

EARLY DEPOSIT BANKING*

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ABSTRACT: This paper describes the development of the deposit bank in Europe to 1600. Deposit banks allowed customers to make payments by transferring deposits on the books of the bank rather than by settling in coin. The paper describes how such payments were made and what kinds of transactions they were used for. Deposit banks developed into financial intermediaries, and the paper examines their liabilities, their assets, the methods they used to manage liquidity and risk, and the regulation to which they were subject. The authorities responded to increasingly frequent failures of deposit banks by establishing public banks.

JEL Categories: G21, N23

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PREFACE

There are two classes of question one might ask about financial systems. The first and broader class relates to their role in the economy: what is their contribution to economic development and growth? What is their impact on the way business is organized? On the organization and behavior of government? The second and narrower class of question relates to financial systems themselves: what is their economic function? How do they evolve? What are the causes and consequences of financial innovation?

History is perhaps the most promising source of answers to both classes of question. This paper is a draft chapter in a planned work that draws on the economic and financial history of the period to 1600. The section of the work to which this chapter belongs focuses on the narrower class of question about the financial system itself during this period. Other sections will take up the broader class of question. Draft chapters of this section are available as the following working papers¹:

1. Finance before the Industrial Revolution: An introduction
2. Medieval and early modern coinage and its problems
3. Early deposit banking
4. Bills of exchange and the money market to 1600
5. Merchant banking in the medieval and early modern economy
6. The capital market before 1600
7. Risk instruments in the medieval and early modern economy

The financial system is part of the institutional structure that facilitates economic transactions. Specifically, the financial system facilitates lending, payments, and trade in risk. While lending often steals the limelight, the role of the financial system in facilitating payments and trade in risk is no less essential. Before 1600, because of the poor quality and inadequate quantity of coin, the payments function was particularly important (Paper 2 discusses the problems of the coinage in this period). As commerce expanded, the pressing need for adequate means of payment prompted a great deal of financial innovation—in particular, the emergence of the deposit bank and the bill of exchange. The deposit bank, the subject of the current paper, provided a means of payment—the transfer of deposits—that minimized the need to use actual cash. The bill of exchange (Paper 4) provided a means of remittance—of transferring funds from one place

¹Copies may be downloaded from: <http://www.dartmouth.edu/~mkohn>

to another—without having to ship specie or bullion. The bill of exchange was also an instrument of credit, the basis on which merchant banks built an efficient international system of commercial credit (Paper 5). While the bill of exchange satisfied the need for short-term finance, the growing need for long-term finance was met by a developing capital market (Paper 6). Trade in risk was still in its infancy, but the period saw the development of marine insurance and the beginnings of futures and options (Paper 7). Paper 1 provides some general background on saving and investment during the period, on the effects of the prohibition of usury, and on the extensive system of ‘informal’ finance’, out of which specialized financial institutions and markets evolved.

INTRODUCTION

The deplorable state of the medieval coinage and its general scarcity inspired the development of alternative means of payment. Most prominent among them was ‘payment in bank’. Rather than physically handing over coin, a payer could transfer a credit on the books of his bank to the benefit of a payee. Such ‘deposit banking’ generally developed out of moneychanging. Moneychangers handled coin and bullion in large quantities and consequently had facilities for secure storage. It was natural for them to accept coin and other valuables for safekeeping. They were not alone in doing this: gold- and silversmiths, innkeepers, various religious establishments, and certain government offices all did so too. But, unlike the others, moneychangers evolved from pure custodians into deposit bankers by allowing their customers to transfer in payment *title* to coin they had deposited with them instead of the coin itself.²

The primary economic importance of deposit banks lay in fulfilling this payments function. However, their deposits provided them with a relatively stable pool of funds that they could profitably lend to others. Unfortunately, such lending exposed them to problems of liquidity and solvency that they were ill-equipped to handle. The frequent failures of deposit banks gave rise first to widespread regulation and then to the establishment of public banks pledged to resist the temptation of lending.³

A. DEPOSIT BANKS AS PAYMENTS INSTITUTIONS

Payment in coin was costly and time-consuming, especially for large payments.⁴ Individual coins, especially those of silver, were of relatively small value for commercial purposes, and large payments involved counting them out in large numbers. Since there

²Moneychangers had acted as custodians of valuables since Classical times. Many monasteries and other religious institutions also acted as custodians. “When Edward I decided to appropriate private deposits in 1294, it was the monasteries that were searched, not the lodging of the Italians.” (Prestwich (1979)). Some religious institutions expanded their financial business beyond custodianship: the Knights Templar used their extensive network of ‘branches’ to provide remittance services; the *Procuratia di San Marco* of Venice provided trustee investment services. Government offices that acted as custodians included the Grain Office in Venice and the Tower Mint in London.

³What follows draws heavily on a number of superb historical studies of deposit banking. The classics are Usher (1943) on Barcelona, de Roover (1948) on Bruges, and de Roover (1963) on Florence. To these must be added important recent contributions by Lane and Mueller (1985) and Mueller (1997) on Venice, Goldthwaite (1985) on Florence, and Blomquist (1979, 1985) on Lucca and Champagne.

⁴See Kohn (1999b)

was an enormous variety of coin of differing fineness and weight in circulation, it was necessary to pay a professional—a moneychanger—to check the quality of the coin tendered. Instead of going through this tedious procedure each time for every payment, it was more efficient for the moneychanger to count and to examine coins only once and to place them in storage. Payment could then be made by transferring not the coins themselves, but the ownership of the coins. Moneychanger-bankers created a sort of book-entry money, by ‘immobilizing’ the actual coin and allowing the transfer of title to it on their books.⁵

PAYMENT IN BANK

Payment in bank, throughout the period, generally required the presence at the bank of both payer and payee. Deposits were credits on the book of the banker: to transfer an amount from a deposit, the banker required an order from the depositor. Normally, that order would be given orally, by the payer himself or by a servant or attorney. The presence of the payee was not absolutely necessary. However, until payment in bank became legal tender, the payee had to be there to accept it for the payment to be considered legally final.⁶ Although written orders of payment were not unknown, they were no more than a supplement to oral orders: in this period, it was normal to conduct all important business in person.⁷ Because payment required the physical presence of the parties, bankers tended to locate where they would be readily accessible to their customers. They set up their booths or stalls in or close by the local market area: in Venice, by the Rialto bridge; in Bruges, by the Wisselbrugge, close to the port and to the

⁵The analogy with the recent practice of immobilizing stocks is obvious. 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 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.

⁶In 1526, Venice made payment in bank legal tender unless explicitly excluded by contract: that is, the creditor had no choice but to accept payment in bank unless he had explicitly specified payment in specie (see Mueller (1979)). With the rise of state-sponsored public banks in the sixteenth and seventeenth century, laws were passed that actually *required* payment in bank for large sums.

⁷The written order of payment, or *polizza*, originated in Florence in the fourteenth century, and by the end of the fifteenth its use was widespread (Spallanzani (1978)). Venice banned written orders of payment in 1520: this partly reflected Venice’s notorious conservatism, but it also reflected the fear that the use of written orders made it easier for banks to evade the conversion of deposits into coin (see below).

Place de la Bourse; at the Champagne fairs, the bankers moved their stalls from fair to fair.

When receiving payment in bank, the payee had several options. He could leave the deposit with the banker—opening an account if he did not already have one—or he could have the deposit transferred to another bank, or he could withdraw the deposit in cash. Often, the payee preferred the first option, and it was quite common for merchants to have deposits at all or many of the major local banks.⁸ Sometimes, the payee might choose to transfer the credit to the bank in which he held his primary account. In the absence of a central bank, banks could effect such interbank transfers only through reciprocal accounts that they held with each other, and which they settled periodically as needed.⁹ Since the banks were usually located close to one another in the ‘central business district’, all that was needed to make a transfer was for the payer’s banker to step over to the payee’s bank, together with the payee, to conclude the transaction.

In addition to providing deposit transfer as a means of payment, deposit banks also played an important role as ‘cashiers’. Rather than keeping and managing their cash themselves, customers used the bank to store cash, make disbursements, and receive payments. Deposit banks offered a number of advantages in this respect. Bankers generally continued to be moneychangers: manual exchange of different types of coin and trade in bullion remained an important part of their business. Consequently, moneychanger-bankers could provide good coin for disbursements and check the quality of coin received in payment. A second advantage of using a bank as cashier was that the banker’s books provided a record of transactions and, if necessary, legal proof. Bankers’ books enjoyed the status of public records, much like the registers of notaries, and bankers were required to swear periodically to the accuracy of their books. So payment in bank provided the payer with legal evidence of discharging his debt, saving him the time and trouble of drawing up a formal legal document (an acquittance) to this effect. Banks often acted as collection agents—for example, receiving taxes and customs duties for the government or payments of rent for landowners. Banks also acted as disbursement

⁸In Venice, merchants typically kept major accounts at one or two banks (where they could expect to receive overdraft) and transitory accounts with one or two others to facilitate collection of receivables (see Mueller (1979))

⁹Private banks in Barcelona tried to use the municipal bank, the Taula, as a central bank, holding deposits there as reserves and using these deposits to clear interbank payments. The authorities banned this

agents: it seems to have been mainly in this connection that the written order of payment, or *polizza*, was used.¹⁰ In Florence employers would pay their workers with *polizze*, which the workers could take to the bank to receive payment in cash; a contractor might make a cash deposit and draw on it in this way over several months to pay his workers.¹¹

Deposit bankers often did not engage in international banking—in foreign exchange and remittance. In Venice and Bruges, as in most other cities, deposit banking was a purely local business and deposit bankers lacked the network of branches or agents in foreign cities required for international banking. However, in Genoa and Barcelona, deposit bankers did engage in international banking. In Florence, some of the great merchant bankers, such as the Peruzzi and the Medici, did themselves operate local deposit banks, so the two businesses were not always distinct.

The intensity of use of bank deposits was low by modern standards. In fourteenth-century Venice, a large cotton importer averaged about 25-30 transactions per year, on about 20 business days; another smaller merchant 140-150 transactions per year on 75-100 business days.¹² A Bruges bank in the fourteenth century recorded on successive days 6 transactions, 4, 39, and 32.¹³ Even this low volume of transactions kept banks busy. Assuming that each transaction took 15 minutes, a business day of 5 or 6 hours would enable a teller to handle no more than 20 or so transactions.

There is little evidence on the fees that deposit bankers charged for their services. Banks did not keep cash accounts, so no records remain of their fees. It is known that in Venice deposit banks did charge a fee for each transfer, and it seems plausible that this was the normal practice elsewhere.¹⁴ There was often an additional fee or *agio* for cash withdrawals, including an exchange fee if withdrawal was in coin other than that in which the deposit was denominated (for example, in gold rather than silver). Deposits subject to transfer did not pay explicit interest, and it is possible that some services would have been provided ‘free’ to depositors as implicit interest on their deposits. On the other

practice in 1437: they regarded the private banks as competitors and they may have been worried about the potential threat to the liquidity of the Taula. See Usher (1943) .

¹⁰ In its legal form, the *polizza* was more like a modern giro payment than a check: unlike a check, it was not negotiable, so that the payee could not assign it to another party (for example, to his own bank) for collection.

¹¹Goldthwaite (1985)

¹²Mueller (1997) p20-21

¹³de Roover (1948)

¹⁴Mueller (1979) ; Mueller (1977)

hand, the prohibitions on usury made it difficult to charge explicit interest on loans, and disguising interest as fees was one obvious alternative.

DEPOSIT BANKING AS ASSIGNMENT OF DEBTS

One way to think about deposit banking is as a way of improving the efficiency of payment in coin. However, there is an alternative, and perhaps more illuminating interpretation—to see it as an extension of a system of payment by the assignment of debt. Commercial transactions were almost never spot or cash transactions: they almost always involved credit and deferred payment.¹⁵ Given the scarcity of cash and the inconvenience in its use, it was common to settle a debt not in cash but by assigning to the creditor a debt owed to the debtor by a third party. This was normally done via the books of the parties involved.¹⁶ A debt might be assigned in this way in payment several times until it eventually came due and was paid in cash or until it was assigned in payment to the debtor himself and was thereby extinguished. Of course, the assignment of a debt was acceptable as a means of payment only if the third party was known to the creditor and considered a good credit. In closed commercial communities, where everyone knew everyone else, this was not a problem. However, in major commercial centers where trade with strangers predominated, payment by assignment of debts could work only if those debts were the debts of a third party known and trusted by all. The deposit bank was such a third party.

Assigning the debt of a deposit bank—a bank deposit—in payment had further advantages. Because the debt of the *same* third party was assigned in many payments there was greater opportunity for netting—extinguishing one debt with another.¹⁷ Because bank deposits were so useful as a means of settlement, depositors were happy to keep them rather than convert them immediately into cash. The result was that bank deposits could be used to mediate a large volume of transactions with very little need for final settlement in cash. The usefulness of deposit transfer as a means of payment was further enhanced by the willingness of deposit banks to grant overdraft credit. That is, if a

¹⁵See Kohn (1999a and 1999b)

¹⁶The assignment of book credit as a means of settlement had already been recognized under Roman law, which had accepted an entry in the book of a creditor as sufficient evidence of the discharge of a debt. The law recognized transfers on the books of ordinary merchants as well as on those of the *argentarii* (silversmiths), the Roman equivalent of bankers.

¹⁷Assignment of debt by transfer on the books of the parties was “by no means exclusively applicable to bankers... The distinctive service of the banker lay in the centralization of these operations and in the consequent increase in the scope of the system of book transfers.” (Usher (1934) p10)

depositor had insufficient funds in his account, the bank would grant him a loan to allow him to settle. Credit is a vital lubricant of any settlement process: it reduces the danger that a participant will be unable to meet his own obligations because of delays in payments due to him. Overdraft credit from deposit banks enabled merchants to manage their liquidity with much smaller reserves than they would otherwise have needed.

The purest expression of deposit banking as assignment of debt was to be found in the banks of the great medieval fairs. The great fairs were the centers of long-distance trade, periodically bringing together merchants from many lands for several weeks of intensive and highly structured trading. The model for all later fairs were the thirteenth-century fairs of Champagne. At Champagne, trading was divided into two main periods. The first period was devoted to the sale of cloth: the sellers were predominantly from Flanders, the buyers from Italy. The second period was devoted mainly to the sale of oriental spices and drugs: here the roles were reversed, with the Italians the sellers and the Flemings the buyers.¹⁸ The fair banks provided the payments system that made this trading structure possible. In the first period, the Italians ‘paid’ for their purchases of cloth by transferring to the Flemish sellers credits on the books of the fair banks; payment was final in that the banks guaranteed settlement. In the second period, Flemish merchants used the credits they had accumulated in the first period to pay for their own purchases of spices and drugs.

The credits used in payment were not really ‘deposits’. Although evidence is scarce, it seems the Italians did not begin by depositing coin with the bankers.¹⁹ 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 second period of trading.²⁰

¹⁸This is a considerable simplification of the actual procedure.

¹⁹On the whole, the Italians did not bring specie or bullion with them to Champagne: the value of their sales generally exceeded the value of their purchases, so it would have made little sense for them to do so. It was the Flemish, Hanseatic, and English merchants who brought silver to Champagne, because their purchases there exceeded their sales. (Spufford (1988) p 140). Of course, *individual* Italian merchants often purchased more in Champagne than they sold, but they could transfer the necessary funds there by bills of exchange rather than in cash (see Kohn (1999c)).

²⁰This is de Roover’s interpretation. “In order to facilitate settlements, [the bankers] were even generous in allowing overdrafts for the duration of the fair. The risk was small, since there existed an effective organization to deal with fugitive debtors who returned to their home towns without first settling

Consistent with this interpretation, ‘deposits’ at the fair banks were not payable on demand, but only during the settlement period that followed the two periods of trading. At that time, merchants with credit balances could, if they wished, receive payment in cash. Conversely, merchants with debit balances had to cover them. They could do so with cash or with bills of exchange, but it was common practice to carry the unpaid balance over to the following fair. This might be done by the banker agreeing to extend the overdraft loan or by the merchant borrowing from another who had a credit balance with the bankers. To facilitate this practice, there soon developed an active market in ‘inter-fair deposits’ (*dépôts de foire en foire*).

During the thirteenth century, the borrowing and lending that surrounded settlement at the fairs of Champagne evolved into a general money market—a market for short term loans. Not only the traders themselves, but others seeking short-term credit or having funds they were willing to lend short-term, came to the fairs to borrow and lend. Moreover, the convenient settlement arrangements and the ease of reinvesting funds or refinancing loans, made the fairs an ideal place for the settlement of debts wherever they were contracted—from London to Genoa. In particular, the fairs became a center for the market in bills of exchange. Indeed, the fairs of Champagne continued to be an important center of financial settlement long after they lost their importance in trade—a pattern that was to be repeated with later fairs, such as those of Lyons.

The fair banks, therefore, provided a sophisticated system of clearing and settlement that handled an enormous volume of trade, and later on an even greater volume of financial transactions, with only the minimal use of coin or bullion. There is evidence that the intention to economize on the use of coin was an important motivation for the establishment of the fairs by the Count of Flanders in the late twelfth century: at that time, trade with France was severely hampered by a scarcity of coin.²¹

THE EXTENT OF DEPOSIT BANKING

Deposit banks provided a system of clearing and settlement not only for the great fairs but also for the great commercial cities of the period such as Genoa, Venice, Bruges, and Barcelona.²² Genoa was probably where deposit banking originated some time in the

their debts.”(de Roover (1954) p204). The bankers at Champagne were themselves from northwest Italy, predominantly from Asti and Piacenza (see Abulafia (1997)).

²¹Nevin and Davis (1970)

twelfth century. Its bankers were generally not Genoese: they came first from Asti and Piacenza (these cities were the home too of the bankers of Champagne) and later from Sienna, Lucca, and Florence. As at Champagne, the clearing and settlement system provided by the deposit banks in Genoa was instrumental in the development of the market for bills of exchange. In Venice, too, deposit banks were essential to the development of the city as a commercial and financial center. They played a vital role in its commodity markets—especially in bullion and in grain—and in its market for bills of exchange. Deposit banks played an equally important role in Venice’s trading colonies overseas—at Constantinople, Tana, Alexandria, Palermo, and Syracuse.²³

In any commercial center, every merchant would have deposits at one, or usually, more of the deposit banks. This was true both for native merchants and for foreign residents. For example, the most important customers of the Bruges deposit banks were the Italian merchants living in the city. Itinerant foreign merchants visiting a city to trade would open temporary accounts at one or more banks to facilitate their trading there. Where deposit banks existed, non-merchant locals took advantage of them. In fourteenth-century Bruges, “every merchant, every broker, every innkeeper, and every *drapier* had [an account], and probably also a good many high-class retailers such as mercers, furriers, and goldsmiths, not to mention nobles and other persons who were not in business at all.”²⁴ Consequently, in the commercial centers, the use of deposit banks was quite widespread: in Venice in 1500, one in six to ten heads of household had a bank account; in Bruges in the fourteenth century, one in eight; in Barcelona in 1433, one in three.²⁵

By the fourteenth century, in all the centers of international trade and finance, whether they were fairs or commercial cities, payment in bank predominated. It did so because it was well suited to the nature of transactions in these places.²⁶ The need for

²²Antwerp, which was the predominant commercial center at the end of our period did not rely on deposit banks for clearing. The reasons for this will become clear presently. See Kohn (1999c) on how Antwerp adapted to the lack of deposit banks.

²³Mueller (1997) Ch. 3

²⁴de Roover (1948)

²⁵Venice: Lane (1937) ; Bruges: de Roover (1948) ; Barcelona: Usher (1943) . These numbers seem to have been arrived at by comparing the estimated number of deposits with the estimated population. Since multiple deposits were common, this may overestimate the number of depositors.

both parties to be present to effect a payment was no inconvenience in a trading center where they were present anyhow to trade with one another. The cost of payment in bank was higher than the cost of payment in coin except for large transactions: the cost of payment in coin increased with the size of the payment; the cost of payment in bank was high—mostly in time and trouble—but it was largely a fixed cost independent of the size of the payment. International commerce and finance generated a substantial volume of large transactions. The volume itself further increased the efficiency of payment in bank by increasing the opportunity for netting, so further reducing the need for settlement in cash. The most important reason why payment in bank was a good fit was that trade in the major international centers was trade among strangers. Where trade was among locals who knew each other well and had easy recourse in the event of default, there was no need for payment in bank: merchants could easily settle transactions on their own books, assigning third-party debts as necessary. However, strangers could not do this: they needed a trusted third party, in the form of deposit banks, to settle their transactions.

Outside the centers of international trade and finance, deposit banking was either much less developed or completely absent. While deposit banks were indispensable in Genoa and Venice, they were of only minor importance in Lucca and Florence, even though these two cities were the home of many of the deposit bankers active in other cities. Lucca and Florence themselves were manufacturing centers rather than trading centers. Consequently, commercial and financial transactions in these cities involved locals rather than strangers, so there was no need to settle through a trusted third party. While deposit banks certainly existed in these cities, they were small and served mainly a ‘cashier’ function: their transactions were mostly cash withdrawals and deposits rather than transfers in bank.²⁷ Similarly, in Flanders, deposit banking was important only in

²⁶“...there seems to be ground for believing that the increase in banking activity during the fourteenth and fifteenth centuries is largely due to the new business in foreign exchange.” (Usher (1934) p7)

²⁷See Goldthwaite (1985) . Historians—de Roover and Lane, as well as Goldthwaite—have been puzzled by this ‘backwardness’ of Florence in deposit banking: “Something was still missing—the appropriate economic conditions for full development? a mentality?—that prevented the Florentines, for all their precociousness in business matters, from turning technical progress into a fully developed capitalist banking system.” (Goldthwaite (1985) p50). Explanation has focused on the lack of a centralized business district (deposit banks in Florence were located in four separate areas of the city) and a relatively large number of small banks: both of these factors made transfer banking and interbank clearing difficult. It seems more plausible, however, that it was the nature of transactions in Florence that was the real reason. Had Florence been a center of international trade like Venice, it would presumably have had fewer banks,

Bruges.²⁸ Other cities, including the much larger Ghent, lacked deposit banks, because they, like Florence, were centers of manufacturing rather than of trade. England was totally lacking in deposit banks: “When Luca Pacioli’s famous tract on double-entry book-keeping, published in Venice in 1494, was translated into English in 1588, the section relating specifically to banking was omitted as irrelevant.”²⁹ It has been suggested that the reason for this lack was the absence of any private moneychangers who could evolve into bankers (moneychanging in England was the exclusive prerogative of the Royal Mint). However, it seems more plausible that there was simply no demand for banking in England at this time. The London goldsmiths were acting as custodians of cash and valuables as early as the fifteenth century. When a demand for banking emerged in the seventeenth century, they proved quite able to transform themselves into bankers.³⁰

B. DEPOSIT BANKS AS INTERMEDIARIES

The primary economic importance of deposit banks lay in their role as payments institutions: “...banking on the European continent, prior to 1800, was not based upon discount, but upon foreign and local exchange. Even credit, considered today the main function of the banks, was incidental to exchange.”³¹ However, deposit banks were, by their nature, also financial intermediaries: they borrowed in their own name and re-lent to others. Financial intermediation grew naturally out of their payments function, which, as we have seen, involved the extension of overdraft credit. To understand how deposit banks functioned as financial intermediaries, we begin by examining the sources of their funds and the uses to which they put them.

SOURCES AND USES OF FUNDS

The principal source of funds for deposit banks, of course, was their deposits. However in order for deposits to be a source of funds—to be available for lending—they had to be seen as a loan to the bank rather than as valuables consigned for safekeeping. Medieval law, relying on Roman precedent, did recognize this distinction. A consignment of valuables for safekeeping was called a *depositum regulare*. Such a deposit was non-

located more conveniently for transfer banking. By the sixteenth century, Florence had ‘caught up’ in the area of deposit banking (see Cipolla (1989)): presumably, by then, the circumstances had changed to demand it.

²⁸See Van der Wee (1993) Ch. 10.

²⁹Lane and Mueller (1985)

³⁰Italian merchant banks in England, such as the Bardi in the fourteenth century, did provide ‘cashier’ services for English clients. See Fryde (1951)

fungible: the precise object consigned had to be restored on demand. In the event of bankruptcy, a regular deposit was fully recoverable by the owner, and general creditors of the consignee had no claim on it. In contrast, a *depositum irregulare* was fungible: equivalent rather than identical objects were to be returned. In the event of bankruptcy, an irregular deposit had the same legal standing as other general liabilities. The deposits of banks were considered to be irregular deposits.³²

Bank deposits came in two main varieties—current accounts and ‘conditioned accounts’. It was the current accounts that were used as a means of payment. They could arise either from the deposit of cash, by transfer from another account, or by the granting of a loan by the bank. Current accounts did not normally pay an explicit return, although the payment services provided by the bank did provide an implicit return to the depositor. Conditioned accounts, on the other hand, were a type of trust or escrow account, payable by the bank only on the fulfillment of some pre-specified condition; they were therefore not normally transferable in payment. In Venice, banks accepted conditioned deposits to be paid, for example, on the coming of age of a son, on the dowering of a daughter, or on the issuing of a court decision. In Barcelona, it was common in executing real estate and commercial contracts to deposit money to the credit of a notary, to be transferred by him to a designated party as soon as certain conditions were met. Conditioned accounts could make up a significant fraction of a bank’s total deposits. Because of their stability and relatively long term, they were particularly suitable as a basis for long-term lending or investment by the bank. Conditioned accounts did normally pay a return. However, because of the prohibition of usury, the return was usually at a variable rate linked to the bank’s profits rather than at a fixed rate of interest.³³

Although current and conditioned deposits constituted their main source of funds, deposit banks also raised funds in other ways. They often accepted term deposits with a fixed maturity—typically, from three to twelve months. In some cities, such term deposits paid a contractual rate of interest: in Lucca, 12% was recognized by statute as a legal return. However, because of usury considerations, the more common practice was a voluntary dividend ‘at the discretion’ of the bank (in Florence, the rate fluctuated between 8% and 10%). Term deposits were not unique to banks: any large business might accept a *deposito a discrezione*. Indeed, until the development of a corporate bond market

³¹de Roover (1954) p 236

³²Mueller (1997) .

³³See Mueller (1997) on conditioned accounts in Venice and Usher (1943) on their importance in Barcelona.

in the nineteenth century, term deposits were the most common form of medium-term business debt.

Deposit banks also raised funds through non-deposit liabilities. Lenders often preferred to lend via formal loan agreements, which provided some distinct advantages over deposits. A formal loan could specify guarantors who would pay if the bank failed, allowing the lender to avoid the vagaries of the liquidation process. It could also protect the lender from legal liability: depositors who received a return based on the bank's profits might be considered effectively partners in the bank and so exposed to unlimited liability for its debts. In Venice, formal loans to banks commonly took the form of a 'local *colleganza*', a common form of business borrowing. It was a notarized instrument of fixed term, usually a year, that paid a market rate determined at maturity (so avoiding any usury problems).³⁴

Deposit banks used the funds they obtained from deposits and loans to support a variety of assets. Overdraft lending was a natural adjunct to the banks' function of clearing and settling payments. We have seen how overdraft played a crucial role at the fairs of Champagne. It was equally important in Venice, especially in the bullion trade.³⁵ Merchants bringing goods to the city were required to pay customs duties immediately on arrival, before they had a chance to sell the goods to raise the necessary funds; the Rialto banks would allow them to pay their duties in bank by overdrawing their accounts. Overdraft loans made to accommodate the payments scheduling of merchants were generally for modest amounts and of short duration. However, overdraft lending could expand beyond this to become a form of commercial loan. In such cases, loans were often large and of long and uncertain duration, and for some banks they could make up a substantial part of their outstanding assets.³⁶

While some commercial lending took the form of overdraft credit, most took the form of equity participation in commercial ventures: often, the bank was a silent or investing partner in a venture partnership. Banks had little choice but to invest in equity: debt instruments were unavailable, partly because of the ban on usury.³⁷ Bankers often

³⁴Mueller (1997) . See Kohn (1999d) for more on the *colleganza*.

³⁵Mueller (1979)

³⁶Note that this lending was voluntary. Because transactions were conducted orally, overdraft was impossible without the consent of the banker. (Usher (1934) p18)

³⁷"The lack of discountable commercial paper, the canonist objection against the taking of interest, and the legal impediments resulting therefrom, left the bankers no other alternative but to seek a profitable use for surplus funds through the direct participation in commercial ventures." (de Roover (1948) p 310)

invested their own personal funds, as well as those of the bank, in commercial ventures, and they often invested the bank's funds in their own commercial ventures: banks were generally sole proprietorships or, more rarely, partnerships, and the distinction between the bank and the banker was fuzzy at best.³⁸

Overall, while commercial lending was an important outlet for deposit banks, the contribution of deposit banks to commercial finance was minor, and they performed no unique function in this respect. Deposit banks engaged too in non-commercial lending. In fact, in some cities such as Florence, non-commercial lending predominated.³⁹

Deposit banks lent to princes, nobles, municipalities, craftsmen, petty traders, and even peasants. In Florence, the market for such loans was well organized: for a commission, brokers (*sensali*) brought potential borrowers together with willing bankers. Unlike commercial lending, non-commercial lending was generally secured. The most common security was a pawn—usually jewelry or plate. Indeed, during a banking crisis in Venice in 1500, a number of failed banks were found to be in possession of vast treasures of jewelry. Lending to a king or prince was essentially a personal loan, much like any other, and the pawning of crown jewels to secure a bank loan was not unusual. In Florence, banks accepted marketable municipal securities as collateral. An alternative to collateral, acceptable for some borrowers, was a promissory note co-signed by one or more substantial guarantors. Lending to peasants was often in the form of a forward purchase of crops: in addition to providing collateral, this avoided the usury problem (the interest rate was built into the purchase price). Banks did not generally engage in petty pawnbroking, because the taint of usury and the low social status would have damaged their reputation and so shaken the confidence of their depositors. However, thirteenth-century Lucca was an exception, and deposit banks there accepted as pledges clothing, utensils, and even horses.

A particularly important non-commercial borrower in some cities was the city government. The outstanding example was Venice in the fifteenth and sixteenth centuries, where as much as 10% to 20% of bank assets consisted of loans to the government.⁴⁰ Lending to the Venetian government began as emergency war finance, but soon evolved into the routine short-term financing of normal government operations. The backing of the Rialto banks enhanced the government's ability to command resources in

³⁸de Roover (1948) Ch. 14 gives examples for Bruges. Lane (1937) and Mueller (1997) give examples for Venice.

³⁹See Goldthwaite (1985) on bank lending in Florence.

a crisis, since suppliers were more ready to accept payment in bank than they were to accept government IOUs. In late sixteenth century Florence, the Ricci bank played a similar role, becoming essentially the official bank of the Grand Duchy. In other cities, however, like Bruges and Barcelona, private deposit banks did little lending to city governments. Loans to city governments, where they occurred, were often secured by assignment of tax or customs revenue. Although such loans rarely bore explicit interest—in Venice, they were said, implausibly, to be ‘moved by love of fatherland’—there was presumably some form of compensation. As was the case with their commercial lending, lending to governments by private deposit banks was not quantitatively important. Even in Venice, the banks funded only a very small part of government debt. However, as was the case with their commercial customers, the contribution of the banks to government liquidity and cash management was crucial and their short-term lending was an essential component of this service.⁴¹

In addition to their loans, some banks held positions in marketable assets such as municipal securities or bullion. Such positions were not investments, but trading positions—a consequence of the banks’ activities as dealers in the respective markets. Since dealers buy and sell on their own account, they must take positions. Moreover, because they need to be well informed about the market in which they trade, it is tempting for them to take speculative positions in anticipation of price movements. In Genoa and in Florence, deposit banks acted as dealers in the market for municipal securities and they often took large speculative positions in municipal debt.⁴² In Venice, the Rialto banks acted as dealers and financiers in the market for bullion and speculated extensively in bullion.⁴³

Discounting of commercial paper appeared only towards the end of the period. In the 1530s, in times of financial crisis, local moneychanger-banks in Antwerp began to purchase at a discount mature commercial paper that had been rendered temporarily

⁴⁰See Mueller (1997) Ch 10.

⁴¹We shall see presently that *public* deposit banks played a more significant role in government finance.

⁴²By holding municipal securities, these banks contributed indirectly—rather than directly through loans as in Venice—to the financing of the government. For more on the market for municipal debt, see Kohn (1999d) . The Cerchi bank of Florence committed much of its capital to speculation in the market for public debt (Goldthwaite (1985) p 40.)

illiquid; by 1600, they were routinely discounting commercial paper before maturity.⁴⁴ Discounting by banks was not itself new: there were earlier examples of discounting receivables. At the Castilian fairs of Medina del Campo (1420-1575), credit balances were due twenty days after the close of the settlement period; however, merchants who did not wish to wait were able to discount their claims with bankers at a cost of 0.5-1%.⁴⁵ In Venice, banks purchased at a discount payments of new coin from the mint due to sellers of bullion; they did the same with tax and customs receivables due to the government.⁴⁶

Like the banks of today, early deposit banks engaged in a variety of ‘off-balance-sheet’ activities. The most common was the provision of guarantees. To attract deposits, banks needed to have excellent credit; so substituting their own credit for that of their customers, for a consideration, was a natural extension of their business. In Barcelona, banks commonly guaranteed the debts of their customers, promising to pay if the customer failed to do so. In Genoa, shipbuilders routinely required guarantees from a bank before beginning construction of a new commission. In Venice, banks began by guaranteeing the payments of customs duties by bullion importers and only later financed them with overdrafts; similarly, they began by guaranteeing government purchase contracts (to “any creditor who doubted the solvency of the government”) before they started to finance them directly.⁴⁷ Other off-balance-sheet activities of deposit banks in various cities included the underwriting of maritime insurance and wagers on horse races. They even included derivatives: the Cerchi of fifteenth-century Florence “bought and sold options to buy claims on credit in the public debt at an agreed rate anytime within a stipulated period, sometimes extending as long as eight months into the future.”⁴⁸

MANAGING LIQUIDITY AND RISK

As financial intermediaries, deposit banks had the same principal concerns as banks today—liquidity and risk. They had to be able to convert their deposits into coin on demand, and they had to ensure their solvency in the face of potential losses. However, the nature of the banks and the nature of the environment in which they operated made

⁴³On Venice, see Mueller (1979) . Speculation in the silver market was named as a primary cause of the bank failures of 1374.

⁴⁴The evolution of discounting is discussed in detail in Kohn (1999c) .

⁴⁵Usher (1943) .

⁴⁶Mueller (1979)

⁴⁷Barcelona, Usher (1943) Ch 8; Genoa, Byrne (1930) ; Venice, Mueller (1997) p 433.

managing liquidity and risk much more difficult than it is today. Banks were small; safe and liquid assets were unavailable; shocks to the economy were large and frequent; and there was no lender of last resort.⁴⁹

Banks were small primarily because the economies they served were small. In the early fourteenth century, before the Black Death decimated Europe's population, only Venice among the great commercial centers had a population of over 100,000. Even as late as 1600, London was the only commercial center to have reached 200,000. The size of banks was limited too by technology: the slowness of transactions and their primitive accounting methods limited the volume of transactions they could handle. Venice probably had the largest banks: in the fifteenth century, one of the four Rialto banks had over 1,200 depositors; in 1500 the ten Rialto banks between them had some 4,000 deposits totaling about one million ducats—roughly \$60 million in today's money. Banks in Barcelona were also relatively large, but in Florence and Bruges deposit banks were much smaller. In mid-fourteenth century Bruges, the typical bank had fewer than 100 depositors and total deposits of £5,000 or less—less than \$1 million in today's money. The staff of a typical bank in Bruges consisted of the banker himself, an assistant, a bookkeeper, perhaps a cashier, and one or two messengers. Because banks were small and had few depositors there was little pooling to support liquidity. In a typical bank in Bruges, a dozen major depositors might account for two thirds of the deposits. This left banks in a precarious position. Depositors were generally nervous about their banks—for good reason, since failures were frequent. So the slightest rumor would cause a run. The withdrawal of only a few large accounts could threaten a bank's liquidity.

Consequently, reserve ratios were much higher than they are today: a ratio of 30% was not unusual. In addition, banks relied on balances with other banks as liquid reserves. Small banks sometimes paid a premium to hold deposits at larger banks, on which they could draw for cash. They were sometimes allowed to overdraw these accounts—a sort of emergency credit line. In times of monetary stringency, banks resorted to all manner of tricks to avoid payment in cash. They might pay out only in low-valued 'black money' which would take a long time to count out and a cart to carry away—rather like a bank today paying only in pennies. They might shorten their hours, reducing the number of transactions they could complete. They might offer depositors inducements not to withdraw cash. It was common to send depositors from bank to bank in an often fruitless

⁴⁸Goldthwaite (1985) p 40.

⁴⁹“In the Middle Ages, commercial banking was not a conservative business but a risky game.” de Roover (1948) Ch 15

pursuit of specie. If all else failed, the banks might simply suspend convertibility—allowing depositors to continue to make payment in bank but not to withdraw cash. In Venice, suspensions were a regular occurrence. During a suspension, the value of bank money would fall relative to cash—creditors being willing to accept a smaller amount if payment were made in cash rather than in bank. Relieved of the need to convert their deposits into cash, bankers could not resist the temptation to expand their lending, and new banks opened to take advantage of the opportunity. The result was an ‘inflation’ of bank money: in 1526, bank money fell to a discount of 20% relative to cash.

Banks lacked safe and liquid assets in which they could invest. Primarily, this was because such assets—negotiable bills of exchange in particular—did not yet exist. However, the prohibition of usury did not help, because it made it difficult or impossible for banks to make loans at interest. To some extent, banks found ways around the prohibition: they disguised interest as fees, or they lent in one currency against repayment in another, hiding the interest in the exchange rate (the same method used in the bill of exchange). However, the most direct way to avoid any accusation of usury was to provide finance in the form of equity rather than debt. This was a major reason why much commercial lending took the form of investment in venture partnerships. But these investments were very risky, illiquid, and of long maturity (a trading voyage could take as long as two years). Overdraft, the other main form of commercial lending, was not much better as an asset: since it was of indefinite maturity, it could not be liquidated in times of stringency. Whatever the form of commercial lending, it was generally poorly diversified—a few large investments or loans making up the bulk of a bank’s assets.

Deposit banks operated in a highly unstable environment that threatened both their solvency and their liquidity. War was a major cause of instability. War, or even the threat of war, could interrupt trade for extended periods; the needs of war finance could empty a territory of coin. The prices of commodities—grain, bullion, spices—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 speculators. The monetary environment, too, was highly unstable.⁵⁰ A general shortage of coin would increase withdrawals, depleting bank reserves. While both debasements and strengthenings caused shortages of coin, they had very different effects on bank balance sheets. Debasement was beneficial. Much of the bank’s assets were ‘real’—reserves of coin which could be recoined at a profit and equity investments—while most of its liabilities—mainly deposits—were ‘nominal’ and would therefore decline in real value as prices rose. On the

⁵⁰See Kohn (1999b)

other hand, strengthening raised the value of nominal liabilities, lowered the value of reserves, and, at best, left other assets unchanged in value. The result could be catastrophic. Apart from the major shocks of monetary policy, banks were also subject to less violent but still significant seasonal fluctuations in the abundance of specie. In Venice and in Genoa, merchants regularly made large withdrawals of cash in July and August to stock the Levant galleys with specie and bullion. Most bank failures occurred between July and October, when bank reserves were low. In Bruges, liquidity was tight in December and January, before the Italian galleys departed and improved in February and March when German merchants arrived bringing new bullion. In Florence, the period of *stretazza* was from September to January when coin was needed to purchase grain from the countryside.⁵¹

The inherent riskiness of a banks' assets was compounded by the general lack of information. Not only were depositors largely in the dark about the state of the bank, but so was the banker himself. Accounting methods were rudimentary, and banks did not take full advantage of what methods there were.⁵² Banks did not keep a complete set of accounts or keep a cash account. The main purpose of the bank's books was to provide a record of its transactions with individual customers (banker and customer met periodically to reconcile their separate records). There was no attempt to obtain a picture of the bank as a whole, except when a failed bank was wound up or when the owners dissolved their partnership. The prohibition of usury discouraged banks from keeping better accounts: more thorough accounts would have exposed their tricks and left them vulnerable to accusations of usury.⁵³ In the absence of solid information, the confidence of depositors was highly dependent on the person of the banker himself. Banks were sole proprietorships or small partnerships, and the owner or owners had unlimited liability for the debts of the bank. The death or illness of the banker or a personal business setback—the separation between bank and banker being tenuous—would often prompt a run on the bank.⁵⁴

⁵¹de Roover (1948) Ch. 12 and Mueller (1997) Ch. 4

⁵²“Decision of policy were made with little or no statistical background, and some mistakes were doubtless due to ignorance of the condition of the bank. Even in the sixteenth century, the account books of banks in Italy and Spain exhibit very imperfectly the precepts of Pacioli's notable treatise on bookkeeping and accounting (1494). The bookkeepers did not attempt much actual analysis until the seventeenth century.” (Usher (1943) pp13-14.)

⁵³Goldthwaite (1985)

⁵⁴Mueller (1997) Ch. 4

C. THE REGULATION OF DEPOSIT BANKS

Deposit banks everywhere were regulated. This is not surprising: in the Middle Ages, all professions and crafts were regulated to a greater or lesser extent by guilds and by governments. But there were special reasons for regulating banks. First, deposit bankers were usually moneychangers, and moneychangers played an important role in the management of the currency. Apart from their semiofficial status as agents of the mint, they were constantly under suspicion of undermining monetary policy by trading bullion at market prices and exporting it to foreign mints. The second reason for the regulation of deposit banks was their economic importance: bank failures could bring commerce to a standstill. In general, the more vital the role of the deposit banks in a city, the greater the degree of government involvement. Often, then as now, a wave of bank failures would focus government attention on the banks and lead to a host of new regulations. However, then even more than now, it was one thing to announce new regulations and quite another to enforce them.

Everywhere, entry into banking was restricted. Usually it required a municipal license, as in Barcelona, or membership of the appropriate guild, as in Lucca and Florence. However, in Bruges the position of moneychanger was a hereditary fief, granted by the Count of Flanders; the four enfeoffed moneychangers enjoyed an official monopoly on deposit banking and additional banks required a license from them.⁵⁵ In Venice, moneychanging and deposit banking were permitted only at authorized tables. The tables belonged to the Commune, and they were auctioned annually to the highest bidder. In most towns, there was a council or magistracy to judge the suitability of those who wished to establish a bank: only 'fit and proper' individuals were granted permission. Restrictions on entry were not always effective. In Barcelona, while deposit banking was regulated, petty moneychanging was not, and many petty moneychangers accepted deposits illegally. In Bruges, innkeepers accepted money from their guests for safekeeping and were soon transferring deposits and using the funds to invest in their own ventures; the Hanseatic merchants seemed to have had more faith in their innkeepers than in the official banks. In Antwerp, as we shall see, deposit banking was banned altogether, but this did not prevent unofficial moneychangers, *kassiers*, from accepting deposits.

Deposit bankers in most cities had to take an oath and to provide surety. The oath was a serious matter: apart from the danger to one's immortal soul from violating an oath—a danger not taken lightly—perjury was a grave offense with severe penalties, not excluding

⁵⁵de Roover (1948)

death. Surety was in the form of real property posted by the banker or, more usually, guarantees provided by third parties. If the bank failed, the guarantors were liable for its debts up to a predetermined sum.⁵⁶ In Barcelona, two or more individuals, other than the banker himself, had to put up a total of 1,000 silver marks, later raised to 2,000—a substantial sum, equivalent to several million dollars in today’s money.⁵⁷ In Venice the required guarantee of 3,000 ducats was raised to 20,000 in 1455 after a series of bank failures; guarantors had to post bond in the form of liquid assets, usually government securities.⁵⁸ In 1309, after a number of bank failures had led to serious friction with the merchants of the Hansa, Bruges supplemented private guarantees with a form of deposit insurance. The city made good on these guarantees in a number of cases.⁵⁹

The authorities sometimes tried to limit the risk exposure of deposit banks by restricting their assets. Venice had a long history of asset restrictions, and added new ones after each banking crisis. In the 1370s, it banned investment in most commodities (especially bullion); in the early fifteenth century, it limited investments in commercial ventures to one and a half times the personal wealth of the banker (as assessed for tax purposes).⁶⁰ A 1477 law in Flanders forbade banks “to deal in commodities or to be partners in such dealings, either at home, or overseas, or beyond the mountains.”⁶¹ Had this restriction been enforced, it would have left bankers with very little opportunity for investment.

We have seen that when their liquidity was under pressure, banks would try to avoid paying out cash. Governments enacted laws to require them to do so. Barcelona passed a law in 1444 requiring banks to pay cash within 24 hours of demand.⁶² Venice passed a law in the 1470s requiring payment in cash within three days (the same law required

⁵⁶The posting of a bond was not unique to banking: it was common practice for all important public offices.

⁵⁷Riu (1979)

⁵⁸Mueller (1979) ; Mueller (1977)

⁵⁹See de Roover (1948) Ch 15. The guarantees were later extended to other nations of itinerant merchants (Nuremburg, Portugal, Spain), but not to the Italians, who were generally resident in Bruges, and so thought able to take care of themselves. In 1480, the Hanseatic merchants received similar guarantees from Antwerp, but only up to 6,000 crowns apiece.

⁶⁰Mueller (1979) ; Mueller (1977)

⁶¹de Roover (1948) p 311

banks to remain open at least two hours in the morning and two in the evening).⁶³ Moreover, the 1522 Venetian law that banned written orders of payment was largely motivated by banks' use of this instrument to avoid paying out cash. Florence passed a law in 1568 requiring banks to pay cash on demand.⁶⁴ The repeated passage of laws enforcing the convertibility of deposits suggests that these laws had little effect.

Bank failures were frequent. When a bank failed, it was liquidated by the authorities. Payments were immediately suspended and records seized. (It was not unusual in Venice for a failed banker to flee the city with the bank's books and then to negotiate personal immunity in exchange for their return.) The sureties were required to pay up, and the personal property of the banker was placed in receivership to be sold to cover the bank's debts (including those to the sureties). The liability of the banker was unlimited. Priority in liquidation varied according to custom: under Roman law, assets were divided pro rata among the creditors; under German customary law, it was first come, first served. In some cities, priority was given to certain classes of depositor, such as foreigners, or widows and orphans. If the depositors could not be repaid in full, the banker might be imprisoned to encourage his relatives to pay his debts in order to secure his release. Barcelona went a step further: a banker who failed to pay up within a year was liable to be executed. This actually happened in 1360, when Francesch Castello was beheaded in front of his bank.⁶⁵ Generally, a failed banker was permanently prohibited from opening another bank. However, Venice recognized the distinction between insolvency and illiquidity: it allowed the owner of an illiquid bank to establish a successor bank if his creditors were willing to accept payment in the form of deposits in the new bank (typically these were term deposits, payable at specified intervals).⁶⁶

D. THE CRISIS OF DEPOSIT BANKING AND THE RISE OF PUBLIC BANKS

Deposit banking seems to have undergone something of a general crisis from the second half of the fifteenth century.⁶⁷ There were waves of bank failures across

⁶²Usher (1943) Ch 8

⁶³Mueller (1997)

⁶⁴In the 1570s, Florentine banks, too, avoided paying out cash by giving customers instead *polizze* drawn on other banks. The decision of the Tuscan Treasury in 1576 not to accept *polizze di banco* in payment and to require cash instead precipitated a liquidity crisis. (Cipolla (1989))

⁶⁵Usher (1943) p 242

⁶⁶Mueller (1997) p 122.

⁶⁷de Roover (1954), Van der Wee (1977)

Europe—notably in Venice, Florence, and Bruges.⁶⁸ The ‘bullion famine’, which peaked at this time, almost certainly played a role. The scarcity of coin strained the banks’ liquidity and the general deflation and slump lowered the quality of their assets and threatened their solvency. Because of the harm done to banks, the effects of the bullion famine were particularly severe in places that relied upon banks for their means of payment. The collapse of banks increased the demand for coin and further exacerbated the shortage. There was also some contagion, as the market for bills of exchange transmitted tight liquidity from place to place.⁶⁹ The widespread and frequent failures of deposit banks, which continued on and off into the sixteenth century, shook the confidence of merchants and attracted the attention of governments. Efforts to regulate bank safety were clearly not working: more radical solutions seemed to be called for.

Banking failures were particularly severe in the Low Countries. The Burgundian authorities decided that the best solution was to ban banking altogether. They had embarked on a program of monetary stabilization and anyhow viewed the moneychanger-bankers with a jaundiced eye, suspecting them of undermining the reforms. Beginning in 1489, the authorities issued repeated orders prohibiting the taking of deposits and payment in bank. The repetition suggests that, as usual, the prohibition was ineffective. However, making deposit banking illegal hardly promotes depositor confidence: in addition to their normal concerns about the soundness of the bank, depositors now had to worry about confiscation by the authorities and possible fines. The result was that deposit banks completely died out in the Low Countries by the end of the fifteenth century.⁷⁰ The absence of deposit banks in Antwerp was to have profound implications for its financial development during the sixteenth century.⁷¹

⁶⁸Goldthwaite (1985) questions the extent of the crisis in Florence, attributing the seeming ‘disappearance’ of deposit banking to the decline of the gild and poor record-keeping. As he notes, deposit banking does not seem to have been of great importance in Florence at this time anyhow.

⁶⁹Mueller (1997) Ch. 4

⁷⁰de Roover (1974) The monetary reforms may have contributed directly to the decline of banking: banking may have become less profitable in a more stable monetary environment. In any event, the decline of deposit banking in the Low Countries seems to have begun before the prohibition (see Van der Wee (1993) Ch. 10).

⁷¹See Kohn (1999c) . Unofficial deposit banking did appear in Antwerp from the 1530s in the form of the *kassiersbedrijf* (cashier’s profession). Initially, however, as their name suggests, *kassiers* acted mainly

Another place where bank failures were a continuing and increasingly severe problem was Venice. As the Venetian Senator Tommaso Contarini noted in 1584, “in the life of the Republic one finds that 103 private banks were erected, of which 96 failed... and 7 alone succeeded.” The repeated failures of the Rialto banks interrupted commerce and tied up depositors funds in lengthy and litigious liquidations. Venice was too commercially sophisticated to consider banning banks: it realized that an efficient payments system was indispensable. Indeed, it was felt that banking was too important to be left to the private sector. Contarini argued that there was an inherent conflict between the profit motive of private bankers and the public need for a stable banking system: “private bankers cannot afford to be simply custodians of money entrusted to them, but have to invest it in trade in order to make a profit. Such investments are not only risky, but immobilize funds which will not be available, if there is a run on the bank.” Although proposals for a public bank were made as early as the fourteenth century, no action was taken until 1584, when the collapse of the last two Rialto banks for a loss of half a million ducats brought private banking in Venice to a halt. The Senate responded by authorizing the establishment of the *Banco della Piazza di Rialto*.

The *Banco di Rialto*, which opened for business in 1587, was designed as a pure payments institution that did not engage in financial intermediation and was therefore not subject to failure. It accepted deposits and allowed deposit transfers and cash withdrawals, but it paid no interest on its deposits and allowed no overdraft or other credit. It was clear that this would not be a profit-making enterprise, and the bank’s expenses were to be paid by the government out of import duties. The management of the bank was licensed to a private individual (the normal practice for many public offices), but the bank was guaranteed by the Senate. Although private banks were not prohibited, none was established for several years. The *Banco di Rialto* was a great success. There were in practice few cash withdrawals, and payment *in banco* was soon at an *agio* (premium) over payment in coin; a market soon sprang up speculating on the fluctuating size of the premium. The prohibition of overdraft seems not to have been observed, as debit balances were numerous: this no doubt improved the efficiency of the payments mechanism.

The *Banco di Rialto* was not the first public bank. Indeed, it was largely modeled on its predecessors—especially the first public bank, the *Taula de Canvi* of Barcelona, established in 1401. The *Taula* was not as successful an institution as the *Banco di Rialto*,

as cashiers: payment in bank seems to have been rare at least until the 1560s, and even then was not important.

and its problems shed some light on the ‘dark side’ of public banking. While the *Taula* was intended as a safe repository for the funds of the city and its citizens, the primary motivation for its establishment was fiscal. A petition, submitted to the city council, supporting the establishment of a municipal bank read as follows:

Certain citizens desirous of promoting the welfare of the city, have thought that if the city were to have a bonded Bank of Deposit it would be possible to place in it the deposits of the city, which amount to a considerable sum, and which it is now required, by order of the city, to place on deposit with some agent. Furthermore, large sums would be deposited by many individuals who would prefer to keep them in such a bank rather than hold them in their own possession. With such sums and the balances from the revenues of the city, it would be possible to redeem bonds, and in a short time reduce the annual charges to which the city is subject.⁷²

The intention was not, therefore, as it was later with the *Banco di Rialto*, to protect the payments function by preventing all bank lending. Rather, it was to direct bank lending to the government and so provide the government with a less expensive way of funding its debt.

The *Taula* was authorized to lend exclusively to the city and prohibited from private lending—including the granting of overdraft credit. It also acted as a fiscal agent for the city and later for the Catalan government—receiving tax payments, issuing bonds, and making interest payments. The city administered the *Taula* directly as a department of municipal government, and its deposits were guaranteed by the city. The guarantee proved an insufficient attraction to draw much commercial business away from the private deposit banks. Unlike them, the *Taula* could not provide private depositors with overdraft credit or foreign remittance through bills of exchange, and its service tended to be bureaucratic and slow. The granting to the *Taula* of a number of privileges—the most important being a monopoly on conditioned deposits—and even the city’s attempts to suppress private banks did little to change this. Moreover, the city proved unable to resist the temptation of easy credit. It borrowed copiously from the *Taula* both to finance emergency purchases of grain and to cover military expenses. As lending expanded, so did the amount of the bank’s deposits, and their value fell to a discount relative to cash. By the 1460s, the *Taula* was forced to suspend convertibility. Deposits continued to fall in value, and the city eventually had no choice but to liquidate the bank, paying off

⁷²Usher (1943) p269

depositors with long-term city debt. The *Taula* was reorganized in 1468, this time with a restriction on its ability to lend to the city.

After Barcelona, a number of other cities set up public banks, but the idea really took off only with the establishment of the *Banco di Rialto* in Venice. Because of their official supervision and public guarantees, public banks had the advantage of inspiring greater confidence on the part of depositors. Indeed, they proved much less subject to failure than had private deposit banks. Moreover, because there was usually only a single public bank, there was no need for inter-bank clearing, and the payments process became much more efficient. By the end of the seventeenth century, most deposit banking on the Continent was in the hands of public banks. However, the Achilles heel of public banks remained—the temptation to finance the government with money creation—and most succumbed to it eventually.

The different approaches taken by the Low Countries and by Venice to the problems of deposit banking in the fifteenth and sixteenth centuries led to two distinct paths of development. In the Low Countries, the ban on deposit banks threw the burden of payment back onto the assignment of private debts and led in Antwerp to the evolution of negotiable bills of exchange. This instrument provided the basis for the highly successful English country banks of the eighteenth century. In Venice, the private deposit bank was replaced by the public bank. This path led to the *Wisselbank* of Amsterdam, established in 1609, and to the Bank of England in 1694. The two paths were reunited in nineteenth century England, and together provided the basis for modern commercial banking.⁷³

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⁷³Van der Wee (1993) Ch. 8

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