
ARTICLES

Local Banking in Renaissance Florence

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Introduction. — I. The bank of Bindaccio di Michele de' Cerchi & Partners. — II. The banker's accounts. — III. Banking operations: money-changing; deposit banking; extension of credit. — IV. The problem of interest charges. — V. Economic functions: fractional reserves and the creation of money; investment. — Conclusion: the banking system. — Appendices: A. selection of surviving banker's accounts; B. data from bankers' balance sheets; C. balance of the Cerchi bank, 15 August 1482.

For all the scholarly attention that has been lavished on the banking activities of Florentines abroad, the city's banks at home have been totally overlooked. Raymond de Roover made a few passing remarks about these *banchi a minuto* (as he called them) when he surveyed the banking scene for the introduction to his book on the Medici bank (1963),¹ but he dismissed them as having

¹ *The Rise and Decline of the Medici Bank* (Cambridge, Mass., 1963), pp. 15-16 (with reference to the older literature). In his *Un changeur florentin du Trecento: Lippo di Fede del Sega (1285 env. — 1363 env.)* (Paris, 1973), Charles de La Roncière studies the activities of a man he calls a banker. De La Roncière admits, however, that del Sega was not registered with the guild and did not operate the usual kind of banking establishment (a *tavola* or *banco*); and clearly his surviving account book is not a business book but merely a record of all kinds of personal economic activity, including speculation in money-changing, the only «banking» activity he engaged in. Del Sega, in

little to do with what we consider banking, since, so far as he was able to determine, they did not accept deposits and engage in transfer operations. He concluded that the local banker was little more than a money-changer and a trader in jewelry.

Local bankers were variously called *cambiatori*, with reference to their trade, or *banchieri* or *tavolieri*, with reference to the counter or place (*banco* or *tavola*) where they conducted their business; and they were organized into their own guild, the Arte del Cambio. A description of local banking is complicated, however, by the presence on the scene, and in the guild, of international merchant-bankers. International banking had its origins in money-changing and transfer in markets abroad as an extension of the commercial activity of merchants operating outside of Florence; they developed the bill of exchange, effected international transfer of credits, advanced loans, and engaged in other related banking activities. Most of these international merchant-bankers worked through partnership networks abroad and did not deal directly with the local public through a formally organized, public place of business in Florence; but others, including some of the great names in Florentine life, did open a local *banco* or *tavola*. For example, the Medici always kept such a local bank open; and the famous merchant of Prato, Francesco di Marco Datini, opened one toward the end of his long career, although he closed it down after slightly more than two years. The local banks of these merchant-bankers were organized as separate partnerships with their own legal and economic identity within the larger complex of commercial firms through which these men operated abroad. Moreover, any merchant-banker who opened a *banco* or *tavola* was required to become a member of the Arte del Cambio, and in this sense too they took their place alongside the strictly local bankers.

fact, was nothing more than a private speculator in the money market (see below, p. 18); he certainly was not a banker and it is hardly correct to call him a *cambiatore* (money-changer) in the contemporary understanding of that profession.

Federigo Melis felt that the organization, in 1400, of the local Datini bank as a separate business and legal entity marked — at least so far as the documented historical record is concerned — a decisive step in the history of banking, for this kind of company “happily represents the transition from banking activity taking place within a commercial company (a mixed, or non-specialized banking company) to an independent, purely banking company.”² In other words, for Melis the origins of banking properly speaking on the local scene in Florence is to be found in these merchant-bankers’ establishments. De Roover would presumably have agreed, although he never explained why, on the other hand, the Florentine money-changers never (according to him) went on to take up the practice of deposit banking, following the evolution of banking he studied so thoroughly in fourteenth century Bruges.

Given the present state of scholarship, therefore, local banks appear as a mixed bag, ranging from the small shops de Roover dismissed as places where money was changed and jewelry traded to the companies that were set up in Florence as part of larger international operations and that could, like that of the Medici, have a capital as high as 12,500 florins (in 1433) and a clerical staff as large as eight (in 1414). The fact is, however, that although we know much about banking practices, thanks above all to the studies of de Roover and Melis, there is no institutional study of local banking as such. It is ironic that de Roover based his judgment solely on what he could find in the statutes of the guild, not on an examination of any banker’s books, since one of his most important contributions to the economic history of Florence had been to demonstrate, through a study of the business records of a wool shop, how distorted a view of the wool industry Alfred Doren got by confining his study almost exclusively to guild records. Melis, of course, did not live to

² *Note di storia della banca pisana nel Trecento* (Pisa, 1955), p. 239.

complete the second volume on Datini's business system, in which he would have studied the extensive records of the local bank of this merchant-banker.

This study is designed to clarify our view of the local banking scene in Renaissance Florence. The point of departure is a description of the local bank of Bindaccio di Michele de' Cerchi, open from 1472 to 1485, some of whose business accounts survive; and the ensuing analysis of banking activities and functions as represented by the Cerchi bank, which was strictly a local business, will be amplified and complemented by material from the client's side of the banker's counter as seen in numerous account books of private persons where their dealings with local banks are registered. Records for other local banks, including those operated by international merchant-bankers, will also be cited but only to the extent they throw some light on the local banking scene; the function of these banks that were branches of more extensive operations abroad raises larger problems that will require separate study.

It is thus the truer instinct of de Roover the business historian that has inspired this study of local banking based on the records of bankers and their clients; and although the following discussion modifies much of what de Roover said about local banking, this article is presented as a validation of a method he laid down for the study of economic institutions. This analysis, in fact, owes much to de Roover's study of bankers' records from fourteenth century Bruges as well as to the exemplary description Reinhold Mueller has recently given us of the functions of Venetian banks during the early Renaissance.³

³ RAYMOND DE ROOVER, *Money, Banking and Credit in Medieval Bruges* (Cambridge, Mass., 1984); REINHOLD MUELLER, "The Role of Bank Money in Venice, 1300-1500", *Studi veneziani*, n.s. III (1979), 47-96.

I. The Bank of Bindaccio di Michele de' Cerchi & Partners

Bindaccio de' Cerchi was born into an old but not a wealthy family. When he was only ten years old, in 1460, his father died; and as the only son he inherited a modest estate consisting primarily of landed property worth 1600 florins.⁴ To judge from the Catasto declarations of Cerchi's grandfather and father, also an only son, there had been no significant accumulation of wealth in over two generations of family economic history. In fact, the year after his father's death the trustees had to sell property in order to repay 1000 florins due to his mother upon her remarriage to Niccolò di Jacopo Giugni. The balance of the estate was managed by the state magistracy for orphans (the office of the Pupilli), who paid Giugni for the expenses of his wife's son. At age eighteen, in 1468, Cerchi came into a much reduced estate and presumably was prepared to strike out on his own, for his tax declaration of the next year shows that his chief asset was a nominal credit of 719 florins in the state debt (the Monte) and that he was paying eight florins in rent for the house where he lived.

On 17 July 1469 Cerchi went to work in the bank of Giovanni di Cerbinò & Partners for one florin a month, probably as an apprentice-cashier; his accounts record salary payments down to 1 September 1470. Later that month he borrowed ten florins to pay the balance still due on his father's long-dormant account at

⁴ The extensive records of the Cerchi family are found in the Archivio di Stato di Firenze (henceforth: ASF), Archivio Cerchi. Bindaccio's records include: a journal kept by the trustees of his inheritance during his minority (no. 313), two books of personal accounts, 1468-92 and 1496-1501 (nos. 314 and 319); and the company records described in Appendix A below. The tax records of his father and grandfather are filed in Santa Croce, Ruote: ASF, Catasto 73 (1427), fol. 226; 493 (1433), fols. 103v-4; 665 (1446), fols. 303-4; 702 (1451), fols. 253-4; 809 (1457), fols. 141-2; 915 (1469), pt. 1, fol. 153; 1006 (1480), pt. 1, fol. 111. The fragment of an historical chronicle by Cerchi has been published by FRANCESCO MAGGINI, "Frammenti d'una cronica dei Cerchi", *Archivio storico italiano*, LXXVI (1918), vol. I, 97-109.

the Cambio and his own matriculation fee, and somehow he then went about the task of setting up his own bank. The first reference to the bank, located at San Tommaso in the Mercato Vecchio, comes in January 1472; and in the following year (when he moved to the Mercato Nuovo) the business appears on the list of companies compiled annually by the guild, the entry stating that the bank's current cash book, lettered A, had been open since June 1472. The earliest surviving company document, a record book (*ricordanze*), was begun in the same year. Cerchi presumably went into business with his own, or borrowed, capital, for he is recorded on the guild list as having no partners; but his financial position must have been strengthened by his marriage to the daughter of Scolaio di Gentile da Sommaia, whose dowry account on Cerchi's books was opened in 1474 with a credit of 1420 florins. In his tax report for 1480 Cerchi lists his only asset as a modest house in the country, at Ponte a Sieve, where his family had had property for generations until the liquidation of his father's estate; he still rented both his bank and his residence in the city. From 1483 onwards, however, his accounts record the purchase and administration of small rural properties in the area of Empoli. After this year entries in the surviving record book of the bank are made with less and less frequency; and finally, in October 1485, he made a memorandum that he was closing down his business, which in fact does not appear on the annual guild lists after 1484. It must have been that Cerchi was able to retire, still in his mid-thirties, to live the rest of his life as a rentier off the fruits of a brief and successful career as a banker. His personal accounts, mostly regarding administration of his real estate, continue until the turn of the century.

Cerchi rented his business premises (a *bottega*) for thirty-five florins a year, about as high a rent as commanded by any industrial or business space in the city, although the rent for a bank in the Mercato Nuovo could go as high as fifty florins. The place was probably not much different from the *tavola* described

in the record book of another banker, Paolo di Alessandro Sasseti, a century earlier, in 1375: a green curtain made of iron chain (*filo*) covered the entrance, and inside was a large counter (*desco*) with a built-in strong box and a bench behind to put the banker at a higher level than his clients.⁵ To fit out such a place for business another banker, Francesco di Marco Datini, on setting up shop on 13 November 1398, purchased money bags with locks and seals, a box with a lock to hold papers, a money dish for the counter, an ink well, locks and keys, and, of course, account books.⁶ Operating costs were minimal. On the account of Cerchi's office expenses in Cash Book C (1476) paper and other unspecified items, including candles, did not add up even to a florin.⁷ Cerchi, who had no partners, apparently operated his bank with no help for the first few years; and then, in 1480, he took on a 16-year old cashier, Lorenzo di Lapo Guardi, for a salary of twelve florins the first year, to be raised to sixteen florins the second year and to whatever Cerchi thought appropriate thereafter.⁸

Much business came to the bank through the agency of brokers (*sensali*). These men performed the essential function of identifying potential clients both for loans and speculative investments and bringing them together with the banker. Brokers operated on their own, living off the commissions they charged. They were members of the guild and were regulated by both the guild and the commune in the interest of the public. One of the brokers who repeatedly brought business to Cerchi was Giovanni di Mariano Filipepi, called Botticello, the brother of the painter known by that name. Another broker, having commissioned Botticelli to paint the *Adoration of the Magi* (today in the Uffizi) for his chapel in S. Maria Novella, has recently made it into the

⁵ ASF, Carte strozz., ser. II, 4 (record book of Sasseti, 1363-1400), fol. 44.

⁶ Archivio di Stato di Prato, Archivio Datini 219, fol. 129.

⁷ ASF, Cerchi 315, fol. 29.

⁸ *Ibid.*, fols. 11, 30v, 48v.

annals of art history with a well-documented career.⁹

In summary, a local bank was a full-scale business by the standard of the time. Some, like Datini's, operated as formal partnerships, presumably with articles of association like those that survive for the banks of Francesco de' Medici (see App. A). One of the latter's banks, operating as de' Medici Buini & Partners, included a partner who was not a person but another partnership (Miniato di Francesco Busini & Partners); and de Roover cites another bank with a sleeping partner who joined in the articles of association through a limited liability contract (*accomandita*). Even those bankers who, like Cerchi, were in business alone nevertheless presented themselves to the public under the guise of a formal company organization: their banks are officially identified on the guild rosters as partnerships, although the entries go on to state that in fact the banker had no partners. "I have no partners," Cerchi himself noted in one of his record books, "but the bank is known as Bindaccio and Partners";¹⁰ and he uses the impersonal "we" in recording the bank's dealings with its clients. With or without partners bankers could augment their capital by accepting time deposits (*a discrezione*) on which fixed rates of interest were paid, usually 8 to 10 percent (in 1476 Cerchi was paying 9 percent on two such deposits totaling 300 florins).¹¹ As the surviving records of Cerchi, Datini and others show, bankers organized the internal operations of their business around a sophisticated accounting system; and beyond the bank's doors they dealt with the public through a well-developed network of independent brokers. What, then, was the nature of the business these local bankers conducted?

⁹ RAB HATFIELD, *Botticelli's Uffizi "Adoration": A Study in Pictorial Content* (Princeton, 1976).

¹⁰ "... e non ò compagni ma dice Bindaccio e Chompagni"; ASF, Cerchi 312, unnumbered folio in back of volume.

¹¹ ASF, Cerchi 316, Cash Book, fols. 3, 6, 18.

II. The Banker's Accounts

The banker's accounting system calls for special comment, first because the account books constitute the chief documentation for the following analysis of banking operations;¹² and secondly because that system has, in the context of accounting practice at the time, one notable peculiarity — the lack of a cash account, which (it will later be proposed) resulted from what was perhaps the strongest external constraint imposed on the banker, the usury doctrine.

Numerous account books survive both for purely local banks, like Cerchi's, and for those operated by international merchant-bankers. This material consists of all kinds of accounts, but most items survive today only as isolated fragments of the complete set of books of which they were once a part. Nevertheless, in their totality they reveal a highly uniform accounting practice among both kinds of local bankers. What follows is a generalized description of the banker's accounting system based on this material (which is inventoried in App. A below, where references to the bankers' books mentioned herein will be found). The system is best exemplified in the most complete set of records that survives for any bank, that of Francesco di Marco Datini and Bartolomeo Cambioni & Partners, which was in business from 1398 to 1401. These accounts are only marginally noted in Melis's general discussion of Datini's accounting practice; and, moreover, Melis did not isolate these particular documents and discuss them all together as the record of a separate business activity with its own peculiar problems.¹³

¹² Articles of association for banking partnerships, like most such business contracts, are mostly concerned with organizational problems and have little information about specific operations. See those for the banks of Francesco de' Medici, cited in App. C below; and one for Guarante di Jacopo di Guarante & Partners, 1449, surviving in the copy of one of the partners, Giovanni di Niccolò Manzuoli (or Mazzuoli): ASF, Corp. rel. sopp. 1024, packet 196, doc. 99 (old numeration).

¹³ *Aspetti della vita economica medievale (studi nell'Archivio Datini di Prato)* (Siena, 1962), pp. 365-76.

The most notable feature of the banker's accounting system is the lack of both a comprehensive ledger and a single cash account. He divided his accounts into two books, a cash book (*quaderno di cassa*) for banking activity and what will here be called a ledger (*libro di debitori e creditori*, usually indentified by the colour of the cover and a letter — thus: *libro bianco A*), which was used for commercial activity. In this system the cash book is not a subordinate book in a hierarchy of accounts but an independent record of a separate activity — and de Roovers's failure to recognize this distinction is behind the perplexity he felt when, on analyzing the Medici balances, he found items from both a cash book (which is usually considered subordinate to a ledger) and a ledger (which is usually considered the central, summary set of accounts). In the banker's system the cash book consists of accounts for both depositors and debtors who promised to pay in cash. It has bilateral accounts — in this respect it resembles a ledger — but double-entry is not practised consistently or even frequently; moreover, it invariably lacks a cash account.¹⁴

The ledger records the banker's commercial activity with, for the most part, a completely different group of clients; and unlike the cash book it is kept in double-entry, with some of the cross-references being to other accounts in the same book (as a result of book transfer of debits and credits) but most being to a separate income-outgo journal (*libro di entrata e uscita*). Ledgers, too, lack a cash account; and the income-outgo journal did not serve this function, for on the one hand it records credit transfers along with cash transactions and on the other hand not all cash transactions were recorded in it. For example, in the ledger of the bank of de' Medici d'Avicano & Partners the account for the sale of jewelry cross-references debits (sales) to outgo and the actual payments made later (credits) to income. Again, when a client

¹⁴ The Cambini bank also kept a series of *quadernucci di cassa* which parallel the *quaderni di cassa*; both have the same kinds of accounts, although those in the former series seem to be much briefer. See App. A.

with an account in the ledger of the Datini bank ordered a third party to make a cash payment to Datini on his account, the banker immediately credited his client's account in the ledger and made two cross-references — one to the income section of the journal and another to the cash book as a debit on the account of the third party: a credit in the ledger thus shows up in the journal as income and in the cash book as a debit (i.e. a promise to pay). This second example, incidentally, is one of the few kinds of transactions that occasioned a cross-reference between the ledger and the cash book in the Datini system.

In short: the two activities of the banker are not fully integrated into a single accounting system by cross-entry and summarized in a central ledger; and there is no cash account that records movement in his cash box, which in fact served both activities. Some of these bankers capped their book-keeping system with a *libro segreto*, which contains capital accounts showing the investment of the partners and division of profits; but these accounts do not record details about the internal operations of the business. Datini apparently did not keep a *libro segreto*, but the Medici did; and others survive for the bank of the sons of Niccolò Cambini (1451-65).

In the absence of a comprehensive cash account, the banker was compelled to take an inventory of his cash box whenever he needed to draw up a balance. Datini's procedure was: 1) add debit balances from the cash book to cash inventory (assets); 2) subtract from this figure the total of credit balances from the cash book (liabilities), the difference being a figure that should equal the result of the final step; 3) find the difference (presumably a credit item) in the income-out book between total accumulated income and total accumulated outgo (or receipts) since the preceding balance. There was almost always a slight discrepancy between the figures that resulted from steps 2 and 3, and this was normally considered a profit (probably from activity of the cash box that did not get recorded, such as manual exchange). Datini

recorded these calculations periodically in the outgo section of the journal. Exactly the same practice is found in the income-outgo books of Strozzi Lanfredini & Partners and in the record book of Strozzi & Lioni. Cerchi's income-outgo journals do not survive, but the numerous balance statements scattered throughout his records show that he too followed the same procedure (see App. C).

All these bankers were explicit about taking a cash inventory in order to draw up balances: Datini referred to his "rivedimento di chassa," Cerchi's balances sometimes included a detailed breakdown of the inventory into number and type (but not condition) of coins, and the articles of association for Francesco de' Medici's banking companies call for an inspection of the cash box every two months (and for a balance every six months). The practice strikes one as peculiar in a business community where it was almost second nature to keep detailed and numerous accounts, including, for many businesses and even for household administration, cash accounts (without which, of course, no double-entry system is complete); and later it will be suggested that the banker's refusal to keep a complete written record of cash movements is related to the need to conceal usurious practices arising out of one of his most basic functions as a banker, money-lending. It hardly needs to be added that the kind of balance described above was useful only in checking the accuracy of one's records: such a balance yielded no material for a proper analysis of the banker's various operations. They are — in de Roover's word, describing the "balances" the Medici bank submitted in tax reports — "arrays of figures and names, usually without any meaningful description of the items listed as assets or liabilities."

These accounting procedures and the terminology used for the identification of the principal books are uniform throughout all these bankers' records, and we can consider the accounting system described above as standard practice among bankers in

fifteenth-century Florence. Datini, at the turn of the century, still complied with a much older guild statute requiring accounts be kept in Roman numerals as a measure designed to reduce fraud; but later in the century Cerchi, like virtually all his contemporaries in the business world, kept accounts in Arabic numerals.

Of Cerchi's bank accounts only one cash book survives, along with three record books and numerous balance statements; but his bank had the full complement of accounts typical of the book-keeping system just described. The balances have figures taken from income-outgo journals, and other books mentioned in his papers and identified by colours (*libro bianco, libro verde*) were undoubtedly ledgers. There are also references to books of secondary importance such as scrap books, (*quadernucci, memoriali, giornali*), none of which are extant.

It is the survival of Cerchi's record books (*libri di ricordi*), however, that give his bank a special importance in the history of local banking far beyond the small scale of its operation; and, in fact, they have inspired this study. For the most part these books contain written and signed agreements with the men to whom Cerchi extended credit in one form or another — the kind of information about a basic banking function that never gets into the accounts themselves. Not even the Datini archive has yielded so much about certain of these practices (although we still await the definitive inventory of this archive). The few record books that survive for the local banks of international merchant-bankers are filled mostly with commercial rather than strictly banking affairs — and this difference, as we shall see, points to a difference also of function between the two kinds of banks.

III. Banking Operations

Money-changing. Banking, as de Roover has shown for Bruges, grew out of manual, or petty, exchange involving both

foreign and local currencies. Manual exchange thrived in periods of frequent debasement and erratic fluctuations of the gold-silver ratio; and in early fourteenth century Florence these conditions offered such good opportunities for speculators to turn a quick profit that the guild found it virtually impossible to limit the ranks of those who engaged in this activity, let alone regulate them.¹⁵ Presumably, official money-changers in Florence as in Bruges at some point began to accept deposits for safekeeping and, eventually, for transfer, thereby extending their business into the kind of banking that we are concerned with here.

It is impossible to say how important manual exchange remained in bankers' operations by the fifteenth century: no evidence turns up in the accounts used for this study. Since, as we have seen, these bankers had to take a cash inventory to balance their accounts, it is difficult to see how profits from any manual exchange over the counter could have evaded the record. Such profits, however, may be reflected in the slight discrepancies that inevitably appear as a result of the procedures, described above, for drawing up balances: these amounts are invariably labelled profits and assigned to the income side of the income-outgo journal, and in the ledger of the bank of de' Medici d'Avicano & Partners they show up on the profit-loss account as "profits from the cash box".

Yet, on those balances where Cerchi puts down a detailed inventory of his cash box he never lists a bewildering variety of coins and hardly ever any foreign issues. Moreover, it is a curious fact about Florentine bankers of the fifteenth century, remarked by more than one scholar working in the field, that nothing in their surviving records — including Cerchi's — indicates that they had anything at all do to with the mint, which presumably was at the centre of the local bullion market (and this is one area in the realm of Florentine banking and monetary policy that

¹⁵ DE LA RONCIÈRE, *Un changeur*, pp. 81-86; see comment in note 1 above.

remains to be studied). Still, there is certainly no proof that these local bankers did not in fact engage in money-changing.

Deposit banking. Acceptance of deposits is a basic function of banks. Today funds are deposited in banks for safe-keeping, for convenience of transfer through a current account, and, as savings, for the interest the banker is ready to pay in order to have money, which he then puts to his own uses.

Florentine banks accepted deposits made primarily for short-term safekeeping, payable on demand. The activity in many of the personal accounts in Cerchi's cash book consists of a single cash deposit on the credit side and subsequent withdrawal(s) on the debit side. As Cerchi once noted in his record book about such an arrangement he had just made on accepting a deposit, he agreed to pay on demand ("abbiamo a paghare a ongni suo piacere").¹⁶ Private account books of depositors provide abundant documentation for this kind of activity. For example, on 4 May 1464 Tommaso di Ubertino Strozzi opened an account with the bank of Francesco and Bernardo Cambini & Partners with a cash deposit of 80 florins, noting the page in the bank's cash book where he was credited with this amount; and when five days later he made another deposit of 50 florins, again recording the reference in the bank's books, he this time added that he could have the money on demand ("a ogni mia volontà"). The Cambini books also survive, incidentally, and so Strozzi's account is one that can be studied on both the client's and the banker's record of it.¹⁷

From a deposit payable on demand it is only a short step to its use by the client to order payments to third parties. The banker's promise to pay on order of the depositor thus produces a

¹⁶ ASF, Cerchi 315, fol. 29v.

¹⁷ ASF, Carte strozz., ser. IV, 410 (Ledger E of Ubertino di Tommaso Strozzi, continued by his son, 1433-67), fol. 39; Ospedale degli Innocenti, Estranei 273 (Quadernuccio Q, 1463-64, of the Cambini bank), fol. 95, and Estranei 274 (Quaderno Q, 1463-64) fol. 138.

fiduciary money. One Florentine, the silk merchant Andrea di Francesco Arnoldi, explicitly recognized this when, in a proposal made about 1430 for a kind of public bank of deposit, he called this bank-money (*schritura di banco*) the same as money (*denari*) and cash (*contanti*).¹⁸ Arnoldi's proposal, an ambitious plan to solve the problem of the state debt by opening current accounts for creditors and then requiring all payments in the city over 5 florins to be made by mere transfer on the commune's books, was hardly conceivable if there had not already been the widespread practice of payment by book transfer among private persons, although he must also have had in mind the more developed banking system in Venice, where he had lived a number of years. Private account books, at any rate, attest to the universal acceptance of bank money for virtually all kinds of payments among men representing the entire spectrum of society, and the very language of accounting became formalized with the use of standard phrases (*per noi a, da noi a, etc.*) to record transfers of credit.¹⁹

Although Cerchi's cash book does not have many current accounts that were very active, one is of particular interest because it shows that the instrument was used even for the payment of working men. This is the account of Filippo di Giovanni Corbizzi, kept for the purpose of paying the expenses of construction on the house of Giovanni Zampini. The account was opened in March 1476 with a debit entry representing a transfer from the previous book in the series and is closed in September of the same year with a transfer to the new book. During this time Corbizzi made three cash deposits totalling f.87 s.4 d.9.²⁰ This

¹⁸ RICHARD A. GOLDTHWAITE, *The Building of Renaissance Florence: An Economic and Social History* (Baltimore, 1980), pp. 316-17.

¹⁹ MARCO SPALLANZANI, "A Note on Florentine Banking in the Renaissance: Orders of Payment and Cheques", *The Journal of European Economic History*, VII (1978), 145-68.

²⁰ ASF, Cerchi 316, fols. 27, 34-36; see GOLDTHWAITE, *Building of Florence*, p. 306.

kind of current account, kept for the purposes of paying the bills of a construction project, was extremely common in the private records of other employers. A published example are the building accounts for the apse of the high altar at San Martino in Gangalandi in 1473, financed by a bequest of Leon Battista Alberti, who had for many years been Prior there. The executors of the estate delegated responsibility for the project to Niccolò Corbizzi and opened a current account for this purpose in the bank of Guglielmo Rucellai and Matteo Baroncelli & Partners with funds transferred from Rome, where Alberti had died. It is Corbizzi's corresponding account in his own ledgers that survives, showing that all payments to the workers were made through the bank.²¹

That workers actually went to the bank to collect their wages for themselves can be confirmed from the records of the painter Piero di Nello, who in 1394 acknowledged receipt of 22 florins due him from Jacopo di Bardo Altoviti and paid "per lui dalla tavola di Primerano di Pilgli."²² Occasionally the mode of payment is stated on the client's record of his current account with a banker. When in 1472 Agnolo di Niccolò Benintendi paid a silk shop for a piece of velvet, he recorded the payment by draft on his account with the bank of Francesco Bagnesi & Partners, and in the corresponding debit entry on the account of the silk shop he wrote that the cash was actually withdrawn at the bank by an employee of the shop ("portò un suo gharzone per me da Francesco Bagnese e Compagni").²³

How orders of payment out of a current account were transmitted by the principal to the banker is not always explicitly indicated in the accounts. De Roover assumed they were effected

²¹ MARCO SPALLANZANI, "L'abside dell'Alberti a San Martino a Gangalandi; nota di storia economica", *Mitteilungen des Kunsthistorischen Institutes in Florenz*, XIX (1975), 241-50.

²² ASF, Corp. rel. sopr. 1023, filza 192 (file of Nelli family documents, folios unnumbered).

²³ ASF, S. Paolo 74 (record book of Benintendi, 1469-78), fol. 11.

by oral, not written, command, basing his conclusion on the description in the guild statutes of bankers seated at a counter with their books in front of them ready to take orders from their clients. The statutes may reflect practice in the early fourteenth century; but the account books, which become more and more numerous from the later fourteenth century onwards, present a very different picture of the banker. Recent research by Marco Spallanzani has established the widespread use of the written order of payment (*polizza*).²⁴ Sometimes these orders are mentioned in the account entry - for example, in the entries Niccolò Corbizzi made on his account for payment of the workers at the Alberti chapel at San Martino; and a few such orders have miraculously survived, inserted in the pages of account books. The banker was also prepared, on command of the payee of an order, to make payment to yet another, fourth, party. Such an oral transfer of a surviving order, written in 1475, is illustrated by Spallanzani from the relevant entries in the banker's book. No examples of endorsements of written orders-of-payment have been turned up, however, and it is not likely that the giro operation had yet reached this level of refinement.

It is more significant, of course, when such payments were made by mere transfer of credits on the banker's book, or by transfer among bankers — and this practice, too, can be abundantly documented. An example can be taken from the ledgers of Lorenzo di Matteo Morelli. On 27 August 1479 the silk shop of Piero Corsini & Partners made part payment for silk purchased from Morelli by ordering payment of 100 florins through its bank, the Heirs of Antonio da Rabatta & Partners. On his records (kept in double-entry) Morelli credited the account of the Corsini shop and debited an account of the da Rabatta bank; but he then, on the same day, credited the bank's

²⁴ "Note on Florentine Banking". Further evidence is cited in GOLDTHWAITE, *Building of Florence*, pp. 306-13.

account for 100 florins and made a cross-reference to a debit on the current account with his own bank, Bartolomeo di Leonardo Bartolini and Francesco di Piero dei Tovaglia & Partners. In other words, a payment had been made by mere transfer on the books of the different bankers of the debtor and the creditor.²⁵

To sum up: the current account was a fully developed institution in Renaissance Florence. The term itself — *conto corrente* — had already entered the language of accounting to describe any ongoing credit account with another party — not just those with a banker — which the principal repeatedly used for payments on demand either to himself or to third parties. The banker accepted deposits against which withdrawals could be made on command, he was prepared to pay other parties on order of the payee, and he effected many of these payments either on his own books in bank or by paper transfer to other bankers.²⁶

The banker kept the record of current accounts in what he called a cash book (*quaderno di cassa*), of the type already described. It was an official document, and this is why the current cash book (and not the ledger) of each banker is identified in his entry on the annual guild lists (mentioned above) of all registered local banks. Hence a depositor had no choice but to defer to the authority of his banker's books if he failed to keep up his own records of his current account — as Lorenzo Morelli once found out when he had to bring his own books up-to-date from his banker's record, even though he had doubts about the accuracy of some of the transactions he was held responsible for.²⁷ And with the kind of records bankers kept, Morelli's bank was

²⁵ ASF, Gherardi 139 (Journal B, 1478-94), fols. 23, 31, 37.

²⁶ All these practices are well documented in the accounts of fourteenth century merchant-bankers: see, for example, GIULIO MANDICH, in A. SAPORI, ed., *Libro giallo della Compagnia dei Covoni* (Milan, 1970), pp. CXXIV-CXLI; and MELIS, *Note di storia della banca pisana*, ch. IV.

²⁷ "Le sopradette dieci partite ò fatto chreditori sechondo al chonto da lloro [Bartolini del Tovaglia & Partners, bankers] benché non mi pare siano bene" (1481); ASF, Gherardi 139 (Journal B, 1478-94), fol. 31.

prepared, years later, to honour his son's request for copies of the father's very active current accounts going back over a period of thirty years, from 1478 to 1508.²⁸ In their records of payments out of clients' current accounts bankers often explain the reason for payment, and hence their books contain a wealth of material about their clients' activities beyond their relations with their bankers. The long run of cash books surviving for the Cambini bank, for example, have yielded much information about the art market, most notably the execution of work by the various artists employed at the chapel of the Portuguese cardinal at San Miniato.²⁹

The history of business techniques should be directed not merely to finding the earliest examples but to the assessment of their diffusion. Although the evidence of the numerous private accounts that survive for Florence leaves no doubt that by the fifteenth century many men had current accounts with bankers and that practices developed for the use of such accounts were highly refined, we are nonetheless still a long way from the modern checking account. The situation can best be grasped through examples, since there is no precise way of quantitatively assessing general practice. The current account that is about as active as any that has been turned up in this study is the one we have now cited several times, that of Lorenzo Morelli — the summaries ordered by his son for thirty years of his activity constitute a good part of an entire account book in themselves. For five years, from October 1478 to November 1483, during the period when Morelli's account with the bank of Bartolini del Tovaglia & Partners was open, he made 49 deposits — 10 in cash

²⁸ ASF, Gherardi 165 ("in sul quale si chopieranno chonti che Lorenzo Moregli ebbe da più persone a llui attenenti").

²⁹ FREDERICK HARTT, GINO CORTI, and CLARENCE KENNEDY, *The Chapel of the Cardinal of Portugal, 1434-1459, at San Miniato in Florence* (Philadelphia, 1964); GINO CORTI and FREDERICK HARTT, "New Documents Concerning Donatello, Luca and Andrea Della Robbia, Desiderio, Mino, Uccello, Pollaiuolo, Filippo Lippi, Baldovinetti and Others", *Art Bulletin*, XLIV (1962), 155-67.

and 39 in transfers of credit by third parties (only six of whom were other banks) — and 261 withdrawals (an average of about one a week), almost all in cash withdrawn by Morelli himself.³⁰ Morelli's account was exceptionally active, however; more typical are the accounts of Bartolomeo di Michele Becchi, the owner of a dyeing establishment. On 7 August 1461 he opened an account with the bank of Mellini & Partners with a credit of f.17 s.10 d.3, transferred from the bank of Zanobi Girolami & Partners, who had purchased Monte credits from Becchi; and by the end of October he had used up this credit in five cash withdrawals. Three months later, on 29 January 1462, he reactivated the account with a deposit of 110 florins in cash, and this was used up by mid-September after ten cash withdrawals and three transfers of credit to third parties. On 31 October 1463 Becchi opened an account in the bank of Francesco di Rinieri Bagnesi & Partners with a cash deposit, and the subsequent activity on this account until it was closed in June 1464 consisted of five cash deposits, ten cash withdrawals, and three transfers. In June 1466 he opened another account in this bank with a credit transfer from the Mellini bank against which he made six cash withdrawals over the next two months.³¹

Even though these examples illustrate transfer operations, including those between banks, the chief activity in them and in most other accounts consisted of little more than a cash deposit and the subsequent withdrawal, over a period of only a few months, of cash until the credit had been exhausted. One is left with the impression that men had only occasional recourse to the current account with local bankers and that they did so more for the short-term security of cash rather than for the facilitation of credit transfers.

Cerchi's surviving cash book confirms this impression.

³⁰ ASF, Gherardi 139, fols. 1, 10, 17, 31, 42.

³¹ ASF, Libri di commercio 11, fols. 18, 19, 21, 31, 33, 66.

Although it was open for six months (in 1476), the book has only 41 folios (and accounts kept *alla veneziana* required the use of both the facing pages that lay opposite one another when the book was open); and yet there are close to 100 accounts, most, obviously, very small (and many not deposit accounts at all but debit accounts with the sellers of future payments on Monte credits, an operation to be discussed below). Almost all the entries that are not transfers from the previous or to the subsequent book record cash transactions (and hence they have no cross-entries); few are transfers from one account to another. Although several accounts were opened with other banks, not one of these records more than several operations; so while Cerchi effected some interbank transfers, this activity was too occasional for us to conclude that he was tied into a banking system within which the continual shifting around of credits and debits substituted cash payments.

However limited in practice some of the more refined techniques growing out of the current account were, familiarity with its more general uses was widespread throughout the society. The many examples of practice cited above that involved working men were deliberately selected to illustrate this point. It was not unusual for working men to be paid out of a current account at their employer's bank; and many were accustomed to receiving written orders, which they then presented to the banker for payment. Nothing better illustrates their familiarity with these practices than the surviving orders-of-payment written by an artisan himself, a kilnman, to instruct his customer, the recipient of loads of bricks, to pay the carrier who made the delivery: the slips of paper are of standard size and format, with the client's name on one side and the order on the other headed by the date and signed below at the right, and the text has the standard phrases "pay to the bearer" and "post to my account" and expresses values in money-of-account. Although these orders were not written to a banker for payment out of a current

account, both their format and language show that the writer — an artisan of modest stature — was integrated into a system of sophisticated accounting and banking practices. It is not likely that many working men themselves had current accounts with bankers, but nevertheless examples are not rare: Cerchi's cash book includes accounts of a carpenter, a baker, a grocer, and a goldsmith, and the account of the sculptor Donatello at the bank of Cambini & Partners has in fact been published.³²

A central question about current accounts still goes unanswered: where were the profits? Who paid — the depositor, for safekeeping of his funds and the convenience of transfer? or the banker, for the use of his client's capital? Luca Pacioli, in the first published treatise on arithmetic (Venice, 1494), in which double-entry accounting is also discussed, wrote that the banker as intermediary is justified in charging a commission;³³ but to date no evidence for payment of such charges, not even for overdraft, has been turned up either from a banker's book or from the private accounts of a depositor. Nor on the other hand is there any evidence that current accounts earned interest.

As we have seen, local bankers in Florence also accepted deposits for fixed rates of interest (*a discrezione*) but they did this to a limited extent for the purpose of raising operating capital. In other words, these were time deposits, not deposits made to open a current account. Cerchi received only two such deposits, in 1476, during the time his surviving cash book was open; and the interest he paid on them was in fact debited on his account of operating expenses (*spese di bottega*). The two depositors were thus not regarded as ordinary clients. Acceptance of such deposits was a normal way of raising capital throughout the

³² The kilnman's orders-of-payment are illustrated in GOLDTHWAITE, *Building of Florence*, pp. 310-11; and other evidence for the working-man's familiarity with accounts is presented on pp. 312-13. Donatello's current account (though not interpreted as such) is published by CORTI and HARTY, "New Documents", pp. 165-66.

³³ Cited in MUELLER, "Bank Money", p. 49.

business community in Florence; it was not a practice peculiar to banks, nor was it a regular service they offered to the public. More will be said about this kind of loan in the discussion below on the problem of interest charges.

Extension of credit. Melis has shown how international merchant bankers normally extended credit through overdrafts they permitted on current accounts with one another.³⁴ The more active current accounts with local bankers noted above show that they too permitted overdrafts. For example, when in March 1476 Cerchi opened the account of Filippo Corbizzi with a transfer from the previous book, that account had a debit balance (that is, a credit in Cerchi's favour) of f.1 s.5 d.3; and with subsequent payments Corbizzi made out of the account, the debit balance rose to f.13 s.18 d.10 before he wiped it out, on 8 April, with a deposit of f.25. Thereafter, the account was never overdrawn. Although the practice is thus verified in Cerchi's books, most of the accounts therein were not active enough to make overdrafts significant as a means for extending credit.

Direct loans were a much more important part of Cerchi's activity as banker. De Roover asserted that pawnbroking in Florence was confined to Jews after 1437 and that local banks did not engage in it — that is, they did not offer small consumption loans on the security of objects of little value. He went on to say, however, that these banks did lend money on the security of jewelry, an activity that led them also to the sale of jewelry on credit; and in fact he concluded, as we have said, that local banking was little more than a kind of jewelry business. Such activity was, nevertheless, high-level pawnbroking. Cerchi uses the term *cose pegnate* as a category on his balance sheets for the jewelry he had accepted as security; and the word *pegno* is commonly found in the description of such transactions in other account books of the period.

³⁴ *Documenti per la storia economica dei secoli XIII-XVI* (Florence, 1972), p. 87.

Lending on the security of jewels was an important part of Cerchi's operation in the early years of the bank, but it became more and more marginal with the passing of time. On the balance of 18 October 1476 his inventory of valuables consisted of 104 items totalling f.306 s.12 d.4 as compared to cash reserves of f.245 s.2 d.3. This merchandise (as he called it) included, besides jewels and jewelry, valuables like belts, gloves, knives, and forks. The later balances show a sharp decline in the inventory of pawns, and in the last years of the bank their total value rarely amounted to as much as 10 florins. Occasionally his record books note the sale of jewelry on an instalment plan, but there is no evidence that Cerchi otherwise dealt in the jewelry trade.

Cerchi also extended credit on no more security than a promissory note. These transactions generated the paperwork that makes up the major content of Cerchi's record books. Here the arrangements were written out to varying degrees of detail, with a clear statement of the obligation of the borrower to recognize his debts before the courts of law of the city and to commit his heirs to the liability against his estate; and the borrower added in his own hand a statement of agreement, which was often countersigned by a guarantor. Cerchi generally paid out cash directly to the borrower or promised to pay a third party for him. The amounts were as low as 2 florins and rarely exceeded 50 florins; and borrowers included, besides men with upperclass names, artisans such as stationers (including Vespasiano da Bisticci), notaries, bakers, weavers, and second-hand dealers. Sometimes a schedule of payments was drawn up, but most loans were due within a brief period of no more than six months. Rarely was credit extended for over a year. The few loans that were secured by anything more than a guarantor's signed pledge were mostly for higher amounts, and surety was generally the borrower's credit in the Monte.

Another use to which Cerchi put his capital, which can be considered a kind of secured loan, was the purchase of interest

payments (*paghe*) on Monte credits. This interest, like the credits themselves, was transferable, with payments being made every four months; so the owner of such funds who needed ready cash could sell future payments at, of course, a discount. Interest payments from the seven-percent dowry fund (Monte delle doti) had a particularly lively market because of the reliability of payment. Such purchases were a kind of loan, to be paid back in instalments through liens on the borrower's fixed income; but there was some risk involved in the purchase of futures that were not fully secured. Cerchi was an active participant in this market. Most of his purchases were for three or four successive interest payments on the seller's capital. In Record Book G there is one purchase for nine payments and another for twelve, that is for payments extending over a period of three and four years. The first payment was generally the next one due, but sometimes Cerchi bought payments the first of which was not payable for a year hence. The date of the first payment and the number of dividends committed to repayment on the original purchase were variables that obviously determined the purchase price. Most purchases were made for three payments (a year's interest starting with the next one due) and cost between 75 and 80 percent of par value, which is to say that the borrower ended up paying as much as 25 to 30 per cent interest, and perhaps even more. Like his loans, the vast majority of Cerchi's purchases were small, ranging between 2 to 20 florins, many from people like weavers, cobblers, barbers, and second-hand dealers.

All these kinds of direct loans — loans in exchange for a luxury object, loans on the basis of a promissory note, purchase of future interest payments on Monte credits — can be found in the accounts of local banks belonging to merchant-bankers; and the surviving balances of these also reveal, if only occasionally, an inventory of luxury goods held as pawns. In this respect no functional distinction can be made between the two kinds of banks. But whereas in Cerchi's record book they constitute the

bulk of the material, in the record book of a bank like Strozzi & Lioni they take second place to exchange operations (another kind of loan, of course) and commercial investments. Although most of Strozzi & Lioni's loans were considerably more substantial than Cerchi's, occasionally they too dealt with artisans: for example, in 1424 they loaned ten florins to Michelozzo di Bartolomeo, indentified here as a goldsmith, in return for his signed promise to pay.

IV. The problem of interest charges

By the fifteenth century the simplistic usury prohibition of an earlier era was being rapidly eroded. Entrepreneurs ever in need of capital in a changing, if not an expanding, economy were not to be held back from profits by moral imperatives, however much they may have regretted some of their methods when they found themselves on the death bed. Subterfuges for the charging of interest on loans were highly developed, the most notable instrument adapted to this purpose being the bill-of-exchange, the legitimacy of which in its primary function the theologians could not deny.³⁵ With the foundation of the Monte in the 1340s, the state itself was committed to a funded debt paying fixed rates of interest; and not only did many Florentines come to have much of their wealth "invested" in this debt through forced loans, but they also participated in the lively market that arose around the buying and selling of negotiable claims to both credits and interest payments. Moreover, even Christians (according to de Roover) were permitted to engage in pawnbroking, at least down to the 1430s; they paid fines for their violation of church law, but these were so regularized that they were in effect public licenses. Although pawnbrokers as manifest usurers could not be

³⁵ The literature on usury can be approached through the well-known studies of de Roover.

members of the guild, local bankers, as we have seen, engaged in what was essentially the same business. In short, Florentines went a long way toward circumventing the usury doctrine in practice; and even some churchmen came to recognize the need of the economy for capital and the legitimate demands men with money to spare could make for others' use of it. Nevertheless, doubts lingered on, and bankers were particularly vulnerable to them. When Francesco Datini sought advice from his associates about opening a local bank in Florence in 1398, one of them answered that Datini risked the ruin of his reputation as a merchant by entering this business, since no banker could avoid usurious contracts.³⁶

One subterfuge practiced by local bankers was the so-called discretionary loan — the *deposito a discrezione*. Such a loan was a kind of time deposit made on the understanding that the borrower would at his discretion make a gift to the lender in return for the use of the latter's money, an act of gratitude and generosity that churchmen could hardly condemn. The practice is found almost exclusively in deposits with businesses on which interest was paid regularly (semi-annually or annually) and at a fixed rate, features strongly suggesting the kind of prior arrangements that disturbed the churchmen. Two such deposits made in Cerchi's bank, at 8 percent, have already been noted; and the evidence for these business loans to both merchant-bankers and cloth producers is so abundant that there is no need to cite other examples. Sometimes the loan was spelled out in the account book in all its particulars. Thus in 1428 the accountant of Strozzi Lanfredini & Partners recorded the credit balance on the account of one such depositor as the sum of "the capital and *discrezione* of his money deposited at the rate of 8 percent per annum."³⁷ Moreover, this bank, like others, kept separate accounts just for

³⁶ MELIS, *Aspetti*, pp. 212-16.

³⁷ "... tra capitale e discrezione de' suoi denari tenuti a ragione di f.8 per cento l'anno"; ASF, Carte strozzi., ser. III, 287 (Ledger A, 1423-28), fol. 171.

these deposits in which the fixed rates that determined the interest "gifts" are explicitly stated.³⁸ Even the founders of an ecclesiastical institution, the executors of the estate of Ser Niccolò Manetti, charged with setting up the convent of Santa Verdiana, felt no qualms about depositing (in 1400) 1000 florins with a clothcutting establishment in return for an annual "commission and gift" of 5 percent.³⁹

The *deposito a discrezione*, in short, was one kind of investment loan that was out in the open. By the fifteenth century money was clearly considered a commodity with a price like any other. Florentines were explicit about fixed charges and used the terms *capital* and *interest* with their full modern significance.⁴⁰ The accounts of Strozzi Lanfredini & Partners on numerous occasions even recorded interest paid on discretionary deposits as the "cost of the money" deposited (*per costo di denari*). Some theologians' recognition of this situation in the money market is implicit in their development of the concept of *lucrum cessans* as a title to interest in their discussion of usury.

Nevertheless, St. Antonino roundly condemned the practice of making loans in any expectation of a return, and doubts about discretionary deposits still lingered on in the conscience of some Florentines. These doubts emerge, for example, in the accounts of the grandson of Luca Pitti, Lorenzo di Buonaccorso. He was a veritable rentier who for over forty years kept shifting his money around in deposit accounts with wool firms, silk firms and merchant-bankers: in 1493 he had a total of 6000 florins deposited in seven businesses earning interest at 8 to 10 percent.

³⁸ *Ibid.*, fol. 46 (the account of "Dipositi abbiamo tolti per altri"); and also RICHARD A. GOLDTHWAITE, *Private Wealth in Renaissance Florence: A Study of Four Families* (Princeton, 1968), p. 66 n. 72.

³⁹ "... providigione e dono... a ragione di cinque per centinaio per un ano"; ASF, Conv. sopp. 90 (S. Verdiana), 143 (accounts of the Manetti estate), fol. 24.

⁴⁰ The terms appear frequently in the late fourteenth-century record book of the banker Paolo di Alessandro Sasseti: ASF, Carte strozz., ser. II, 4 (who once, on fol. 11, recorded a transaction "per cagione d'usura overo interesse").

Although Pitti received his gift payments regularly and at fixed rates, he is not always explicit about rates and sometimes he tempers the formulary language of accounting with a precautionary note about the arrangement. For example, in 1466 he deposited 750 florins with Jacopo de' Pazzi & Partners "con quella discrezione che parrà e piacerà a Jacopo de' Pazi," and he recorded the interest payments (at the stated rate of 6 percent) as "e' quali denari mi donano di loro volontà." And this precaution was not unfounded, for Pitti almost got into trouble with the ecclesiastical officials when one of the men with whom he had made a deposit was unable to keep up the payments, apparently because of business difficulties, and in fact brought charges of usury against him. When Pitti opened his Ledger C, in 1493, he recorded a deposit of 400 forins he had since 1473 with Cosimo Rucellai & Partners, Battilori, which was at the time earning a stated rate of 8 percent in accordance with an agreement with Andrea di Carlo Strozzi, a partner and "governor" of the business. But the new account remained largely inactive; and on 10 June 1497 Pitti made a memorandum that Strozzi had accused him of usury before the bishop's court. Pitti appealed to the Mercanzia, the supreme communal guild court where suits involving business dealings were handled; and it ordered Strozzi to renounce his case in the bishop's court and work out a settlement. A year later Strozzi finally decided to come to a settlement; and Pitti agreed, even though he got much less than he had coming to him under the original arrangement, because (as he states) he simply wanted to save himself from any further trouble in the matter.⁴¹ Obviously, common as discretionary deposits were, they were still not altogether above suspicion and therefore not without potential trouble for the depositor.

⁴¹ Archivio contemporaneo G.P. Vieusseux, Fondo Ginori Conti, Rinuccini 106 (Ledger C, 1493-1512), fols. 10 and 91 (accounts of the deposit), and 212v (the 1497 memorandum). See also Pitti's Ledger A, 1465-82 (*ibid.*, Rinuccini 104), for the record of his investments in the form of discretionary deposits at the beginning of his career.

I have already suggested that the banker's fear of condemnation is to be inferred from the absence of any evidence of the charging of interest in his records. No charges for overdraft show up in current accounts, in either the banker's or the client's record of them; and no mention of interest is made in loan contracts, while accounts for these are kept in such a way so as to disguise income from this source. The numerous entries in Cerchi's record books, for instance, spell out all the conditions of his loans except the interest charge, and so far as the written record goes it appears that the lender simply repaid what he borrowed. Nor do the accounts of any of these bankers include a profit-loss account, where his earnings from this activity would be expected to show up.

The borrower, who was likewise culpable when entering into such illicit contracts, also preferred not to enter any record of interest charges in his accounts, not even when he recorded transactions with pawnbrokers. The victims were less disciplined in the coverup, however; and occasionally the indicting information slips into their records. For example, on 28 July 1478 Niccolò di Carlo Strozzi made an entry in his journal for a charge of lb.16 s.13 for the interest (*interesso*) for fifteen months on 11 florins he had borrowed on security of a pawn.⁴² Another borrower, Francesco di Matteo Castellani, made a memorandum of a loan he took out in 1450 (and secured by jewels) in which he revealed how the banker's record had been deliberately falsified: he noted that although he had signed an agreement in the banker's book to repay a loan of 110 florins, he had in fact borrowed only 100 florins, with the 10 additional florins being a «gift» charge.⁴³ At least two of Cerchi's customers also managed somehow to slip the real conditions of their loans into the brief promissory statement they had to sign below the record of the transaction in

⁴² ASF, Carte strozz., ser. IV, 71, fol. 111v.

⁴³ ASF, Conv. supp. 90 (S. Verdiana), 84 (record book of Castellani, 1436-53), fol. 39r.

Cerchi's own book, both stating in their recognition of the debt owed for purchase of Monte credits that they had paid less than indicated in the statement by Cerchi to which they were subscribing — the difference, of course, being the interest charged for deferring payment.⁴⁴ In short, what got onto the official record of a debt contract — whether an agreement written in a banker's book, the account entry in the book of either party, or a notarized contract between two parties⁴⁵ — is what the debtor agreed eventually to pay, not what he actually received.

Since bankers' accounts as official records were subject to confiscation should any accusation be made against them,⁴⁶ the desire to hide interest charges probably explains why they adopted the peculiar accounting system described earlier, notable for its lack of a cash account (and therefore of double-entry). The use of a double-entry ledger, complete with cash account, would have required the banker to record the interest charge on the lender's account; otherwise, the cash account, which would have been credited the amount of the loan and debited what was paid back, would not reflect the true state of the cash inventory. As it was, bankers' books have no record of interest charges. As a result of the desire to conceal interest charges the accounting system was not summarized in a single ledger or integrated among several books by cross-reference; it had no focus on a cash account, which theoretically should have been a central account in a banker's record-keeping system; and balances (which required a cash inventory) yielded no material with which the

⁴⁴ ASF, Cerchi 315, fols. 33v and 34v.

⁴⁵ An example of disguised interest in a notarial contract is found in a memorandum, dated 26 October 1401, made by a wool manufacturer, Simone di Piero del Guanto, in which he records making a loan of 20 florins but having it notarized as 22 florins, adding that "i deti f. gli prestamo a dischrezione". ASF, Conv. supp. 79, 213 (accounts and records of del Guanto, 1401-21).

⁴⁶ Such a case has been studied by ARMANDO SAPORI, "L'interesse del denaro a Firenze del Trecento (dal testamento di un usario)", *Studi di storia economica (secoli XIII-XIV-XV)*, 1 (Florence, 1955), 223-43.

banker could go beyond the mere fact of profit or loss to analyze the nature of his financial situation. In short, for fear of discovery of their usurious activities, bankers preferred not to adopt the most advanced accounting techniques, with the result that they deprived themselves — and us — of a record with a clear and comprehensive overview of their financial position.

V. Economic functions

Fractional reserves and the creation of money. The use of bank money — that is, the practice of effecting payment through a bank — opens up the possibility for the banker to put to his own use some of the money left on deposit with him in the hope that his depositors will not call in their claims for cash payment all at once. In other words, the banker can operate on a fractional cash reserve; and to the extent that he does this, he in fact creates money. Little is known about this economic effect of early banking. Indirect evidence from Venice — mostly from government records of regulatory policy — suggests that bankers did hold less than 100 percent reserves: the government required them to post security to protect their depositors, complaints are heard that bankers were not always prompt in making payment on request, and bankers seemed to have developed devices for delaying payment.⁴⁷ De Roover asserted that in 1427 the Medici bank in Florence had only 5 percent reserves, but his evidence was the family tax declaration, which can hardly be relied on for a full statement of cash assets.⁴⁸ To date, no light has been thrown on the subject by evidence from bankers' book themselves.

To the extent the Datini, Cerchi, and Strozzi balances can be taken at face value as an accurate statement of their affairs, we in fact have some precise information about the cash reserves on

⁴⁷ MUELLER, "Bank Money", pp. 73-74.

⁴⁸ *Medici Bank*, p. 228.

which these bankers operated, since their balances list both cash-on-hand and liabilities. This information is tabulated in Appendix B. Here it is seen that Cerchi held less than 100 percent reserves about two-thirds of the time, while the two other much larger bankers operated at that level only about half the time. About one-third of the balances of both Cerchi and Strozzi show them holding even less than 50 percent reserves. These percentages of reserve funds are certainly maximum figures, since by their nature the balances reveal no information about the amount of credit extended in the commercial activity of the bank as recorded in the ledgers (more could be learned about this from an audit of the Datini book). Nevertheless, these banks were founded with capital funds invested by the partners — Datini's opened with a capital of 5000 florins — and deposits may not have been regarded as a major source for working capital.

In any case, the total deposits of these banks as represented in Appendix B by creditors' claims are not impressive, not even those of the Datini and Strozzi firms, given the scale of their commercial activity. With an average of only 35 to 40 banks at any one time in the later fifteenth century, most of them one-man firms like Cerchi's, the amount of money on deposit in local banks must have been a miniscule part of the liquid wealth of the city; and hence it is difficult to see how expansion of the money supply by banks operating on fractional cash reserves could have had a significant effect on the economy as a whole.

Investment. An assessment of the economic function of banks depends also on what bankers did with the capital represented by their liabilities to depositors. International merchant-bankers invested directly in productive enterprises and extended credit to producers and merchants through overdraft on current accounts and dealing in bills-of-exchange; and it might be presumed that bankers like Datini and Strozzi who opened local banks did so to attract additional investment funds by accepting deposits. Yet, these banks had on the one hand a sizeable initial capital

formation represented by the investment of the partners involved and on the other hand — to judge from the data in Appendix B — relatively insignificant liabilities to depositors; and for those banks whose surviving records include both ledgers and cash books (Datini, Cambini), the greater activity in the former as compared to the latter would also suggest that the merchant's opening of a local bank was not designed primarily to gain access to more capital. As for Cerchi, whose only formal business activity was his local bank, he seems not to have used whatever capital he had access to for investment in commerce and industry — although the picture might be different if we had his income-outgo journals and his ledgers. The only item in Record Book H that records his employment of capital in the commercial sector of the economy is a deal he made for the sale of sugar from Palermo (fol. 6).

Operating as high-level pawnbrokers, local banks like Cerchi's made direct loans, thus facilitating the conversion into cash of certain kinds of valuables where a considerable amount of capital was tied up — Monte credits, jewels, and other luxury items; and, indeed, in calling bankers like Cerchi high-level pawnbrokers, we are suggesting that these bankers provided a service for the liquidation of capital tied up in luxury items of higher value than the ordinary Jewish moneylender could normally consider. These kinds of loans made to artisans may have been investment loans, if the capital was put to work in artisan enterprise; but it is more likely that most of Cerchi's loans expanded consumption, not investment, credit. Likewise, the credits he extended to Salomone di Manovello and Agnolo d'Abramo & Partners, Jewish moneylenders (*prestatori*), which must have ended up in the hands of the lower classes, should probably be put in the category of distress, or consumption, loans.⁴⁹ The few loans for which a specific reason is given in

⁴⁹ ASF, Cerchi 316 (Cash Book C), fols. 15, 21, 31.

Cerchi's records were made for purposes of paying a dowry or meeting a tax payment; and to the extent that this money thus ending up in the public coffers was secured by liens he held on Monte credits, Cerchi performed the function of recycling money within the area of the fisc.

Besides direct loans, Cerchi used much of his money to speculate, above all in the lively market where credits in the public debt were bought and sold. He dealt in credits in both the Monte Comune and the dowry fund as well as in claims to interest payments on the latter;⁵⁰ and he even 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.⁵¹ Cerchi several times underwrote insurance on maritime shipments (which, of course, required no capital outlay); and in August 1483, ten months in advance of the next annual horse race on the feast day of Florence's patron saint, John the Baptist, Cerchi paid 12 ½ florins for a 50-florin bet on the performance of Lorenzo de' Medici's horses and then sold it for 18 florins six days before the event.⁵² The bet took the form of a promise to pay which was obviously negotiable, and a broker handled the arrangements.

⁵⁰ In 1480 Cerchi made 15 purchases totalling 938 florins in dowry fund credits at between 46 and 68 percent of face value. In 1481 he made 5 purchases totalling almost 9000 florins of Monte credits, most of which he sold off in small amounts by January 1482; prices ranged between 12 and 16 percent of par. The range of prices depended not only on current market conditions but also on the specific arrangements of the transaction regarding claims on future interest and the time allowed the buyer to make full payment. Many of these transactions were made through a broker; and the arrangements were generally spelled out in an entry in the record book.

⁵¹ For example, in October 1482 Cerchi paid out 25 florins in three transactions for purchase of options to buy a total of 5000 florins of Monte credits at 11 percent anytime down to the end of June 1483. If in the meantime the market value went above this value he could take his option and resell the credits for a profit. He sometimes protected himself in this kind of speculation by selling options at the same time. The price of all such options bought and sold by Cerchi amounted to one-half percent of par value, which therefore must have been a standard price for this kind of transaction.

⁵² ASF, Cerchi 317, fol. 9v.

De Roover considered local bankers little more than traders in jewelry; but of the bankers studied here only the one he looked at — Francesco de' Medici — showed much interest in this activity. To the extent that these bankers accepted valuables as security on loans, they were likely to be drawn into the jewelry market; but the records of Cerchi and the others studied here reveal only a small inventory of jewelry. Francesco de' Medici's banks were decidedly interested in this market, for the 1483 contract for the first partnership explicitly states the business was set up for «un traficho a uso di bancho a minuto e arienti e sopra e' cintole, gioie, chose apartinenti a detto mestiero». De' Medici, however, was not a small operator like Cerchi: he had a wool shop and maintained commercial operations in Lyons and the Middle East, and by the time he went into a new partnership in 1488 the bank had a capital of 3000 florins and was engaged in the trade of luxury objects of all kinds, including jewelry, tableware and wearing apparel as well as Spanish tuna, to an extent that went far beyond his activity as a pawnbroker. Although these Medici records have yet to be studied, it appears more correct to call him, like Datini and the others, a merchant and a manufacturer who for some reason or other preferred to channel some of his commercial activity through a local bank rather than a trader in jewelry whose business derived from his activity as a local banker.

Conclusion: the banking system

The local bankers in fifteenth century Florence were a mixed bag about whose activities much remains to be learned. On the whole, however, they do not seem to have differed very much from their counterparts in Bruges a century earlier, the money-changers studied by de Roover. Deposit banking was more developed in Florence in the sense that many more men from

lower down in the social order dealt with banks, the written order-of-payment was a familiar instrument to virtually everyone, and accounting techniques were more refined; but a century earlier, before the Black Death, these practices were probably not to be found in Florence any more than they were in the Bruges studied by de Roover. The notable difference in Florentine practice was that a local banker like Cerchi could also operate as a pawnbroker, making loans secured by pledges, though it is not likely that bankers did this in the earlier fourteenth century, when the guild statutes forbidding this activity were drawn up and when the usury doctrine was less malleable.

In de Roover's view local banking in Florence underwent a contraction of activity during the Renaissance, a phenomenon he felt was not limited just to this city. He pointed to the decline in the number of banks after the end of the fourteenth century, and the falling-off of business thereafter was particularly sharp. With not even enough members to fill the offices of the guild after 1490, and with only 8 banks still operating in 1516, de Roover concluded that the banking system «collapsed», virtually «destroying» deposit banking in the city, although why this should have happened remained a mystery to him. In view of the centrality of deposit banking to capitalism, and of the traditional notion of Florence's prominence in the historical development of business institutions and practices, it is surprising that no one has taken up the problem that de Roover so clearly pointed out. The conclusion to this article is directed not so much to presenting a challenge to his view of the matter as to indicating some of the paths that will have to be followed for the further exploration of the area that he was the first to venture into.

A primary consideration in the eventual mapping of this territory is the magnitude of the phenomenon we are dealing with. De Roover cites the scattered data we have for the number of banks in the second half of the fourteenth century — 57 in 1350, just two years after the Black Death, 61 in 1356, 71 in 1399;

and two decades later Giovanni Rucellai reported that there were 72. By the second half of the fifteenth century, however, their number had been reduced by about one-half. The guild registration lists, which are complete from 1460 down to the end of the century, record between 35 and 40 companies in any one year, an average that remains stable throughout the entire period except for a slight resurgence in the decade of the 1470s (at precisely the time when Cerchi went into business), when the annual lists often have over 50 companies.⁵³ After 1501 the rosters were not kept up; and although there are lists for scattered years down to 1520, the record is not dependable. The deterioration of the guild's record-keeping, however, is evidence of a decline not of banking but of the efficiency of the guild, a problem de Roover alluded to when he noted the increasing difficulty it had even in filling its offices from the membership. By this time, in fact, Florentine guilds had long lost much of an economic function in the areas of their formally defined activity, with the result that the quality of their internal administration deteriorated; but this institutional history cannot be taken as an indicator of the vitality of the respective sectors of the economy the guilds nominally represented.⁵⁴ Our knowledge of local banking in the sixteenth century, in short, remains a complete blank.

In a sector that comprised great international companies like the Medici alongside local one-man operations like Cerchi's, the number of firms alone can hardly be the basis for an assessment of the importance of this kind of business. Although most were individual enterprises like Cerchi's, it is impossible to know whether they were typically as small as his. His, certainly, was a miniscule — but successful — operation. Something of its scale is seen in a mere glance at the figures, cited in Appendix B below, for the total expenditures, cash-on-hand, debts, and cash reserves

⁵³ ASF, Arte del Cambio, 15 and 16.

⁵⁴ See, for example, my analysis of the masons' guild in *Building of Florence*, ch. 5.

of his bank as compared to the Strozzi and Datini banks. In the period 1480-84 Cerchi paid out 4254 florins in direct loans, only about 945 florins per annum, and made additional loans of 1011 florins in the form of purchases of future interest payments on state debt, an average of 225 florins per annum. The average direct loan was 47 florins, the median was closer to 30 florins. The small scale of Cerchi's operation is also reflected in the limited quantity of paperwork his business generated: the record books average no more than one entry a week in the period 1480-84; and we have already observed that for the six months in 1476 when his surviving cash book was open, only forty-one folios were used (with two folio sides needed for each bilateral account).

Any assessment of banking must consider also the functions these banks performed. These are: 1) the acceptance of deposits, 2) the facilitation of transfer and exchange, and 3) the use of liabilities to make credit available. For Florence it cannot be said that local banks were the exclusive, or even the most important, agents in the performance of these functions.

Banks were not the only place where a Florentine could deposit cash. Some religious institutions accepted money and valuables for safekeeping. In 1436, for example, the small-time silk dealer Lapo di Pacino deposited 84 florins with the hospital of Santa Maria Nuova, for which he wrote out a deposit slip, half of which was put in the bag with his money and the other half he himself kept for presentation (by himself or anyone else) to the hospital for repayment.⁵⁵ The masons' guild (the *Arte dei Maestri di Pietra e di Legname*) once used this hospital and once the local

⁵⁵ Ospedale degli Innocenti, Estranei 579 (Ledger B of Lapo di Pacino, 1433-50), fol. 14: «... e se gli avessero a paghare per me, gli àno a paghare per una poliza di mia mano; et per contrasengnio, cioè parte di detta poliza, lasai loro nella mia borsa dove diedi detti f. 84 nuovi; e' resto della poliza mi serbai io, Lapo, per contrasengnio, e quando àno chi porti loro il detto contrasengnio di resto di detta poliza, gli àno a paghare, altrimenti no».

Benedictine monastery (the Badia) for safekeeping of funds it hoped to use eventually for building a hospital.⁵⁶ In 1464 Santa Maria Nuova started paying interest on deposits of any size, a practice that has not yet been verified for private banks (and one which suggests that it was beginning to use these funds rather than keep them in bags as it apparently did for Lapo di Pacino).⁵⁷ The Florentine with larger amounts could also make time deposits *a discrezione* with any of the city's major businesses — not only a bank, but a wool shop, a silk shop, or a mercantile house — which might be looking for extra capital; and private account books — like the Pitti ledgers examined above — are filled with records of these deposits.

Nor was a bank the only place where one could open a current account which could then be used to transfer credits to third parties. Most major partners in a business — and this group would certainly include most of the city's wealthier men — had an active current account on their own firm's books out of which ordinary living expenses, as well as other expenses, could be paid, in cash or by book transfer, as debits against their earnings. Moreover, as we have seen, offsetting — by which men, normally through written orders, transferred credits from employers, renters, customers, etc., to other parties by mere book transfer — was so common in Florence that even artisans were frequently involved in the vast cooperative bookkeeping enterprise that such a practice entailed; and some of these accounts in private books are veritable current accounts.⁵⁸ This widely diffused practice among private persons is a notable but little remarked feature of economic life in Florence, and it was probably more significant

⁵⁶ GOLDTHWAITE, *Building of Florence*, p. 268.

⁵⁷ LUIGI PASSERINI, *Storia degli stabilimenti di beneficenza e d'istruzione elementare gratuita della città di Firenze* (Florence, 1853), p. 335.

⁵⁸ For example, see the account of Bartolomeo Scala with Bernardo Rinieri, studied by Alison Brown, «Bartolomeo Scala's Dealings with Booksellers, Scribes and Illuminators, 1459-63», *Journal of the Warburg and Courtauld Institutes*, XXXIX (1976), 237-39.

than the banking system in reducing the recourse to specie and even in expanding the money supply. For transfer abroad and foreign exchange the Florentine could of course use the services of any merchant-banker, whether the latter had a local bank or not.

Finally, to whatever extent local bankers used their liabilities to make credit available to others, it is not likely that in this respect they collectively played a major role in the performance of the economy. Considering the number of banks and the size of some of the larger ones, like the Strozzi and Datini banks, we can hardly say that banks were the primary source of investment funds for the leading sectors of the economy — cloth manufacture and international trade. It is also obvious that they served no essential function in international banking: very few of the great merchant-banking firms that operated abroad opened a local bank; and it is not at all clear what advantage those that did gained from it. De Roover's study of the Medici *tavola* in Florence, dependent almost entirely on lists of debtors and creditors submitted for tax purposes rather than on internal business records, did not result in a functional analysis of how it fit into the larger Medici system. Even Melis, with his vast knowledge of the completely documented Datini system, could not explain why Datini, after so many years in business, was prompted to open a local bank only to shut it down so soon thereafter; nor was he able to clarify the function it performed in Datini's total business system. The virtually complete documentation of Datini's affairs could undoubtedly be studied to yield an explanation (which might in fact change the view of local banking presented here).

We have also remarked that one of the functions of local banks like Cerchi's was to facilitate the temporary liquidation — that is the conversion into cash — of certain non-monetary forms of wealth, namely jewelry and credits in the public debt, that were perhaps beyond the range of the operation of a normal

pawnbroker; but once again, banks were by no means the exclusive agencies for this service. Innumerable private account books of men who were not bankers document the occasional private loan on the security of jewelry and speculation in Monte credits. Moreover, the market for both these activities underwent changes at the end of the fifteenth century in a way that probably reduced the business of bankers as well as these private operators and may in fact point to the decline in the kind of local banking represented by Cerchi's operation. On the one hand, with the opening of the Monte di Pietà in 1496, pawnbrokers and money-lenders faced stiff competition from a large public institution, which had the additional advantage, in this precarious business, of having at least some formal ecclesiastical sanction; and on the other hand, Monte reforms at about the same time resulted in the gradual reduction of negotiable credits in the early sixteenth century and therefore the diminution of a form of wealth that so many private speculators — and not only bankers like Cerchi — had dealt in.

We can conclude this discussion of local banking in fifteenth century Florence by raising some doubts about whether any kind of banking *system* properly speaking actually existed. First: bankers performed no services that could not be had from other men; and my impression of the record of the «banking» functions found in private account books as compared to the activity of a banker like Datini, Strozzi, or Cambini — not to mention Cerchi — is that local banks collectively by no means dominated the market for these services. De Roover wrote that «there can be no banking where there are no banks», but I would suggest that the importance for the economic life of the city of practices usually associated with banking cannot be assessed only with reference to the activity of banks strictly defined.

Secondly: there was no system in the sense that these banks were tied together in any kind of larger institutional structure. Their purely formal corporate organization within the guild was,

by the fifteenth century, largely irrelevant to the conduct of their business except in matters of what de Roover called professional standards, which were more in the public rather than narrow guild interest; no organization was imposed on them by the state through a regulatory policy (very unlike the situation in Venice); and, needless to say, there is no evidence that banks and bankers were linked to one another through interlocking business investments, partnerships, or family relationships. Most of these local banks were, like Cerchi's, one-man operations; and, like Cerchi's, many had a relatively brief life that did not continue into a second generation of the family. The circle of bankers, in other words, saw considerable mobility in and out of its ranks, and it is hardly possible to talk of a closed «banking establishment» held together and perpetuated by familial (or any other) ties.⁵⁹

Finally, whatever the organizational ties binding banks together, in a more purely economic sense a banking system exists to the extent that interbank exchanges take place and these have significant effects on the stock of money and the velocity of its circulation. The record of Cerchi's bank, however, shows that such exchanges were relatively infrequent events; and considering the small scale of his operations, and comparing the relatively small scale of the banking side of the Strozzi and Datini companies with the commercial side of their activities (App. B), we can doubt that, whatever the extent of interbank exchanges at the local level, the «system» as it was developed in Florence had a major impact on the economy. In this respect it is of course significant that the banking sector never underwent a major crisis after the failures of the 1340s, not even with the collapse of what was perhaps the largest and most prestigious bank following the exile of the Medici in 1494. Bankruptcies were not unusual occurrences, but for the most part they remained isolated events;

⁵⁹ An analysis of the guild's roster is forthcoming in my study of the power and weakness of the Medici bank as a business. The situation was apparently no different in the early fourteenth century: de LA RONCIÈRE, *Un changeur*, pp. 76-77 and 84-86.

even the chain-reaction set off in 1464-65, the only one that elicited much comment by contemporaries, sent only minor ripples through the banking community — and none at all (so far as we know) in any other sector of the economy.⁶⁰

The Florentine banking “system” appears all the more amorphous when compared to the situation in Venice. There, a handful of banks located at the Rialto — the *banchi di scritta*, specializing in deposits and book transfer — were central to the economy of the city. Few in number and almost literally at arm’s reach from one another, bankers were able to establish an efficient clearing system among themselves, even though transfers were effected through oral rather than written order; and the deposits of the four banks open at the end of the fifteenth century totalled over a million ducats — an astronomical figure by Florentine standards.⁶¹ Deposit banking was obviously much more developed in Venice; and it is hardly a coincidence that the current account of the one Venetian, Andrea Barbarigo, whose financial records survive in more than mere fragments is at least as active as any current account with a deposit banker to be found in the hundreds, if not thousands, of account books that survive for Florence from the same period. There was much more of a banking system in Venice also in the sense that these Rialto banks were highly regulated by the state. Significantly, a banking failure in Venice, much more than in Florence, was a serious matter, because at stake was, in fact, a veritable system absolutely central to the performance of the economy as a whole.

Our assessment of Florentine banking in the late middle ages

⁶⁰ References to contemporary comment on this failure are assembled by de ROOVER, *Medici Bank*, pp. 359-60. Subsequently, other references have been found by MARK PHILLIPS in the «Diverse notizie storiche...» of Marco Parenti, Biblioteca Nazionale di Firenze, Magl. XXV, 272, pp. 15-17, and by F. W. Kent, in the collection of studies on Giovanni Rucellai, *A Florentine Patrician and His Palace* (London, 1981), p. 79 n. 6.

⁶¹ FREDERIC C. LANE, «Venetian Bankers, 1496-1533», reprinted in his *Venice and History* (Baltimore, 1966), p. 72.

and the Renaissance has been shaped largely by scholars who, representing the first generation of business historians, especially Raymond de Roover and Federigo Melis, both trained as accountants, approached the subject as historians of techniques. Their studies have made us aware of the modernity of Florentine business practices, including even the language of accounting; and, like good historians, these scholars had in mind not just isolated first examples of this or that technique but general practice that prevailed throughout the business community. The sum of these devices, however, somehow did not add up to a modern banking system. 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.

APPENDIX A

SELECTION OF SURVIVING BANKERS' ACCOUNTS
(Archival references in italics)

1. Paolo d'Alessandro Sasseti:
Libro di ricordi (includes also personal memoranda), 1363-1400 (*ASF, Carte strozz., ser. II, no. 4*)

2. Francesco di Marco Datini and Bartolomeo Cambioni & Partners
(*Archivio di Stato di Prato, Archivio Datini*):
Libro bianco A (ledger), 1398-1408 (*no. 223*)
Libro di entrata e uscita A, 1398-1401 (*no. 221*)
Quaderno di cassa A, 1398-1400 (*no. 219, second part*)
Quaderno di cassa B, 1400-1401 (*no. 224*)
Quaderno di sugello A, 1398-1400 (*no. 219, first part*)
Quaderno di sugello B, 1400-1401 (*no. 225*)
Quaderno di lettere A, 1398-1400 (*no. 222*)
Memorial A, 1398-1400 (*no. 220*)

3. Lorenzo di Messer Palla Strozzi and Orsino di Lanfredino Lanfredini & Partners (*ASF, Carte strozz.*)
Libro di dare e avere, 1420-23 (*ser. III, no. 288*)
Libro di entrata e uscita A, 1418-20 (*ser. III, no. 284*)
Libro di entrata e uscita B, 1420-23 (*ser. III, no. 285*)
Quaderno di cassa B (extracts, presumably for personal use), 1422-23 (*ser. IV, no. 363*)
Quaderno di cassa C. 1423 (*ser. III, no. 286*)
Libro di ricordi B, 1420-23 (*ser. III, no. 290*)

4. Palla di Messer Palla Strozzi and Giovanni di Francesco Lioni & Partners
(*ASF, Carte strozz., ser. III*)
Quaderno di Cassa (B?; extracts made on occasion of settlement of accounts), 1425-26 (*no. 283*)
Libro di ricordi A, 1421-26 (*no. 282*)

5. Bank of Niccolò Cambini and his sons: the long series of parallel books of this bank, which span the years 1454-77, are in the archive of the Ospedale degli Innocenti, Estranei 217-299; they are too numerous to list here, Thanks to Professor Bruno Dini, I was able to consult the schematic index to them in the Istituto di storia economica of the Università degli Studi di Firenze.

6. Bindaccio di Michele de' Cerchi & Partners (*ASF, Cerchi*)
 - Libro di ricordi A, 1472-77 (*no. 316*)
 - Libro di ricordi G, 1480-83 (*no. 315*)
 - Libro di ricordi H, 1483-88 (*no. 317*)
 - Quaderno di cassa C, 1476 (*no. 316*)
 - Balances, 1474-76 and 1480-84 (unnumbered folios at end of *no. 312*, and Libri di ricordi A, G and H *passim*)

7. Francesco di Giuliano de' Medici and Gabriello di Jacopo d'Avicano & Partners (*Harvard University, Baker Library, Selfridge Collection*)
 - Articles of association, 1483 (*no. 495, fasc. AB, fol. 40*)
 - Libro bianco A (ledger), 1485-86 (*no. 524*)
 - Libro rosso B, 1487-89 (*no. 529*)
 - Giornale A, 1485 (*no. 523*)
 - Giornale B, 1485-86 (*no. 525*)
 - Libro di ricordi B, 1486-92 (*no. 527*)

8. Francesco di Giuliano de' Medici and Bastiano di Leonardo Buini & Partners (*Harvard University, Baker Library, Selfridge Collection*)
 - Articles of association, 1488 (*no. 495, fasc. AB, fol. 44*)
 - Ledger A (libro bianco), 1488-89 (*no. 532*)
 - Giornale A, 1488-91 (*no. 531*)
 - Giornale B, 1490-91 (*no. 533*)
 - Libro di ricordi A, 1488-91 (*no. 530*)

APPENDIX B

DATA FROM BANKERS' BALANCE SHEETS

The following data are presented to give an idea of the scale of operations of these banks. Income is not included because the figure given in the documents usually includes the accumulated excess of income over expenditures from previous balances, and it is not always possible to isolate this figure from the actual income during the period for which the balance is made. The problem of the ratio of cash to liabilities is discussed in the text on page 38, and the nature of balance sheets in general is explained on page 15. Figures are in florins.

Local Banking in Renaissance Florence

	Date of balance	Total expenditure	Cash-on-hand	Liabilities	Ratio of cash to liabilities (%)
Francesco di Marco Datini and Bartolomeo Cambioni & Partners, 1398-1401					
1398:	Dec 20	10,732	1,064	577	184
1399:	Feb 15	15,457	1,742	772	226
	Apr 19	25,431	232	309	75
	Jun 7	23,746	1,912	513	373
	Jul 19	18,211	446	700	64
	Nov 22	45,979	1,582	863	183
1400:	Jan 24	24,089	1,727	695	248
	Mar 24	19,791	1,128	1,525	74
	Jun 5	26,468	541	2,104	26
	Jul 4	12,005	1,386	575	241
	Aug 4	5,278	—	3,053	—
	Sep 10	3,950	367	3,299	11
1401:	Feb 1	22,198	313	159	197
	Mar 25	11,125	—	—	—

Source: Archivio di Stato di Prato, Archivio Datini, 221 (Income-outgo Book A), outgo section, *passim*.

	Date of balance	Total expenditure	Cash-on-hand	Liabilities	Ratio of cash to liabilities (%)
Lorenzo di Messer Palla Strozzi and Orsino di Lanfredino Lanfredini & Partners, 1418-20					
1418:	May 25	10,651	1,765	1,138	155
	Jul 20	15,024	1,568	3,008	52
	Dec 26	39,196	2,708	1,335	203
1419:	Mar 4	16,068	8,357	2,617	319
	May 6	12,103	3,777	3,528	107
	Jun 10	9,334	735	4,850	15
	Oct 7	34,420	1,091	3,329	33
	Dec 5	13,462	1,136	5,184	22
1420:	Feb 10	6,943	779	1,530	51
	Mar 30	14,312	—	—	—

Source: ASF, Carte strozz., ser. III, 784 (Income - outgo Book A), outgo section, *passim*.

Richard A. Goldthwaite

	Date of balance	Total expenditure	Cash- on-hand	Liabilities	Ratio of cash to liabilities (%)
Bindaccio di Michele de' Cerchi & Partners 1474-76 and 1480-84					
1474:	Jan 1	—	353	640	55
	Aug 1	—	183	407	45
1475:	Aug 29	—	524	1,503	35
1476:	Oct 18	—	245	291	84
1480:	Jun 19	—	360	394	91
	Aug 20	—	316	286	110
	Oct 10	—	300	371	81
	Nov 19	2,905	182	—	—
1481:	Mar 18	1,147	249	349	71
	May 20	1,209	267	230	116
	Sep 21	1,815	166	365	45
	Nov 25	523	118	121	98
1482:	Feb 13	—	101	645	16
	Mar 26	797	193	177	109
	Jul 7	715	436	141	309
	Aug 15	811	294	273	108
	Oct 28	—	158	106	149
	Nov 30	706	81	243	33
1483:	Jan 26	557	203	244	83
	Apr 6	—	241	415	58
	Jun 15	—	448	411	109
1484:	Jan 4	—	209	593	35

Source: see Appendix A above.

APPENDIX C

BALANCE OF THE CERCHI BANK, 15 AUGUST 1482

This is a typical balance of the kind Cerchi made periodically. It includes all the items Cerchi worked with, but the format below is not exactly that in the document, which records his calculations (following the steps described in the text above) rather than a final statement. Since his procedure was to work backwards from the total on the asset side, converting lire into florins, no total for the liability side appears in the document; and I have not reduced the totals to a common denominator of florins. The balance, assigned to profits, is a bookkeeping figure only and does not represent real earnings. I cannot explain the item *fiorini pengni*, which appears in most of these balances.

ASSETS			LIABILITIES		
	<i>f. s. d.</i>	<i>l. s. d.</i>		<i>f. s. d.</i>	<i>l. s. d.</i>
Debits from journal	76.17. 6	241.17. 5	Credits from journal	25. 0. 7	68. 0. 0
Debits from cash book	52.10. 2	375. 9. 0	Credits from cash book	202.12. 0	154. 1. 4
Pawns	5. 4. 0	33. 0. 4	Fiorini pengni	— — —	29. 7. 0
Cash-on-hand	294. 8. 9	— — —	Balance from income-outgo	262.17. 4	— — —
			Unexplained item	0. 5. 5	— — —
			BALANCE: profit	10. 1. 2	— — —
TOTAL	429. 0. 5	650. 6. 9		500.16. 6	251. 8. 4

