early on and were used by peasants and well as townsfolk.<sup>5</sup> In Italy, Jewish and 'lombard' pawn-brokers, and (from the fifteenth century onwards) *monti di pieta* extended credit into the countryside on a formal basis, making extensive use of written records.<sup>6</sup> In ancien regime France, and in many parts of southern Europe, credit was often based on written contracts and relied on notaries to act as

<sup>&</sup>lt;sup>1</sup> In growth theory see Banerjee and Newman, 'Occupational Choice'; Galor and Zeira, 'Income Distribution and Macroeconomics'; and Acemoglu and Zilibotti, 'Was Prometheus Unbound by Chance?'. In development see Besley, 'Savings, credit and insurance'; Fafchamps, *Rural Poverty, Risk and Development*.

<sup>&</sup>lt;sup>2</sup> See Rosenthal and Wong, *Before and Beyond*, pp. 129-167; van Zanden, *Long Road*, pp. 22-25, 131-132, and 222-224.

<sup>&</sup>lt;sup>3</sup> A turning point in the study of preindustrial credit was a special issue of the journal *Annales* (1994). More recently, see for example Berthe, ed., *Edettement paysan*; Schofield and Lambrecht, eds., *Credit*; Clemens, ed., *Schuldenlast und Schuldenwert*.

<sup>&</sup>lt;sup>4</sup> Briggs, *Credit*, and references therein to earlier pioneering studies such as Clark, 'Debt litigation'.

<sup>&</sup>lt;sup>5</sup> van Bavel, *Manors and Markets*, pp. 181-193; Zuijderduijn, *Medieval Capital Markets*.pp. 183-225; and Zuijderduijn et al., 'Small is beautiful'.

<sup>&</sup>lt;sup>6</sup> Botticini, 'A Tale of "Benevolent" Governments'.

intermediaries. Notaries could facilitate the financing of long-term investment, as well as the short-term and immediate need to smooth income and consumption.<sup>7</sup>

Many of these important formal institutions were absent from the medieval English countryside. The agrarian credit market of medieval England did benefit from some formal institutions. In particular, virtually all peasants had access to law courts in which creditors could initiate civil suits to recover unpaid debts. The most important category of court for peasant creditors and debtors was the manor court. Manor courts existed in their thousands across the country. Each court was run by its landlord, who enjoyed the profits of justice. The work of the manor court was diverse, focusing on matters such as the administration of seigniorial prerogatives and peasant land transfer. But a significant element of the business of many such courts was inter-peasant disputes over debt, trespass, and broken agreement. The network of manor courts did not constitute part of a state legal system as such, but it did offer an accessible and cheap form of local justice. The large numbers of peasant debt lawsuits recorded in the written proceedings of many of these courts (court rolls) testify to the manor court's popularity in many places as a debt recovery tribunal.

At the same time, however, the medieval English rural credit market undoubtedly suffered from institutional weakness. For example, certain manor courts were unattractive places in which to sue, as they were slow and ineffective in handling debt and other civil litigation. Even where a manor court administered litigation efficiently, it still faced basic limits to its powers. The geographical jurisdiction of each manor court was small, and did not stretch beyond the manor's boundaries. A manor court struggled to exercise justice over a debtor who did not hold property within this territory, or 'fee'. When contemplating lending to a person who was not a neighbour, a creditor could not safely assume that his local or 'home' manor court would have jurisdiction over that individual. Alternative jurisdictions, other than the creditor's home manor court, were available in which to sue. However, a creditor could not always easily identify which court (manorial or other) did have jurisdiction over his debtor. A yet more significant potential weakness of rural credit in this period was that private written records of debts, equivalent to the notarial registers used in Continental

<sup>&</sup>lt;sup>7</sup> Research of the past twenty years has uncovered widespread capital markets across France before the Revolution and has overturned the assumptions of previous historians: see Fontaine, 'Antonio and Shylock'; Hoffman, Postel-Vinay and Rosenthal, 'Redistribution and long-term private debt in Paris', 'Information and economic history', and *Priceless Markets*. For cautionary comments, see Brennan, 'Peasants and debt in eighteenth-century Champagne'. For notaries and credit in medieval southern Europe see e.g. Menant and Redon, eds, *Notaires et crédit*.

<sup>&</sup>lt;sup>8</sup> Harvey, Manorial records; Razi and Smith, Medieval society.

<sup>&</sup>lt;sup>9</sup> For features mentioned in this paragraph, see Briggs, *Credit*.

<sup>&</sup>lt;sup>10</sup> Briggs, 'Manor court procedures'.

Europe, were rarely kept in England. 11 Most contracts were arranged orally among peasants who were often illiterate. The fact that written records were rarely used may have exacerbated the difficulty of establishing an individual's credit history, and it obviously posed problems for proving a contract's non-fulfilment. Finally, most credit was provided without collateral, a feature which reflects the restricted property rights of many peasants over their land. The sanctions available to the creditor upon default were consequently limited. In short, in spite of the existence of a system of local courts, this particular credit market seems relatively underdeveloped in certain key institutional aspects.

Given this comparative institutional weakness, how was it possible for an effective credit market to emerge in the medieval English countryside? An indication of the potential limitations of a weakly institutionalized rural credit market is provided by Hoffman's discussion of early modern France. Hoffman distinguishes between credit based on intermediation, for example, through notaries; and 'local credit', based on bilateral loans that appear to have been largely enforced by personal exclusion and reputation. Many peasants did not have access to notaries. As Hoffman observes, notaries 'did not extend credit everywhere, and where they did offer it, their services might be costly or inaccessible for some individuals'. That, he observes, 'left local credit'. 12 Hoffman suggests that local credit in rural France was enforced on a personal basis; 'borrowers gained if they cooperated with their lenders and paid what was due' for if they did not they faced exclusion from future credit and future trade. This form of personal enforcement is well understood in economic theory. 13 A large theoretical and empirical literature demonstrates that strategies involving both bilateral and multilateral exclusion can be used to enforce informal contracts.<sup>14</sup> Such personal forms of deterrence are, however, limited in their effectiveness and this can severely restrict the extent to which lenders are willing to extend credit.

As we argue below, part of the answer why medieval English villagers were not confined to a system of 'local credit' may lie in the use of pledges. The records of a number

<sup>&</sup>lt;sup>11</sup>Urban and mercantile credit was organized on different lines to rural credit, with a greater use of written instruments. Statutory debt registries were established in London, Bristol and York after 1283. The mean debt recognized on the London Merchants registry between 1285 and 1307 was £26 10s. Hence such debts were on a different scale to those that came before the manorial courts. See McNall, 'Business of Statutory Debt Registries,' p. 76. Also, until the 1270s a significant role was played by urban Jewish moneylenders who kept written records of the debts they were owed. See Koyama 'Political Economy'; and Mundill, The King's Jews, pp. 28-42.

12 Hoffman, *Growth in a Traditional Society*, p 77.

<sup>&</sup>lt;sup>13</sup> Hoffman draws his insights from a model by Bernhardt, 'Money and Credit', but the general mechanisms for personal enforcement are laid out by Telser, 'A theory of self-enforcing agreements'.

Multilateral punishment strategies are the subject of Greif, 'Maghribi traders' and 'Contract Enforceability and Economic Institutions in Early Trade'. Hoffman also considers the possibility of collective enforcement a la Greif but deems this comparatively unlikely.

of manor court debt cases indicate that the action concerned was brought by or against a pledge, rather than by or against the principal creditor or principal debtor. It is clear that these pledges were personal sureties used to guarantee debts. But the descriptions in the documentary evidence leave much unclear about the pledges' role in credit arrangements. Because of this, we use insights from development economics and the literature on group lending to produce simple theoretical models. These generate predictions that help us to evaluate competing interpretations of the problematic documentary evidence. More generally, this paper contributes to a growing literature in economic history that examines how medieval and early modern credit markets functioned. In uncovering how the practice of pledging helped to improve the effectiveness of medieval credit markets this paper also contributes to discussions in new institutional economics on private-order institutions.

In Section 2, we introduce the obstacles to credit markets that we examine in the paper, namely the issues of contract enforcement and asymmetric information. Section 3 discusses the documentary evidence and the information it contains about pledging for debts. In Section 4 we examine the possibility that pledging existed to overcome problems of contract enforcement, while in Section 5 we examine the possibility that the primary role of pledges was to generate information about borrowers that was useful to lenders. Section 6 considers the wider relevance of the medieval system of pledging for debts.

## 2. Sources of Inefficiency in Rural Credit Markets

There are two principle sources of inefficiency in credit markets: enforcement costs and asymmetric information (where enforcement costs are widely defined so as to encompass the costs associated with unreliable or biased decisions). Credit transactions are – by their very nature – transactions that take place over time, 'namely, some time elapses between the quid and the quo'. As such, credit transactions are particularly susceptible to what Greif has called the fundamental problem of exchange: the problem of making a credible commitment to make a payment at some future date. <sup>19</sup> One-off credit transactions are unlikely to occur if the borrower cannot be deterred from absconding with the loan. They resemble one-sided

6

<sup>&</sup>lt;sup>15</sup> The terms 'plaint', 'plea', 'case', and 'action' are used synonymously to mean 'civil lawsuit'.

<sup>&</sup>lt;sup>16</sup> Briggs, *Credit*, pp. 92-5, offers a preliminary consideration. For useful discussion of pledging for debts in the village of Writtle (Essex) in the fifteenth century, see Clark, 'Medieval debt litigation', pp. 61-3, 136-41.

<sup>&</sup>lt;sup>17</sup> Banerjee et al., 'Thy Neighbor's Keeper'; Guinnane, 'Cooperatives'; Fontaine, 'Antonio and Shylock'; Hoffman, Postel-Vinay and Rosenthal, *Priceless Markets*; Richardson, 'Prudent Village'.

<sup>&</sup>lt;sup>18</sup> Greif, 'Institutions'; Ogilvie, 'Whatever is, is Right?'; Edwards and Ogilvie, 'Contract Enforcement'.

<sup>&</sup>lt;sup>19</sup> Greif, 'Institutions and impersonal exchange', p. 169.

prisoner's dilemmas: the borrower's dominant strategy is to default. Hence the cost of enforcing a contract will play a central role in determining whether or not a credit market can exist at all and high enforcement costs can result in segmented and inefficient markets.<sup>20</sup>

The other pervasive source of inefficiency is asymmetric information. Under asymmetric information lenders and borrowers have access to different information. The problem is not only that lenders have less than complete information, but also that borrowers are aware of this asymmetry and can use it to act opportunistically. This can result in lenders refusing to lend even when it is mutually beneficial to do so. Asymmetric information is not an issue in small or close-knit societies where information about the characteristics of borrowers is common knowledge. Credit, however, is of comparatively limited value in small or close-knit societies because both lender and borrower are likely to suffer from similar income shocks (i.e. bad weather or disease). Credit becomes more valuable if it can be extended more widely. However, it is when lenders try to lend to borrowers whom they do not know well that the problems associated with asymmetric information begin to bite.

There are several specific problems that can arise under asymmetric information. When lenders are unable to monitor the behaviour of borrowers *ex post* moral hazard can result in borrowers engaging in excessively risky behaviour since lenders bear part of the cost of a default. Alternatively, if different borrowers represent different risks, then under complete information lenders would offer them different terms of repayment. However, if they are uninformed about individuals' characteristics they have to offer all borrowers similar terms and face the problem of adverse selection whereby the contract they offer affects or 'selects' the kind of borrower who accepts the contract. We focus on the problem of adverse selection as similar principles apply to the case of moral hazard, and to situations when lenders are unable to observe the precise circumstances of the borrower (costly state verification).

In the case of adverse selection, lenders are reluctant to lend to prospective borrowers whose qualities are unknown to them because they do not know whether the borrower is likely to repay (safe) or unlikely to repay (risky). They, therefore, require a higher interest rate to induce them to lend. However, risky borrowers, who are less likely to repay, are relatively less concerned about the rate of interest that they will have to pay in the event that they do repay. This means that the higher rate of interest deters precisely those safe borrowers who are more likely to repay and, as a result, increases the likelihood that the pool of

7

<sup>&</sup>lt;sup>20</sup> Hoff and Stiglitz, 'Introduction'; Besley, 'How do market failures'.

prospective borrowers will consist of borrowers who are risky and more likely to default. This process is self-reinforcing because this selection effect, in turn, again raises the interest rate required to induce lenders, and can result in credit markets completely unravelling.<sup>21</sup>

Despite these potential problems, rural credit markets *did* exist in medieval England. Moreover, these markets *did not* suffer from the pathologies that affect many such markets in developing economies today; credit does not appear to have been rationed, a considerable proportion of peasants had access to credit, and loans did not just pass between kin, lenders lent to strangers. How was all this possible in a society where peasants often lacked collateral, the reach of the manorial courts was limited, and other legal institutions were undeveloped?

### 3. The Manorial Court Records

Most evidence about England's rural credit market between the thirteenth and fifteenth centuries comes from the rolls of manorial courts. Crucially, these records cannot tell us about all credit transactions. In general, the records only detail instances where the debtor failed to discharge the obligation successfully, and where the creditor chose to use the manor court to recover the debt. Peasants did make use of the court rolls to register a new debt obligation at its inception, but this was rare.<sup>22</sup> Thus it must be remembered that any set of manorial court rolls offers an incomplete picture of the locality's credit activity. Since it is impossible to estimate the debts that ended up in each manor court as a proportion of all credit extended, statistical techniques cannot be used to evaluate the performance of these rural credit markets. Instead we combine archival evidence with economic reasoning and formal modelling to try to understand how they functioned.

Peasants in many contemporary developing countries depend on informal kinds of mutual insurance.<sup>23</sup> In contrast, peasants in medieval England relied on credit markets and contracts were enforced through the courts. The courts were forums where debt claims could be contested and renegotiated. The amounts contested in the manorial courts were typically small and poor individuals appear to have used the court system. For this reason we are

<sup>22</sup> On such 'recognizances', see Briggs, *Credit*, pp. 80-2.

<sup>&</sup>lt;sup>21</sup> Stigliz and Weiss, 'Credit Rationing'.

<sup>&</sup>lt;sup>23</sup> Scott, *Moral Economy*; Platteau 'Mutual Insurance'; Fafchamps, 'Solidarity networks'; Udry, 'Risk and Insurance'.

confident that the credit market revealed in the manorial records was the principal source of credit for villagers.<sup>24</sup>

Usually, it cost a creditor nothing to initiate a debt plaint in the manor court. A plaint was initiated through an oral notification to a court officer. After plaint initiation, the officers summoned the defendant to appear at the court's next session. If the defendant failed to appear, he would be 'attached' or 'distrained' by the court until he did appear at the subsequent session. These were measures to guarantee the debtor's appearance, notably the seizure of the defendant's movable property (usually livestock), which would be held until he answered the complaint against him.

It was possible for the parties at any point to pay the court to reach a settlement out of court. This arrangement was called a 'licence to agree'. Very often, though, the matter would be 'pleaded', that is, with both parties present in court the plaintiff could make his claim against the defendant, and the latter would be able to respond. Most contracts were made orally and only extremely rarely did this pleading involve the production of written proof. Pleading often resulted in termination of the suit through the defendant's acknowledgement of liability. Sometimes, however, the defendant denied all or part of the claim. A denial would usually result in a trial, using either a jury of court suitors, or an oath-swearing ritual known as compurgation. Either the plaintiff or the defendant, or both, was liable to be amerced (fined) by the court, depending on the outcome of the case.

The manor courts enforced the judgements they made against defendants in actions of debt. They did this by ordering such an individual to repay debts and damages, and, where he failed to do so, by seizing his movables and 'levying' the outstanding obligation from these chattels. However, the institutional capacity of the manorial courts was limited, since both in attaching and distraining defendants to appear, and in enforcing judgements, each individual manor court had the power to seize only those goods situated on the fee, i.e. the relatively restricted territory under the manorial lord's jurisdiction. Thus if a peasant from manor i wanted to sue a peasant from manor j in debt, it might make most sense for the plaintiff to use the court of manor j — the debtor's home manor court — since it had jurisdiction over the debtor/defendant. On the other hand, court j might be biased in favour of the local defendant, in which case the plantiff might use court i, his own home court. A third option was that the creditor could sue in a non-manorial court with debt jurisdiction in the locality, such as a

9

<sup>&</sup>lt;sup>24</sup> See Briggs, *Credit*; McIntosh, *Autonomy and Community*, pp. 176-177.

hundred court, a county court, or a church court.<sup>25</sup> Usually landlords did not restrict their peasant tenants from using courts other than their own for interpersonal debt litigation. The exception to this was where a tenant of manor i sought to sue another tenant of manor i in a court other than that of manor i. In such a scenario, the lord of manor i would often impose a financial penalty on the parties, if the lawsuit was of a type that his manor court was empowered to hear.<sup>26</sup>

Usually, a manor court debt case was contested between the two principal parties to the original contract, debtor and creditor. Occasionally, however, one, or sometimes two or more, of the litigants in the case is described as the 'pledge' of a third person.<sup>27</sup> The personal pledge was an important figure in the functioning of the manor court, and in medieval society more generally. A pledge was a surety who guaranteed that an individual instructed by the manor court to carry out an order, observe an injunction, or make a payment would act as required. A very common reason for the appointment of a pledge was to guarantee that his 'pledgee' would pay a court amercement (fine). At every session of every manor court, dozens of such pledges might be assigned to a similar number of pledgees. Such pledging was used in connection with all aspects of the manor court's business. In civil litigation such as debt, pledges were used to facilitate the prosecution of cases through court. For example, pledges were often appointed by the court to secure the appearance in court of absent defendants. The institution of personal pledging has attracted extensive research among historians who have explored the social networks and relationships that it entailed.<sup>28</sup>

There is a crucial distinction, however, between the pledges appointed by the manor court to guarantee its orders – including orders made in the resolution of civil litigation - and the pledges examined in this paper, whose existence only surfaces in occasional debt cases. Like the court appointed pledge, the job of the pledge mentioned in debt cases was that of surety. However, the latter type of pledge was not appointed by the court. Instead, his role was part of the private negotiations that led to the formation of credit contracts. Thus while the manorial court records testify to the importance of 'public' order institutions in providing

<sup>&</sup>lt;sup>25</sup> For these courts, see for example Brown, *Governance*, pp. 106-115. Like the manorial courts, the other court types mentioned only enforced debts worth less than 40 shillings. Larger debts had to be sued in the royal courts using a writ.

<sup>&</sup>lt;sup>26</sup> Briggs, 'Seigniorial control'.

<sup>&</sup>lt;sup>27</sup> Where the litigants included multiple pledges, the most common number seems to have been two, but debt plaints have been found which mention up to five pledges.

<sup>&</sup>lt;sup>28</sup> E.g. Pimsler, 'Solidarity'; Smith, 'Kin and Neighbours'; Postles, 'Personal pledging in manorial courts'; Postles, 'Personal pledging: medieval "reciprocity" or "symbolic capital"?'; Phillips, 'Collaboration and litigation'.

a legal framework for peasants to negotiate and resolve disputes, credit markets also relied upon the existence of a private order phenomenon: the practice of pledging for debt contracts.

Table 1 column C shows that only a small minority of all debt plaints heard in various well documented manor courts mention the involvement of pledges of this latter type. The number of cases that mention pledges is not necessarily a reliable guide to the extent of pledging for debts across all credit transactions. Even among cases that went to court, it was only when a creditor chose to sue a debtor's pledge, rather than the principal debtor himself, that the pledge's presence is revealed in the records. Thus even if a debt went bad and came to court, we never know for sure whether a pledge had been involved. Furthermore, even when a defendant was being sued in his capacity as pledge, many debt plaints are not in a form where they say so. Plaints terminated by a 'licence to agree', or failure to prosecute, give no details about the disputed debt, and hence do not say whether the debt arose from pledging.

Only the cases in column B of Table 1 give details about the disputed debt (mostly 'pleaded' cases), and hence are liable to mention pledging. The evidence in Table 1 is drawn from a database of all debt actions initiated in several well-documented courts. Additional information in this paper is drawn from a separate database, which contains a selection of unusually detailed cases from a wider range of manorial court rolls.

What exactly was the role of this kind of pledge? Usually, the court roll entry that records a 'pledge case' says little about the disputed transaction or the pledge's involvement. This typical example comes from the manor court rolls of Oakington (Cambridgeshire):

It appears by the inquest jury in which Robert Swon, plaintiff, and William Tilere place themselves that the same William owes 2s 8d [two shillings eight pence] as pledge of Simon Threscher, as [Robert] complains against him, with damages taxed at 3d. Therefore it is considered that the said William shall be in mercy [i.e. fined], and order is made to levy.<sup>29</sup>

This case is unusual in that rather than involving just the usual two parties, the principal creditor and principal debtor, it involves three people. However, although the entry suggests

<sup>&</sup>lt;sup>29</sup> Cambridge University Library, Queens' College, box 4 roll 8 (4 August 1380).

that William Tilere was pledge in some form of credit arrangement between two other men, and became liable for the borrower's debts, the specifics are unclear.

To discover more about the pledge's function one can look at the small minority of 'pledge case' entries which offer more details than the typically laconic example above. Collectively, those pleaded cases indicate that the role of the pledge or pledges was to witness an agreement and to make a payment on the principal's behalf if he failed to do so. For example, a 1322 case at Balsham (Cambridgeshire) recorded that Stephen Carpenter of nearby East Wratting had lent 20s to Richard Schimming, with Hugh in Angulo as Richard's pledge. However, claimed Stephen, at the due date neither Richard nor Hugh had offered repayment, so now Stephen was suing Hugh.<sup>30</sup> This and other cases imply that the pledge's liability for the debt was equal to that of the principal debtor. Several 'pledge case' entries note the pledge undertook to act 'as pledge and principal debtor'. This confirms that pledge and debtor were in a position of shared liability.<sup>31</sup>

When were pledges appointed? A few of the more detailed pledge cases shed light on this. Some such cases show that the involvement of a pledge could arise when the terms of an existing debt or debts were being renegotiated. Here, the pledge acted as a surety that the new repayment terms would be observed. For example, at Fornham (Suffolk) in 1346, Robert Chaplain sued John Fairweder for a debt of 4s. Robert claimed that in March the previous year he and one William Fraunceys had made a reckoning of sums outstanding from several previous sales of barley made by Robert to William. This showed William to be indebted to Robert for 4s., which it was agreed he would pay in the following May. Further, 'to give greater security that this should be done, the aforesaid John became pledge and principal debtor to pay the said 4s to the said Robert if the said William should not pay'. Although the court rolls are silent about such matters, one might guess that the debtor's ability to produce a pledge in such renegotiations influenced the length of the repayment term granted, or any interest charges imposed by the creditor. The same detailed pledge could arise when the terms of an existing that the debtor's ability to

<sup>&</sup>lt;sup>30</sup> Briggs, Credit, p. 65.

<sup>&</sup>lt;sup>31</sup> In discussing the pledge's liability for his principal's debt, we prefer the general term 'shared liability' to the stricter legal concepts of joint and several liability. Shared liability with a sole pledge is shown well in a case from Langtoft (Lincs), 22 April 1333 (Lincolnshire Archives, 6 ANC/1/32/4): 'Thomas Gelous complains that Gregory Robilard unjustly detains from him 30s of silver which he owes him, and undertook to pay as pledge and principal debtor for Hugh Truan at Epiphany last past, on which day the same Hugh paid nothing...'. Where a debtor had multiple pledges, we regard each pledge as having a shared liability with the debtor, even though each pledge was usually only liable for a share of the debt; we return to this issue below.

<sup>&</sup>lt;sup>32</sup> Suffolk Record Office (Bury St Edmunds branch), E3/15.9/1.2.

<sup>&</sup>lt;sup>33</sup> Interest was prohibited by canon law. However, the usury prohibition could be evaded (Koyama 'Evading the Taint'), and historians agree that a return over and above the principal would have been usual. This was set by custom and precedent, and was not a variable that lenders were able to manipulate. See Helmholz, 'Usury';

Just as common, however, was a scenario in which the pledge was appointed at the initial lending. An unusually detailed example dated May 1277 comes from Heacham (Norfolk). In this case, Richard Marth' sued Edmund Caperun. Richard claimed that shortly before the previous Christmas in his house at Ringstead some three miles from Heacham, he had sold stockfish worth 18s to Ralph le Vintner. Clearly this was a credit sale, with payment deferred. However, Richard had refused to deliver the fish to Ralph 'until he had a good pledging'. Edmund had then come before Richard, and undertook to pay the 18s purchase price if Ralph failed to do so. Dates for the payment were agreed. But Edmund, Richard claimed, had failed to pay at the dates agreed, hence the lawsuit for recovery of the 18s, plus damages. The detailed pledge cases reveal other key features of the system of pledging for debts. For instance, there is evidence that the court's methods of enforcing its judgments in debt actions were applied to pledges in the same way as they were to principal debtors. Court orders were made to 'levy' outstanding debts from the pledges' goods. The standard pledges are several orders were made to 'levy' outstanding debts from the pledges' goods.

Most of the 'pledge cases' in Table 1 involve a creditor suing his debtor's pledge or pledges. However, it was also possible for a pledge who had discharged his principal debtor's obligation to later recover his losses by suing him in the manor court. We can identify numerous examples of pledges suing borrowers.<sup>36</sup> This kind of action was sometimes given a distinctive title: a 'plea of not acquitting pledges', or a 'plea of pledge'.

The entries in manorial court rolls that record private debt litigation were written as memoranda of a legal process. Their purpose was to note court decisions and orders in lawsuits, not to explain the transactions behind those lawsuits. It is thus unsurprising that the

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Nightingale, 'English Parochial Clergy'. It is quite possible that some loans were interest free. For instance in their contemporary study of fishermen in Kerala, Platteau and Abraham, 'An Inquiry' did find zero interest loans being employed. Also see Fafchamps and Gubert, 'Contingent loan Repayment'.

<sup>&</sup>lt;sup>34</sup> Norfolk Record Office, Le Strange DA1. Edmund denied the pledging. The wording gives the impression that creditor and debtor were unknown to one another prior to the transaction. Another good example is from West Halton (Lincolnshire), date March 1315. Here, John son of Robert of Alkbarowe sued Simon son of Dulcie. John claimed that in January 1314 he had bought six quarters of malt from Stephan Droury, which the latter would deliver at the start of August, John evidently having advanced the purchase price of the malt. Simon, John claimed, became the 'pledge and principal debtor' to make the said payment of malt if John defaulted. Simon was now sued for failing in his duties as pledge: Westminster Abbey Muniments, 14545.

<sup>&</sup>lt;sup>35</sup> For good examples from Langtoft, see Lincolnshire Archives, 6 ANC 1/25/6.

<sup>&</sup>lt;sup>36</sup> A good detailed example from Tibenham (Norfolk): 'Geoffrey Bacon was summoned to respond to Richard de Marlyngforth in a plea of debt, whereof [Richard] complains that on Tuesday after the feast of St John the Baptist in the 21<sup>st</sup> year of King Edward that now is [26 June 1347], the said Geoffrey bought from a certain John Swan a certain horse for 2s, to be paid at the feast of St Thomas [probably 7 July] then next following. And the said Richard stood pledge [manucepit] that this should be done. On which day, the said Geoffrey did not pay the said money, so that the said John Swan requested the said Geoffrey to pay the said money, but he refused to do so. As a result the said Richard, through default of the said Geoffrey, paid the said money to the said John. The said Richard often besought the said Geoffrey and requested that he should repay him the said two shillings. But he refused to pay, and still does so, to the damage of the said Richard two shillings. And therefore he produces suit...': Cambridge University Library, Buxton Papers Box 67 (30 July 1347).

manor court evidence on the role of personal pledging in debt contracts is fragmentary and opaque. That evidence does permit some broad conclusions, however. While it is clear that pledges are referred to in only a minority of debt actions, this does not necessarily mean that the use of pledges in the credit market in general was rare. Pledges are mentioned in debt cases heard in a large number of manor courts in different locations. This suggests the use of pledges in credit relationships was geographically widespread. Examination of the few more detailed pledge cases shows that pledges were appointed as part of the renegotiation of ongoing transactions. Just as common, however, was the appointment of a pledge as guarantor at the outset of a new credit relationship.

The archival evidence thus leaves uncertainties in our understanding of pledging for debts. In what follows we attempt to resolve these through discussion of two theoretical models which outline the possible role played by pledging in the credit market.

## 4. Pledging as a Form of Enforcement

Building on existing game-theoretic models, we develop a simple framework for examining the problem facing lenders and borrowers. This framework can be used to study a number of different hypotheses or interpretations of the available historical evidence. First we focus on the problem of contract enforcement. Our model demonstrates how the practice of pledging could have supplemented the ability of manorial courts to enforce debt contracts. In Section 5 we develop an information-based interpretation of pledging and examine how borrowers could use pledges to credibly signal to lenders that they were likely to repay their loans.

Most rural credit took the form of deferred payment for goods rather than cash loans. This reflects the relative shortage of good quality coinage in the rural economy (particularly for small scale transactions).<sup>37</sup> As we have noted loans were typically small and were used for consumption rather than investment purposes.<sup>38</sup> We treat deferred payment and cash loans as equivalent.<sup>39</sup>

Some notation can be introduced to help clarify the role played by the manor court in enforcing credit relationships. The lender has an endowment of value l which he can lend to the borrower. The loan is assumed to be of greater value to the borrower than it is to the

<sup>38</sup> Three quarters of the debts recorded in Oakington, Cottenham, and Dry Drayton, 1291–1400 were worth less than 5s: Briggs, *Credit*, p. 59.

<sup>&</sup>lt;sup>37</sup> See Sargent and Velde, *The Big Problem of Small Change*, pp. 131-135.

<sup>&</sup>lt;sup>39</sup> For convenience, 'loan' is used here to denote both a cash loan, and credit extended through a deferred payment.

lender, either because the borrower has a productive investment that he wishes to make, or because he needs it to offset a negative income shock. This is reflected in the assumption that the amount is multiplied, by a factor x > l, so that the borrower receives x l. The loan is also of short duration so there is no discounting. Subsequently, the borrower either repays the debt by returning  $\mathbf{r} \in (\mathbf{l}, \mathbf{x})$  to the lender or he fails to repay (default). Failure to repay can either be opportunistic or stochastic (there is a bad harvest or some other negative shock). If the borrower fails to repay the loan then the lender can take him to court at a cost c. The court is able to convict the borrower with probability  $\mathbf{c}^{\mathbf{b}}$  and, in the event that his suit is successful, it can award the lender damages equal to d. We refer to this as the Loan Game and it is depicted in Figure 1a.

Consider the case where the borrower can choose not to repay. Every efficient strategy profile involves the lender lending l to the borrower. If the threat to take a defaulting borrower to court  $ex\ post$  is credible  $ex\ ante$ , then it can ensure that lending and repayment take place along the equilibrium path. If the threat to go to court is not credible, a lender will not lend anything since there is no reason to expect the borrower to repay. To be credible the cost of going to court and successfully obtaining a verdict has to be less than the benefit that the lender gets from the credit relationship: i.e.  $\mathbf{c} \leq \mathbf{c}^{\mathbf{b}} (\mathbf{r} + \mathbf{d}) - \mathbf{1}$ . Hence in weakly institutionalized societies, where courts are costly to use (high c), or unable either to secure judgements against, or recover the value of the loan from, defaulters (both low  $\mathbf{c}^{\mathbf{b}}$ ), the threat of taking a borrower to court, especially for small loans, will not deter borrowers from defaulting. As a result, lenders will not make small loans to individuals who are outside their close kinship or village network. Credit markets will be undeveloped and segmented.

The difficulties courts faced in enforcing debt contracts were particularly likely to result in thin and segmented credit markets when borrowers and lenders lived within the jurisdictions of two different manorial courts. In medieval England the costs of using the manorial courts were low (there was no charge to bring a case) if a lender sued a borrower with distrainable property within the jurisdiction of lender's home manor court. Local credit could be supported by existing public-order institutions. However, if a lender lent to an

<sup>&</sup>lt;sup>40</sup> Debtors or pledges who were found liable typically paid a court fine or amercement in addition to damages.

<sup>&</sup>lt;sup>41</sup> Instead of the courts, repeated interactions and reputational concerns will be relied upon to enforce repayment. See Telser, 'Theory of Self-Enforcing Agreements'; Coate and Ravallion, 'Reciprocity without Commitment'. The theoretical literature emphasizes the limitations of such systems. See Ligon et al., 'Informal insurance'. Credit markets in economies where the population principally rely on mutual insurance are undeveloped and often dominated by a small number of moneylenders who either charge extremely high rates of interest or have private means to enforcing repayment. See Basu, 'Implicit Interest Rates' and Bell, 'Credit market and interlinked transactions'.

individual who resided in a different jurisdiction, he had to choose which court to use, his home court i or the borrower's home court j. It was more costly for the lender to sue in the borrower's court ( $^{\mathfrak{C}_{i}} > ^{\mathfrak{C}_{i}}$ ) but his chance of recovering the debt might have been higher ( $^{\mathfrak{C}_{i}} ^{\mathfrak{b}} > ^{\mathfrak{C}_{i}} ^{\mathfrak{b}}$ ) as court j had the power to distrain the debtor. If this were so, lenders would use the borrower's court for larger loans (corresponding to larger values of r + d), but not for small loans. Even this case is optimistic, however, as the lender's probability of recovering the debt  $^{\mathfrak{C}_{i}} ^{\mathfrak{b}}$  need not be higher than  $^{\mathfrak{C}_{i}} ^{\mathfrak{b}}$  as it is quite possible that court j would be biased in favour of a local defendant. Providing lenders with a choice of courts did not necessarily enable them to extend credit further. This is depicted in Figure 1b.

Could pledging improve matters? Let us initially concentrate on the problem of contract enforcement. Consider the extensive form game depicted in Figure 2. We call this the Repayment Game. It depicts the relationship between a lender, a borrower, and a pledge where the borrower has already acquired a pledge. As we will demonstrate it can be interpreted as a subgame within a wider set of strategic interactions. There are three players: the lender L, the borrower B, and the pledge P. The lender first decides whether or not to lend to the borrower an amount l. The borrower then decides whether or not to repay an amount r, which may or may not include a discretionary amount of interest. If the borrower fails to repay the debt then his pledge can pay the loan. If the pledge fails to pay the debt then the lender has the option of taking either the original borrower or his pledge to court. Finally if the lender sues the pledge, the pledge then has the option of suing the borrower.

If the pledge pays on behalf of the borrower or is sued by the lender then he is able to exact an amount equal to y from the defaulting borrower. A lender who decides to go to court has to pay a cost c to do so. Once in court, who measures the probability that a lender will obtain a favourable decision to obtain repayment from the borrower directly, while measures the probability of obtaining payment from his pledge. A borrower or pledge who is successfully sued pays damages d in addition to the amount he owes r. We allow for the possibility that the pledge may be able to sue the borrower for recovery of the debt at a lower cost than can the lender. The payoffs associated with each terminal node for the borrower (B), pledge (P), and lender (L) are depicted in Figure 2. The game is one of complete information and can be solved via backwards induction.

<sup>&</sup>lt;sup>42</sup> See note above. The important point is that the interest rate was not a variable that could be adjusted to reflect risk or a lender's time preference because the usury prohibition prevented lenders from charging an explicit interest rate.

Depending on the parameters there are many possible equilibria. Here we concentrate on a (subgame) perfect equilibrium in which the practice of pledging plays a strategic role in improving repayment rates. Suppose that at the final node the pledge can credibly reclaim the debt from the borrower and that at the penultimate node it is not worthwhile for the lender to sue the borrower but it is worthwhile for the lender to sue the pledge. In this case no loan would take place in the Loan Game. However, pledging can make lending feasible. Specifically, the threat of being sued motivates the pledge to pay the debt on behalf of the borrower and then reclaim the debt back from the borrower at a later date (this depends on the value of *y* where *y* might include both the damages and court fees paid by the pledge). This threat in turn induces the borrower to repay the loan in the first place even though he would have not have repaid the lender in the absence of a pledge.

Enforcement considerations were most likely to figure prominently in those instances when lenders and borrowers came from different villages and lived within the jurisdictions of different manor courts. If lenders relied solely on their 'home' manorial courts to enforce contracts they were unlikely to be willing to lend to borrowers who held property outside of the fee, especially as we have seen for small debts. Without pledging, the limited capacity of the manorial courts would in theory have constrained the extent and scope of rural credit networks.

Does the documentary evidence suggest that the practice of pledging allow medieval creditors to lend to borrowers from different villages? In exploring this question, we have to rely on the manner in which the court roll scribe noted the personal names of the parties in the lawsuit. If a particular manor court's scribe did not specify a place of residence for an individual, it is assumed here that that individual resided within the manor. By contrast, non-residents are deemed to be those given an external place name following the personal name, e.g. 'Laurence Suitor of Lolworth'. This methodology may underestimate the extent to which persons from different places of residence engaged in credit relations together, since it is sometimes possible to prove by other evidence that scribes only inconsistently added explicit

<sup>&</sup>lt;sup>43</sup> Other equilibria include those in which lending does and does not occur. If  $\max[\alpha^p, \alpha^b] < \frac{c}{r+d}$  the lender cannot credibly threaten to sue either the borrower or a lender then the only subgame perfect equilibrium is one in which no lending takes place. If  $\alpha^b \ge \max[\alpha^p, \frac{c}{r+d}]$  there are two equilibria in which lending

is one in which no lending takes place. If r+d there are two equilibria in which lending takes place. However in both cases the pledge does not play a strategic role in enforcing repayment. The role of the pledge is simply to witness the contract. This was undoubtedly important in many transactions: it increased the probability that a court would find the borrower liable (r) but it is not of primary interest to us.

place name identifiers for non-residents.<sup>44</sup> Using this methodology, we looked at all the pledge cases from a number of manors to assess how many such cases featured a principal creditor and a principal debtor from different communities (Table 1 column D). It appears that pledge cases with parties from different residences form a small minority of all pledge cases in several of those court roll series, and they are not present in all. We interpret this as evidence that while the practice of pledging could in principle enable lenders to lend securely to non-local borrowers, this was not its primary function.

# 5. Pledging as a Source of Information

Thus far we have emphasized how pledging could have helped improve contract enforcement, but evidently this is only part of the story. The large literature on intermediaries in credit markets suggests the possibility that pledges also played a role in generating information that lenders could use in deciding whether or not to extend a loan. In order to address this aspect of the pledge's role we must first consider two additional questions: who pledged and why? The answers to these questions will shed light upon what kind of institution pledging was, and thereby help us to select the appropriate analytical framework for studying pledging.

First, who pledged? A recent literature in economics emphasizes the role that specialized intermediaries can play in supporting trade when institutions are weak. Avinash Dixit has developed a model of intermediation in which paid specialists act as either extralegal enforcers of contracts or as specialist sources of information on borrowers. This framework does not appear to be appropriate for studying pledging as we find no evidence that pledges were either paid or that they were specialized intermediaries. The court roll evidence provides little sign that pledging for debts was dominated by small numbers of specialists, or even just one specialist, in each village. There is also little to support the idea that village figures who may have been unusually well-informed about their fellows, such as manorial or village officials, monopolized such pledging. One can find occasional references to officials acting as pledges for debts, but they are rare. Fairly representative evidence from Littleport (Cambridgeshire) supports these points (Table 2). At Littleport, the 23 pledge cases – which corresponded to an approximately equal number of failed credit transactions

<sup>&</sup>lt;sup>44</sup>: See Briggs, 'Credit and the peasant household economy', p. 244.

<sup>&</sup>lt;sup>45</sup> Hoffman, Postel Vinay and Rosenthal, *Priceless Markets*; Ghatak and Guinanne, 'The economics of lending'; Guinanne, 'Cooperatives'.

<sup>&</sup>lt;sup>46</sup> In a case from Halesowen (Worcestershire), one of three individuals sued as pledges of Philip le Yonge was Richard bailiff of Warley, but this is an isolated example: Birmingham City Archives, 346318 (16 April 1348). In 'standard' pledging used to carry out manor court business, manorial officials did act frequently as pledges.

mention some 22 different pledges (several actions mention multiple pledges). With the possible exception of John Fox sr., who was sued as pledge in five separate actions, there is no-one whom one could point to as a specialist pledge for debts. Most of the pledges were themselves regular participants in the credit market, as creditor and/or debtor.

Why did individuals agree to act as pledges? One possibility is that they were paid. If this were the case, then pledges might indeed resemble the kinds of intermediaries discussed by Dixit.<sup>47</sup> Significantly, however, no evidence suggests that pledges were paid for standing surety for debts. None of the detailed pledge cases mentions a pledge being paid for his services by either borrowers or lenders. If pledges were routinely paid by borrowers, then one might expect to find manor court debt cases in which pledges sued borrowers for withheld fees. As already noted, pledges did sometimes sue the borrowers for whom they stood surety. As far as one can tell, however, the pledges invariably did so in order to recover losses sustained when they paid off a creditor on the debtor's behalf.

Instead of being paid specialists, pledges seem to have had very similar characteristics to borrowers and pledging seems to have been reciprocal. Reciprocal pledging recalls the practice of group lending employed to improve the performance of credit markets in developing countries. We can therefore draw on insights from the group lending literature that suggest that shared liability can improve repayment rates by increasing the incentive the borrower has to wisely invest his loan (i.e. reducing moral hazard) and by enabling the lender to avoid making loans to borrowers who are unlikely to repay (i.e. reducing adverse selection).

We employ a model developed by Maitreesh Ghatak which demonstrates how group lending enables lenders to overcome the problem of adverse selection by providing incentives for the group to screen out risky borrowers. Group lending motivates 'safe' borrowers to match and form groups with other 'safe' borrowers. The reasoning behind this is simple: since joint or shared liability means that if one individual defaults then the entire group is excluded from credit in the future, borrowers are induced to select themselves into groups with other borrowers who are similar to themselves. In the group lending literature this mechanism is called assortive matching. The matching process itself generates economically valuable information that lenders can use to improve the allocation of loans.

To focus on the role of asymmetric information we abstract away from the problem of opportunistic default and focus on the case in which there is an exogenous probability of

<sup>&</sup>lt;sup>47</sup> Dixit, 'On modes of economic governance'.

default  $\rho$  and borrowers are either safe with probability  $\mu$  or risky with probability  $1 - \mu$  (where  $\rho_s > \rho_r$ ) and the lender does not know a borrower's type. In standard credit market if  $1 > \rho_r r + (1 - \rho_r)[\alpha^b (r + d) - c]$  then it is not profitable for the lender to lend to risky types. It is still efficient to lend to safe types  $(1 > \rho_r r + (1 - \rho_r)[\alpha^b (r + d) - c])$ . However, if the proportion of risky borrowers  $(1 - \mu)$  is high enough the market unravels and neither safe nor risky borrowers obtain loans due to adverse selection.

To see how the practice of pledging could have improved matters, suppose pledges are informed about borrowers' types. The Repayment Game (Figure 2) depicted the interactions between a lender, a borrower, and a pledge conditional on a borrower having already acquired a pledge. Figure 3 explores the remainder of the game in the case where there is asymmetric information.<sup>48</sup> Nature moves first and assigns the borrower B with a type, 'safe' or 'risk' with probability  $\mu$  and  $1 - \mu$  respectively. As before, we assume that it is worthwhile for the lender to lend to safe borrowers but not to risky borrowers. However, the lender does not observe a borrower's type. We assume that  $1 - \mu$  is high enough so that in the absence of pledging the problem of adverse selection means that no lending takes place.

Borrower B approaches P who then has to decide whether to be his pledge. The pledge knows the borrower's type. If P does not agree to pledge then the lender has to decide whether or not to lend to the borrower as in the Loan Game and the probability that a borrower repays is given by his type. If P does agree to act as B's pledge then a variant of the Repayment Game is played. The principle difference is that B's type determines the probability that the loan is repaid. The lender observes whether or not the borrower has a pledge but does not observe the borrower's type. We assume that if a borrower fails to repay the loan the pledge is liable but we do not depict this part of the game in Figure 3 as it is not important for our analysis.

The key to understanding how pledging could overcome adverse selection lies in the process that matches borrowers and pledges. Pledges agree to act as pledges because they wish to access the credit market and borrow in the future. They are motivated by *dynamic incentives*. Safe types are motivated to pledge because of the reciprocal expectation that the borrowers would in turn stand as pledges for them when they wished to borrow. And risky types do not agree to act as pledges because they know that in the future both safe and risky types will be unwilling to pledge for them. The practice of pledging screens out risky

<sup>&</sup>lt;sup>48</sup> Formally this model is very similar to standard models of group lending. Hence we sketch the model and do not fully solve it. Interested readers can consult Ghatak, 'Group Lending'.

borrowers and ensures that safe types match with safe types. In equilibrium the lender will never lend to a borrower without a pledge as he will assume that any borrower without a pledge is risky. Expectations are self-fulfilling and both borrower and pledge are drawn solely from the population of 'safe types'.<sup>49</sup> Thus, in theory pledging can overcome the problem of adverse selection.

Is this model consistent with the available documentary evidence? The model predicts that reciprocal pledging could overcome the problem of adverse selection so long as the following three conditions held. (i) Pledges were better informed about the characteristics of borrowers than lenders. (ii) The principle of shared liability deterred individuals from agreeing to pledge for borrowers who they knew were likely to default. (iii) The future benefits of reciprocal pledging were large enough to induce pledges to act as sureties for individuals who they knew were likely to repay.

- (i) Pledging does not alleviate adverse selection unless pledges have access to information about borrowers that lenders lack. This is a plausible assumption as there is reason to believe that villagers would have had incentive and opportunity to acquire information about the credit-worthiness of their neighbours and that information of this kind was shared within small groups but not more generally available to lenders. At Willingham (Cambridgeshire), the wording of a few of the pledge cases suggests that the use of a pledge had encouraged creditors to lend to individuals about whom they knew little or nothing. For example, in 1389 William Grigge was found to owe Adam Dowe 5s as 'pledge of a certain unknown man of Orwell, which he ought to have paid at Willingham'. The unusual fact that the debtors in this and similar cases are not named suggests that their creditors did not know their names, and so could not notify them to the court. 51
- (ii) As we have seen, pledges shared liability with borrowers. The extent of this shared liability varied according to the number of pledges serving. Where there was a single

<sup>49</sup> The solution concept is a Perfect Bayesian Equilibrium (PBE). A PBE consists of a set of strategy profiles and posterior beliefs such that (1) both safe and risky borrowers choose strategies that are mutual best responses to the actions of the lender; (2) the lender plays a best response given his beliefs about the borrower's type; and (3) the lender updates his beliefs according to Bayes' law.

Suppose that the lender believes that a borrower with a pledge is safe with probability 1 and a borrower without a pledge is risky with probability 1. These posterior beliefs are consistent with the best responses of both safe and risky types so long as the matching process functions in the way that has been described and only safe types have an incentive to act as pledges and they only agree to pledge for other safe types. Hence the outcome we describe is a PBE. This mechanism is directly analogous to that in Ghatak 'Group Lending'.

<sup>&</sup>lt;sup>50</sup> Greif, 'Maghribi traders' demonstrates how information about the behaviour of commercial agents could be rapidly transmitted amongst a coalition of merchants.

<sup>&</sup>lt;sup>51</sup> Cambridgeshire Record Office, L1/177 (26 November 1389). Orwell is a village about 15 miles from Willingham. The Willingham rolls yield three further cases in which the name of the creditor and pledge is stated, but the principal debtor is merely described as 'a certain man', or 'a certain outsider' (two cases).

pledge, borrower and pledge were both equally liable for the entirety of the debt. By contrast, where there were multiple pledges, it appears to have been a general rule that each pledge was liable for only a portion of the debt. The pledge's liability was also restricted in the sense that a pledge did have legal recourse to recover from the borrower any debts that they paid on the borrower's behalf. Nevertheless the borrower and his pledge or pledges functioned as a 'group' from the perspective of the lender. Each pledge, whatever the number serving, was liable in some degree following the borrower's default, and it was the pledge who was responsible for obtaining compensation from the borrower.

(iii)Pledges could expect to be borrowers at a future date. All but two of the 22 recorded pledges for debts at Littleport are known to have acted also as principal borrowers in other transactions (Table 2). This is consistent with our model of reciprocal pledging: pledges were just the sort of individuals who were themselves likely at other times to require pledges in order to secure credit. This framework offers one mechanism that can explain the pivotal role played by pledging in rural credit markets.

Our explanation of how pledging ameliorated the problem of adverse selection also suggests ways in which pledging could have helped to overcome moral hazard and facilitate debt renegotiation. If lenders cannot observe the behaviour of the borrower after the initial loan has been contracted, the borrower may use the loan unwisely. This problem of moral hazard deters lenders from extending credit in the first place and may impede debt renegotiation in the event that the borrower has suffered from a genuine exogenous shock that prevents them from repaying on time. Stiglitz suggested that group lending encouraged peer monitoring that can effectively substitute for lender monitoring.<sup>53</sup> Chowdhury demonstrates that it is the sequential lending element of microcredit contracts that provides an incentive for ensuring borrowers monitor one another.<sup>54</sup> Pledging could have generated similar dynamic incentives. It not only motivated borrowers to pledge for other borrowers who they thought were likely to be able to repay, but also induced them to monitor those borrowers and to ensure that the loan was not wasted.

Evidence that pledges were used to monitor borrowers in medieval credit markets comes from cases where pledges were appointed when a debt was being renegotiated. It is

<sup>52</sup> Many of the pleaded actions that mention multiple pledges focus on the issue of whether an individual pledge was liable for the entirety of a debtor's obligation. For fuller discussion, see Briggs and Schofield, *Select Cases*. <sup>53</sup> Stiglitz, 'Peer Monitoring'.

<sup>&</sup>lt;sup>54</sup> Chowdhury, 'Group-lending'. Ghatak and Guinanne, 'The economics of lending' p. 224 also make this point briefly.

highly likely that many loans were initially contracted without pledges. These were cases where the lender could either rely on the manorial court to oblige the borrower to repay, or cases where the lender believed that he had sufficient information about the borrower's ability to repay the loan. What is interesting is the fact that when borrowers had failed to repay, pledges were often appointed in order to guarantee a new renegotiated loan. In addition to the case from Fornham discussed earlier, we have found other examples where pledges seem to have been appointed for the first time when new repayment terms for outstanding debts were being arranged.<sup>55</sup> In such cases, it seems as if the lender was not able to observe the behaviour of the borrower and hence was unable to tell whether or not the reason given for the earlier failure to repay the loan was legitimate or not. The introduction of a pledge was a way of monitoring the borrower's actions.

Finally, a borrower and his pledges could have acted as a small insurance network. If the borrower was unable to repay then one of his pledges could step in for him and vice-versa next period. The groups formed by borrowers and their pledges resemble informal insurance networks but they are better able to smooth risk because they also have access to the formal credit market. The motivation of mutual insurance provides a rationale for having several pledges and complements the other advantages brought by the practice of pledging.

## 6. Discussion and Concluding Comments

Rural credit markets existed in medieval England, and the shared-liability institution of pledging played an important role in their development.<sup>56</sup> We have shown how pledging facilitated the enforcement of contracts. By overcoming the spatial limitations on the manor court's jurisdiction, pledging helped enable lenders to extend credit to outsiders and strangers. Perhaps more importantly, we have shown that by generating economically valuable information for lenders, pledging helped overcome problems of asymmetric information.

<sup>&</sup>lt;sup>55</sup> See e.g. the following from Weasenham (Norfolk): 'John Brodeghe complains of Geoffrey Chuket in a plea of debt, and says that because a certain John Molle lately owed him 3s 4d silver, the said Geoffrey at Fakenham on the Thursday after the feast of St Martin in the 19<sup>th</sup> year of Edward father of the king that now is [14 November 1325] became pledge and principal of the same John concerning the aforesaid 3s 4d...'. The inclusion of 'lately' (*nuper*) here indicates that Molle's debt was already outstanding at the time Chuket became pledge. Cambridge University Library, Coke of Weasenham Box 3 no. 35 (16 July 1327).

<sup>&</sup>lt;sup>56</sup> Pledging for debts was also important in the medieval urban credit market: Kowaleski, *Local markets*, pp. 208-9.

In exploring how these credit markets functioned we are inevitably limited by the surviving historical evidence. The nature of this evidence means it is impossible to ascertain the proportion of credit relationships that went to court, or the proportion of credit relationships or indeed manorial lawsuits that involved pledges. In assessing the empirical support for the theoretical mechanisms that we have identified it is important to note that both in the model of enforcement and in the adverse selection model the appearance of a pledge in court was an 'off the equilibrium path' phenomenon. This means that the significance of pledging as an institution cannot be readily gauged by the frequency with which it occurs in the manorial records. In principle, when pledging functioned effectively, references to pledges for debts would not appear in the court record at all.<sup>57</sup> In reality, 'pledge cases' do appear, but they are only a small proportion of the total number of debt cases that went to court. Pledge cases could have been comparatively rare either because credit relationships in which pledges were not used were more likely to result in default than those involving pledges, and/or because the majority of credit relationships did not involve pledging. In any case, the importance of pledging as an institution does not lie in the number or proportion of loans that were facilitated as a result of its existence, but in the character of these loans. The significance of pledging was at the margin. Pledging enabled loans to be made to individuals who would not otherwise have access to credit. At the margin it was vital in permitting loans to be made to strangers, or between individuals who lived in different jurisdictions.

This paper contributes to a growing literature on the relationship between private order institutions and formal legal structures.<sup>58</sup> This literature has argued that private order institutions can resolve many coordination and collective action problems. Yet it has been criticized for neglecting the role played by the formal legal system in many of the historical instances discussed.<sup>59</sup> Through the example in this paper we have sought to show how social capital and legal institutions could complement each other. In this case, an informal, 'private-order' phenomenon - pledging – worked in combination with the formal or public legal system, in the shape of the manor courts. Indeed, it seems probable that in developing the system of pledging for debts, the participants in the English credit market had borrowed and

<sup>&</sup>lt;sup>57</sup> Strictly speaking, pledging would never appear in court along the equilibrium path of the enforcement game but would appear in the game with adverse selection when safe types default. See Greif, 'Reputation and Coalitions', p. 869, and Greif, 'On Contract Enforcement', p. 22, who notes it is misleading to argue that the lack of 'smoking gun' documentary evidence invalidates a similar such argument, since '[t]he lack of such evidence, after all, is what the theory predicts. Punishment is off-the-equilibrium path and rare events are not likely to appear in the historical documents some 900 years later'.

<sup>&</sup>lt;sup>58</sup> Benson, 'Spontaneous Evolution of Commercial Law'; Greif 'Maghribi traders'; Milgrom et al., 'Role Of Institutions In The Revival Of Trade'.

<sup>&</sup>lt;sup>59</sup> Ogilvie, 'Whatever is, is right?'; Ogilvie, 'Merchant Guilds'.

adapted for private use an institution which, as explained above, was at the heart of the functioning of the manor courts. Pledging for debts helped provide rural lenders and borrowers with a solution to many of the apparent institutional weaknesses identified at the start of this paper, most notably the multiplicity and jurisdictional fragmentation of local law courts, the absence of debt registries or other sources of written information about borrowers, and the limited use of collateral for loans. However, it was the existence of a network of manor courts possessing the power to seize the property of debtors and pledges that ultimately permitted the system of pledging for debts to function successfully.

The system of pledging for debts and the rural credit market it supported was thus dependent on the manor courts present in any particular locality. It follows that a locality lacking an effective manor court or courts committed to enforcing private contracts would also have lacked a significant credit market, even if pledging for debts was practised locally. More importantly, it also follows that the general weakening of the English manor courts in the fifteenth century is of obvious significance. In that period, the decline in the importance of manorial lordship meant that manor courts tended to be held less frequently, and dealt with much less business overall, including interpersonal debt litigation. <sup>60</sup> Deprived of the fullyfunctioning network of local courts on which it depended, the system of pledging for debts seems unlikely to have been able to do much to arrest the contraction of rural credit networks evident in England in this period. When the economic importance of credit in town and country began to increase again in the sixteenth century, local courts again played a prominent role in the enforcement of interpersonal debt contracts. However, in accounts of this later period, little emphasis has been placed on the role of pledges for oral debts, and instead commentators note the growing prominence of formal institutions such as written bonds and mortgages.<sup>61</sup>

In evaluating the wider economic significance of pledging for debts in the medieval countryside, it is perhaps most appropriate to situate this phenomenon within discussions of the transition from informal to formal credit markets and within the long history of credit market institutions. Wide and deep credit markets existed in many parts of Europe long before the industrial revolution and the onset of modern growth. Through institutional innovation and adaptation lenders and borrowers in medieval England were able to overcome many of the problems that continue to blight credit markets in many parts of the world today. The study of these institutional innovations and adaptations warns against a binary distinction

<sup>&</sup>lt;sup>60</sup> Briggs, 'Availability of credit'.

<sup>61</sup> Muldrew, Economy of Obligation; Poole, 'Debt'; Kew, 'Mortgages'.

between formal and informal credit institutions. Pledging enabled individuals to access financial markets at a lower cost because it effectively 'piggy-backed' on the existence of relatively close knit relations between peasant households. By harnessing some of the social capital upon which informal insurance systems rely, it supplemented the public-order institutions of the courts and thereby enabled peasants to gain access to credit markets which would otherwise have been closed to them.

Table 1. The incidence of 'pledge cases' in manor courts

	A	В	С	D
Manor court/years	Total debt cases begun	Total no. cases from col. A liable to mention pledges	No. col. B cases that are 'pledge cases' (%)	pledge cases in col. C with parties from different places of residence
Oakington (Cambridgeshire) 1291-1400	893	402	37 (9.2)	1
Oakington 1401-80	153	30	0 (0.0)	0
Great Horwood (Buckinghamshire) 1302-60	179	96	8 (8.3)	0
Willingham (Cambridgeshire) 1377-1400	700	331	29 (8.8)	6
Willingham 1401-58	357	110	2 (1.8)	0
Littleport (Cambridgeshire) 1316-27	530	228	23 (10.1)	2
Balsham (Cambridgeshire) 1310-49	176	92	8 (8.7)	1
Halesowen (Worcestershire) 1336- 48	233	127	13 (10.2)	1
Swaffham Prior (Cambridgeshire) 1351-70	106	22	0 (0.0)	0
Swaffham Prior 1422-60	214	92	4 (4.3)	0
Totals	3541	1530	124 (8.1)	11

Sources: Oakington: Cambridge University Library, Queens' College boxes 3-5, rolls 1-20, 24; Great Horwood: Oxford, New College Archives, 3912-3915; Willingham: Cambridgeshire Record Office, L1/177-9; Littleport: Cambridgeshire Record Office, R 93/96; Balsham: London Metropolitan Archives, ACC/1876/MR/02/001-011; Halesowen: Birmingham City Archives, 346278-346320; Swaffham Prior: Cambridgeshire Record Office, EDC 7/13/5-6. Notes: Cols. A and B take account of all actions of debt/detinue, regardless of final outcome. Recalculation of the number of 'pledge cases' explains some slight discrepancies between the figures in col. C, and Briggs, Credit, p. 92 n. 70.

Table 2. Littleport pledge cases showing names of creditor, debtor, and pledge(s), 1316-27

Start date of plaint	Creditor	Pledge(s)	Debtor pledged for
13 Aug 1316	John le Herd	John Mounfort	John Pomat
8 Dec 1316	John Fox jr	<u>John de Elm</u>	Henry Shepherd
8 Dec 1316	John Fox jr	John Fox sr	Ralph Shepherd
8 Dec 1316	William Abbot	<u>John Fox sr</u>	Henry Shepherd
8 Dec 1316	William Abbot	John Mounfort sr	Ralph Anke
8 Dec 1316	Oliver Beaucosin	John Maminester	John, son of the reeve of
			Feltwell
27 July 1317	John Tepito	Richard Aucre	John de Akre
27 July 1317	Robert le Carter	<u>John Albin</u>	Michael vicar of Milton
27 July 1317	John Fox jr	John Fox sr	Ralph Shepherd
27 July 1317	William Hewen	Walter Albin, Henry	William Peche
		<u>Swetegrom</u>	
3 Dec 1317	John Brokenhorn	Ralph Bolay	Peter Ilger
22 March 1319	William Lovechild	Ralph Bolay, John Fox sr,	Oliver Beaucosin
		John Beaucosin	
18 July 1319	Robert le Carter	<u>Ralph Bolay</u>	Michael Kiggel
28 Sept 1319	John Fox jr	Ralph Shepherd	Henry Shepherd
11 Dec 1319	John Bolewere	John Portioye, John Malin	Peter Ilger
23 Mar 1321	Walter Albin	John le Fisher, John le Henry Shepherd	
		Herd, John Fox Sr, John	
		<u>Fox jr</u>	
19 May 1321	John le Fisher	Ralph Shepherd	Henry Shepherd
19 May 1321	John le Fisher	Hugh Belde, Richard	William de Tydd
		<u>Mauntele</u>	
7 July 1322	Robert le Carter	John le Fisher, William	John Ibbot
		<u>Acreman</u>	
12 Dec 1323	Unknown	Laurence Dere	Thomas Brenwater
1 Mar 1325	John Beaucosin	<u>John Mounfort</u>	Nicholas Beaucosin
30 Apr 1326	William Abbot	Robert le Carter, John Albin	Walter Albin
12 Aug 1327	Unknown	John Beauscosin	John Fox jr

Source: Cambridgeshire Record Office, R 93/96. Note: pledges with names in italics and/or underlined are also evidenced elsewhere in these records as a principal creditor and/or principal debtor: debtor only; creditor only; acted as creditor and debtor.

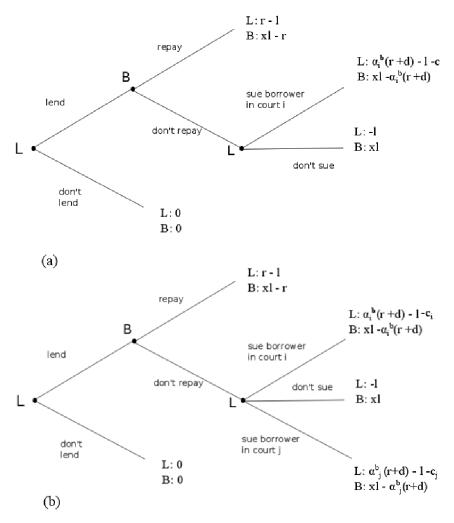


Figure 1: The Loan Game. Panel (a) depicts the Loan Game with a single court. Panel (a) depicts the Loan Game with two courts i and j.

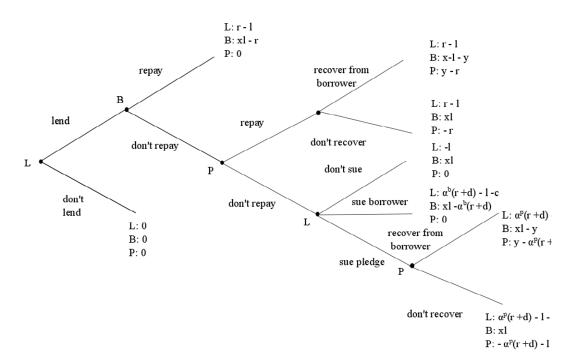


Figure 2: The Repayment Game

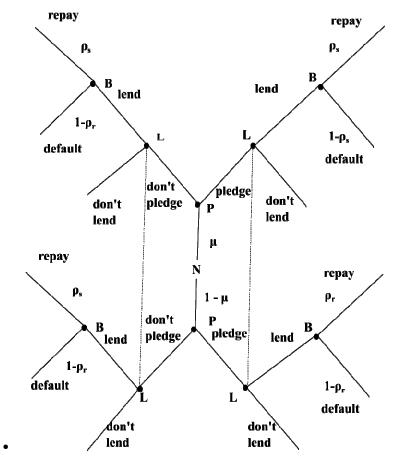


Figure 3: Pledging and Adverse Selection. The nodes where the pledge is liable to repay on behalf of the borrower are not depicted.

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