8. The commercial system of payments and remittance

Merchants constantly needed to make and receive payment—often in large amounts. They did so when buying and selling goods and services, when borrowing and lending, when paying tolls and taxes, and when discharging debts and distributing profits. Also, because merchants operated in multiple locations distant from one another, they frequently needed to remit funds from one place to another. The costs of payment and remittance were a significant part of transactions costs.

The means of payment and remittance available initially—coin and bullion—were quite inadequate to the needs of commerce. So commerce developed its own system of payment and remittance based on the transfer of IOUs. This system developed where the need was greatest—in the organized markets of major commercial cities.

We will examine how this system of payment and remittance evolved—first its initial development during the Commercial Revolution, and then its continuing evolution in subsequent centuries. We will conclude by asking how the evolution of this system contributed to the development of commerce and to economic progress in general.

Means of payment during the Commercial Revolution

Payment is made by transferring something of value—as means of payment—from one person to another. The means of payment can be an object of intrinsic value—usually a quantity of precious metal, commonly minted into coin. Or it can take the form of an IOU—a promise to settle at a later date.

Coin and its problems

In preindustrial Europe, coin came in a bewildering profusion of types. Each small jurisdiction issued its own coins, and they varied widely in weight and fineness.[1] Because of the crude technology of minting, even new coins differed in weight, and they were easy to clip and counterfeit. The quality of a given issue deteriorated over time as a result of wear and because of the culling of heavier coins. To keep up with this deterioration, successive issues tended to be of progressively lower weight and fineness. And not only

[1](Spufford 1988)

was the coinage of poor quality, but there was never enough of it: there was a chronic shortage of coin throughout the period, punctuated occasionally by an acute shortage.

The value of silver coins was too low for making large payments conveniently: the necessary counting, sorting, weighing, and testing of thousands or even millions of coins could take weeks. Instead, for large payments, merchants generally used silver bars, or, when they became available in the late thirteenth century, gold coins. Even so, payment in coin or bullion remained difficult and expensive.

Payment by IOU

As a result, people generally used IOUs instead whenever they could. However, accepting an IOU in payment requires trust: there has to be some confidence that the IOU will ultimately be honored. Consequently, the use of IOUs in payment developed initially only among people who knew one another well.

We have seen that exchange often involved sales credit: that was how one merchant sold to another whom he knew and trusted. But it was also how one villager sold to another and how shopkeepers, craftsmen, or innkeepers sold to their regular customers. Selling on credit in this way meant, essentially, accepting an IOU in payment: in exchange for the actual delivery of goods or services, the seller accepted from the buyer a personal promise to pay later.

Managing payment by IOU

Exchange based on sales credit requires periodic settlement. Someone who has extended credit to another may wish to liquidate the debt in order to be able to make purchases himself—although, if he too can buy on credit this may not be essential. A more important reason for periodic settlement is the need to limit exposure to default by the debtor. Periodic settlement constitutes a 'test of solvency'.

Of course, if sales credit must ultimately be settled in currency, the need for currency is not eliminated but merely deferred. However, actual payment in currency can be reduced by setting off one debt against another—by *netting*. With netting, only a

part of the original debt will remain to be settled in coin, and the more successful the netting the smaller the part.[2]

When sales credit was reciprocal, as it often was in local trade, there was considerable opportunity for bilateral netting. A baker who sold bread on credit to a shoemaker would eventually need a new pair of shoes. The extended periods for which debts were often carried made this sort of netting easier. In larger communities, however, and with more complicated patterns of trade, there were fewer opportunities for bilateral netting. Some form of multilateral netting was therefore desirable.

The simplest form of multilateral netting is the assignment of third-party debt. For example, a merchant who owes 100 florins to a supplier and is in turn owed 80 florins by a customer can assign the customer's debt to the supplier in partial settlement. Repeated assignment of debts in this way creates opportunities for bilateral netting—for example, if the merchant's supplier happens to be in debt to the merchant's customer.

The assignment of third-party debt was common among merchants. In the Mediterranean zone, merchants generally assigned debts via the books of the parties concerned. Merchants in the northern zone, however, did not keep books: instead, they recorded debts by means of promissory notes ('letters obligatory'). So it was these they assigned in settlement.[3]

Limitations on payment by IOU

A system of payment based on IOUs works only within a community of people who know one another. Each knows the other's credit, and the need to preserve that credit gives each an incentive to honor his debts. Debts can be carried for extended periods, because no one is going to flee to escape his obligations. And if trust between the parties breaks down, there is a common formal order to call upon (of village, association, or city). Multilateral netting through the assignment of third-party debt is possible within a community, because credit is common knowledge: a creditor would know whether or not to accept the debt of a particular third party in settlement.

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[2]Often what remained was settled in kind rather than in cash.

[3]The assignment of third-party debt was also common within local communities. Quite complex chains of assignment were common, even in the country.

The principal problem for a payments system based on IOUs is what to do when a participant fails to settle as promised. This poses a danger to the system as a whole, because each participant relies on timely settlement by others to be able to settle his own debts. One failure to settle can therefore lead to another in a cascade that eventually brings the whole system to a halt.

The problem can largely be eliminated, of course, through flexibility—by creditors being willing to give debtors extra time to settle when necessary and appropriate. Such flexibility is possible, once gain, only within a community. Then, a creditor is likely to know whether a particular debtor is temporarily short of funds or insolvent—flexibility being appropriate in the former case but not in the latter.

When it comes to payments between strangers, however, none of this works. The credit of strangers is unknown, the incentive of a continuing relationship is usually absent, and social constraints on behavior are weak. The obvious alternative in these circumstances is payment in cash. Indeed, despite the problems of the coinage, cash was the chosen means of payment for the myriad, relatively small, transactions in town markets. Cash was not, however, a practical solution for payments between merchants. Instead, there developed in the major commercial centers a system of payment based on the assignment of the IOUs of deposit banks.

Deposit banks

Deposit banks had their origin in moneychanging. The problems of the coinage created a need for professionals able to exchange one type of coin for another and to check the quality of coin tendered. For such moneychangers, rather than checking coin over and over again for each payment, it made sense to check it only once and then place it in storage: payment could then be made by transferring, not the coin itself, but a claim to the coin.

In this way, moneychanger-bankers created a sort of book-entry money by 'immobilizing' the actual coin and transfering the title to it on their books.[4] Rather than

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[4]There is an obvious parallel with the recent practice of immobilizing stocks. Today, stock certificates are locked away in the vaults of a depository that records on its books the ownership of the stocks it holds. The delivery of a stock can now be effected simply by changing a 'book entry'—in reality, a computer

physically handing over coin, a payer could transfer a credit on the books of his bank to the benefit of a payee. The practice was known as 'payment in bank'.

Payment in bank as assignment of third-party debt

While payment in bank originated as a way of improving the efficiency of payment in coin, it was at the same time an example of settlement by the assignment of third-party debt. As we have seen, for the assignment of such a debt to be acceptable, the third party in question must be known to the potential assignee and considered a good credit. In major commercial centers where trade with strangers predominated, deposit banks played the role of such a third party—universally known and trusted.[5]

Payment by assignment of bank deposits had additional advantages. Because the debt of the *same* third party was assigned in many payments, netting was easier.[6] As a result, bank deposits could be used to mediate a large volume of transactions with very little need for final settlement in cash. Moreover, because bank deposits were so useful as a means of payment, depositors held on to them rather than converting them immediately into cash.

Trust in deposit banks was reinforced by public regulation. Banks were licensed by the city authorities, who required from potential bankers a solemn oath—then a very serious matter—together with third-party sureties. The authorities also restricted a bank's permissable assets and activities. Cities sometimes even went so far as to provide guarantees themselves: for example, in Bruges in 1309, when a series of bank failures infuriated foreign merchants and threatened the city's trade, the authorities instituted a form of deposit insurance.[7]

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record—rather than by physical delivery of the stock certificate. Immobilization of stocks has greatly increased the efficiency, and reduced the cost, of settling stock trades.

[5]Deposit banks were not the only ones to play the role of trusted third party. Many merchants held balances with innkeepers and brokers and they settled with one another by transferring balances on the books of these intermediaries ((Nicholas 1992); (Nicholas 1979)). Also, merchants often held working deposits with merchant banks (about which we will learn presently) and used these too for payments purposes ((de Roover 1944)).

[6](Usher 1934)

[7](de Roover 1974)Ch. 15.

Bank lending and overdraft

The willingness of people to hold on to bank deposits made it possible for banks to become lenders. They did this by creating a deposit for a borrower without any corresponding deposit actually having been made. Since such a 'fictitious deposit' was indistinguishable from the real thing, the borrower could nonetheless use it to make payment. As a consequence of this practice, the amount of deposits outstanding came to exceed the amount of coin held against them—fractional reserve banking.

The ability of banks to lend enabled them to offer a solution to the problem, noted earlier and in Chapter 6, of traders being unable to settle on time—the problem of liquidity risk. The solution that worked within a community—flexibility—was not feasible in transactions between strangers. Instead, the deposit bank provided a 'liquidity facility'. If a depositor temporarily lacked a sufficient balance in his account to settle, the banker would allow him to 'overdraw' his account. That is, the banker would make him a loan that permitted him to settle.[8]

The banker was in a position to provide such credit, because he knew his customers and because his customers had an incentive to repay in order to preserve the banking relationship. Such overdraft lending was a natural extension of the bank's function as a payments intermediary.

Banking at the fairs

The purest example of deposit banking as assignment of debt was to be found at the great medieval fairs. As we saw in Chapter 6, trading at Champagne was divided into periods. The first period were devoted mainly to the sale of cloth. The sellers were predominantly from Flanders, the buyers from Italy. A subsequent period was devoted to the sale of oriental spices and drugs: now the Italians were the sellers and the Flemings, the buyers.[9]

The fair banks provided the payments system that made this separation into trading periods possible. In the first period, the Italians paid for their purchases from Flemish

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[8]Note that this lending was at the discretion of the banker. Because transactions were conducted orally, overdraft was impossible without the banker's consent. (Usher 1934) p18

[9]This is a considerable simplification of the actual procedure.

merchants by transferring to them credits on the books of the banks.[10] In the later period, the Flemish merchants used the credits they had accumulated in this way to pay for their own purchases of spices and drugs from Italian merchants.

The credits, in this case, were not really deposits. Although evidence is scarce, it seems the Italians did not deposit coin with the bankers in advance. Rather, the bankers created the credits on their books by allowing Italian merchants to overdraw their accounts during the first period of trading; these overdrafts were then largely extinguished by payments the Italians received during the later period of trading.[11] Consistent with this interpretation, 'deposits' at the fair banks were not payable on demand, but only during the settlement period that concluded the fair.

Inter-fair deposits

In the settlement period, merchants with negative balances had to cover them. Although they could in principle settle in cash, it was more common to roll over the unpaid balance to the following fair. This was usually done by borrowing from other merchants who had completed their trading with positive balances with the bankers. Similarly, merchants with positive balances could, if they wished, receive payment in cash, but many preferred instead to lend them.

To facilitate the borrowing and lending of bank balances, there soon developed an active market in inter-fair loans or 'inter-fair deposits'. This market played the role of a liquidity facility at the fairs. If a debtor was unable to settle a debt to a stranger as promised, he could borrow temporarily in this market—from someone who knew and trusted him—to pay his creditor on time.

Inter-fair deposits were a convenience for both borrowers and lenders, since it enabled them to balance their purchases and sales over time without having to ship bullion back and forth between their home cities and the fairs. For example, a merchant who bought more than he sold at one fair could balance this by selling more than he

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[10]Payment was final in that the banks guaranteed settlement.

[11](de Roover 1954) p204. The bankers at Champagne were themselves from northern Italy, predominantly from Asti and Piacenza (Abulafia 1997), and so in a position to extend credit to their fellow Italians.

bought at another: he did not have to settle his 'deficit' in cash.[12] The market for inter-fair loans enabled netting to be extended *across* fairs.[13]

Deposit banking probably originated in Genoa some time in the twelfth century. By the fourteenth, payment in bank predominated in all the major commercial centers, both cities and fairs.[14] Every merchant residing in such a center, whether native or foreign, would hold deposits at one or more deposit banks; visiting merchants would open temporary accounts.

MEANS OF REMITTANCE DURING THE COMMERCIAL REVOLUTION

Without a way of remitting funds to or from a distant market, a merchant would have had to balance the value of goods he sold and purchased there. If he had intended to purchase goods there he would have had to bring with him, or send, goods of equal value and sell them to cover the purchase; if he had intended to sell goods in the distant market he would have had to purchase other goods there with the proceeds and bring them or send them home.

The ability to bring or send coin or bullion loosened this constraint, but doing so was costly. Because each place had its own coinage, the coins or bullion sent or brought had to be melted down and reminted. And, because coin and bullion were especially vulnerable to theft and robbery en route, extra security was needed.

Remittance by IOU

Remittance by IOU offered a less expensive alternative. A merchant could deliver funds to someone in his home city in exchange for a promise of funds in the distant market; he could then use the funds he received there to cover any excess of his purchases over his sales. Similarly, a merchant who sold more than he purchased in a

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[12]See (Grafe 2001), for example, on the practice at the Castilian fairs or (Farmer 1991) on the English fairs.

[13](Nicholas 1992) p 171

[14]In cities, even large ones, that were not primarily commercial centers, deposit banking either did not develop at all (for example, in Paris and London), or it did not develop to the same extent (for example, in Florence).

distant market could repatriate the excess funds by delivering them to someone there in exchange for a promise of repayment at home.

Cambium contracts and letters obligatory

Remittance by IOU seems to have originated in the late twelfth century in the inland cities of northern Italy as part of their system of trading with the Fairs of Champagne.[15] The earliest instrument of remittance was the *cambium* contract—a promissory note, drawn up formally by a notary.[16] In such a note, one merchant acknowledged receipt from another of payment in local currency and promised to repay him in a different place at a future date in the currency of that place. To settle the transaction on the specified date, the two parties concerned, or their agents, had to be present at the place of repayment.

A similar instrument, the letter obligatory, appeared a little later in the northern zone. As we have seen, this was a promise by one merchant to pay another: in this case, payment might be in the same place or in another. Consequently, in this case, payment was often in the same currency. Moreover, the letter obligatory was not a formal document drawn up by a notary, but rather an informal document written in the hand of the debtor.

Like sales credit, the *cambium* contract and the letter obligatory were direct obligations of one party to another: that is, no intermediary was involved. Consequently, again like sales credit, they required trust, and their use was therefore limited to merchants who knew one another and who had recourse, if necessary, to a common system of formal order. Expansion of remittance by IOU to transactions between strangers had to await the emergence of a mediated instrument.

Bills of exchange

By the late thirteenth century, as we saw in Chapter 6, there existed a number of large trading companies, each with branches in many of the principal commercial centers. Such companies found it easy to offer the service of remittance as a sideline: they accepted

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[15](Ashtor 1983)

[16](Blomquist 1990)

payment at one of their branches in local coin and sent instructions to a branch at a different location to repay in the coin current there.[17] The instrument they used for this transaction was called a *lettera di cambio* or bill of exchange.

Remittance by bill of exchange therefore involved four parties. The 'deliverer' delivered funds to the 'taker' and received from him the bill of exchange. The deliverer sent the bill to his own agent at the designated place of payment—the 'payee'. The payee presented the bill to the agent of the taker there—the 'payer'. In the meantime, the taker would have sent notification to the payer (an *avisa*) instructing him to honor the bill when it was presented.

The bill of exchange was an informal letter, not a notarial deed. This lowered the cost and increased the speed of the transaction but also initially made it unenforceable in a civil court. However, merchant courts did recognize such informal documents.[18] Moreover, since the taker-payer was typically a large trading company which provided remittance services as part of its business, it had an interest in preserving its reputation for honesty and reliability.[19]

Remittance by bill of exchange depended, therefore, on the existence of large international trading companies with multiple foreign branches willing to provide this service—willing to act as 'merchant banks'.[20] Such companies were predominantly Italian—initially Lucchese, then mostly Florentine. However, non-Italians did play a minor role: Catalan merchant banks, for example, were active in Bruges and Palermo.

The exchange network

Cities served by merchant banks were known as 'banking places'. In northern Italy, the center of medieval commerce, most cities were banking places, as were many cities in the Mediterranean zone. There were fewer banking places in the northern zone—the fairs

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[17]The Knights Templar, a military order, had monastic houses around Europe and in the Holy Land; they used these 'branches' in much the same way to provide remittance services. (Barber 1994).

[18]See Chapter 6 for a discussion of merchant courts.

[19]For additional security, it was usual to begin the text of the bill with "*Al nome di Dio*", making default blasphemous.

[20]We will look at these companies, and at how they operated, in greater detail in Chapter 9.

of Champagne, and when Champagne declined, Paris, Bruges, and London. Banking places constituted a network, and only within this network was it possible to remit funds by bill of exchange.[21]

Centers of the exchange network

Banking places were not all, however, of equal importance. At any one time, the exchange network had a center and perhaps one or two sub-centers. The first great center, from the late twelfth century, was Champagne, with Genoa as a sub-center; Lucchese merchant banks dominated both. By 1320, Venice had replaced Champagne as the center of the exchange network, which was by then dominated by the Florentines. Bruges was the sub-center for northwest Europe; exchange there was largely in the hands of fewer than a dozen Florentine houses and a few Lucchese.

As a rule, it was the great commercial centers that became centers of the exchange network.[22] They were by their nature the source and destination of a large volume of remittance. The large volume created a liquid and competitive market. And the liquid and competitive market lowered costs and attracted more business.

Consequently, while it was possible to remit directly from one ordinary banking place to another, most remittance was indirect, routed through one of the centers.[23] For example, a fourteenth-century Italian merchant remitting funds from London to northern Italy would usually find it cheaper to do so by remitting to an agent in Bruges and having the agent remit from there to the final destination.

Organized markets for exchange

In most banking places, and certainly in the centers of the network, there would be an organized market for exchange. In Bruges, for example, the exchange market was held in the square that faced the inn of Van der Beurse, called the Beursplein or Place de la

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[21](de Roover 1954), (Mueller 1997), (Spufford 1988)

[22]It is notable, for example, that Florence never became a center of the exchange network, even though Florentines dominated the business of exchange for centuries. However, unlike Genoa or Venice, Florence was more a center of manufacturing than a center of commerce.

[23](Boyer-Xambeu, Deleplace et al. 1994) p 74

Bourse. Trading there took place each day during fixed hours, opened and closed by the ringing of a bell.[24]

An organized market provided a mechanism for setting prices—which were in this case rates of exchange. For any particular transaction, the rate was negotiated between the parties, but negotiation was constrained by the general state of the market. Potential takers and deliverers generally relied on specialized brokers to find the best available rate, and the activity of these brokers kept rates reasonably uniform.[25]

Settlement and liquidity

Organized exchange markets relied on deposit banks for settlement. Indeed, settlement of bills of exchange soon provided deposit banks with most of their business.[26] Settlement in bank minimized the need for settlement in cash, thereby lowering the cost of transactions and speeding them up. Indeed, deposit banks were so indispensable to the smooth functioning of the exchange market that when the banks were closed in Venice, due to snow or a local feast day, the exchange market shut down as well.[27]

Overdraft lending by deposit banks and markets for inter-fair loans provided liquidity facilities for the exchange market. However, the exchange market was itself an alternative source of liquidity. A merchant temporarily lacking the funds to honor a bill presented for payment could—if his credit was good—become the taker on another bill, thereby acquiring the funds he needed to meet his obligation on time.

THE FURTHER DEVELOPMENT OF THE PAYMENTS SYSTEM

In the centuries that followed the Commercial Revolution, the system of payments and remittance continued to develop. Development was largely driven by the need to address the system's central problem—the chronic instability of deposit banks. Throughout the period, bank failures frequently disrupted markets, paralyzing trade and exchange.

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[24](Blockmans 1992)

[25]On the work of brokers, see Chapter 6.

[26](Usher 1934) p7

[27](Mueller 1997) p 570

Two solutions to this problem eventually emerged—a system of payments without deposit banks and a new kind of deposit bank that was less likely to fail. To understand these solutions, we need first to understand why it was that deposit banks were so prone to fail.

The instability of deposit banks

As we have seen, the lending of deposit banks began with the provision of short-term overdraft to depositors. But banks soon expanded their lending well beyond this, and as a result their deposit liabilities come to exceed by a large margin the amount of coin they held against them. This situation exposed banks to problems of liquidity and of solvency: they needed to be able to convert deposits into coin on demand; and they had to ensure that losses on their loans did not compromise their ability to honor their commitments to their depositors.

For several reasons, ensuring the liquidity and solvency of banks was much more difficult then than it is today. First, banks were extremely small. No bank in fourteenth century Bruges, for example, had more than 100 depositors or more than $1 million, in today's money, in deposits.[28] The total personnel of such a bank might consist of the banker himself, an assistant, a bookkeeper, perhaps a cashier, and one or two messengers. Because bank failures were frequent, depositors were nervous about the safety of their deposits, and the slightest rumor could set off a run. Since a dozen large depositors might hold two thirds of the bank's deposits, simultaneous withdrawals by only a few of them could cause the bank to fail.

A second reason why banks were so unstable was the lack of safe and liquid assets in which they could invest: no such assets then existed. Much of a typical bank's assets took the form of equity investments in trading ventures. These were risky, illiquid, and of relatively long maturity (a trading voyage could take two years). The other common bank asset, overdraft loans, was hardly much better: the maturity of these loans was indefinite, and, just like the equity investments, they could not be turned into cash in an emergency.

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[28](de Roover 1948). Venice's banks were probably the largest: in 1500 its ten banks had between them some 4,000 deposits totaling about one million ducats—roughly $60 million in today's money ((Lane 1937)).

Moreover, whatever the form of a bank's assets, they were generally poorly diversified: a small number of large investments or loans accounted for most of the total.

A third reason for the instability of banks was that they operated in a highly unstable environment. War, or even the threat of war, could interrupt trade for extended periods, and the needs of war finance could empty a territory of coin. Commodity prices were highly volatile, and a collapse of prices could be disastrous for banks that had invested directly in commodities or that had extended loans or guarantees to those who traded in them.

The monetary environment, too, was highly unstable. A general shortage of coin would increase withdrawals, depleting bank reserves. A strengthening of the coinage (deflation) would raise the real value of the bank's liabilities, decrease the value of its reserves, and, at best, leave other assets unchanged. The result could be catastrophic.[29]

All of these problems came to a head in the second half of the fifteenth century.[30] The 'bullion famine', which peaked at that time, was devastating for banks. The scarcity of coin strained their liquidity and the general deflation and slump threatened their solvency. Bank failures increased the demand for coin, which further exacerbated the shortage. Problems were contagious, as the market for bills of exchange transmitted tight liquidity from place to place.[31] Bank failures occurred in waves—most notably in Venice, Florence, and Bruges—that continued into the sixteenth century.

Payments systems without banks

One solution for the unreliability of deposit banks was simply to do without them. This became possible when the IOUs that served as means of remittance were adapted for use as a means of payment. This adaptation became possible because of changes in the exchange network.

As we have seen, Venice replaced Champagne as the primary center of the network in the early fourteenth century. Venice, in its turn, was succeeded by Geneva and then by

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[29]Since the effects of debasement (inflation) were just the reverse, banks actually benefited from it.

[30](de Roover 1954; Van der Wee 1977)

[31](Mueller 1997) Ch. 4

Lyons in the fifteenth century. And in the sixteenth, Antwerp emerged as a secondary center to Lyons.

Genoese merchant bankers did enough business to be able to establish an alternative center of their own, first at Besançon, and then later at Piacenza—where it continued to be known as the 'Bisanzone'. The Bisanzone fairs were unique in that they were created solely for the purpose of clearing bills of exchange and served no other function. With the decline of Lyons and Antwerp late in the sixteenth century, Bisanzone came to dominate the exchange network and continued to do so well into the seventeenth century.[32]

Settlement at Lyons and Bisanzone

Lyons and Bisanzone—unlike Champagne—did not rely on deposit banks for settlement. Unlike Champagne, they were not public markets but 'inside markets', in which merchant bankers transacted only with one another. Because the participants were few and of known reputation, they did not need to assign the debt of a trusted third party—of a deposit bank. They could just as easily assign one another's debt.

Settlement proceeded roughly as follows. Participating merchant bankers compared their 'market books', in which each had listed his bills payable and receivable. Pairs of bankers netted bilaterally payments due to one another. Any remaining imbalance was covered either by assigning debts due from third parties, which might be netted later in the process, or by drawing new bills. These bills might be payable at the next fair or at another banking place.

Instead of relying on deposit bank overdraft for liquidity, participants accommodated each other through 'overdraft' on their own market books. Instead of relying on inter-fair deposits to balance credits and debits over time, participants drew new bills of exchange.[33]

By the end of the sixteenth century, a group of some sixty merchant bankers was meeting regularly four times a year at the Bisanzone fairs, "to settle the debits and credits

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[32]The Bisanzone fairs were the keystone of the 'Genoese system' of finance and remittance that connected Seville, Genoa, and Antwerp. We shall have more to say about this in Chapter 9.

[33]"De Rubys thus reports that a million *livres tournois* were paid in the course of one morning without a single *sol* being disbursed." (Boyer-Xambeu, Deleplace et al. 1994) p93

of half of Europe".[34] This is the same principle we saw at work in the case of commission agents in Chapter 7. Rather than transacting with one another directly, a large number of strangers engaged in financial transactions with one another through a small group of merchant bank intermediaries. Within such a small group, an informal order could work well.

Settlement at Antwerp

This system of settlement worked for the exchange markets of Lyons and Bisanzone because the number of participants was small. The exchange market at Antwerp, however, had many participants, coming from many different countries. In such a public market, one would have expected settlement to continue to rely on payment in bank. Antwerp, however, had no banks. In the wake of a series of banking crises in the fifteenth century, the authorities had simply banned them.[35]

This left the exchange market at Antwerp with no choice but to rely on the assignment of *private* third-party debt—primarily letters obligatory.[36] Not surprisingly, this did not work well.[37], However, after the problems inherent in this practice were addressed a series of legal innovations, performance improved significantly.

To understand the nature of these innovations, consider a hypothetical example. Suppose Andy has an IOU from Charles; Andy assigns this IOU to Bob in payment. The first problem is that if Charles defaults, only Andy, the original creditor, has the right to sue him: Bob has no direct recourse. This problem was solved in 1507 when the Antwerp civil courts recognized the transferability of letters obligatory. What transferability means is that if Andy assignes Charles's IOU is to Bob, it becomes an IOU to Bob, rather than to his original creditor, Andy.

Solving this problem, however, created another. If Charles does not pay up, Bob can now sue him, but he no longer has any recourse against Andy: Andy's debt to Bob is

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[34](Van der Wee 1977)

[35]The rulers of the Low Countries first banned banks in 1489. (de Roover 1974)

[36]Netting and settlement took place on each of the four 'quarter days' that had originally marked the Brabant fairs. Letters obligatory and bills on Antwerp were usually written to mature on those days.

[37](Van der Wee 1977)

considered discharged by the transfer to him of Charles's IOU. Clearly, under these conditions, no-one would be willing to accept in settlement the paper of someone of unknown or inferior credit.

This second problem was solved when the courts adopted the principle of negotiability. Under this principle, if Charles fails to pay up, Bob has recourse against Andy, who assigned him Charles' IOU in payment. Andy's debt to Bob is considered discharged only when the assigned IOU is actually paid. Moreover, if Charles's IOU has been assigned more than once, then Bob has recourse against each assigner in turn—from the first to the last. As a result, under negotiability, each additional assignment strengthens the credit of the instrument. The negotiability of letters obligatory was first established by edict for Antwerp in 1536 and for the whole of the Low Countries in 1541.

To keep track of the chain of assignment it became customary for each assigner to endorse the instrument—to sign it on its back—another legal innovation. Endorsement legally bound the assigner/endorser (in our case, Andy) to indemnify the assignee (Bob) if the issuer (Charles) and the previous assigner/endorsers failed to pay up. The first examples of endorsement date from the 1570s and by the turn of the century the practice was widespread.

Initially, only letters obligatory circulated in Antwerp. However, with the increasing presence there of South Germans and Italians, whose preferred instrument was the bill of exchange, it became necessary to bring bills of exchange into the settlement system. Consequently, by the 1530s, it had become the practice to assign bills of exchange in the same manner as letters obligatory.[38] Over the course of the sixteenth century, northern merchants gradually switched over from using the letter obligatory to using the bill of exchange.[39]

Commercial paper as money

As commercial paper (letters obligatory and bills of exchange) evolved into a negotiable instrument, it became a kind of convertible money, similar in many respects to the deposit of a deposit bank. Merchants in Antwerp used commercial paper as a means

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[38](Van der Wee 1993) Ch. 10

[39](Van der Wee 1977)

of payment: instead of transferring the debt of a deposit bank on the books of the bank, they transferred from hand to hand the debt of non-banks.

Commercial paper commonly changed hands ten or twenty times before maturity, and a hundred times was not unusual.[40] Obviously, the paper with the best 'names' circulated the most freely, and the paper of the Fugger merchant bank, the *Fuggerbriefe*, passed from hand to hand almost like modern banknotes.[41]

Discounting

The usefulness of commercial paper as a means of settlement was further enhanced by the practice of discounting. Although assignment of commercial paper was acceptable in settlement, when money was tight, creditors were willing to pay a premium for settlement in cash. Those who had cash could exploit this situation by offering to buy commercial paper for cash at a discount.[42]

Those most active in discounting were the 'cashiers' or money dealers, unofficial pseudo-banks that had appeared after official deposit banks were suppressed. Cashiers escaped the prohibition by insisting that they were not banks, but simply cash-managers.

Discounting commercial paper was authorized officially in 1540 and by the 1550s it was a common practice.[43] By providing liquidity, discounting improved the quality of the market and increased the acceptability of commercial paper in settlement. It also provided a way for letters obligatory to be used as an instrument of pure credit: a merchant wishing to raise cash could simply write a letter obligatory and discount it with a cashier.

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[40]In many cases, circulating paper found its way back to the original issuer, so extinguishing the debt, and eliminating the need for settlement ((Van der Wee 1963)).

[41](Van der Wee 1977)

[42]Discounting itself was not new: there were earlier examples of the discounting of other types of receivable.

[43](Van der Wee 1963)

Payments systems based on public banks

While fairs learned to do without deposit banks—Antwerp had begun its career as a trading center as one of the fairs of Brabant—several commercial cities found a different solution to the payments problem in a new kind of bank—the public bank.

The public bank was more stable than a private deposit bank, because its function was limited to payments: any form of lending was prohibited. Giving up lending to protect the bank's payments function in this way made perfect sense in terms of the general good. The payments function of deposit banks was crucial, while their contribution to financing was quite minor. Of course, giving up lending made the bank much less profitable, but this was not much of a problem for a public institution.

The Banco di Rialto

Venice was not the first city to create a public bank, but it was the most influential in establishing the practice. Bank failures had been a continuing problem in Venice, repeatedly interrupting commerce and tying up depositors' funds in lengthy and litigious liquidations.[44] A severe banking crisis in 1584 proved to be the last straw, convincing the Venetian Senate to establish a public bank.[45] The *Banco di Rialto* opened for business in 1587.

The *Banco di Rialto* accepted deposits and allowed deposit transfers and cash withdrawals, but it paid no interest on its deposits, and it allowed no overdraft or other lending. This was clearly not a profit-making enterprise, and the bank's expenses had to be paid out of public funds. The management of the bank was licensed to a private individual—which was the normal practice for public services—but the bank was guaranteed by the Senate. Although Venice did not prohibit private banks, none were established for several years.

The *Banco di Rialto* was a great success. Its deposits were so useful as a means of payment that there were actually few cash withdrawals, and payment *in banco* was soon

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[44]In a speech in 1584, a Venetian senator noted that of the 103 private banks founded during the life of the Republic, 96 had failed ((Mueller 1997) p 122).

[45]The idea was not new: there had been proposals in Venice for a public bank for at least a century ((Mueller 1997)).

at a premium over payment in coin.[46] The prohibition of overdraft seems to have been ignored, which no doubt improved the efficiency of the payments system. Furthermore, since there was only a single bank, there was no need for inter-bank clearing, and this too increased efficiency.

The success of the *Banco di Rialto* inspired imitation and many Italian cities set up similar public banks—for example, Milan in 1593 and Rome in 1605. In Genoa, an existing public financial institution, the *Casa di San Giorgio*, began accepting deposits in 1586.[47]

The Bank of Amsterdam

The idea of the public bank spread to northern Europe with the establishment of the Bank of Amsterdam (*Amsterdamsche Wisselbank*) in 1609.[48] However, the motivation in this case was somewhat different.

The city authorities had been suspicious of the new-fangled practices that were spreading to Amsterdam from Antwerp—settlement by assignment and discounting by cashier-bankers. The authorities believed that commercial paper ought to be settled in hard cash. However, when they tried to shut the cashiers down, they met with strong resistance from the city's merchants, who considered the cashiers' services indispensable. So the city set up a 'public cashier' as a substitute.

The Bank of Amsterdam offered transferable deposits convertible into good coin.[49] There was no overdraft or other lending, so that deposits were fully backed by coin, and all services were free. To get merchants to use the Bank, commercial paper over 600 guilders was required to be payable in deposits of the Bank.

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[46](Van der Wee 1977)

[47](Parker 1977)

[48](Van der Wee 1977), (de Roover 1948)

[49]The Bank traded extensively in precious metals to provide the mints with the bullion needed to produce this coin, and it later came to play a central role in the European and world market for bullion. (van Dillen 1934)

The Bank was spectacularly successful, and similar public banks were soon established in other northern cities. By the end of the seventeenth century, there were some 25 public banks across Europe.[50]

Despite the success of public banks, private cashier-banks did not disappear. In many places, including Amsterdam, they competed successfully with the public banks by offering better service—particularly by being more willing to extend overdraft.[51]

Although public banks were more stable than private banks, they were not entirely immune to the temptations of lending—particularly to the governments of their parent cities. In fact, some public banks were created specifically to provide the city government with inexpensive credit. The lending of public banks, like that of private banks, often ended badly.[52]

Antwerp and Venice, therefore, found two very different solutions to the problem of banking instability—negotiable bills of exchange and discounting on the one hand and the public bank on the other. The two practices were later combined in Amsterdam and in London as the foundation for a more stable system of private banking.[53]

The negotiable bill of exchange was a relatively safe and liquid asset. The discounting of bills therefore provided a form of lending well suited to small banks—precisely what earlier had been lacking. Moreover, the public bank lent additional stability to the system by providing liquidity to private banks in times of crisis.

Modern commercial banking that combined these two elements was to play an essential role in financing the expansion of English trade in the eighteenth century and in financing the subsequent Industrial Revolution.[54]

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[50](Parker 1977)

[51]Amsterdam gave up its attempts to prohibit private cashiers in 1621 and chose instead to regulate them. (van der Borght 1896)

[52]The first public bank, the *Taula de Canvi*, was established in Barcelona in 1401 and failed in the 1460s as a result of excessive lending to the city.

[53](Van der Wee 1963). By 1600, goldsmiths and scriveners (scribes) in England were starting to take on the banking functions performed by cashiers in Antwerp and Amsterdam. The Bank of England was founded in 1694.

[54]See, for example, (Pressnell 1956).

CONCLUSION

The development of a system of payment and remittance through the transfer of IOUs contributed to economic progress directly. It also contributed to it indirectly by facilitating financial development.

The direct contribution to economic progress

The development of a system of payments and remittance that used IOUs rather than bullion and coin reduced transactions costs. Obviously, it reduced the cost of payments and remittance, but it also reduced transactions costs in other ways.

The reduction in the costs of making payment and remittance

Payment by IOU greatly reduced the need to count, weigh, examine, and sort coin. And remittance by IOU similarly reduced the need for the costly shipment of coin or bullion from place to place.

Of course, payment and remittance by IOU were not themselves without cost. Payment in bank required both payer and payee to be present, since the order to pay generally had to be given to the banker orally.[55] And the banker had to register the credit and the debit in his books by hand: a dozen such transactions kept him busy all day. Remittance by IOU similarly involved time and paperwork.

However, unlike the cost of using currency or bullion, the cost of payment and remittance by IOU was largely independent of the sum involved. So it was much less expensive for large transactions.

The saving in resources and the stimulus to trade in bullion

Means of payment and remittance are 'money'. So the cost of providing Europe with money was greatly reduced by the use of IOUs. If all payments and remittance had had to be executed in coin or bullion, it would have required a far larger amount of both. This would have increased the demand for bullion in Europe and so raised its value there, leading to more investment and more effort in prospecting and mining. The use of IOUs

[55]Later in the period, when payment in bank was recognized as legal tender, the payee did not have to be present. And there was some use of written orders of payment.

for payment and remittance therefore reduced not only the cost of individual transactions but also the social cost of the system.

As a result of the substitution of IOUs for bullion, bullion—especially silver—remained cheaper in Europe than it was elsewhere. It was therefore profitable for Europe to export large quantities of silver in exchange for goods from the Islamic world and Asia. So, instead of having bullion tied up as money, Europe traded it for foreign goods.

This effect was strengthened in the sixteenth century, of course, when Europe began to import even cheaper American silver and re-export it to Asia. The profitability of this arbitrage stimulated inter-zone trade, with all the growth-enhancing benefits of market expansion that this implied.

The facilitation of multilateral trade

Remittance by IOU facilitated multilateral trade. In its absence, trade between two places would have had to be balanced bilaterally either in goods or through the shipment of bullion. One place would have been able to buy from another than more it sold to it only by shipping bullion to cover the difference. Remittance by IOU made it possible to offset an excess of imports from one place with an excess of exports to another: that is, it made it possible to net trade flows. As a result, trade had to be balanced not bilaterally between each pair of places but only multilaterally between each place and all other places.

For example, Lucca was an important manufacturer of silk cloth, which it exported to Champagne. To produce the cloth, Lucca imported the raw silk it needed through Genoa. Lucchese merchants buying raw silk in Genoa could cover their purchases there by writing IOUs payable in Champagne. When these merchants sold the raw silk in Lucca, they could remit the proceeds to Champagne to cover their IOUs. They did so by purchasing IOUs payable in Champagne from merchants who exported silk cloth to the Fairs and therefore had funds available in Champagne from the sale of the cloth.[56]

In the absence of remittance by IOU, Lucca would have had to bring home the proceeds of its exports to Champagne in bullion and to pay for its imports from Genoa by

[56](Blomquist 1990) The IOUs in question were *cambium* contracts.

shipping bullion to that city. Remittance by IOU eliminated the need for both shipments of bullion.

The impact on the organization of commerce

This reduction in transactions costs affected patterns of trade and the extent of the market, but it also affected the organization—and so the productivity—of commerce.

In the absence of remittance by IOU, each individual merchant would have had to export goods to a distant market equal in value to those he imported from there or to cover the difference by shipping bullion—a costly option. Remittance by IOU removed the requirement that the trade of each merchant be balanced in this way by making it possible to net across merchants. One merchants could import goods without exporting anything while another exported goods without importing anything—and nobody had to ship any bullion.

This possibility made it much easier for merchants to specialize—both in particular sorts of goods and in particular trading destinations. For example, some Lucchese merchants became experts in buying raw silk and knew the market in Genoa. Others became experts in selling silk cloth and knew the market at Champagne. By facilitating this sort of division of labor and specialization, the use of bills of exchange increased the productivity of commerce.

The contribution to financing

In several different ways, the development of the system of payments and remittance contributed significantly to the development of financing. The IOUs that served as means of payment and remittance were nonetheless IOUs; as such, they themselves played an important role in the financing of commerce. Also, the liquidity facilities that arose to serve the system of payments and remittance expanded to become more general sources of financing. And a workable system of payments and remittance was necessary for the efficient functioning of the system of financial markets in Europe.

Means of remittance and payment as short-term loans

Means of remittance were, by their nature, simultaneously instruments of financing. Funds were delivered in one place to be repaid later somewhere else: the delay made the transaction a loan. Such loans became an important source of working capital for

merchants. For example, returning to our earlier example, Lucchese merchants who purchased raw silk in Genoa financed their working capital by writing IOUs payable at Champagne.

As we have seen, the use of bills of exchange in remittance generally involved the participation of a merchant bank. When merchants banks took funds in return for a bill of exchange, they borrowed; this borrowing enabled them to lend—delivering the funds to someone else in return for their bill of exchange or making some other type of loan. In this way, merchant banks became important financial intermediaries: we will have much more to say about this in Chapter 9.

Deposit banks were also financial intermediaries: they borrowed in their own name—by accepting deposits—and re-lent to others. As we have seen, overdraft lending grew naturally out of their payments function, and banks also invested in commercial ventures. Banks also made non-commercial loans to princes, nobles, municipalities, craftsmen, petty traders, and even peasants.[57] The scale of lending by deposit banks was, however, much smaller than that of lending by merchant banks. Moreover, as we have seen, it was not entirely a favorable development, since it tended to undermine the banks' stability.

The development of liquidity facilities into general sources of financing

The broadening of bank lending is an example of a liquidity facility—in this case, overdraft—expanding into a more general source of financing. This happened too, more consequentially, with another liquidity facility— the market for inter-fair deposits at the Fairs of Champagne.

This market started out as an adjunct to the settlement process, but before long most loans were unrelated to settlement. During the thirteenth century, the borrowing and lending that surrounded settlement evolved into a general money market—a market for short term loans. Not only traders at the Fairs, but others seeking short-term credit or having funds they wished to lend short-term, came to the Fairs to borrow or lend.

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[57]Non-commercial loans were generally secured. The most common security was a pawn—in the case of princes and nobles usually of jewelry or plate. The king of England once borrowed from bankers in Bruges by pawning his crown jewels.

The maturity of an interfair deposit was typically to the following fair—say three months. However, the maturity was sometimes 'for two fairs'. And, in any case, it was easy to roll the loan over—usually at the new market rate. Later fairs, including Lyons and the Brabant fairs at Antwerp, imitated Champagne in their use of the interfair deposit. In their case too, markets for interfair deposits developed into general markets for short-term loans.

The market for bills of exchange began as a market for instruments of remittance, and, as we have seen, it also served as a liquidity facility for the settlement of those instruments. But it, too, evolved into a general money market. Merchants could raise funds by selling bills; merchants and non-merchants alike could invest their funds by purchasing bills.

The use of the bill of exchange as a pure instrument of credit was soon facilitated by a practice known as 'dry exchange'.[58] This combined two bills of exchange, back to back, to create a loan in the same place. For example, a merchant in Venice would borrow there by writing a bill payable in London. When the bill was presented to his representative in London for payment, the representative would borrow the necessary funds to settle by writing a bill to be paid by the merchant himself in Venice. If, as was the custom, each bill was payable after three months, the round trip to London created a six-month loan *in Venice*.[59] If a longer loan was required, a merchant could extend the term further by rolling the amount over for one or more additional 'returns'.

Trading centers become financial centers

Before long, it became usual even for debts contracted elsewhere—from London to Palermo—to be made payable at a particular fair. This was convenient for several reasons. Fairs possessed efficient arrangements for settlement, and it was easy to remit funds to them or from them. Also, if the debtor was temporarily short of funds, he could refinance his loan by borrowing in the interfair deposit market or in the

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[58]For a thorough discussion of dry exchange, see (de Roover 1974) Ch. 4 and (Mueller 1997) Ch. 8

[59]It was the purely the great distance from Venice to London that made the latter an important center of Venetian exchange. (Mueller 1997) Ch. 8

exchange market. Similarly, if the creditor did not have immediate use for the funds repaid to him, he could easily lend them again short-term in one of these same markets.

In these ways, the facilities that developed in trading centers for payment and for remittance by IOU lowered the cost of financial transactions as well the cost of trade transactions. So, growing out of their function as trading centers the various fairs also became important financial centers. And they often continued to function as financial centers even after their importance as trading centers declined.

Integration of financial markets

As financial markets developed, bills of exchange were used increasingly to remit funds for financial as well as for commercial reasons. In particular, merchant bankers used them to transfer funds to where they would earn the highest return. For example, the Bruges correspondent of Francesco Datini of Prato wrote to him on April 26, 1399: "It appears that there is an abundance of specie in Genoa; so do not send our money to Genoa, or only if you can get a very good price for it; put it rather in Venice or Florence, or here in Bruges or in Paris or Montpellier."[60]

A merchant banker could go a step further. Rather than merely directing funds to where rates were highest, he could borrow funds where rates were low (by being a taker on bills) and lend them where rates were high (by being a deliverer).[61] Such arbitrage helped to integrate financial markets across Europe and thereby to equalize interest rates.[62]

It also generated an enormous volume of transactions in bills of exchange. Indeed, as early as the fourteenth century, most bills of exchange were related to finance rather than to trade. For example, between 1336 and 1340, the Covoni company of Florence registered 443 exchange transactions: of these, only 70 were trade-related, while the

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[60](Braudel 1984)

[61](de Roover 1948) Ch. 4.

[62]Of course, this was not true arbitrage: an adverse movement of the exchange rate could turn a profitable 'arbitrage' into a loss-making speculation. So merchant bankers integrated financial markets only to the extent that they were willing to bear this risk.

remaining 373 were financial.[63] Because of the increasing predominance of financial bills, the volume of exchange soon exceeded the volume of trade by a wide margin.

[63](Mueller 1997) Ch. 8. Of the financial bills, 335 were 'speculative', to exploit interest-rate differentials (159 were from Florence to Venice and 176 were from Venice to Florence). The remaining 38 involved 'dry exchange'.

REFERENCES

Abulafia, D. (1997). The impact of Italian banking in the late Middle Ages and Renaissance, 1300-1500. Banking, trade, and industry : Europe, America, and Asia from the thirteenth to the twentieth centuries. Alice Teichova, G. K.-v. Hentenryk and D. Ziegler. Cambridge, Cambridge University Press**:** 17-34.

Ashtor, E. (1983). Levant Trade in the Later Middle Ages. Princeton, Princeton University Press.

Barber, M. (1994). The new knighthood : a history of the Order of the Temple. Cambridge ; New York, Cambridge University Press.

Blockmans, W. (1992). Bruges, a European trading center. Bruges and Europe. V. Vermeersch. Antwerp, Fonds Mercator.

Blomquist, T. W. (1990). "Some observations on early foreign exchange banking based upon new evidence from thirteenth century Lucca." Journal of European Economic History **19(2)**(Fall): 353-375.

Boyer-Xambeu, M.-T., G. Deleplace, et al. (1994). Private Money & Public Currencies: The 16th Century Challenge. Armonk, NY, M.E. Sharpe.

Braudel, F. (1984). The Perspective of the World. New York, Harper & Row.

de Roover, R. (1944). "Early accounting problems of foreign exchange." The Accounting Review **19**: 381-407.

de Roover, R. (1948). Money, Banking and Credit in Mediaeval Bruges. Cambridge, Mass., The Mediaeval Academy of America.

de Roover, R. (1954). "New interpretations of the history of banking." Journal of World History **2**: 38-76.

de Roover, R. (1974). Business, Banking, and Economic Thought. Chicago, University of Chicago Press.

Farmer, D. (1991). Marketing the produce of the countryside, 1200-1500. The Agrarian history of England and Wales: Vol. III 1348-1500. E. Miller. London, Cambridge U.P.

Grafe, R. (2001). Northern Spain between the Iberian and Atlantic worlds: Trade and regional specialization, 1550-1650 Ph.D., London School of Economics and Political Science.

Lane, F. C. (1937). "Venetian bankers, 1496-1533: A study in the early stages of deposit banking." Journal of Political Economy **45**: 187-206.

Mueller, R. C. (1997). The Venetian Money Market: Banks, Panics, and the Public Debt 1200-1500. Baltimore, Johns Hopkins University Press.

Nicholas, D. (1979). "The English trade at Bruges in the last years of Edward III." Journal of medieval history **5**: 23-61.

Nicholas, D. (1992). Medieval Flanders. London, Longman.

Parker, G. (1977). The emergence of modern finance in Europe 1500-1730. The Fontana Economic History of Europe. Volume 2: The Sixteenth and Seventeenth Centuries. C. M. Cipolla. New York, Harvester Press**:** 527-594.

Pressnell, L. S. (1956). Country banking in the industrial revolution. Oxford, Clarendon Press.

Spufford, P. (1988). Money and Its Uses in Medieval Europe. Cambridge, Cambridge University Press.

Usher, A. P. (1934). "The origins of banking: The primitive banks of deposit 1200-1600." Economic History Review **4**.

van der Borght, R. (1896). The History of Banking in the Netherlands. A History of Banking in All The Leanding Nations, Vol IV. New York, The Journal of Commerce and Commercial Bulletin**:** 191-371.

Van der Wee, H. (1963). The Growth of the Antwerp Market and the European Economy. The Hague, Martinus Nijhoff.

Van der Wee, H. (1977). Monetary, credit and banking systems. The Cambridge Economic History of Europe. Volume V: The Economic Organization of Early Modern Europe. E. E. Rich and C. H. Wilson. Cambrigde, Cambridge University Press**:** 290-393.

Van der Wee, H. (1993). The Low Countries in the Early Modern World. Aldershot, Variorum.

van Dillen, J. G. (1934). The Bank of Amsterdam. History of the Principal Public Banks. J. G. v. Dillen. The Hague, Martinus Nijhof**:** 79-123.