

MONEY, BANKING AND CREDIT
IN MEDIAEVAL BRUGES

Italian Merchant-Bankers Lombards and Money-Changers

A Study in the Origins of Banking

by

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THE MEDIAEVAL ACADEMY OF AMERICA
CAMBRIDGE, MASSACHUSETTS

1948

Preface

THIS book is the outcome of my finding a casual reference to the existence of several account books of mediaeval merchants in the Bruges Municipal Archives. For some time I had been interested in the history of accounting and I had delved in the archives of Antwerp, my native city. Antwerp is rich in business records of the sixteenth and later centuries but I had seen no earlier account books. Upon learning of their existence in Bruges I immediately wrote a letter of inquiry to the Curator of the Bruges Archives. The reply was courteous but not encouraging. Yes, there were some mediaeval account books in the Bruges Archives, but the script was nearly illegible and the interpretation of those documents, I was tactfully given to understand, would require the combined talents of a palaeographer, a bookkeeper, and a financier. At that time I knew some bookkeeping and I had worked in a bank, but I could qualify neither as a financier nor as a palaeographer. Nevertheless, undaunted by the difficulties, I made arrangements with the Archivist, Monsieur Remi A. Parmentier, to visit the Bruges Archives and to examine those mysterious and alluring account books.

The first visit took place in May 1929. It was followed by many others because Monsieur Parmentier had not exaggerated the difficulties. Several of my short vacations—I was then working in a business office—were spent bending over the huge ledgers of Collard de Marke and Guillaume Ruyelle in the *salle des public*, where only the carillon interrupted from time to time the archival silence. As the years passed my acquaintance with Monsieur Parmentier grew into a warm and enduring friendship. Not only did he grant me unusual privileges and facilities for research but he introduced me to Professor Egide Strubbe and thus enabled me to publish the preliminary results of my investigation in the *Annales de la Société d'Emulation de Bruges*. My last visit to the Bruges Archives was in 1938. By that time I had completed my research and had conceived the general scheme of this book. Its completion was prevented for a long time by other duties and when it was finally completed publication was delayed by the War. During all these years Monsieur Parmentier never lost hope. It is only fitting that this book for which he has waited so long be dedicated to him.

Before leaving Bruges, I must also thank Monsieur Albert Schouteet, the Assistant Archivist. He has helped me in many ways by answering repeated queries and by sending me transcripts of various documents. He was also generous enough to communicate to me the text of a hitherto unknown document, which he had discovered, and which established beyond doubt that Guillaume Ruyelle, one of the two money-changers whose account books are preserved in Bruges,

de Roover

Chapter 4

THE BUSINESS OF EXCHANGE AND THE MECHANISM OF THE MONEY MARKET

ONCE we know how the Italian mercantile and banking houses were organized, managed, and financed, the next question which comes to mind is what did they do with the funds that were placed at their disposal? An answer to this question is provided by the articles of association of the year 1455 relating to the branch which the Medici banking house maintained in Bruges. These articles state unambiguously that the purpose of the contract was to form 'a company for the trade in merchandise and in foreign exchange in the city of Bruges in Flanders' ('compagnia per traficcare nella villa di Bruggia in Fiandra di mercatantia e cambi').¹ By the word *cambi* we should understand the trade in bills of exchange and not manual or petty exchange which was the special province of the money-changers. In other words, the agreement provided that the funds available for investment were to be used in trade either directly by dealing in commodities or indirectly by extending loans to other merchants who could profitably employ additional funds.

bills of exchange = cambi

The partnership agreement makes this purpose clear by stipulating in Article Two that Angelo Tani, the junior partner and branch manager, was to limit his activity to legitimate business practices, *bona-fide* commercial transactions, and licit exchange contracts. This stipulation—at least in principle—excluded *ipso facto* all contracts tainted with usury. More specifically, Tani was permitted to lend money only to merchants or master-artificers either by giving them credit in the books or by purchasing their bills of exchange (*dare a cambio*).² Credit was to be granted only with caution and with due regard to the financial standing and business reputation of the customers. Sales of foreign exchange on credit (*cambi a credenza*) to lords temporal and spiritual—prelates, priests, clerics, or officials—were explicitly forbidden except by special written consent of the senior partners. These provisions, it is clear, excluded all consumption loans, for credit was restricted to merchants, to master tapestry-makers, and to industrial entrepreneurs, such as *drapiers*.

only loans to merchants master-artificers

excluded consumption loans

In so far as the merchant-bankers extended credit to customers who bought merchandise from them, they did only what every merchant did, and still does, and cannot for that reason be considered as bankers. The merchant-bankers deserve this qualification, however, because they financed foreign trade by purchasing bills of exchange from merchants who were not their customers and

financed foreign trade with credit

bills of exchange = money substitutes =

Mechanism of the Money Market
loan repaid from proceeds of sale

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because they concerned themselves with arbitrage between different places.

The purchase of bills necessarily involved the extension of credit. Although mediaeval bills were not discounted and did not circulate by way of endorsement, they should be considered as money substitutes, since they reduced to a minimum the shipments of specie which were necessary in order to make international payments. As for arbitrage, this practice achieved the same result and, in addition, provided a self-regulating mechanism for the international distribution of specie. As Bernardo Davanzati pointed out already in the sixteenth century, the merchant-bankers, even though they sought only their private gain, promoted the general welfare and performed a useful function by adjusting any inequalities which might occur in the balance of payments between the different places of Europe.³

One of the oldest extant exchange contracts in which Bruges is mentioned is dated May 15, 1306. The two parties involved in this contract were both prominent: on the one hand, Giovanni Villani, the famous Florentine chronicler, representing the Peruzzi Company, and on the other hand, Tommaso Fini, *receveur de Flandre*, representing the Gallerani Company of Siena.⁴ In this document Tommaso Fini acknowledges having received an unspecified sum in reals—an imaginary coin reckoned at twenty-four groats—*pro justo pretio et cambio* from Giovanni Villani and promises to return the equivalent, or £2500 *tournois*, at the forthcoming May Fair of Provins either to Giovanni Villani himself, or to Ugucione Bonaccorsi Bentacorde, or to Filippo Villani, or to any other partner or certain attorney of the Peruzzi Company.⁵

This document, it should be noted, is not yet a bill of exchange and it is therefore, safer to call it a *cambium*, or exchange, contract. For one thing, the document is a notarial deed, not an informal letter missive. Furthermore, no mention is made of a third party, the drawee. In all probability, Tommaso Fini himself or his agent intended to go to the Fair of Provins to sell Flemish cloth and to repay there the Peruzzi from the proceeds of the sale. The German legal writers, especially Levin Goldschmidt, give to such a contract the name of *Eigenwechsel* because the drawer and the drawee are the same person or members of the same firm.⁶ The contract concluded between Giovanni Villani for the Peruzzi Company and Tommaso Fini for the Gallerani Company unquestionably involved the extension of credit, since the former advanced money to the latter and received in exchange an instrument promising repayment at a later date in a different place, and in a different kind of currency. All the essential elements of an exchange transaction were present, but the instrument for implementing the agreement between the contracting parties was not yet the bill of exchange.

Apparently the *cambium* contract in notarial form was fairly common during the thirteenth, and the first decades of the fourteenth, century. There are a great many examples among the Genoese notarial records recently published

3rd party = drawee

exchange contract

by Dr Renée Doehaerd.⁷ In most cases money borrowed in Genoa was made repayable at the fairs of Champagne. One of the later documents, however, refers to Bruges. According to its contents, two brothers, Daniel and Uguetus Lomellini, confessed on April 23, 1313, to have received an unspecified amount (*tot denarios*) of Genoese currency from their kinsman, Manfredo Lomellini, acting in the name of Bonvilano Lomellini, and promised to repay in Bruges, on the following first of June, the sum of five hundred gold reals at twenty-four groats per real. However, if the debtors failed to pay in Bruges at the set date, then they promised to repay the creditor in Genoa at the rate of forty-five sous *Genovini* per real after another period of two months, or on August 1, 1313.⁸

The contract is said to be made *nomine vendicionis et cambii*, but I doubt very much whether it rests on a real and genuine exchange transaction. In my opinion, the contracting parties never intended to effect a settlement in Bruges. In all probability this is a spurious, or fictitious, exchange contract which was used to conceal a straight loan with interest, or usury, as it was still called in the Middle Ages. In reality the borrowers received an unspecified sum in Genoese currency on the strength of a solemn promise to repay on August 1, 1313, an amount of £1,125, or five hundred times 45s., in the same currency.⁹

There were in this period two kinds of exchange contracts: the ordinary *cambium* and the *cambium nauticum*. Perhaps the latter should be considered as an outgrowth of the sea loan (*foenus nauticum*) rather than as a different form of exchange contract. In any case, the ordinary *cambium* contract usually contained the clause that payment was due *salvus in terra* or unconditionally. In the case of the *cambium nauticum* or *cambium maritimum*, however, the borrower's promise to pay was not given unconditionally but was contingent upon the safe arrival of a certain vessel or a certain cargo.

From 1278 onward, if not earlier, the Genoese began to send galleys through the Straits of Gibraltar to England and Flanders. After 1298 these voyages became regular, and Sluys, the seaport of Bruges, became the terminal of the galley fleets to the West.¹⁰ Genoese merchants who had goods aboard the galleys often raised the funds necessary to finance their ventures by means of a *cambium nauticum*. For example, on April 4, 1312, Dagnanus Ventus acknowledged having received from Nigro de Coturno an unspecified sum in Genoese currency and promised to pay to the lender 518 reals and eight old groats one month and a half after a certain galley had safely reached the port of Sluys (*applicuerit ad portum Cluse*). This galley, according to the deed, belonged to the said Ventus and a Manuel de Bonaver and was ready to sail from Genoa to the parts of Bruges (*ad partes Bruges*). The contract explicitly stipulated that the debt, or *cambium*, was subject to the act of God, the fortunes of the sea, and the risks of men-of-war (*ad risicum et fortunam Dei, maris et gentium*). In other words, fulfillment of the promise to pay depended upon the safe arrival of the galley

usury

unconditionally
vs.
contingent

at destination. As security, the borrowers pledged ten bags of ginger and fifty bales of alum which were loaded aboard the galley and were registered under the lender's name in the ship's chartulary.¹¹

Apparently the *cambium* contract in notarial form was still popular in 1327. On August 6 of that year the Bruges representative of the Acciaiuoli Company entered into such a contract with a merchant of Piacenza. The former declared in the deed that he had received from the latter an unstated amount in gold reals to the equivalent of 240 florins. This sum of 240 florins was to be repaid in Piacenza on the following first of November to the said merchant or his accredited agent.¹²

The *cambium* contract in notarial form was particularly well suited to the needs of the traveling trade because of the legal safeguards which surrounded a formal deed requiring the intervention of a notary. The emphasis was still on the promise to pay.¹³ Usually the borrower promised that he himself or his agent would repay the lender, the latter's agent, or, less frequently, the bringer of the instrument at the fairs or in another place.¹⁴ The insertion of such clauses meant only that the debtor could validly pay to a partner, a factor, a proxy, or an accredited agent of the creditor, and did not transform such instruments into negotiable paper in the modern sense.¹⁵ It is true that the creditor by virtue of his title had the right of recourse against the original borrower if his agent failed to carry out the promise to pay.

The notarial instruments lost much of their popularity after the Italian merchants began to conduct their business by correspondence from the counting house and to keep balances with permanent agents or correspondents abroad. In Western Europe this development occurred at the same time as the decline of the fairs of Champagne and, as already explained, there is a close connection between the two phenomena. From then on, legal safeguards became less important than expediency, and the notarial contract was replaced by an informal letter missive which eliminated all superfluous legal verbiage. Thus emerged a new instrument: the bill of exchange, called at first *lettera di pagamento* and later *lettera di cambio*.¹⁶ From a solemn and verbose promise to pay the instrument was reduced to a brief command to pay given by the maker to his correspondent abroad. The old formulas, however, survived in the Northern trade, and *cambium* instruments emphasizing the acknowledgment of a debt were still used among Hanseatic and Flemish merchants in the sixteenth century.¹⁷

The *cambium nauticum* shared the fate of the *cambium* contract and became less and less common during the fourteenth century. Most probably this decline was due to the development of marine insurance which made possible a more satisfactory division of risks.

It seems likely that the bill of exchange developed out of the letter of advice

promise to pay

* certain parties to receive payment

decline of fairs

Acceptance
by Genoa

which usually accompanied the more solemn notarial instrument. There is at least one Bruges document which sheds some light on this transition from the formal cambium contract to the informal bill of exchange. The document in question is an acceptance given in notarial form and dated March 30, 1330. According to this instrument, Nado Spiliato, the representative of the Acciaiuoli Company in Bruges, accepts a bill drawn on him for an amount of six hundred reals of twenty-four groats, equivalent to £1,342 10s. Genovini at the rate of 44s. 9d. Genovini per real. This sum had apparently been advanced in Genoa by Antonorio Grimaldi to Niccolò Guicciardini, the Genoese representative of the Acciaiuoli Company on the preceding fifteenth of February. The Italian text of the bill is quoted in full in the Latin text of the acceptance. As soon as the bill is paid, the payee in Bruges promises to notify Antonorio Grimaldi so that he will cancel the solemn acknowledgment of debt given before a notary by Guicciardini, the maker of the bill.¹⁸

If I interpret the evidence correctly, it discloses the existence of two documents: a principal instrument which is still the solemn promise given before a notary and a complementary instrument which is the Italian letter missive containing the order to pay. Jurists and historians have quibbled a great deal over the existence of two documents during the transition period from the notarial cambium contract to the informal bill of exchange without reaching an agreement.¹⁹ Those who favor the existence of two instruments are presumably right on the basis of the available evidence. In any case, the final result is the same: by the end of the fourteenth century, if not before, the bill of exchange had emerged as the sole document. However, bills of exchange continued to be made out in duplicate or triplicate as a safeguard against the loss of one copy in the mail.

According to the document of 1330, the acceptance, also, was considered sufficiently important to require the intervention of a notary. This formality was soon discarded, and acceptance was given simply by writing the word accettata across the face of the bill as is still the custom today.²⁰ The intervention of a notary continued to be required only for the drafting of protests in case the drawee of a bill either refused to accept or to pay.²¹ Today still protests are made by a notary, a *huissier*, or some other public official.

The essential difference between the mediaeval bill of exchange and the modern draft is that, in the Middle Ages, a bill always originated in an exchange contract. Such a contract may be defined as an agreement by which a deliverer, usually a merchant-banker, gave a certain sum of money in local currency to another merchant and received from him a letter missive which was payable at a future date (credit transaction), in another place, and in another currency (exchange transaction). By definition such a contract involved both a credit and an exchange transaction.²² Because of the slowness of communication, even a

sight draft was in effect a time bill, since it had to travel from the place where it was issued to the place where it was payable.²³ The difference of place (*distancia* or *differentia loci*) and the conversion of domestic into foreign currency (*permutatio pecuniae absentis cum praesenti*) were two essential features of the exchange contract. To this rule there was one exception, namely, when the same money was current in the place of issue and in the place of payment.²⁴ rule

Such a case is illustrated by one of the earliest bills which happens to be known. On October 5, 1339, Barna da Lucha and Co., a firm established in Avignon, drew a bill of 312 3/4 florins on Bartalo and Co. in Pisa. In exchange for the bill the drawers had received an advance of three hundred florins from Tancredi Bonagiunta.²⁵ There was consequently an 'advantage,' or agio, of 4 1/4 per cent in favor of the lender.²⁶ As the bill was payable on November 20, 1339, or forty-six days from date, the lender's gross profit corresponded to thirty-four per cent a year.²⁷

A typical exchange contract involved four parties and two payments: an advance of funds in the place where the bill was issued and a repayment in the place where the bill was due. The four parties who participated either in the conclusion or the execution of the contract were: (1) the deliverer (It. *datore*, Fr. *donneur*, and Fl. *gever*) who furnished the value of the bill; (2) the taker (It. *prenditore*, Fr. *preneur*, and Fl. *nemer*) who took up the money supplied by the deliverer and made out the bill to the person or the firm designated by the latter; (3) the payor or drawee on whom the bill was drawn and who was expected to accept it and to pay it at maturity; and (4) the payee in whose favor the bill was made out. In most cases the payor was a correspondent of the taker and the payee, a correspondent of the deliverer. Sometimes two of the parties to the contract were merged in the same individual or the same firm. Such an anomaly did not alter the substance of the contract in the least.

The terms *datore* and *prenditore* are likely to create confusion, especially *prenditore* or *preneur*, as this word has changed its meaning in both French and Italian. Since the middle of the seventeenth century, the terms *preneur*, *nemer*, or *prenditore*, refer to the person to whose order a bill is payable and not to the drawer or maker.²⁸ In mediaeval sources, however, *prenditore* and *datore* have always the meaning given above.²⁹ Further evidence is given by the writings of the English mercantilists prior to Mun: they consistently used the terms 'deliverer' and 'taker' as they are defined here.³⁰

As already explained, the mediaeval bill of exchange in contrast to the modern draft, or *traite*, was based on a real or fictitious exchange transaction. The two instruments differ in two other important respects. The mediaeval bill unlike the modern so-called bill of exchange was neither discountable nor negotiable.

To discount a bill would have been illegal in the Middle Ages, since the

Church was strongly opposed to the taking of interest. It was usury to exact anything beyond the principal on a *mutuum*, or straight loan.³¹ By definition a *mutuum* was always a gratuitous contract. If it ceased to be gratuitous, it became *ipso facto* a usurious contract.³² In other words, it was usury to take 'a certain gain' on a *mutuum*. The emphasis is on the word 'certain.'³³ Instead of being discounted, mediaeval bills were bought and sold at a price which was determined by the rate of exchange. The result was that the profit of the banker, instead of being certain as it is today, became uncertain since it depended upon the fickle and unpredictable behavior of the exchange rates. It is this speculative element which justified exchange dealings in the eyes of the Churchmen.³⁴ To be sure, interest was concealed in the exchange rates, that is to say, in the price at which bills were bought and sold. But it made no difference. The logic of the Churchmen was impeccable: they argued that a *cambium* contract was not a straight loan since it involved an exchange transaction.³⁵ Moreover, exchange dealings were justified *pro utilitatem reipublicae* or for the benefit of the common weal. Only fictitious exchange was condemned as a contract *in fraudem usurarum* because it was merely a cloak for a straight loan.

This theory was not a rationalization invented by the merchant-bankers to appease a troubled conscience but the accepted doctrine of the Church as it was built up by several generations of canonists and theologians. The outcome was that exchange dealings, provided they were genuine and not fraudulent, were perfectly lawful and were not branded as usurious.

Mediaeval bills were not negotiable credit instruments.³⁶ The earliest known examples of endorsed bills date back to the years 1610 and 1611.³⁷ Prior to the beginning of the seventeenth century, bills of exchange, as a rule, were not payable to order, to the bearer, or to a certain person or his assigns.³⁸ I have not found a single example of such formulas among the numerous Italian bills which are available in print or which I had the opportunity to examine in the Datini Archives.³⁹ Further evidence that negotiability was lacking is found in the books of the Italian merchant-bankers, especially of the Medici and of Francesco Datini, with which I am familiar. The entries in the ledgers indicate clearly that bills were actually paid to the person or the firm named in them as the payee. These entries usually give a detailed description of each transaction and include the names of all the parties to the contract. The lack of negotiability, of course, was not as great an obstacle to the assignability of debts as it might seem because of the extensive use of book transfers both in foreign and in local trade. Thus specie payments were eliminated as much as possible not only in the clearance of local debts but also in the settlement of international balances. Negotiability should not be confused with assignability. These two terms are by no means synonymous, although they are often used carelessly as if there were no shade of difference in the meaning.

Avignon, Barcelona, Valencia, and Palma de Mallorca. As was customary in the Middle Ages, this firm combined trade in all sorts of commodities with dealings in bills of exchange. Datini also controlled a local bank and a cloth-manufacturing establishment in Prato. When he died in 1410, he was one of the richest merchants of his time. Like the Medici later, he received the permission to augment his armorial bearings with the fleur-de-lis of France.⁴⁶

Issued ↙
 Francesco Datini had no branch in Bruges but was represented in this place by several correspondents, among whom the firms Giovanni Orlandini and Piero Benizi & Co. and Alberto and Bernardo degli Alberti & Co. were probably the most important. There are in the Datini Archives many bills issued by these Bruges correspondents and paid by the Datini firm or its branches in Italy and Spain. The account books also give information about bills which the Datini firm drew on Bruges and on other places. The originals of outgoing bills, of course, have not been preserved with the exception of a few bills which were returned after being protested.

The following bill is a typical sample. Let us examine in how far it fits the description given above.

Al nome di Dio, amen.

dì 12 di dicembre 1399

Paghate per questa prima al usanza a Domenicho Sancio schudi seicento a s.10 d.5 per ∇ i quali ∇600 a s.10 d.5 per ∇ sono per la valuta da Jachopo Ghoscho, e ponete a nostro chonto chostì. Idio vi guardi.

Giovanni Orlandini e Piero Benizi
 e chonpagni in Bruggia

[In a different handwriting:]

Accettata a dì 11 di gennaio 1399 [1400]

[On the back:] Francescho da Prato e chonpagni
 in Barzalona

Prima⁴⁷

Like most mediaeval bills this one involves four parties (two in Bruges and two in Barcelona) and two payments (an advance of funds in Bruges and its repayment in Barcelona). In this case the four parties to the contract are: (1) the drawer or taker, the firm Giovanni Orlandini and Piero Benizi & Co. in Bruges, who made out the bill; (2) the payor or drawee, the Barcelona branch of the Datini firm, to whom the bill was addressed; (3) the payee or presenter, Domenico Sancio, probably a Spaniard or a Catalan, in whose favor the bill was made out; and (4) the deliverer or remitter, Jacopo Gosco, who gave consideration for the bill. According to the text, the drawer received an advance of six hundred écus (∇) at twenty-two groats, or £55 groat in Flemish currency, and requested the drawee to repay this amount to Domenico Sancio at the exchange rate of 10s. 5d. Barcelonese per écu of twenty-two groats. In the Middle Ages it was customary to state the exchange rate in the text of a bill. The date

given in the bill is December 12, 1399. It was accepted on January 11, 1400. According to the records of the Datini firm an amount of £312 10s. Barcelonese, or the equivalent of √600 at 10s. 5d. per écu, was charged to the drawer and credited to the payee upon acceptance of the bill.⁴⁸ This entry shows plainly that after acceptance the payor considered himself as primarily liable for the bill or, in other words, as the principal debtor. It appears from numberless letters in the Datini Archives that the drawee was notified of the issuance of a bill not by a special letter of advice but by an ordinary business letter which usually dealt also with other topics.⁴⁹

The above bill was payable at usance. Between Bruges and Barcelona, the usance was thirty days after sight, according to Uzzano's handbook for merchants (1442).⁵⁰ The exactness of this information is corroborated by the Datini records.⁵¹ About 1450 there was probably a change in commercial practice because the *Libro di mercatantie et usanze de' paesi*, compiled between 1460 and 1481, and other manuscript sources state that the usance was twenty days after sight instead of thirty days.⁵² The usance between Bruges and Florence was seventy days from date according to Pegolotti and sixty days from date according to later sources.⁵³ The usance was always sixty days from date between Bruges and places in Italy (Genoa, Pisa, and Venice) but only thirty days between Bruges and London and between Bruges and Paris or Avignon, regardless of the direction in which the bill was traveling.⁵⁴ Usance bills to and from Montpellier did not fall due until forty days from date.⁵⁵ In the Middle Ages bills were usually payable at usance. Exchange quotations, unless otherwise specified, applied to usance bills.

It would be a mistake to believe that bills were usually paid in specie. The records of the Datini branch in Barcelona disclose that such was not the case and that bills of exchange were often paid by assignment in bank or by book transfer of one kind or another. For example, a bill drawn by the Orlandini of Bruges on the Datini branch in Barcelona was accepted by the drawee on August 30, 1398, and paid by assignment in bank, that is, by transfer in the books of a money-changer on October 1, 1398, or thirty-two days later.⁵⁶ In another instance, the same Orlandini sent a remittance of √200 at 10s. 6d. Barcelonese per √, or £105 Barcelonese, for collection to the Datini firm of Barcelona. The bill matured on January 20, 1400, but was not honored until January 24. On this date, the payor, one Giovanni Bibero, a Barcelonese draper, ordered his banker, Pere Brunet, to credit the Datini firm with £105, Barcelonese currency. The entries in Datini's ledger enable us to follow this transaction step by step.⁵⁷ No specie comes into the picture at any time. Conditions in Bruges were the same. There, too, it was the custom to pay bills of exchange by transfer in bank rather than in specie.⁵⁸

As already explained, a typical exchange transaction involved four parties.

There were hardly any exceptions to this rule, but it was possible for two parties to be represented by the same individual or the same firm. Frequently either the payee and the payor or the deliverer and the taker were one and the same person or firm. In the first case the bill usually contained the formula *pagate a voi medesimi* ('pay to yourselves') as in the following example:

Al nome di Dio di 25 febraio 1400 [n. s.]
 Pagharete per questa seconda lettera se per la prima non avessi paghato
 al usanza a voi medesimo 1b.420 barzalonesi, le quali 1b.420 sono per la
 valuta sono qui contento da Giovanni Orlandini e Piero Benizi e compagni.
 Fatene buon paghamento e ponete a mio conto. Che Idio vi ghuardi.
Ghuiglielmo Barberi salute di Brugia
 [On the back:] Franciescho di Marcho e compagni
in Barzalona

Seconda⁵⁹

This bill not only contains the formula *pagate a voi medesimi*, but the reader will notice that the exchange rate is not given, contrary to the prevailing custom. The explanation for this omission is probably that the drawer, whose business affairs were in bad shape, did not want to disclose that he was not able to sell his bills at the current rate. As a matter of fact, the drawee refused to carry out the order given in the above bill and returned the first copy to the Orlandini because he learned that Guglielmo Barberi was on the verge of bankruptcy.⁶⁰ As the bill was payable to the drawee himself, probably no protest was necessary.⁶¹

How could a drawee pay himself and be at the same time payee and payor? The jurists have been baffled by this problem and have not succeeded in offering a satisfactory explanation.⁶² Fortunately, the Datini records give the clue to the mystery. Bills payable *a voi medesimi* were not paid in cash but by transfer in the books of the payor who was also the payee. For example, on December 26, 1399, the same Barberi drew a bill on the Datini firm in Barcelona similar to the one quoted above. In accordance with the contents of the bill, the payor who was also payee simply transferred a sum of £520 16s. 8d., Barcelonese currency, from the debit of Barberi, the drawer, to the credit of the Orlandini who had furnished the value of the bill in Bruges. The matter was adjusted by such a transfer because both Barberi and the Orlandini happened to have the same correspondent in Barcelona. The result of the transfer was that the Datini firm in Barcelona now owed £520 less to Barberi and £520 more to the Orlandini. In short, bills payable *a voi medesimi* were orders to transfer rather than to pay.⁶³

Mediaeval bills of exchange sometimes contained the formula *per la valuta ricevuta da noi medesimi* ('for the value received from ourselves').⁶⁴ This

type of bill was normally issued by a person who had money both to collect and to pay in a foreign place. In order to satisfy his creditor, such a person naturally found it convenient to draw on his debtor in the same city. The drawer of such a bill was at the same time deliverer and taker. In his books the amount of the bill would simply be written to the debit of the creditor and to the credit of the debtor. Thus mediaeval bills could either originate in a transfer or be settled by transfer. It even happened that adjustment was made by transfer at both ends. The extensive use of transfers gave flexibility to the mediaeval bill despite the lack of negotiability, as has been pointed out. *

It is impossible to understand exchange dealings in the Middle Ages without some knowledge of the manner in which exchange rates were quoted. At first, exchange quotations in Bruges were based on the real of twenty-four groats, of the coinage of Saint Louis, as appears from the Genoese notarial records published by Dr Doehaerd. In 1313, for example, the real was rated at about forty-five sous, Genoese currency.⁶⁶ The real went out of existence early in the fourteenth century. For a time, exchange quotations continued to be based on an imaginary real. This impractical system was soon abandoned, for Pegolotti's handbook which was written around 1340, contains a table of equivalence which gives the value of the real in sous and deniers *a fiorino* corresponding to different rates of the florin in Flemish groats.⁶⁶ Thus, according to Pegolotti's table, the real was worth 58s. *a fiorino* if the florin was rated in Bruges at twelve groats, and only 43s. 6d. *a fiorino* if the florin was rated at sixteen groats.⁶⁷ Apparently two methods of quoting the exchange were in use: one based on the real and the other on the Florentine florin. It is probable that at the time of Pegolotti the new system was coming in and the old system was falling into disuse.

After 1350, in any case, the exchange in Bruges on all Italian places was quoted in a variable amount of groats per florin (Genoa and Florence) or per ducat (Venice).⁶⁸ The exchange on Paris was also quoted in an uncertain number of groats per franc, a gold coin at that time, but Bruges gave the certain to London and Barcelona. In the case of London, exchange quotations were expressed in so many sterlings, that is, English pennies, per écu of twenty-four groats, Flemish currency. In the case of Barcelona, however, the exchange was based on an imaginary écu of twenty-two groats—and not twenty-four—and quoted in sous and deniers, Barcelonese currency.⁶⁹ This system with very few changes, if any, continued in use throughout the fifteenth century. Toward the middle of that century the fairs of Geneva and later those of Lyons acquired great importance as international clearing centers. Exchange rates for bills payable at those fairs were quoted in groats per écu of sixty-six to the gold mark.⁷⁰

According to the merchant handbooks, Bruges quoted regularly the course

TABLE 2
EXCHANGE QUOTATIONS IN BRUGES DURING THE FIFTEENTH CENTURY
FOR BILLS PAYABLE ABROAD

| Place of payment | Exchange quoted | High* | Low* | Usance |
|------------------|---|--------|--------|---------------------------------|
| Avignon | In so many groats, Flemish currency, per florin (<i>florino di pitetto</i>) | 30 gr. | 24 gr. | 30 days from date |
| Barcelona | In so many sous and deniers, Barcelonese currency, per écu of 22 groats, Flemish currency | 9 s. | 7 s. | 20 days after sight |
| Florence | In so many groats, Flemish currency, per florin (<i>florino di suggello</i>) | 5½ gr. | 45 gr. | 60 days from date |
| Geneva | In so many groats, Flemish currency, per écu of 66 to the gold mark | 50 gr. | 46 gr. | Payable at the end of each fair |
| Genoa | In so many groats, Flemish currency, per florin of 25s., Genoese currency | 29 gr. | 25 gr. | 60 days from date |
| London | In so many sterlings, English currency, per écu of 24 groats, Flemish currency | 24 st. | 20 st. | 30 days from date |
| Valencia | In so many sous and deniers, currency of Valencia, per écu of 22 groats, Flemish currency | 10 s. | 8 s. | 60 days from date |
| Venice | In so many groats, Flemish currency, per Venetian ducat of 24 <i>grossi d'oro in oro</i> | 54 gr. | 47 gr. | 60 days from date |

*The figures in these two columns are valid for the third quarter of the fifteenth century only, since they are based on a source compiled around 1460. Changes in monetary standards at home or abroad were apt, of course, either to raise or to lower the limits between which the exchange rates fluctuated. The reader will notice that the range of fluctuation was greater than it would be today under an automatic gold standard.

Source: *El libro di mercantile et usanze de paesi*, ed. Franco Borlandi, Turin, 1936.

of the exchange on London, Paris, Barcelona, Genoa, Venice, Florence, and later Geneva and Lyons. Any reference to German places is conspicuous by its absence. This omission can be explained only by the fact that there were no organized exchange markets in Germany, not even in Lübeck, the leading Hanseatic city. The business methods of the German merchants were much more primitive than those of the Italians. It is not until the sixteenth century that Frankfort-on-the-Main and Hamburg became banking centers. The lack of banking facilities in Germany greatly hampered the *camera apostolica* or papal treasury throughout the fourteenth and fifteenth centuries. For example, it took a full year to transmit funds from Cracow to Avignon. Usually such funds were conveyed to Bruges by traveling merchants and thence relayed to Avignon by the papal bankers who had permanent branches in Flanders.¹¹ The first lap of the journey was slow and hazardous: usually the papal bankers did not receive any funds until the traveling merchant had reached Bruges and sold the goods which he had brought from Poland. Once the funds were in the hands of the bankers, the transfer was made with speed and efficiency.

Lack of
German banking
before

They notified their representatives in Avignon who promptly credited the papal treasury. This last transaction required only a letter of advice and two bookkeeping entries: one in the books of the papal bankers in Bruges and one in those of their representatives in Avignon. The contrast between the two methods of transferring funds is illuminating and does not require further comment. *after*

In the Middle Ages, when two places dealt with each other, it was customary for the exchange to be based on the currency of one of them. Thus the exchange between Flanders and England was based on the écu both in Bruges and in London. In the same way the exchange was based on the Florentine florin and quoted in Flemish groats in both Florence and Bruges. Similarly the exchange ran upon the ducat in both Venice and Bruges and upon the écu in both Bruges and Barcelona. The only exception to this general rule was that of two places which used the same currency, such as Paris and Montpellier.

Today, a banker who discounts commercial paper knows his profit in advance, since the discount is deducted at once from the face value of the draft or the promissory note. In the Middle Ages, however, a merchant-banker who bought a bill of exchange acquired after a while a credit balance in foreign currency and in a foreign place. His profit, far from being certain, remained indeterminate, until he made his returns by re-converting this balance into local currency. The result was that an exchange transaction, in order to be complete, involved two bills instead of one: one for the exchange and the other for the re-exchange (*cambium et recambium*). It is true that the banker could make his returns in specie, in merchandise, or by exchange. The first of these three alternatives need not be considered, since specie shipments were profitable only under exceptional circumstances. The second possibility may be excluded, too, since it involved a speculation in commodities and not in exchange. *

In order to explain how a banker determined his profits, it is inadvisable to use a real case taken from documents. Real cases usually involve technical complications.⁷² It is, therefore, preferable to proceed by analysis and to deal with a hypothetical case. Let us suppose that a merchant-banker established in Bruges bought a bill of 600 ducats, payable in Venice, at the rate of 50 groats, Flemish currency, per Venetian ducat. The cost of such a bill was £125 groat in Flemish currency. Since the usance of bills on Italy was two months, this banker's correspondent in Venice collected the sum of six hundred ducats at the end of this period. Up to this point, the merchant-banker in Bruges was unable to figure out whether he had gained or lost on this transaction. All he knew was that there were now six hundred ducats standing to his credit in Venice. This money could not remain idle. In order to keep it running upon

the exchange, the merchant-banker had the choice between two alternatives: either he could resell the six hundred ducats in Bruges by drawing a bill on Venice or he could instruct his correspondent in Venice to buy a bill on Bruges and to remit.

Usually a remittance was more profitable than a draft.⁷³ Let us, therefore, suppose that the banker's correspondent in Venice had received instructions to remit and that he bought a bill on Bruges, let us say, at 52 groats per ducat with the proceeds of the first bill. This second bill matured in Bruges after two months. At the end of this period the merchant-banker in Bruges collected £130 groat, or the equivalent of six hundred ducats at 52 groats per ducat. He had consequently made a profit of £5 groat in the space of four months, since he had paid £125 for the first bill and received £130 for the second.⁷⁴ This profit arose from the difference of two groats between the rate of the ducat in Venice and in Bruges.

Let us now examine this case with greater scrutiny. If the correspondent in Venice had bought the second bill at 53 groats, the banker's profit would have been increased to three groats per ducat. At the rate of 51 groats in Venice, he would have gained only one groat per ducat. At the rate of 50 groats, he neither gained nor lost, since he paid and recovered the same number of groats for each ducat. At any rate below 50 groats, the Bruges banker suffered a loss instead of making a profit.⁷⁵

This analysis leads to the conclusion that the banker's profits or loss depended entirely upon the price of the second bill or, in other words, upon the margin between the rate of the ducat in Venice and in Bruges.⁷⁶ As long as the ducat was rated higher in Venice than in Bruges, the banker made a profit. He just broke even if the two rates were equal. But he lost as soon as the rate in Venice sank below the rate in Bruges. The same analysis may be applied to exchange between any two places where there existed an organized exchange. The equilibrium of the money market required that the rate of exchange be always higher in that one of the two places which gave its currency to the other. Under conditions of equilibrium, the écus of twenty-four and of twenty-two groats were always rated higher in Bruges than in London and in Barcelona, respectively. In the same way the rate of the franc in Paris was always above the rate of the franc in Bruges. This rule is of general validity, and there are no exceptions.⁷⁷

It may be well to keep in mind that exchange dealings in the Middle Ages were limited to time bills. The purchase of a bill necessarily involved an extension of credit. Since interest could not be charged openly, it was concealed in the rate of exchange. It is the presence of the time factor which explains the discrepancy between the rate of the ducat in Venice and in Bruges, for example. Any rise of the interest rate tended to raise the exchange rate in Venice and to

f. Quia in nomine domini Amen
 Nos Alberto e Bernardo degli Alberti
 mercatorum in Bruges
 1380
 Nos Alberto e Bernardo degli Alberti
 mercatorum in Bruges
 1380

Nos Alberto e Bernardo degli Alberti
 mercatorum in Bruges
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 Nos Alberto e Bernardo degli Alberti
 mercatorum in Bruges
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Nos Alberto e Bernardo degli Alberti
 mercatorum in Bruges
 1380
 Nos Alberto e Bernardo degli Alberti
 mercatorum in Bruges
 1380

BILLS OF EXCHANGE (RECTO)

The first bill was issued by the firm Alberto e Bernardo degli Alberti of Bruges; the second, by Guglielmo Barberi, an Italian merchant residing in Bruges; the third, by Bernardo degli Alberti of Venice. The text of the third bill is given on p. 74 n 82. From the Datini Archives, Prato (Tuscany).

lower the exchange rate in Bruges or, in other words, to increase the gap between the two rates. Conversely, any fall of the rate of interest tended to close the gap between the two exchange rates. This gap also tended to increase or to decrease with the remoteness of the maturity date. Thus bills payable at double usance were rated higher than usance bills in Venice and lower than usance bills in Bruges.

If the rate of interest had been the only factor which influenced the exchange rates, a buyer of bills would always have made a profit on transactions involving exchange and re-exchange. Unfortunately the exchange rates fluctuated in response to factors which were much more powerful than the rather weak influence of the rate of interest. These forces were often strong enough to upset temporarily the equilibrium of the money market. As a result of this instability the profits of a banker were never certain but were speculative, since they were determined by the un dependable oscillations of the exchange rates and the uncontrollable forces which operated in the money market.

The forces other than the rate of interest which regulated the course of the exchange were three: (1) changes in the monetary standard either at home or abroad, (2) disturbances in the balance of payments between any two places, and (3) speculation based on the expectations of the exchange-dealers or on the criminal attempts of manipulators who sometimes tried to corner the money market. To this list one should perhaps add the disturbing effects of regulations enacted by the public authorities who, especially in England and to a lesser extent in Flanders, made from time to time clumsy attempts to interfere with the freedom of the money market or of the exchanges. Those forces influenced the course of the exchange as they still do today and caused violent upward or downward movements of the rates. For example, a debasement of the currency in Flanders was bound to cause an immediate and sudden rise of the ducat, the florin, and the franc both in Bruges and abroad. At the same time the écu was likely to drop drastically not only in Bruges but also in London and in Barcelona. Disturbances in the balance of payments had a similar effect upon the exchange rates. If there was, for example, a shortage of ducats in Bruges for making payments in Venice, the ducat was bound to rise in Bruges until the demand equaled the supply. A shortage of ducats in Bruges frequently corresponded to an oversupply of Flemish currency in Venice. As bills on Bruges would be offered for sale in excessive quantities, their price was likely to fall and to cause a rise of the ducat in Venice, too.⁷⁸ Moreover, the rise of the ducat would probably affect all the other exchange rates because of arbitrage transactions and the interdependence of all markets.⁷⁹

Speculation caused the exchange rates to deviate from their normal level, but such deviations did not outlast the first change in the temper of the money market. As for government regulations, they were usually designed to protect the national currency, to prevent an outflow of bullion, or to attract specie from

change
of
interest
rates

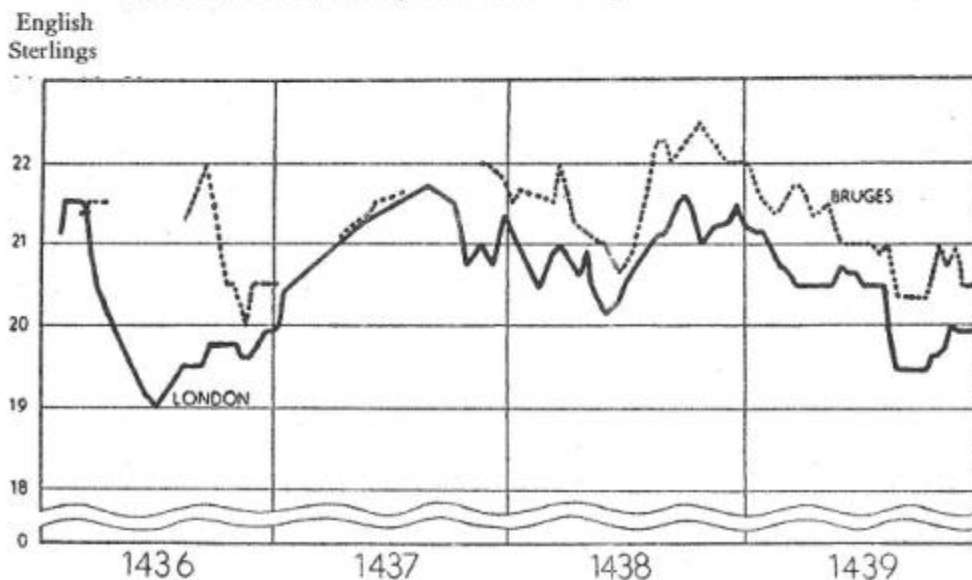
abroad. Needless to say, the results were often the opposite of those that were intended.

All these forces tended to pull the exchange rates up or down and increased the risks which were run by takers and deliverers alike. Violent exchange fluctuations, however, did not occur every day, and the money market was in equilibrium most of the time. As already explained, the lender was bound to gain in a stable market. The result was that the bankers, who were mostly lenders, made a profit in the majority of cases. However, it could and did happen that they lost because adverse exchange fluctuations sometimes overruled the stabilizing influence of the rate of interest.

The correctness of this analysis is fully confirmed by the business records of the merchant-bankers and the actual behavior of the exchange rates. The account books of the Datini branch in Barcelona, those of the Medici bank in Bruges, and those of the Borromei bank in London show clearly that profits originated in exchange speculation, and not in fixed interest charges, and that not all exchange transactions were profitable. However, the profits outbalanced the losses.⁸⁰ There are almost no statistical data available on mediaeval exchange rates, but I have been able to make use of the only more or less continuous series that exists. The data are plotted on Chart I. As this chart reveals, the écu of twenty-four groats was rated higher in Bruges than in London. According to

CHART I

RATE OF ECU OF 24 GROATS, FLEMISH CURRENCY, IN BRUGES AND LONDON



Source: Gerolamo Biscaro, 'Il Banco Filippo Borromei E Compagni (1436-1439)', *Archivio Storico Lombardo*, XL (1913), 375-377.

the few surviving records of the Medici bank, the exchange rate of the ducat in Bruges usually remained below the same rate in Venice.⁸¹ As already explained, the ducat was quoted in Flemish groats both in Bruges and in Venice. The actual behavior of mediaeval exchange rates thus confirms the correctness of the foregoing analysis.

The merchant-bankers always operated on two places at least and sometimes on three. There are many examples of three-cornered exchange transactions in the only surviving fragment of a ledger of the Medici bank in Bruges (1441). Earlier examples are found in the Datini records. Datini's correspondents in Bruges frequently used their credit balances in Barcelona to make remittances to Italy. In other cases, the same merchant-bankers allowed their correspondents in Italy to draw on Barcelona. For example, on February 21, 1400, the firm Bernardo degli Alberti of Venice drew a bill of four hundred ducats at 16s. 3d. Barcelonese per ducat on the Datini firm in Barcelona with the request to charge the amount of this bill, £333 6s. 8d. Barcelonese, to the Alberti of Bruges.⁸² The Orlandini of Bruges followed the same policy as the Alberti. On March 26, 1400, the Orlandini of Florence drew a bill of three hundred florins on Datini's *fondaco* in Barcelona with instructions to debit their Bruges office.⁸³ On another occasion, the Datini firm remitted three hundred florins to Florence and charged £228 2s. 6d. Barcelonese against the Orlandini of Bruges for this remittance.⁸⁴ In a letter of January 9, 1400, the same Orlandini instructed the Datini in Barcelona to remit one thousand florins to Genoa, one thousand ducats to Venice, and one thousand florins to Florence, and to cover these transactions by drawing on Bruges.⁸⁵ Apparently it was less profitable to remit directly to Italy than indirectly by way of Barcelona. In another letter dated February 26, 1400, the Orlandini strongly expressed their dissatisfaction with their Barcelona correspondents because they kept balances idle and failed to remit either to Bruges or to Italy (*nostro paese*) under the pretext of not finding any suitable takers.⁸⁶ *

If these facts are typical, they seem to suggest that the balance of payments between Flanders and Catalonia was favorable to the former so that bankers' balances tended to accumulate in Barcelona. On the other hand, the balance of payments between Flanders and Italy was probably favorable to the latter. The records of the Medici branch in Bruges indicate that conditions were still the same forty years later. In any case, the Medici of Bruges were constantly drawing on Barcelona to replenish their balance in ducats with the Medici of Venice.

Contrary to the common belief, it is untrue that mediaeval bills were usually drawn by an exporter on his customer abroad in settlement of a *bona fide* commercial transaction.⁸⁷ Such a view, to put it bluntly, is in contradiction with the facts and disregards the great difference between mediaeval and modern business practices. Mediaeval merchants were commonly 'adventurers' who sent goods to correspondents abroad in the hope that the latter would be able to sell

the consignments at a profitable price. For example, Guglielmo Barberi, who exported Flemish cloth to Spain, consigned his shipments to the Datini firm which was his agent in Barcelona. Barberi took up money in Bruges by selling bills on his agent in Barcelona and expected him to pay the bills with the proceeds of the cloth. Sometimes Barberi drew before all the goods were actually sold, and the Datini firm was forced to give him credit. In any case, mediaeval bills were as a rule drawn by a principal on his agent or by an agent on his principal.

Not all mediaeval bills of exchange were commercial bills. A large proportion of bills were what might be called finance bills. They were issued by bankers to adjust international balances or to make a profit on arbitrage. This was the rule with exchange dealings involving three places instead of two. Another fact is sometimes overlooked: merchants who did not want to sell their wares at prevailing prices often raised the funds necessary to carry inventories by selling foreign drafts. In other instances merchants financed their trade with one country by drawing bills on another. A striking example is the case of Andrea Barbarigo, a Venetian merchant, who financed his trade with the Levant by drawing bills on London, Bruges, and Geneva.⁸⁸ It is not surprising that the volume of exchange transactions was much larger than the volume of trade. I have always been impressed by the fact that the account books of mediaeval merchant-bankers with which I am acquainted contain many more items relating to bills than to dealings in commodities.

As Bernardo Davanzati has pointed out, the business of exchange was an art which was practiced by the merchant-bankers who delivered money on the exchange not because they needed funds elsewhere but because they were thus able to lend at a profit without violating the ban of the Church against usury.⁸⁹ An important consequence was that the extension of commercial credit was tied to the exchange, and that exchange rates were very sensitive to any change in the conditions of the money market. The existence of recurring movements of contraction and expansion is attested by the mediaeval handbooks on commerce. They use the expressions *strettezza* when referring to a tight money market and *larghezza* when referring to an easy money market. The same terms occur again and again in the correspondence of the merchant-bankers. Stringency was usually caused by a shortage of loanable funds relative to the demand for short-term credit. Such market conditions tended, of course, to depress the price of bills because deliverers were willing to lend only on their own terms. On the other hand, *larghezza* meant that money was cheap, that bills were sold at a high price, and that deliverers were seeking reliable takers.

A low price of bills corresponded either to a low or to a high exchange depending upon the way in which the exchange rates were quoted. When the rate was based on a foreign coin, a low price of bills also corresponded to a low

Commercial bills
vs
finance bills

Summary

Price of bills =
Volume of
money sent

exchange. When the rate was based on a domestic coin, a low price of bills corresponded to a high exchange. The same rules, in reverse, apply to a high price of bills. In Bruges, a tight money market and a rising rate of interest was likely to cause a fall of the ducat, the florin, and the French franc and a rise of the two imaginary écus. *Ceteris paribus*, an easy money market had the opposite effect, that is, of raising the rate of the ducat, the florin, and the franc in Flemish currency and of lowering the rate of the two écus in English and Barcelonese currency.

The merchant-bankers were skilled in their art and watched carefully the course of the exchange and the trend of the market both at home and abroad. According to Uzzano, an exchange-dealer ought to be well informed about trade practices, mint regulations, and market conditions so that he might decide whether, under given conditions, it was more profitable to remit by bill of exchange or to ship specie.⁹⁰ There is no doubt that the merchant-bankers followed Uzzano's advice. As much as possible, they tried to be deliverers, or lenders, where money was scarce and to be takers, or borrowers, where it was abundant and where bills sold for a good price.⁹¹ In most places the money market tended to contract at certain times of the year and to expand at other times. The pattern of these seasonal variations was well known to the bankers and is described in detail in the mediaeval handbooks. In Bruges money was usually dear in March before the fair and in June and December before the sailing of the galleys. The tension usually eased during the intervening months, especially during August and September when many merchants from other towns in the Low Countries and from Germany came to Bruges to buy supplies and brought in a flow of specie.⁹²

Chart I shows that the exchange rate actually followed the seasonal pattern described by the handbooks for merchants. Both in 1438 and in 1439 the money market was presumably stringent late in the autumn, since the rate of the écu rose in Bruges and dropped in London, thus increasing the distance between the two curves. The same happened in both years during Lent. In March, 1438, the écu did not rise much in Bruges but there was a sharp drop in London. The following year, the écu actually rose in Bruges while it continued to fall in London. According to the chart, the distance between the rate of the écu in Bruges and the rate of the écu in London was less in mid-summer and in January than at any other season in both 1438 and 1439. It is regrettable that the available statistical data are so scanty. It is probable, however, that more complete data, if they were available, would not invalidate the preceding analysis or contradict the observations of contemporaries who had practical knowledge of the mechanism of the money market.

Summary

NOTES TO CHAPTER 4

¹Grunzweig, *Correspondance*, I, 55 f.

²*Ibid.*, p. 57: Article Four of the partnership agreement.

³Bernardo Davanzati, 'Notizia de' cambi a M. Giulio del Caccia, dottor di Legge,' *Scrittori classici italiani di economia politica, Parte Antica*, II (Milan, 1804), 55.

⁴The text of this document has been published in full by Fris, 'L'historien Jean Villani en Flandre,' *op. cit.*, pp. 4-6 (cf. Davidsohn, *Forschungen*, III, 96, No. 502). On Tommaso Fini, see V. Fris, 'Note sur Thomas Fin, receveur de Flandre,' *Compte rendu des séances de la Commission Royale d'Histoire*, LXIX (1900), 8-14; Bigwood, *Régime*, I, 202-15, and *passim*.

⁵These men were all partners in the Peruzzi Company. See Saporì, 'Storia interna,' *op. cit.*, p. 20, No. I.

⁶Goldschmidt, *op. cit.*, pp. 417-30.

⁷Renée Doehaerd, *Les relations commerciales entre Gènes, la Belgique et l'Outremont d'après les archives notariales génoises aux XIIIe et XIVe siècles* (3 vols., Brussels, 1941). A list of such contracts is given in the index (*ibid.*, III, 1284-85).

⁸*Ibid.*, III, 1085, No. 1788. Cf. III, 1061, No. 1757.

⁹Dr Doehaerd (*op. cit.*, I, 129) comes to the same conclusion. She correctly points out that such a contract involves *cambium et recambium*, or exchange and rechange. I would add that the contract eliminated all element of risk due to exchange fluctuations by stipulating in advance the rate at which returns from Bruges to Genoa would be made. There is nothing to distinguish such a contract from a *mutuum* or straight loan.

¹⁰Renée Doehaerd, 'Les galères génoises dans la Manche et la Mer du Nord à la fin du XIIIe et au début du XIVe siècle,' *Bulletin de l'Institut historique belge de Rome*, XIX (1938), 1-76.

¹¹Doehaerd, *Relations commerciales*, III, 1057, No. 1754. Similar contracts are listed in the index under the heading 'Change maritime,' III, 1284.

¹²Davidsohn, *Forschungen*, III, 180, No. 899.

¹³Doehaerd states correctly that the instrument was still in the form of a *reconnaissance de dette* or an acknowledgment of debt (*Relations commerciales*, I, 128).

¹⁴A common formula was the following: 'Tibi vel tuo certo misso per me vel meum missum dare et solvere promitto' ('I promise to give and to pay either myself or through my agent to you or to your accredited agent').—Doehaerd, *Relations commerciales*, II, 305 f., No. 577, and *passim*. Sometimes the contract stipulated that the debt was payable to the creditor or to his agent, bringer of the instrument ('promitto tibi vel tuo misso danto mihi hanc cartam') as in the document of 1207 (?) first published incorrectly by Canale.—Goldschmidt, *Universalgeschichte*, pp. 423 f. According to Goldschmidt, the *cambium* contract contained frequently 'a passive and an active order clause' (*aktiver und passiver Orderklausel*).—*Ibid.*, p. 433. In my opinion this terminology is simply misleading.

¹⁵Sayous, 'L'origine de la lettre de change,' *op. cit.*, p. 95. For example, a contract of 1244 stipulates that it is payable to the original lender, or to his certain attorney, or to any one of his partners (Doehaerd, *Relations commerciales*, II, 266, No. 507). In this connection one may also consult the section on notarial contracts in Abbott P. Usher, *The Early History of Deposit Banking in Mediterranean Europe* (Cambridge, Mass., 1943), I, 61-70. I do not wish to discuss further this controversial matter which is outside the scope of this study.

¹⁶Edler, 'Lettera di cambio' and 'Lettera di pagamento,' *Glossary*, pp. 154 f.

¹⁷The text of these instruments is found in notarial protests published by Jakob Strieder *Aus Antwerpener Notariatsarchiven; Quellen zur deutschen Wirtschaftsgeschichte des 16. Jahrhunderts* (Stuttgart, 1930), Nos. 132, 174, 192, 216, 237, and *passim*. In nearly all cases the contracting parties are Flemish, Hanseatic, or High-German merchants and the language used in the instruments is invariably either Flemish or a form of German. These documents should be compared with the Italian bill also published by Strieder (*ibid.*, p. 53, No. 47).

In my opinion these German and Flemish credit instruments have been unjustly neglected. Despite their unconventional wording, they should be considered as genuine bills of exchange.

¹⁸Davidsohn, *Geschichte*, IV², 220, and *Forschungen*, III, 191, No. 962.

¹⁹The thesis that there were two documents, a principal *instrumentum* and a complementary letter, was first propounded by the German jurists, notably by Goldschmidt (*Universalgeschichte*, pp. 433-36). This thesis was later challenged by Sayous ('L'origine de la lettre de change,' *op. cit.*, p. 103) and by Enrico Bensa, but it was supported by Alessandro Lattes in his article 'Genova nella storia del diritto cambiario italiano,' (*Rivista del diritto commerciale*, XIII¹ [1915], p. 188), in his review of Bensa's *Francesco di Marco* (*ibid.*, XXVII¹ [1929], 101 f.) and in his 'Note per la storia del diritto commerciale,' (*ibid.*, XXXI¹ [1933], 535-40). Further evidence is given by Doehaerd, *Relations commerciales*, I, 131, and III, 617-18, Nos. 1126, 1127.

²⁰Numerous examples will be found among the bills published by Enrico Bensa, *Francesco di Marco da Prato: notizie e documenti sulla mercatura italiana del secolo XIV* (Milan, 1928), pp. 321-51.

²¹Goldschmidt, *Universalgeschichte*, p. 457.

²²A polemic has raged over this point among the jurists (Goldschmidt, Schaube, Lattes) in which the French historian Sayous joined. I do not see why they wasted so much time and ink in discussing the obvious, but I do see that the lawyers have done their best to blur and to confuse the issues.

²³As was pointed out by Sir Thomas Gresham in the sixteenth century! The text is quoted by Tawney in his introduction to Thomas Wilson, *A Discourse upon Usury* (New York, 1925), p. 72.

²⁴This was often the case between two places within the same realm. In the fifteenth century, for instance, Montpellier and Paris, and Avignon and Paris, exchanged one franc for one franc and a certain percentage more or less according to the conditions of the money market. See *El libro di mercatantie et usanze de' paesi*, ed. Franco Borlandi ('Documenti e studi per la storia del commercio e del diritto commerciale italiano,' No. VII; Turin, 1936), p. 120: 'Chostumi di Vingnione: per Parigi vi si chanbia franchi contra a franchi.'

²⁵The text of this bill is given by Goldschmidt, *op. cit.*, p. 441. It was first published by Francesco Bonaini (*Statuti inediti della città di Pisa dal XII al XIV secolo* [Florence, 1857], III, 201 ff.) and later by Heinrich Brunner ('Beiträge zur Geschichte und Dogmatik der Werthpapiere: I. Brügger Schöffensprüche zur Geschichte des Wechselrechts im fünfzehnten Jahrhundert,' *Zeitschrift für das gesamte Handelsrecht*, XXII [1877], 8 ff.); by C. Freundt (*Das Wechselrecht der Postglossatoren* [Leipzig, 1899-1909], I, 24); and by André-E. Sayous ('Note sur l'origine de la lettre de change et les débuts de son emploi à Barcelone [XIV^e siècle], *Revue historique de droit français et étranger*, 4th series, Vol. XIII [1934], p. 319).

²⁶The Italian term is *vantaggio*, from which the term 'agio' is obviously derived. Edler, *Glossary*, p. 310.

²⁷One must be careful not to call this profit interest. Probably Pisan money was at a premium in Avignon. The 4½ per cent agio included both premium and interest.

²⁸This change in meaning has been so misleading that Edler (*Glossary*, pp. 99 and 222) gives wrong definitions for *datore* and *prenditore*. *Prenditore* should be defined as drawer or seller of a bill instead of purchaser and *datore* should be defined as remitter, deliverer, or buyer of a bill instead of drawer. The confusion in terminology has been increased by the German jurists, especially Goldschmidt, who coined the terms *Wechselnehmer* and *Wechselgeber*. These terms were unknown to the Middle Ages and should be avoided. In mediaeval sources, the *prenditore* is always the person who takes up the money given, or lent, by the *datore* and makes out the bill. On the other hand, the *datore* is always the party who gives, or lends, the money and receives the bill. *Prenditore*, consequently, corresponds to what the Germans understand by *Wechselgeber* and *datore*, to what they mean by *Wechselnehmer*.

²⁹Here are some of the most common terms used in Italian records of the fourteenth and fifteenth centuries relating to the bill of exchange:

dare a cambio: to buy a bill, to invest money on the exchange or in the purchase of bills.
mandare debito: to draw, to be drawn on.
mandare a pagare: to draw (supplanted by *trarre* in the fifteenth century).
mandare a ricevere: to remit, to send a bill for collection to a correspondent.
prendere (or pigliare) a (or per) cambio: to take up money, or to borrow, by selling bills.
dare compimento: to pay or to honor a bill.
carestia or strettezza: scarcity of money, tight money market.

dovizia or larghezza: abundance of money, easy money market. A few of these definitions do not agree with those given by Florence Edler in her *Glossary* but she has come to the conclusion, after a careful study of the Datini letters and account books, that the new definitions given here, including those of *datore* and *prenditore*, are the correct ones.

³⁰Raymond de Roover, 'What is Dry Exchange? A Contribution to the Study of English Mercantilism,' *The Journal of Political Economy* [hereafter referred to as *JPE*], LII (1944), p. 252.

³¹'Quicquid sorti accidit usura est,' Decretum Gratiani, pars II, causa XIV, quest. III, c. iii. E. Friedberg (ed.), *Corpus Juris Canonici*, I (Leipzig, 1879), 735.

³²T. P. McLaughlin, 'The Teachings of the Canonists on Usury (XII, XIII and XIV centuries),' *Mediaeval Studies*, I (1939), 101. The other gratuitous contract was the *commodatum*. If a *commodatum* was not gratuitous, it became a *locatio* which, however, was not a usurious type of contract.

³³Tawney, Intro., Wilson, *Discourse*, p. 109. The gain was 'certain' in the sense (1) that the lender assumed no risk and that the loan yielded a profit to him whether the borrower gained or lost in investing the proceeds of the loan and (2) that usury usually was computed on the basis of a given percentage a year, that is to say, it varied proportionately to the duration of the loan (*ratione temporis*).

³⁴This was the opinion of Thomas de Vio, Cardinal Cajetan, among others. Wilhelm Endemann, *Studien in der romanisch-kanonischen Wirtschafts- und Rechtslehre* (Berlin, 1874-83), I, 150.

³⁵This was the prevailing opinion with a few exceptions including the orthodox Henricus de Segusia (Hostiensis) and, much later, the heretical Dr Thomas Wilson.

³⁶Usher (*Early History of Deposit Banking*, p. 26) states that 'discounting could not develop until the doctrine of negotiability was established.' This statement is true, but it should be added that the opposition of the Church to the taking of interest was another factor which prevented this development. The merchants could not and did not openly defy the canons of the Church but were resourceful in finding new forms of contract which were not objectionable. Cf. Gennaro Mondaini, *Moneta credito banche attraverso i tempi* (2d ed.; Rome, 1942), p. 127.

³⁷One of the earliest of these bills has been published by Usher (*Early History*, p. 104) and republished with his kind permission in my article, 'Le contrat de change depuis la fin du treizième siècle jusqu'au début du dix-septième,' *RBPB*, XXV (1946-47), 112-13. These bills were found by me in 1938 after considerable search among hundreds of other bills preserved in the Antwerp Municipal Archives. Apparently endorsed bills were still scarce in 1610 but the practice of endorsing bills spread rapidly within the next twenty or thirty years. I found one example after another of endorsement among the bills dating from 1640 onward, while I was selecting the samples which I photographed for Professor Usher (*Early History*, p. xii).

³⁸There is no rule without exception. One of the sixteenth-century bills published by Strieder (*op. cit.*, p. 165, No. 237) is payable 'to Johan van Kasteren or the bringer of the bill' ('Johan van Kasteren oft tom brynger der billen'). It is significant that the Lucchese merchants protested in 1565 or thereabouts to the Antwerp municipal authorities against the use of the payable-to-the-bearer clause in bills of exchange and other credit instruments. Jan A. Goris, *Les colonies marchandes méridionales à Anvers de 1488 à 1567* (Louvain, 1925), pp. 338-39. I do not wish to go further into the legal aspects of this controversial subject of negotiability, since it is outside the scope of this study. However, I would like to make two re-

marks in this connection. One, I am not ignorant of the fact that the bearer clause occurs frequently in the great variety of credit instruments—bills of debt, chirographs, letters obligatory, recognisances, bonds, and other obligations—which were used in the Northern and Baltic trade. I might refer to the chirographs of Ypres and Nivelles published by Des Marez and by Bigwood (*Régime juridique*, I, 507-15). The Italian merchant-bankers adapted themselves to the business practices followed in the Northern trade and made advances secured by such instruments. The Borromei in London, for example, lent money to Robert Utingham, mayor of the Staple, on instruments payable 'to the said Utingham or to the bearer' ('a Robert Utingham vel al portator').—Biscaro, *op. cit.*, pp. 364-65 and *passim*. Two, even in the Low Countries the status of the bearer was uncertain at law. At best the insertion of the payable-to-the-bearer clause enabled the bearer to sue a recalcitrant debtor in his own name without power of attorney from the original creditor. But all courts did not allow such a procedure and some required a power of attorney despite the presence of the bearer clause. The bearer, in any case, was not a holder in due course. In other words, defenses opposable to the original creditor were also opposable to the subsequent assignee or to the bearer of the instrument.

³⁹This statement is in agreement with that of Alessandro Lattes, *Il diritto commerciale nella legislazione statutaria delle città italiane* (Milan, 1884), p. 181: 'Di quelle formule più o meno perfette al portatore, che sono così frequente in altre carte del Medio Evo . . . manca quasi ogni esempio per le cambiali.' There are apparently two or three exceptions among the bills of exchange published by Bensa, but upon closer inspection it appears that the bills in question are actually letters of credit issued to travellers rather than real bills of exchange. One of the so-called bills is payable to a cardinal or to his proxy. Bensa, *Francesco di Marco*, p. 323, Nos. 16, 17; p. 326, No. 20.

⁴⁰The Churchmen even argued that in matters of exchange the just price was the market price, or the current rate of exchange. It was lawful to buy bills at the current price or above but not below. Those who bought bills below the current price were taking advantage of the borrower's need and were suspect of usury.

⁴¹Bigwood, *Régime*, I, 653: 'Il n'y eut pas, à proprement parler, de commerce de change, et Bruges ne devint pas une place de paiements.' This statement is simply false and is contradicted by the evidence which the author himself gives in a footnote. The fact that papal revenues collected in Germany and Poland were transmitted to Avignon by way of Bruges proves by itself that this city was an important financial center.

⁴²There are plenty of examples in the business letters of the Medici branch in London and in those of Datini's correspondents in Bruges. The Medici letters only are available in print.—Grunzweig, *Correspondance*, pp. 19, 24, 26, 98. Exchange rates are quoted in the following way (*ibid.*, p. 26): 'Per costì 36 $\frac{3}{4}$, Vinegia 40 $\frac{3}{4}$, Bruggia 19 $\frac{3}{4}$ in $\frac{3}{4}$, Genova [and not Ginevra] 22 $\frac{3}{4}$.' This sentence means: Florence, 36 $\frac{3}{4}$ sterlings per florin, Venice 40 $\frac{3}{4}$ sterlings per ducat, Bruges from 19 $\frac{3}{4}$ st. to 19 $\frac{3}{4}$ st. per écu of 24 groats, Genoa 22 $\frac{3}{4}$ st. per Genoese florin.

⁴³Pegolotti, *op. cit.*, p. 243.

⁴⁴*Ibid.*, pp. 239, 247.

⁴⁵Florence, State Archives, Mediceo avanti il Principato, filza 134, No. 2; Fragment of a ledger belonging to the Bruges branch of the Medici bank, fol. 231.

⁴⁶The Datini Archives in Prato, Italy, are the most valuable collection for mediaeval business and economic history. The wealth of material contained in this collection is almost unbelievable. There are more than five hundred account books, over three hundred bundles of business letters—each package containing several hundred letters—and countless other commercial documents ranging from insurance policies to small slips of paper on which were jotted down the quotations of exchange rates and the prices of commodities. Historians who have tried to work in the Datini Archives have been overwhelmed by the mass of material. Only a small part has been explored as yet. The best work on Datini is Bensa, *Francesco di Marco da Prato*. The only publication in English is Robert Brun's article, 'A Fourteenth-Century Merchant of Italy: Francesco Datini of Prato,' *Journal of Economic and Business History*, II (1930), 451-66. The Datini Archives suffered no damage during World War II.

⁴⁷Prato (Tuscany), Datini Archives, No. 1146, Cambiali:
In the name of God, amen.

December 12, 1399

Pay at usance by this first of exchange to Domenico Sancio six hundred écus at 10s. 5d. [barcelonese] per ∇, which ∇600 at 10s. 5d. per écu are for the value received [here] from Jacopo Gosco, and charge them to our account. God be with you.

Giovanni Orlandini and Piero Benizi & Co.
in Bruges

Accepted January 11, 1400

[Verso:] Francesco da Prato & Co. in Barcelona

First [of exchange]

⁴⁸The entry by which the amount of £312 10s. Barcelonese was charged to the firm Orlandini and Benizi, of Bruges, reads as follows: 'E deon dare a di 11 di genaio ∇600 a sol. 10 den. 5 per ∇ trasonci per uso in Domenicho Sancio in questo a c. 293 debino avere, per altre n'ebono da Giachopo Ghoscho.....£312.10.0'
Datini Archives, No. 802, Libro nero D, fol. 283v.

⁴⁹The usual formula was: 'Avisamovi di ∇ [amount] vi traemo in [name of payee] a s.— d.— per ∇ i quali al termine paghate e ponete a conto per noi.' Another formula was: 'V'abbiamo tratto ∇ [amount] a sol.— den.— per scudo per uso in [name of payee] per la valuta a di [date of bill] da [name of remitter]. Ponete a conto per noi.'

⁵⁰Giovanni di Antonio da Uzzano, *La pratica della mercatura* (Vol. IV of Gian-Francesco Pagnini, *Della Decima*; Lisbon-Lucca, 1766), pp. 102 f.

⁵¹Bensa, *Francesco di Marco*, p. 350.

⁵²*El libro di mercatantie*, p. 15. The same figure of twenty days after sight is given in a manuscript handbook: Florence, Biblioteca Nazionale, Codice Magliabechiano, XI, 97, Abaco Benedetto [after 1474], fol. 60v.

⁵³Pegolotti, *Pratica*, p. 195; *El libro di mercatantie*, p. 10.

⁵⁴Uzzano, *op. cit.*, pp. 100-103. There may be an exception in the case of Genoa. According to the *Libro di mercatantie* (p. 13), usance bills drawn from Bruges on Genoa were payable two months from date, but those drawn from Genoa on Bruges matured ten days after sight. Pegolotti, however, states that the usance was two months in both directions (*op. cit.*, p. 195).

⁵⁵Uzzano, *op. cit.*, p. 101. According to the *Libro di mercatantie*, exchange transactions between Bruges and Montpellier were very rare (*radissimi*).

⁵⁶The bill was issued in favor of Giovanni Gharone. His account was credited upon acceptance of the bill:

Giovanni Gharone dè avere a di 30 d'agosto [1398] ∇ cinquecento a soldi 9 denari 10 [per] ∇, promettimo loro per lettera da Brugia di Giovanni Orlandini e compagnia, in questo carta 199 debino [dare]. Sono per altri ∇500 da Antonio Salella....£245 s.16 d.8

The entry relating to the payment of the bill reads as follows:

Giovanni Gharone dè dare a di primo d'ottobre [1398] £ dugientoquarantacinque s. 16 d.8 disonli per noi Giame di Pue di Lucho e Giovaneto Savasso [money-changers] in questo carta 223 debi avere.....£245 s.16 d.8

As this entry shows, Gharone was paid by credit to his bank account. Datini Archives, No. 801, Barcelona Branch, Libro Verde C, fol. 213.

⁵⁷When the bill reached Barcelona, the Datini firm at once charged the account of Bibero, the payor, and credited the Orlandini. On January 24, the Datini firm was notified that it had received credit at the bank of Pere Brunet, a Barcelonese money-changer (called Piero Brunetto by the Italians). Consequently, his account was charged and Bibero's account was discharged. Datini Archives, No. 802, Barcelona Branch, Libro nero D, fols. 284, 297. The entries are quoted in the footnotes to my article 'Early Accounting Problems of Foreign Exchange,' *The Accounting Review*, XIX (1944) 405, nn. 27, 30.

⁵⁸This practice was also followed in Genoa. An early example (1315) is given by Doehaerd, *Relations commerciales*, III, 1136, No. 1853.

⁵⁹Datini Archives, No. 1146: Cambiali:

In the name of God

February 25, 1400

Pay by this second of exchange, if you have not paid by the first, at usance to yourselves £420 Barcelonese which 420 pounds are for the value received here from Giovanni Orlandini, Piero Benizi, and Partners. Make good payment and charge to my account. May God protect you.

Guglielmo Barberi
Greetings from Bruges

[Verso:] Francesco di Marco and Partners
in Barcelona

Second

⁶⁰According to a letter of the Orlandini dated March 17, 1400.

⁶¹Although protests were sometimes made even when the payor and payee were the same, as appears from an entry in the ledger of the Medici bank in Bruges. They caused a bill drawn by Nicolo di Bartolomeo of Venice and payable to themselves to be protested by a Bruges notary. The protest charges were debited to the Medici branch of Venice which apparently had furnished the value. Florence, State Archives, Mediceo avanti il Principato, Filza 134, No. 2. See de Roover, *Medici Bank*, p. 80.

⁶²Goldschmidt (*op. cit.*, p. 443, n. 131) states correctly that bills containing this formula were credited by the payor to the remitter, but such a statement does not explain anything. Bensa (*Francesco di Marco*, p. 158) also deals with the problem and states that such bills were paid by compensation, which is true but does not clear up the matter.

⁶³The text of the entries in the ledger is given in my article 'Early Accounting Problems,' *op. cit.*, p. 405, n. 34.

⁶⁴An example is given by Bensa, *Francesco di Marco*, p. 329, No. 27.

⁶⁵Doehaerd, *Relations commerciales*, III, 1085, No. 1788.

⁶⁶Pegolotti, *op. cit.*, p. 247.

⁶⁷The figures given by Pegolotti are correct and can be easily checked by using the Chain Rule:

$$\begin{aligned} 1 \text{ real} &= 24 \text{ groats} \\ 12 \text{ groats} &= 1 \text{ florin} \\ 1 \text{ florin} &= 29s. \text{ a fiorino} \end{aligned}$$

These equations give the result that one real was worth 58s. a fiorino. Different results are obtained for different values of the florin.

⁶⁸My sources on exchange quotations in the fifteenth century are the handbook of Uzzano and *El libro di mercatantie*, sometimes attributed to Giorgio Chiarini, especially p. 132.

⁶⁹Uzzano, *op. cit.*, pp. 141, 149, 149-50; *El libro di mercatantie*, pp. 5, 15-16; and Florence, Biblioteca Nazionale, Ms. Palatino, No. 573, Abaco Benedetto, fol. 54: 'A Bruggia si fanni e' paghamenti a lire, soldi, e denari . . . Ed è vi 2 ragioni di schudi immaginati che l'uno vale grossi 24 e l'altro grossi 22.'

⁷⁰*El libro di mercatantie*, p. 17. Uzzano does not mention the fairs of Geneva.

⁷¹Yves Renouard, *Les relations des Papes d'Avignon et des compagnies commerciales et bancaires de 1316 à 1378* (Paris, 1941), p. 211.

⁷²In actual practice merchant-bankers determined their profits by using a bookkeeping device and by opening to each of their correspondents abroad two accounts, one *Nostro* and one *Vostro* account. This question is so technical that full development would require several pages and interest very few readers who are not accountants. Those who are not discouraged by a technical discussion will find that the matter is fully explained in my article, 'Early Accounting Problems of Foreign Exchange,' *The Accounting Review*, XIX (1944), 381-407.

⁷³A draft was profitable only in the case of a rising exchange in Bruges and unprofitable

in the case of a falling exchange. Moreover, in the case of a draft, the lender had no speculative advantage over the borrower.

| | |
|--|----------------|
| ⁷⁴ Proceeds of the second bill in Bruges, 600 ducats at 52 groats per ducat..... | £130 gr. |
| Deduct: cost of the first bill, 600 ducats at 50 groats per ducat | £125 gr. |
| Gross profit, 2 groats per ducat..... | <u>£ 5 gr.</u> |

⁷⁵The same analysis is presented in my article, 'Le contrat de change depuis la fin du treizième siècle jusqu'au début du dix-septième,' *RBPH*, XXV (1946-47) 111-128.

⁷⁶It is the existence of this margin which gave to the lender a speculative advantage over the borrower.

⁷⁷A complete analysis of 'the theory of interest in exchange' will be found in my article, 'What is Dry Exchange? A Contribution to the Study of English Mercantilism,' *JPE*, LII (1944), 250-66. This article deals with the exchange between London and Antwerp in the sixteenth century but the same analysis may be applied to mediaeval cases by simply changing the factual data.

⁷⁸A fall in the price of bills corresponded to a falling exchange in Bruges and to a rising exchange in Venice.

⁷⁹This analysis, of course, is incomplete, but I deal here with well-known phenomena that are explained in almost any book on economic theory.

⁸⁰The question is so technical that it is impossible to go into more detail here but a full description of the accounting procedure is given in my article, 'Accounting Problems of Foreign Exchange,' *op. cit.*, 381-407. In my opinion the evidence presented in this article is decisive.

⁸¹Raymond de Roover, *The Medici Bank*, p. 36.

⁸²Datini Archives, No. 1146:

Al nome di Dio a dì 21 di febraio 1399 [1400]
Pagate per questa prima a usanza a Andrea de' Pazzi e compagnia £ trecento trentatre s.6 d.8 barzalonesi, cioè £333 s.6 d.8, per £ quaranta grosso da Manette Davanzati e compagnia e ponete a chonto de' nostri di Bruggia e R. [rimandate?]. Cristo vi guardi.
Bernardo Alberti e compagnia
in Vinegia

Accettata di 30 marzo 1400

[On the back:] Franciescho di Marcho e compangni
in Barzalona

Prima

The exchange rate is not explicitly stated but appears to be 16s. 8d. Barcelonese per ducat. The *lira grosso* (i.e., *lira di grossi*) mentioned in the bill was equal to ten ducats.

⁸³Datini Archives, No. 1146. The bill in question was for 300 florins at 15s. 8½d. Barcelonese per florin, or £235 15s. Barcelonese. The bill was in favor of Antonio d'Allesandro & Co. in Barcelona, and the value had been received in Florence from Filippo di Piero Rinieri. The bill contains the sentence: 'Ponete a conto de' nostri di Bruggia.'

⁸⁴Datini Archives, No. 802, Libro Nero D, fol. 284:

Giovanni Orlandini e Piero Benizi e compagni di Brugia.....
E deon dare a dì 7 di genaio [1400] F. 300 rimetterno loro a Firenze a loro per uso in Diamante e Altobiancho degli Alberti e compagni per valuta a soldi 15 d.2½ per fiorino qui a Nicholaio degli Alberti e Filipozo Soldani in questo carta 288.....£228.2.6
According to this entry the bill was drawn by Nicolaio degli Alberti and Filipozo Soldano in Barcelona on Diamante and Altobiancho degli Alberti of Florence and payable to the Orlandini in the same city. The Datini firm bought the bill for account of the Orlandini firm in Bruges at the rate of 15s. 2½d. Barcelonese per florin.

⁸⁵Datini Archives, No. 853: Fondaco di Barcellona, Carteggio di Bruggia, II. The instructions are repeated in later letters dated February 9 and March 13, 1400.

⁸⁶*Ibid.* Orlandini letter of March 4, 1400. Similar complaints were expressed in a later letter dated January 9, 1401 (*ibid.*, No. 854: Carteggio da Bruggia, III). Of course, idle balances did not yield any profits.

⁸⁷It is untrue, as Bigwood states (*Régime juridique*, I, 653), that 'il n'y eut guère à Bruges que des opérations de change consécutives ou connexes à des opérations commerciales.'

⁸⁸Frederic C. Lane, *Andrea Barbarigo, Merchant of Venice, 1418-1449* (Johns Hopkins University Studies in Historical and Political Science, Series LXII, No. 1; Baltimore, 1944), pp. 25-26, 188-92. As Barbarigo borrowed by selling bills, it is no wonder that he usually lost on his exchange dealings. At one time, he lost £14 *di grossi* or 140 ducats on exchange and re-exchange with London. As he himself explains in his ledger, he incurred this loss because he drew on London at 45 and 44 sterlings per ducat but his correspondents redrew on Venice at about 40 sterlings per ducat. There was, consequently, a loss of about 4 sterlings per ducat in six months or two usances. This loss corresponds to an interest rate of about 18% a year, which is plausible. The text of the entry is given by Vittorio Alfieri, *La partita doppia applicata alle scritture delle antiche aziende mercantili veneziane* (Turin, 1891), p. 79. At another time Barbarigo lost £2 *6s. di grossi* or 23 ducats on exchange with Bruges. Although he bought cloth in England and Flanders, the funds raised by the sale of bills were apparently not used for this purpose but for financing his purchases of cotton in the Levant.

⁸⁹Davanzati, 'Notizia de' cambi' *op. cit.*, pp. 54-55.

⁹⁰Uzzano, *op. cit.*, p. 152.

⁹¹Fra Luca Paciolo, 'De cambiis seu cambitionibus,' distinctio 9, tractatus 4, *Summe de arithmetica, geometria, proportioni et proportionalita* (Venice, 1494), fol. 167. Cf. Uzzano, *op. cit.*, p. 152: 'La buona regola del cambiare vuole essere questa: guardarsi di non si trovare debito nella terra ne' tempi che di ragione i denari vi debbono essere buoni.'

⁹²*El libro di mercatantie*, p. 168.

de Rover

money-changers

Chapter 12

de Roover

THE FLEMISH CURRENCY SYSTEM, THE TRADE IN BULLION, AND THE MONEY MARKET

THE trade in money and bullion, the first of the three main functions performed by the money-changers, involved much more than the petty exchange of coins. The money-changers formed the link between the public and the mint. The existence of such a link was essential to the smooth operation of the money market. But the mechanism of the money market cannot be fully understood without some knowledge of the monetary system. Therefore, it appears necessary to give a description of the Flemish monetary system during the fourteenth and fifteenth centuries.

* In the field of mediaeval history, there is, perhaps, no topic which has given rise to more confusion than money. Although much has been written on the subject, there are very few satisfactory treatises.¹ The reason is obvious: the solution of an economic problem rests on a correct interpretation of the facts; if the facts are misrepresented or if the interpretation of them is based on a false theory, the whole analysis is likely to suffer from this initial mistake. Most of the writings on money in the Middle Ages are deficient in one respect or the other, and are, therefore, misleading, if not entirely worthless. One cause of the lack of reliable studies is that economists and historians have failed to cooperate. Much writing has been done either by historians, who could read documents but were ignorant of economic problems, or by economists, who were admirable in their logic but unfortunately wrong about their facts.² However, most of the work on mediaeval money has been done neither by historians nor by economists, but by numismatists. They certainly deserve great credit for the publication of valuable source material, but their commentaries on the sources have usually been valueless from the standpoint of economic history.³ The reason is that numismatists look at monetary problems from a collector's point of view and are more interested in the identification of particular coins than in money as a standard of value or a medium of exchange.

* The chief fallacy which pervades most of the work on money in the Middle Ages is the mistaken notion that 'money of account' was some kind of 'ideal' or 'imaginary' money which was used as a basis for the valuation of the real coins.⁴ This valuation, the theory runs, could be changed arbitrarily by the monetary authorities. The 'money of account' was thus some kind of a standard suspended in mid-air like Rodilard, the cat, in one of the fables of La Fontaine.⁵ This theory

has been widely accepted.⁶ On the basis of it, an Italian economist has even discovered that the Middle Ages enjoyed the blessings of a managed currency which was intended to prevent the fluctuations of the price-level!⁷ Truly, the mediaeval monetary authorities must have been endowed with a surprising understanding of financial problems.

In reality, the facts do not lend support to the theory of 'ideal money' or of an 'independent' standard. As the studies of Professor Hans van Werveke on Flemish currency and of Professor Gino Luzzatto and Dr Allan Evans on Venetian and Florentine currency clearly show, mediaeval monetary systems were pegged either directly or indirectly to gold or silver. They were based either on a real coin, such as the groat in Flanders, or on a coin which had ceased to circulate, but which still represented a definite weight of gold or silver.⁸ In Flanders a unit of this latter type was the *denier paris*. Originally, a silver groat had been equal to twelve deniers *paris*. When the *denier paris* disappeared from circulation in the beginning of the fourteenth century,⁹ some people continued to reckon in deniers *paris* representing a weight in silver equivalent to one-twelfth of the groat, a real coin. Thus the municipal accounts of Bruges were kept in pounds, shillings, and deniers *paris*. As has been explained, the money-changers of Bruges were less conservative and kept their books in pounds, shillings, and deniers groat, the new monetary unit.

According to this system, the pounds and shillings groat were not represented in circulation by any real coin, but were simply 'monies of account' or mere numerical expressions, just as today one guinea is an expression for twenty-one shillings sterling.¹⁰ In other words, pounds and shillings groat were mere multiples of the basic coin, the groat. One pound, of course, corresponded to twenty shillings or 240 deniers groat, and one shilling, to twelve of such deniers. Neither the pound *paris* nor the denier *paris* existed under the form of a real coin, but the shilling *paris* was represented in circulation by the groat, a silver coin, as both the shilling *paris* and the groat were equal to twelve deniers *paris*. From this explanation it appears clear that Flanders, in the fourteenth and fifteenth centuries, was on a silver standard based on the groat.

The gold coins, whose circulation was authorized, were rated at so many groats apiece. These rates were generally determined by the monetary authorities, but it was clearly beyond the power of these authorities to set arbitrary rates. The official valuation had to be made with due regard to the gold content of the coin in question, to the silver content of the basic coin (the groat), and to the market ratio between gold and silver.¹¹ If a change occurred in any of these elements, an adjustment of the rate became necessary. It is true that the existence of seigniorage gave some leeway to the monetary authorities in the fixing of rates. If a coin was undervalued in the official tariff, it would either disappear from circulation or circulate only at a market rate above the official rate.¹² If, on the

contrary, a gold coin was overvalued, it would tend to drive the other coins out of circulation¹³ and to create a scarcity of silver.¹⁴ This latter phenomenon was less likely to happen, since the seigniorage was rather high on silver coins and acted as a deterrent to their exportation.

During the fourteenth century the groat was not the only silver coin in circulation, since the mint also coined half-groats, sterlings ($\frac{1}{2}$ of a groat), and double sterlings.¹⁵ The *botdragars* or double groats were apparently not issued until 1373.¹⁶ According to Charles the Bold's monetary ordinance of October 13, 1467, the circulation was made up of pieces of four groats, two groats, one groat, one-half a groat, and one-fourth a groat.¹⁷ These coins were commonly known as 'white money.' Their silver content was not exactly proportionate to their relative value because of differences in seigniorage and mint charges, but the price of the mint for a mark troy *argent-le-roi*—an alloy $\frac{23}{24}$ pure—was nearly uniform for all denominations.¹⁸ The individuals who sold bullion to the mint received a slightly better price, if they asked for pieces of two or four groats, rather than for the smaller denominations.

black money
In addition to white money, the circulation included coins called mites ($\frac{1}{24}$ groat) and double mites ($\frac{1}{12}$ groat), which were known as 'black money.' They were made of an alloy which contained very little silver. As mechanical processes of coinage were unknown in the Middle Ages, the mint charges on black money were very high.¹⁹ In 1418, mint charges alone, not including seigniorage, amounted to as much as fifty-two per cent in the case of mites and forty-six per cent in the case of double mites per mark troy *argent-le-roi*. The intrinsic value of black money was thus far below its face or nominal value. As a result, the mites and double mites were somewhat like token coins. They tended to remain in circulation indefinitely and were never exported for their value in bullion. Even the debasement of white money did not affect the circulation of black money, as the margin between intrinsic and face value was ample enough to provide for automatic adjustment.

It is obvious that any study of mediaeval money should be based on a careful analysis of the monetary ordinances of the period. In other words, does the above description of the Flemish monetary system agree with the text of the monetary ordinances? For this purpose it is not necessary to examine all the published ordinances one by one, but rather it is sufficient to make a selection. Let us, therefore, take one ordinance of the fourteenth century and another of the fifteenth century.

According to Louis de Male's ordinance of November 25, 1356, the master of the mint Bardet de Malpily, a Florentine, was allowed to coin 'un blanc denier qui aura son cours pour douze deniers parisis et à sys deniers et quatre grains d'aloÿ d'argent le roy, et de cinq sols et noef deniers de taille au marc de Troyes.'²⁰ In other words, the ordinance allowed the coinage of a groat (equal to twelve



THE GRAND'PLACE OF BRUGES

The Old Cloth Hall with its belfry is in the rear. To the left is the Waterhalle or New Cloth Hall. Some of the stalls once occupied by the money-changers are clearly visible on the picture. From Saderus, *Flandria illustrata*.

deniers *parisis*), weighing $\frac{1}{69}$ of the mark troy and having a fineness of $\frac{37}{72}$ *argent-le-roi*.²¹ On this basis the silver groat, in 1356, weighed 3.55 grams and contained 1.82 grams *argent-le-roi* or silver $\frac{23}{24}$ fine.²² The ordinance added that the merchants who sold silver to the mint were to receive 118 groats or 9s. 10d. gr. for each mark troy *argent-le-roi*. As 134 groats were struck from each mark *argent-le-roi*, the seigniorage and the mint charges combined amounted to sixteen groats per mark.²³

The second ordinance which has been chosen as an example is the ordinance of October 13, 1467, promulgated by Charles the Bold shortly after his accession to power as the ruler of the Low Countries, of Burgundy, and of Franche-Comté. This ordinance provided for the coinage of a 'denier d'argent à 4d. 12 grains argent le roy et de 130 de taille ou dit marc, qui aura cours pour ung gros de Flandres pieches. . .'²⁴ According to this text, 130 groats were to be struck out of a mark troy having a fineness of $\frac{9}{24}$ *argent-le-roi*. The groat thus weighed 1.89 grams and contained 0.71 grams *argent-le-roi*.²⁵ The ordinance further provided that 346 $\frac{2}{3}$ groats or 28s. 10d. 2st. groat were to be coined out of each mark troy *argent-le-roi*, that the merchants were to be paid 26s. 11d. gr. for each mark *argent-le-roi*, and that the difference of 1s. 11d. 2st. gr. was to cover the seigniorage and the mint charges.

The text of these two ordinances, it seems to me, is susceptible of only one interpretation: the groat was a real coin, and Flanders was on a silver standard all through the fourteenth and fifteenth centuries. There is not the slightest foundation, even by twisting the text, for the theory of an independent standard.

The ordinance of October 13, 1467, provided also for the minting of other denominations besides pieces of one groat. The tabulation of the data given in the ordinance confirms the remarks which have been made in this connection (see Table 10).²⁶ The reader will notice that the price which the mint paid for one mark troy *argent-le-roi* varied slightly from 26s. 11d. gr. for the lower denominations to 27s. 4d. gr. for the highest denomination. The purpose of these small price differences was evidently to encourage the coinage of high standard denominations, as there was always the danger of overstocking the market with inferior white and black money.

According to these data the silver content of the groat had fallen from 1.82 grams in 1356 to 0.71 grams in 1467. This decrease was due to the steady debasement of the currency. In the Middle Ages debasement consisted in reducing the silver or gold content of the monetary unit either by a reduction of the degree of fineness (*mutatio in materia* or *in proportione*) or by a diminution in weight (*mutatio in pondere*). The two methods were even frequently combined. Under the Flemish monetary system, a depreciation of the standard (*piéd des monnoies*) involved an upward revision of the official rates at which the gold coins were quoted and an increase in the price which the mint

TABLE 10
REGULATION OF THE SILVER COINAGE ACCORDING TO THE ORDINANCE OF OCTOBER 13, 1467

| Denomination | Fineness of Alloy (1) | Taille* (2) | Weight of Coin (3) Grams | Silver Contents (4) Grams | Number of Coins Struck from One Mark Troy Argent-le-roi (5) | Equivalent of Figure in Column (5) in s and d groat (6) | | Seigniorage and Mint Charges (7) | | Mint Price of One Mark Troy Argent-le-roi (8) | |
|-----------------------|-----------------------|-------------|-----------------------------|------------------------------|---|---|-----|----------------------------------|-----|---|----|
| | | | | | | s | d | s | d | s | d |
| White Money | | | | | | | | | | | |
| Four Groats | 0.9167 | 77½ | 3.16 | 2.90 | 84½ | 28 | 2 | 10 | 27 | 4 | |
| Two Groats | .5000 | 84½ | 2.90 | 1.45 | 169 | 28 | 2 | 14 | 27 | 0 | |
| One Groat | .3750 | 130 | 1.89 | 0.71 | 346¾ | 28 | 10¾ | 23¾ | 26 | 11 | |
| One-Half Groat | .3333 | 234 | 1.05 | 0.35 | 702 | 29 | 3 | 28 | 26 | 11 | |
| One-Fourth Groat | .2222 | 324 | 0.76 | 0.17 | 1458 | 30 | 4½ | 41½ | 26 | 11 | |
| Black Money | | | | | | | | | | | |
| Double Mite (¼ Groat) | .0347 | 204 | 1.20 | 0.04 | 5875 | 40 | 9½ | 13 | 10½ | 26 | 11 |
| Mite (⅓ Groat) | 0.0208 | 264 | 0.91 | 0.02 | 12672 | 44 | 0 | 17 | 1 | 26 | 11 |

*The *taille* was the number of coins struck from one mark troy of the fineness indicated in column (1).

Source: Gilliodts, *Monnaies*, V, 589-590, and Deschamps de Pas, 'Essai sur l'histoire monétaire,' *Revue Numismatique*, VII (1862). The figures of both authors contain obvious errors which partly correct each other.

paid for one mark troy *argent-le-roi*. Another result of debasement was to bring Gresham's law into play. The new and lighter groats were sure to eliminate the old and heavier groats, if the value of the latter under the form of bullion rose above their value as coins. Only badly clipped and abraded coins were likely to remain in circulation. All other things remaining equal, debasement called for an upward adjustment of the price level.

It sometimes happened that the standard was raised instead of being lowered. Such a 'raise' (*renforcement* or *retour à la forte monnaie*) was most of the time as difficult to carry out as it is today to return to the old parity after an inflation of paper money. A raise involved not only a reduction of the mint price and a scaling down of all the gold coins, but also the demonetization of the existing silver currency. As Gresham's law was likely to operate against the reform of the currency, it was necessary to decay and to call in all the silver coins and to replace them with the new currency.²⁷ Such a conversion was liable to create at least a temporary shortage of money. But these transitional difficulties were nothing in comparison with the economic problems which were certain to follow in the wake of the currency reform. As a 'raise' was essentially a deflationary measure, it required a downward adjustment of wages and prices. It is here that the policy of the monetary authorities was bound to encounter the greatest resistance. There is no reason to assume that, in the Middle Ages, prices were more flexible than they are today. An artificial reduction of the price level, therefore, was likely to lead to depression, business failures, unemployment, and widespread discontent.

In Flanders, the depreciation of the standard was especially rapid during the fourteenth century. Under Louis de Male the inflation of the currency assumed almost catastrophic proportions. The silver content of the groat sank from 4.22 grams *argent-le-roi* before 1318 to 1.01 grams in 1383.²⁸ The fifteenth century, on the contrary, was a period of relative monetary stability. Debasement continued, but at a slower pace. Between 1384 and 1480, the silver content of the groat dropped only from 1.225 grams to 0.64 grams *argent-le-roi*.²⁹ Moreover, the currency remained stable for several years in succession. According to the available information, there was no change in the standard from 1390 to 1407, from 1409 to 1416, from 1418 to 1428, and from 1433 to 1466.³⁰ The monetary authorities also made an effort to stem the tide of inflation by raising the standard in the face of serious difficulties. Such raises occurred in 1384, in 1390, in 1407, and in 1409.³¹ Thus, in 1384, the silver content of the groat was increased by nearly twenty per cent, but the most drastic deflation was carried through by the reform of January 1390. This reform raised the silver content of the groat from 0.81 grams to 1.07 grams *argent-le-roi*, so that the new groats contained one third more silver than the old groats.³² The reform of 1390 was followed by more moderate raises of the standard in 1407 and 1409.³³ The

policy of deflation was pursued steadfastly until 1416, when the monetary authorities relapsed into debasing the currency.

Although Flanders was a fief of the French crown, the Flemish monetary system became independent from the French system after 1337.³⁴ It is true that the kings of France advanced the claim that they had the right to determine the standard and to set rates throughout their realm.³⁵ But the counts of Flanders got around this difficulty by minting preferably at Ghent or at Malines.³⁶ These mints were located on the territory of the Empire and the king of France had no jurisdiction over them. The French silver currency did not circulate in Flanders, but the king's gold coins could not be barred and were always listed among the current coins.³⁷

According to a widely current theory, the debasement of mediaeval currencies is explained by the dwindling supply of precious metals in Western Europe due partly to the outflow of gold and silver to the East and partly to the exhaustion of the European mines.³⁸ While this theory may contain an element of truth, it is far from being satisfactory and neglects many important aspects of the problem. For example, the counteracting effect of the increased use of money substitutes, such as bills of exchange in international trade and bank deposits in the making of local payments, is entirely overlooked. Fundamentally, the theory rests on the assumption that, in order to stop the decline of the price level, it became necessary to strike an increasing number of monetary units out of a diminishing supply of bullion.

But the study of Flemish documents does not reveal the existence of any downward trend of the price level. On the contrary, prices rose sharply during the fourteenth century and more slowly during the latter part of the fifteenth century.³⁹ They tended neither to rise nor to fall during the intervening period of deflation and relative monetary stability.

As far as the fifteenth century is concerned the main source regarding the movement of the price level is a series of prices published by a Belgian historian Hubert van Houtte. This series is based on average prices of farm produce which were collected by an official body called 'la Chambre des Renenghes' or the 'Tribunal de l'Epier.'⁴⁰ This institution existed at least from 1351 and lasted until the end of the *Ancien Régime*. It was the duty of the Tribunal de l'Epier to collect data on prices in order to determine the money value of rents and other dues payable in kind to the public domain. The chart appended to van Houtte's study shows that the price of foodstuffs was subject to violent fluctuations, obviously due to famine conditions, bad harvests, and an inelastic demand, but there is no evidence of a downward trend.

For the fourteenth century there are no price series or index numbers available, but other documents give a fairly good idea of what was going on. Apparently, prices and the cost of living rose faster than wages.⁴¹ All through the

reign of Louis de Male, there were constant complaints among the workers of the woolen industry about low wages (*cranke loon*) and the high cost of living (*diere tijt*).⁴² The workers repeatedly petitioned the authorities for wage increases. That the complaints were justified is evident from the fact that wage rates were usually increased, but not as much as the workers demanded. For example, in 1374 the dyers sent a request to the authorities of Ghent in order to obtain an increase of the rates to which they were entitled for the dyeing of various kinds of cloth. The master dyers submitted figures which showed that their remuneration did not cover their cost of production. Probably the rates were fixed by gild regulations and had not been changed despite the rise in the price of alum and dyestuffs, the main raw materials used by the dyers. They claimed that they were unable to make a living and to support their wives and children. The authorities granted them an increase equal to two-thirds of the difference between the cost figures submitted by the dyers and the prevailing rates.⁴³ This decision seems to suggest that the dyers were rather generous in figuring out their cost, otherwise they would have continued to lose money.⁴⁴ Whatever the truth of the matter, there is no doubt that wages in general did not keep up with the rising price level. The resulting deterioration of the standard of living among the working classes is certainly one of the factors which explain the revolt of 1379. On the other hand, the debasement of the currency must have had a stimulating effect on business. The lower cost of production probably permitted the Flemish cloth industry to hold out much longer against the increased competition of English woolens.⁴⁵ The end of currency inflation in 1384 also marked the beginning of the slow decline of the Flemish *draperie*.

The deflation policy, which was adopted after the rise to power of the House of Burgundy, perhaps under the influence of Oresme's ideas, was even more harmful than the currency inflation of the preceding period.⁴⁶ Especially the 'raise' of 1389-1390 opened the door to serious trouble. The reform called for a downward adjustment of all prices, but, in fact, prices did not go down, at least not immediately. In all probability, the 'raise' reacted unfavorably upon the balance of payments, created a scarcity of money, and had a paralyzing effect on business, in particular on the all important cloth industry. As the public was accustomed to think in terms of groats rather than in terms of purchasing power, the workers resented the reduction of their wages. In Bruges the city-treasurer, who was responsible for the enforcement of the monetary ordinances, was nearly killed by an angry mob.⁴⁷ The only classes to benefit by the reform of the currency were the recipients of house rents and of *cens* or feudal dues—in fact the *rentiers*, the landed gentry, the clergy, and the duke himself in his capacity of landowner and feudal lord. According to the ordinance of December 20, 1389, they were entitled to receive payment in new

*

 Revolt
of
1379

*

groats, i.e., on the basis of seventy-two groats to a noble.⁴⁸ It is true that the *rentiers* and the fixed-income groups had been the principal victims of the inflation. All other creditors (except the recipients of rents and *cens*) were to be repaid in old groats or on the basis of 102 groats to a noble, the value of the noble before the reform of the silver currency.⁴⁹ This was after all a wise measure, otherwise all the banks (all the money-changers) would have been confronted with impending bankruptcy. The protection of the rights of orphans and the regulation of prices were left to the paternal care of the local authorities.⁵⁰

A great many debtors were sorely hit by the ordinance of December 20, 1389. Protests were general. They soon forced the authorities to act in order to 'relieve the people' (*relever le peuple*) from the crushing burden of debts. On December 5, 1390, a new ordinance was passed at the urgent request of the representatives of the three principal cities and of the Franc de Bruges. The municipal authorities and those of the Franc were thereby empowered to scale down the rents due to their own burghers, but not those to the duke, to the Church, or to noblemen who were not burghers of the said cities.⁵¹

The monetary ordinance of 1389-1390 not only disturbed the relations between debtors and creditors, but also sharpened the conflict between wage-earners and employers. Wages, of course, had to be equated to the new standard. Such an adjustment, it would seem, should be easy, as it is a problem of simple arithmetic. In fact, the wage reductions gave rise to a great deal of bickering as both employers and workers tried to take advantage of the confusion created by the reform of the currency. In Courtrai, for example, the *drapiers* or cloth manufacturers proposed to reduce the wage rate of the fullers from forty-one groats to thirty-two groats for each cloth to be fulled. The *drapiers* argued that wages had to be reduced proportionately to the raise of the standard (*selon ce que la dicte monnoie estoit plus forte le salaire des dix foulons devoit estre diminué*), but the fullers opposed such a move on the ground that the rate of forty-one groats had been set once and for all by an ordinance of Louis de Male. The case was finally arbitrated by the Council, and an ordinance of August 25, 1390, set the wage rate of the fullers at thirty-six groats, certainly a less than proportionate reduction.⁵²

In other cases the employers were the stronger of the contending parties and succeeded in reducing wages more than proportionately. Thus, in Oudenarde, the wage rate of the finishers and shearers was apparently reduced from four groats to eight sterlings or two and two-thirds groats for *raemlakene* and from twelve groats to eight groats for *smijlakene*, another kind of cloth, or a reduction of one third in both instances.⁵³ It did not take long for the finishers to find out that this reduction was all the more disastrous, because the price level had not fallen. They petitioned the aldermen for a return to the scale of wages which had been in operation before the reform of the currency. These demands were

naturally opposed by the *drapiers* who pointed out that business was so bad (*naer de quaedde neeringhe die nu es*) that they could not afford to pay higher wages. There was probably something to this argument. Very likely the *drapiers* themselves were hard hit by the business depression which was the result of currency deflation. In any case the perplexed municipal authorities fixed a maximum scale below which wages were to be determined by free competition. On the whole the decision was favorable to the employers since it was a direct blow to the monopoly of the finishers' guild and the practice of collective bargaining.⁵⁴

The evidence concerning the effects of monetary policy on the movement of the price level is admittedly scant. Therefore, it would be dangerous to make any generalizations. It is here that price studies should come in, but their importance should not be overrated. In the Middle Ages, the prices of foodstuffs in particular, were subject to erratic fluctuations due to famine conditions and to the lack of a properly-organized rationing system. As a consequence, the selection of a satisfactory index is extremely difficult. In the absence of price studies, the accessible evidence should not be despised. As far as it goes, it shows clearly that any tampering with the money was likely to have far-reaching and disrupting effects. Perhaps the results of deflation were even less desirable than those of inflation. Prices were not flexible. Wages, especially, were sticky, because they were fixed either by custom or by guild regulations. Today the same is true, and it is notorious that trade union rules have the same effect of freezing wages.

In view of the rigidity of the mediaeval price structure, prices did not respond readily to a contraction of the quantity of money; hence debasement was often the only means by which it was possible to restore economic prosperity and to bring the balance of payments into equilibrium.⁵⁵ The continuous debasement of mediaeval currencies, consequently, was not due to any permanent or long-run causes. Very often debasement was only an expedient used reluctantly and in the last resort to meet temporary difficulties.⁵⁶

Today seigniorage has disappeared in most countries, but it was one of the distinctive features of mediaeval currency systems. The effects of seigniorage on the operation of the money market have not always been understood, and many people have only hazy ideas on the subject. The most important result of the existence of a seigniorage charge was to raise the face value of the coins above the value of their metallic content as long as the exchange rates were favorable and bullion was pouring into the mint.⁵⁷ If, on the contrary, exchange rates were depressed and if bullion was leaving the country, the market price of gold or silver was likely to rise above the mint price with the result that bullion would cease to flow toward the mint and that the mint would be forced to suspend operation.⁵⁸ As mediaeval mints were farmed out, the stoppage of work at the mint was one of the main causes of debasement.⁵⁹ The mintmasters, seeing that

x

mint

they were losing money, could be expected to break their contracts if the currency were not debased. It is clear that debasement was likely to entail some recoinage. Debasement also, by lowering the internal price level in terms of foreign currencies, was bound to set forces in motion which would tend to restore the equilibrium of the balance of payments, to stop the drain of bullion from abroad, and to raise the mint price above the market price of bullion.⁶⁰ Thus the mint would be enabled to resume operations until the next crisis in the money market. Debasement, in a certain way, fulfilled the same function as does today the raising of the discount rate by the central bank.

The fact that the mints were run for profit was undoubtedly at the root of many debasements.⁶¹ Contrary to common belief, it is doubtful whether mediaeval rulers derived any real benefit from debasing the currency.⁶² What the rulers gained from debasement by an increase of their seigniorage, they were apt to lose tenfold in other ways, because the income from other sources of revenue did not increase as fast as the price level.⁶³ It is not true that debasement increased directly the financial resources of the state as does today the unrestricted issue of fiat or paper money.

Another consequence of the existence of a seigniorage charge was to widen the margin between the import and export specie points.⁶⁴ The import specie point was often lowered by granting a refund (*uncrue*) to the merchants who delivered bullion to the mint.⁶⁵ Such a measure was effective only within certain limits. It did attract bullion to the mint, if the exchange rates were already favorable and if there was only a slight difference between the mint price and the market price of bullion. But under less favorable conditions a refund on the seigniorage was not sufficient to induce people to send bullion to the mint.

As we have seen in a preceding chapter, the existence of seigniorage was to a certain extent a deterrent to the common practice of picking and culling. Seigniorage also conferred a certain elasticity on the mediaeval currency systems by allowing some leeway in the rating of current coins.⁶⁶

The Flemish monetary system which has just been described remained in operation all through the fourteenth and fifteenth centuries. In the beginning of this period, however, it seems that it was still customary between merchants to make payments by weight rather than by tale. For this purpose the city of Bruges maintained an establishment, called *barnecamere* in Flemish or *chambre fonderie* in French, for the refining and assaying of silver.⁶⁷ This establishment issued silver bars bearing an assay stamp or hallmark as a guarantee of fineness. According to the municipal statute of 1309 on the trade in bullion, it was unlawful to have silver refined elsewhere than in the municipal *chambre fonderie* or to send any unmarked silver out of the city.⁶⁸ The municipal *chambre fonderie* charged six deniers *parisis* for the refining of one mark of high-standard or white silver and three deniers *par.* per mark of low-standard or black alloy.⁶⁹

The *chambre fondoire* had a monopoly on the weighing of silver used in making payments. The tariff was twenty deniers par. per hundred marks and ten deniers par. from twenty to one hundred marks. Below twenty marks there was a flat rate of three deniers according to weight (*van den ghewichte*), but the exact meaning of this expression is uncertain.⁷⁰ Only the money-changers had the right to weigh silver up to the amount of five marks.⁷¹

The *chambre fondoire* declined rapidly. It is not mentioned any more after the middle of the fourteenth century.⁷² The causes of this decline are not far to seek. They were two-fold: (1) the resumption of gold coinage and the preference given to gold coins in the making of large payments, (2) the disappearance of the traveling or caravan merchant, who carried his money in his belt, and the appearance in Bruges of Italian business houses and agencies which used almost exclusively bills of exchange in making payments abroad.⁷³

After the resumption of gold coinage, Flanders retained the silver standard, but gold coins were used as a subsidiary or commercial money and circulated at variable rates. As a result of this condition, silver and gold were not freely exchangeable. The money-changers made it their business to supply gold to those who had silver but needed gold, and silver to those who had gold but needed silver. The services of the money-changers entailed the payment of a fee which is called *avantaige* in the Collard de Marke and Guillaume Ruyelle account books. *Vantaggio*, the Italian equivalent of *avantaige*, was soon shortened to *agio* which, in most European languages, has come to designate any difference or premium on exchange.⁷⁴

Curiously enough the agio or commission of the money-changers was not computed on a percentage basis until the end of the fifteenth century. According to the municipal statute of 1309, the money-changers were allowed to charge one mite for every four gold coins that they appraised. In the case of silver the rate was one mite per pound.⁷⁵ The pound in question was probably the pound *parisis* so that the rate was $\frac{1}{432}$ per pound.⁷⁶ According to Francesco Balducci Pegolotti, whose handbook for merchants was compiled between 1310 and 1340, the tariff for expert advice on the value of coins was apparently one-fourth groat per hundred *royals* from each of the parties or one-half groat per hundred *royals* in all.⁷⁷ The *royal* was a gold piece worth twenty-four deniers groat according to Pegolotti.⁷⁸ On this basis, the commission of the money-changers was as low as one-fifth per thousand for appraising the value of coins. The agio was higher, if the money-changers actually were a party to the contract and bought or sold gold in exchange for silver. In such a case they were allowed one half-groat or twelve mites per noble of seventy-two groats or $\frac{1}{144}$ according to the ordinances of Philip the Bold dated December 26, 1399.⁷⁹ The monetary ordinance of October 12, 1433, provided for a double tariff: the money-changers were authorized to take eight mites or one-third groat on each gold piece which they

bought as bullion, but the commission for the exchange of current coins was one-sixth groat or four mites for the smaller, and one-third groat or eight mites for the larger gold pieces.⁸⁰ These larger pieces were apparently the English and Flemish nobles which, in 1443, were worth ninety-six and ninety-two groats respectively.⁸¹ The smaller gold coins included presumably the francs, the crowns, the Rhenish florins, the clinkaerts, the pieters, etc., whose value ranged from twenty-eight to fifty groats.⁸² The rates of remuneration fixed by the ordinance of October 12, 1433, were still valid in 1467.⁸³ Maximilian's ordinance of December 14, 1489, however, simplified and improved the existing system considerably by establishing a flat rate of one per cent on all exchange transactions.⁸⁴

The canonist writers did not object to fees being charged on the exchange of coins or 'manual exchange.'⁸⁵ For this reason such fees often served the useful purpose of concealing interest. But, even disregarding this possibility, there is no doubt that *agio* was an important source of profit for mediaeval banks. The ledgers of Collard de Marke and Guillaume Ruyelle do not give any precise information in this connection, because they do not contain any accounts for operating results. The profit derived from exchange transactions simply resulted in a cash surplus.⁸⁶

The ledgers do disclose, however, that the money-changers carefully kept track of any deposits or withdrawals made in gold rather than in silver currency. If an entry relates to a transaction actually settled by a payment in gold coins, one usually finds the word *or* behind the amount written in the extension column of the ledger. A 'p' (for *payement*) behind a ledger entry refers to payments in silver currency. The purpose of these notations was evidently to help the bookkeeper in computing the fees which were ultimately owed by the customer.

Apparently a depositor who made a deposit in silver could withdraw his money gratuitously in the same kind of money, but had to pay *agio*, if he wanted gold. On the other hand, a depositor could receive credit in £ s. d. gr. for the equivalent of a given number of gold coins. In such a case he had the right to be repaid in gold without charge, but it seems that a fee was due, if the repayment took place in another form of currency. A good example is furnished by the account of Jehan de Concorighe in one of the Collard de Marke ledgers. This customer, besides several deposits in silver, made two deposits totalling £151 5s. 5d. gr. in gold. Later he withdrew from his account £110 16s. 9d. gr. in gold coins. After a while the balance of his account, £163 0s. 3d. gr., was transferred to another folio of the ledger. But under the transfer entry there is a notation *si a 40 lb. or*, meaning the balance of £163 0s. 3d. gr. includes forty pounds in gold or the difference between £151 5s. 5d. gr. and £110 16s. 9d. gr.⁸⁷

The Collard de Marke ledgers contain numerous entries relating to *agio*

which was charged to customers of the bank. The account of Zegres Onin le Jeune includes such an entry. It is stated explicitly therein that the customer owed the agio on thirty pounds groat, because he had a silver and not a gold account.⁸⁸ Probably Zegres Onin le Jeune had taken out gold against credit in silver currency. On May 2, 1369, the account of the Italian merchant-banker Guglielmo Rapondi was charged with £1 5s. gr. for all the agio which remained due up to the date of the entry.⁸⁹ According to an entry in the account of Roulof Rabonne of Louvain, the fee on £211 15s. 1d. gr., paid with 510 *grands moutons* at 51 groats apiece, 800 francs at 31 groats apiece and thirteen groats in silver, was £3 9s. 2d. gr. or a little over 1½ per cent.⁹⁰ Agio was even charged between money-changers as appears from an entry in the account of the money-changer Pieter van Oudenaerde. On May 14, 1369, Collard de Marke paid him 29s. 6d. gr. for agio on £120 gr. received in gold coins.⁹¹

Sometimes the money-changers also sold bullion to the gold- and silver-smiths, but transactions of this kind were few and unimportant.⁹² Besides the exchange of current coins, a much more important source of profit was the purchase of bullion, especially of non-current foreign coins. According to the monetary ordinances, the money-changers were allowed to buy such coins, paying their value in bullion minus the customary fee or agio. The bullion supposedly had to be delivered to the mint. The extant ledgers of Collard de Marke and Guillaume Ruyelle give little information concerning their business dealings with the mint. These dealings were, undoubtedly, very important and were recorded in special books called *papiers de le monnoie*, of which no copy is known to be extant.

From occasional references in the existing records of Collard de Marke, it appears that there was a great deal of cooperation between the money-changers of the same city in their relations with the mint. For instance, on March 26, 1369, Collard de Marke wrote £158 3s. 10d. gr. to the debit of his colleague Pieter van Oudenaerde 'for a keg of coins which had just come from the mint.'⁹³ This entry suggests that the money-changers arranged to make joint shipments of bullion to the mintmaster at Ghent.

In Collard de Marke's extant ledgers there is also an account open in the name of Thumas Sarlande, 'à le cause dou mestre de le monnoie'⁹⁴ but the connection between him and Jehan Terminel or Interminelli, the master of the mint, is not made clear. The amounts involved are rather high and it is difficult to make out what the entries really mean. Apparently, in April and May 1369, Collard de Marke sent to Ghent, where the mint was located, several shipments of bullion amounting to a total of £501 19s. 7d. gr. The detail concerning these shipments is not given in the extant ledger, but was recorded in the missing *papier de le monnoie*. The proceeds were partly used to repay an amount of four hundred pounds which had been advanced by Thumas

Sarlande before Christmas 1368. At that time he was paid fifty pounds groat interest (*pour le pourfit de lui*) by Collard de Marke.⁹⁵ In settlement of the remaining £101 19s. 7d. gr., the mint sent new coins amounting to £51 19s. 7d. gr. about the first of August 1369. The balance of fifty pounds groat was charged to Thumas Sarlande and was still standing on the books in December 1369, when the ledger was closed.⁹⁶

This loan of four hundred pounds groat made to Collard de Marke by Thumas Sarlande is certainly a puzzle. Collard de Marke, it is evident from his records, was in financial trouble at the end of 1368 and his cash position was seriously impaired. Did the mint sometimes come to the rescue of imperiled money-changers by lending them money? It is worthwhile to raise this question, even though it cannot be answered from the available evidence. The problem, at any rate, is of great importance: if such loans were ever made, one has to draw the conclusion that mediaeval mints sometimes performed the functions of a central bank.

In theory, anyone had the right to bring bullion to the mint and was entitled to receive the regular price per mark troy fixed by the monetary ordinances. In practice, however, bullion was purchased from the public by the money-changers and delivered by them to the mint. The general public was never in contact with the officers of the mint. The purveyors of the mint were the money-changers who collected all the bullion which came on the market and usually sold it to the mint.⁹⁷

At the end of the thirteenth century, an attempt was made to do away with the private exchange business. After the conclusion of a monetary union between Flanders and Brabant, Robert de Béthune, regent of Flanders, issued on October 31, 1299, an ordinance which ordered all exchanges 'to be pulled down.'⁹⁸ The merchants trading with England could obtain at the mint the foreign money which they needed. There is no evidence that Robert de Béthune's ordinance was ever enforced. If a timid attempt was ever made in that direction, it certainly was given up after a short time because of practical difficulties. The grant of 1294 to the money-changers of Lille and an Antwerp privilege of 1306 contain provisions which indicate that the ruler had, in theory, the right to abolish all private exchanges.⁹⁹ In England the authorities actually succeeded in abolishing all private exchanges and in replacing them by the King's Exchanger who had tables at Dover, in the Tower of London, and in other seaports.¹⁰⁰

The importance of the money-changers as purveyors of the mint is perhaps best emphasized in a document of 1357. This document is a statement of the debts left by an absconding master of the mint, an Italian named Bardet de Malpils. In July 1357, he suddenly left Ghent for an unknown destination.¹⁰¹ His liabilities amounted to the formidable sum of 27,598 moutons at 24 groats

TABLE 11
STATEMENT OF THE DEBTS LEFT BY BARDET DE MALPILYS,
AN ABSCONDING MASTER OF THE MINT, JULY 1357

| NAMES OF THE CREDITORS | Amount of Claims (Moutons d'or) | Per Cent of Total |
|---|------------------------------------|-------------------|
| The Bruges money-changers: Guillaume Ruyelle, Jaquemon Vlaminc, and Jehan Moens | 6,091 | 22.0 |
| The Bruges money-changer, Eyrard Goederic | 5,867 | 21.3 |
| The Bruges money-changer, Christiaen Juedemaere | 458 | 1.7 |
| Total claimed by Bruges money-changers | 12,416 | 45.0 |
| Merchants of Ghent (no names given) | 4,045 | 14.6 |
| Money-changers of Ypres | 1,579 | 5.7 |
| Others | 509 | 1.9 |
| Total claimed by private individuals | 18,549 | 67.2 |
| Baudouin de Vos, varlet du Comte | 9,049 | 32.8 |
| Total of all claims | 27,598 | 100.0 |

Sources: Gaillard, *Recherches sur les monnaies de Flandre*, II, 119-21, doc. LIII; Limburg-Scirum, *op. cit.*, Nos. 925 and 926; Bigwood, *Régime*, I, 230; de Roover, 'Ruyelle,' *op. cit.*, 38-41.

apiece or £2,759 16s. groat which the count of Flanders had to make good, because he was responsible for any embezzlement committed by his official, the master of the mint (see Table 11).

The highest single item listed in the statement of Bardet de Malpilys' liabilities is a sum of 9,049 *moutons* due Baudouin de Vos, *varlet du Comte*.¹⁰² This title suggests that Baudouin de Vos was a public official and perhaps a *receveur* or collector of public revenue. If this assumption is correct, the item of 9,049 *moutons* represents minting done for public account. Presumably bullion and abraded coins which, by taxation or in other ways, flowed into the public treasury were turned over to the mint in order to be recoined. As this item does not exceed 32.8 per cent of the total, one must conclude that minting for public account was less important than minting for private account. The statement shows clearly that the money-changers were the chief channel by which bullion found its way to the mint. The debts to the money-changers represent 65.3 per cent of Bardet de Malpilys' total liabilities, if the 'merchants of Ghent' mentioned in the statement, may be considered as money-changers, too. The words 'merchants' and 'money-changers' were often used loosely in the monetary ordinances and other public documents of the period.¹⁰³ The money-changers of Bruges, with claims representing 45 per cent of the total, presumably did more business than those of Ghent or Ypres who came in for only 14.6 and 5.7 per cent of the aggregate liabilities. The minting done for private individuals other than money-changers was obviously negligible, if

the statement of the debts left by Bardet de Malpils can be regarded as a reliable guide.

According to law, the money-changers were supposed to deliver all their bullion to the mint. In fact, they did so only if they could not sell their bullion for a better price to some one else. To put it in another way, the money-changers continued their deliveries of gold and silver to the mint as long as bullion did not command a premium over the mint price. Such a phenomenon was likely to happen, if there was a brisk demand of bullion for the industrial arts, if the exchanges were unfavorable and bullion was being sent abroad, or if debased coins from a neighboring country invaded the circulation because the public disobeyed the ordinances and accepted this spurious money.¹⁰⁴ The money-changers were often accused of having a hand in the plot by uttering such adulterated coins.¹⁰⁵ The history of money in the Middle Ages is a continuous struggle between the forces of the market and the unrealistic and obdurate authorities.¹⁰⁶

Each time that the complaints about the scarcity of money became too loud or that the circulation was swamped with under-weight coin, the authorities awoke from their slumber and clamped down on the money-changers. From time to time one of them ended on the gallows.¹⁰⁷ It happened more often that money-changers were fined and that the unlawful money found in their possession was confiscated. The gold coins may have circulated among the public at the official rate, but the Collard de Marke ledgers, decidedly, give the impression that such coins were bought and sold in the exchange at a market rate which was subject to constant variation. In 1366, nine money-changers, including Collard de Marke and Guillaume Ruyelle, were fined ten shillings groat each for having accepted and uttered nobles at a rate higher than the official price.¹⁰⁸ In 1392 a fine was exacted from the money-changer Henry de Hedes for the same reason.¹⁰⁹

The authorities were especially anxious to enforce the monetary ordinances after the currency reform of 1390. In 1392 the *écoutète* of Bruges learned that the money-changers bought non-current coins without cutting them in two and thus converting them into bullion. He called two aldermen and searched with them the houses of the money-changers. The above-mentioned Henri de Hedes and the widow of Jehan de Courtrai were found in possession of forbidden coins; the former had £210 14s. 6d. *parisis* and the latter, £188 10s. 4d. *parisis*. All the forbidden coins were seized, and the offenders had to pay heavy fines besides.¹¹⁰ In 1408 several money-changers were fined for sending bullion to foreign mints.¹¹¹

In order to prevent the perpetration of frauds, the money-changers were required to keep their offices wide-open, so that anyone could observe them from the street.¹¹² One may doubt whether any one of these measures was in

the least effective. From time to time a money-changer might be betrayed by an informer or be caught by surprise, but the alarm was soon given whenever the *écouteur* and his sergeants were on the move. However, the real reason why the monetary ordinances could not be enforced lay deeper than in the failure of repressive measures.

Why would a money-changer have converted coins into bullion, if he could find a merchant or a traveler going abroad who needed foreign currency and who was willing to pay a price above that of the mint? The ordinances disregarded completely the conditions which prevailed in the business world and the money market.

The monetary policy of mediaeval public authorities was to favor the import of bullion and to prevent its outflow in order to keep the mint going and to maintain an 'abundant' supply of currency.¹¹³ Such a policy was based on the correct assumption that prices could only be kept stable, if the quantity of money was not diminished, everything else remaining the same. But the mediaeval authorities overlooked entirely the importance of short-run fluctuations, chiefly in a country like Flanders which, already in the Middle Ages, was largely dependent upon foreign trade. No prohibitions could prevent the outflow of bullion if the exchange rates reached the export point, because coins could so easily be concealed and smuggled out. As the interest rate, because of the usury prohibition, played a very subordinate role, debasement was the only method by which mediaeval authorities could relieve the tension which resulted from a loss of bullion to neighboring countries. This analysis leads in a different way to the same conclusion as before: monetary stringency of a recurrent character was the fundamental cause of debasements.

There is another problem to which mediaeval authorities did not give enough consideration, namely, the influence of the money market on the cash position and the reserve ratio of the banks. This phenomenon must have been well known among the merchants, if not among the mintmasters and other financiers, because it is accurately described by Giovanni di Antonio da Uzzano (1442) and by the authors of other handbooks for merchants.

Uzzano observed that there was a seasonal ebb and flow in the money market and that, in the great commercial centers of his time, money tended to be scarce during one season and plentiful during another. In Bruges, according to the Italian merchant manuals, money was usually tight in December and January, when many ships were ready to sail, but expanded in February-March and August-September, when a great number of merchants from outside, especially Germans, came to the town and brought in cash.¹¹⁴ The reason given by Uzzano and others for the scarcity of money during the winter is only partly true. Actually, the scarcity was caused by the drain of currency due to heavy purchases of cloth in the surrounding manufacturing districts. These purchases

were especially heavy in wintertime, because stocks were accumulated for shipment early in the spring, when navigation was resumed.

* Uzzano also noted that these seasonal movements of the money market affected the cash reserves of the banks. In Florence, he wrote, money was always dear from September to January because of the payments which had to be made in the country, with the result that cash was withdrawn from the banks in order to meet the demand for hard money.¹¹⁵ In Florence the cash reserves of the banks were thus depleted in the autumn because of a real 'crop movement.' In Genoa money was generally scarce in July because the galleys sailed at that time for the Levant. They usually carried bullion which had to be taken from the banks and from the offices of the money-changers.¹¹⁶

There is no reason to believe that the Bruges banks (the money-changers) were unaffected by the state of the money market. The Collard de Marke ledgers, due in part to the conciseness of the entries, give unfortunately little information in this respect. It is, therefore, necessary to rely a great deal on circumstantial evidence and on theoretical interpretation.

Summary * * As the Bruges money-changers had no correspondents abroad, they did not import bullion themselves, but it was brought to them by the merchants, who were given either local currency in exchange or, more often, credit on the books.¹¹⁷ By this process, bank deposits were likely to expand if bullion flowed into Bruges. The cash reserves of the banks would also increase. If this movement kept on, the banks might feel that they could safely expand their loans and their investments. Business, in general, would be promoted, and the banks would be glad to deliver the incoming bullion to the mint in order to get local currency.

On the other hand, the money-changers, as a rule, did not send money abroad. If bullion was needed for export, it was likely to be taken out of the banks by the merchants drawing on their bank accounts.¹¹⁸ If such withdrawals continued and outbalanced the sales of bullion to the money-changers, their cash reserves would inevitably decline. Eventually this decline would force the banks to curtail their loans and their investments. Such a contraction was liable to have disastrous effects by increasing the pressure on the money market, by bringing down prices, by encouraging the practice of picking and culling (because the heavier coins had more value as bullion abroad), and by stopping the deliveries of bullion to the mint.

As has been explained, a cessation of the work at the mint was the first step toward debasement of the currency. If the money-changers were hard pressed for cash, they could be trusted to favor the same move. As the liabilities of the banks were in groats and multiples of the groat—pounds and shillings—debasement or a devaluation of the groat would improve directly and immediately their financial condition by creating a cash surplus and by stretching out their

dwindling cash reserves. In other words, the money-changers could have their cash reserves recoined into a greater number of groats and still owe to their customers the same number of groats as before the debasement. The position of the banks would also be improved indirectly. Debasement was likely to relieve the strain on the money market, to arrest the fall of the price level, to stop the foreign demand for bullion, and thus to check the drain on the coffers of the money-changers. It is not surprising, therefore, that they were in favor of debasement whenever there was an acute scarcity of money and they were threatened with impending ruin by the exhaustion of their cash reserves. An essential difference between the mediaeval and the modern banking systems is that, in the Middle Ages, the commercial banks could not turn for aid to a central bank in times of stress.

Bruges banks = money-changers

NOTES TO CHAPTER 12

¹The most noteworthy contributions are the following articles: Hans van Werveke, 'Monnaie de compte et monnaie réelle,' *RBPH*, XIII (1934), 123-52; Allan Evans, 'Some Coinage Systems of the Fourteenth Century,' *Journal of Economic and Business History*, III (1931), 481-96; Gino Luzzatto, 'L'oro e l'argento nella politica monetaria veneziana dei secoli XIII e XIV,' *Rivista storica italiana*, 5th series, Vol. II, fasc. 3 (1937), pp. 17-29; Marc Bloch, 'Le problème de l'or au moyen âge,' *AHES*, V (1933), 1-34. On the Flemish monetary system in particular, we are indebted to Professor Hans van Werveke of the University of Ghent for a series of excellent studies: *De Gentsche stadsfinanciën in de middeleeuwen*, chap. vi, pp. 107-61; 'De ekonomische en sociale gevolgen van de muntpolitiek der graven van Vlaanderen,' *op. cit.*, pp. 1-15; 'De Vlaamsche munthervorming van 1389-1390,' *Nederlandsche Historiebladen*, I (1938), 336-47. In connection with these studies of Dr van Werveke, one should also read Henri Laurent, 'Crise monétaire et difficultés économiques: en Flandre aux XIVe et XVe siècles,' *AHES*, V (1933), 156-60.

²Luzzatto, 'L'oro e l'argento,' *op. cit.*, pp. 17 ff.

³*Ibid.*, p. 17.

⁴One expounder of this fallacious theory is the French numismatist Adolphe Dieudonné, who writes: 'La livre de compte, c'est la monnaie d'apparence immuable derrière laquelle se dissimulent les espèces; la livre de compte, c'est le billet. Seulement, il intervenait à l'état de promesse verbale et, lorsqu'il s'agissait de régler, au lieu de fournir du papier, on traduisait le compte en monnaie métallique ('L'actualité d'hier: changes et monnaies au moyen âge,' *Revue des Deux Mondes*, 7e période, XXXVII [1927], 931). This statement of Dieudonné's, it seems to me, does not make sense. Dr van Werveke was one of the first to challenge the theory of 'ideal' money in his article, 'Monnaie de compte et monnaie réelle,' *op. cit.*, pp. 123 ff.

⁵Dr van Werveke correctly refers to 'une monnaie fonctionnant dans le vide,' (*ibid.*, p. 127).

⁶Chiefly among the French and Belgian historians. See, for example, Ernest Babelon, *La théorie féodale de la monnaie*, (Mémoires de l'Académie des Inscriptions et des Belles Lettres,' in-4° series, Vol. XXXVIII; Paris, 1908), Part I, p. 19; Victor Tourneur, 'De la méthode à suivre pour évaluer en monnaies modernes les valeurs anciennes énoncées dans les textes historiques belges du XIe siècle au XVIIIe,' *RBPH*, I (1922), 105; Laurent *La Loi de Gresham au moyen âge*, p. 5. This book of Laurent's is full of contradictions and errors in interpretation. Laurent was an excellent historian, but he made the mistake of accepting the theory of the independent standard. A book on money, unfortunately, stands or falls with the soundness or falseness of the underlying monetary theory. Another characteristic formulation of the theory of the independent standard is given by Joseph Calmette, *La société féodale* (Paris, 1923), p. 64: 'Elles [les altérations] étaient facilitées par la complication du régime monétaire tel qu'il existe au moyen âge, époque où la monnaie de compte était différente de la monnaie réelle [italics mine].'

⁷Luigi Einaudi, 'The Medieval Practice of Managed Currency' in *The Lessons of Monetary Experience: Essays in Honor of Irving Fisher* (New York, 1937), pp. 259-69; *idem*, 'Teoria della moneta immaginaria nel tempo da Carlomagno alla Rivoluzione francese,' *Rivista di storia economica*, I (1936), 1-35.

⁸van Werveke, 'Monnaie de compte,' *op. cit.*, pp. 123-34.

⁹*Idem*, *Gentsche stadsfinanciën*, p. 109.

¹⁰Cf. A. Luschin von Ebengreuth, *Allgemeine Münzkunde und Geldgeschichte des Mittelalters und der neueren Zeit* (2d ed.; Munich, 1926), p. 195; Pirenne, *Economic and Social History of Medieval Europe*, pp. 109 f.; Walter Täuber, *Geld und Kredit im Mittelalter* (Berlin, 1933), p. 69.

¹¹Concerning changes in this ratio, see Tourneur, 'Méthode pour évaluer en monnaies modernes les valeurs anciennes,' *op. cit.*, p. 108; van Werveke, *Gentsche stadsfinanciën*, pp. 115-36.

¹²Money-changers were fined if they received or sold gold coins at a rate exceeding the official valuation.

¹³In 1408, for example, the money market in Flanders was swamped with Rhenish florins. Assays revealed that these florins were worth only 29 groats instead of 33 groats. The municipal authorities of Bruges asked the count of Flanders to ban the Rhenish florins from circulation (Gilliodts, *Inventaire*, V, 28).

¹⁴Victor Brants, *Esquisse des théories économiques professées par les écrivains des XIII^e et XIV^e siècles: l'économie politique au moyen âge* (Louvain, 1895), p. 189: 'Il y a un texte d'un mémoire du XIV^e siècle, émané d'un monnayeur inconnu, qui prouve d'ailleurs que cette loi économique était comprise à merveille. Il est curieux de signaler, comme une ancienne formule de la loi attribuée à Gresham, ce texte qui, par des exemples alors récents, démontre le danger de ne pas ajuster l'or et l'argent, ce qui fait, selon son énergique expression, que tantôt l'argent mange l'or, tantôt l'or mange l'argent.'

¹⁵Victor Gaillard, *Recherches sur les monnaies des comtes de Flandre depuis les temps les plus reculés jusqu'à l'avènement de la maison de Bourgogne*, II (Ghent, 1857), 159. The Flemish sterling, equal to $\frac{1}{2}$ groat, should not be confused with the English coin of the same name. On the coinage of sterlings, see *ibid.*, p. 74, No. XXVIII.

¹⁶It is not true, as Dr van Werveke asserts (*Gentsche stadsfinanciën*, p. 142), that the coinage of pieces of one groat was discontinued after the appearance of the double groat. The double groat was simply added to the existing denominations. See the ordinance of July 16, 1384, published by Gilliodts (*Inventaire*, IV, 122). This ordinance mentions the double groat (art. 1) and the single groat (art. 2).

¹⁷Gilliodts, *Inventaire*, V, 589 f. In 1489, the following denominations were in circulation: *grand double* (4 patards, 8 groats), *double patard* (4 groats), *patard* (2 groats), one groat, half-groat, $\frac{1}{2}$ groat, *denier* ($\frac{1}{2}$ groat, $\frac{1}{12}$ patard), two mites ($\frac{1}{12}$ groat), one mite ($\frac{1}{24}$ groat). See ordinance of December 14, 1489, published in *Groot Placcaet-Boeck inhoudende de Placcaten ende Ordonnantien van de Hoogh-Mog. Heeren Staten Generael der Vereenighde Nederlanden*, I (The Hague, 1658), 2580-81.

¹⁸Seigniorage, strictly speaking, is a tax on the coinage of money paid by the individual who delivered bullion to the mint and received in exchange a smaller quantity of gold or silver under the form of new coins. *Brassage* or mint charges were usually added to seigniorage in order to cover the cost of the coining process.

¹⁹For instance, according to the ordinance of June 12, 1418, the price of the mint, the seigniorage, and the mint charges per mark troy *argent-le-roi* were as follows:

Groat:

| | | | | |
|---|------|-----|-----|------|
| Mint price of one mark troy <i>argent-le-roi</i> | 21s. | 2d. | gr. | 92% |
| Seigniorage | | 4d. | | 1.5% |
| <i>Brassage</i> or mint charges | 1s. | 6d. | | 6.5% |
| Total | 23s. | | gr. | 100% |

Double mites:

| | | | | |
|---------------------------------|------|-----|-----|------|
| Mint price of one mark troy | 21s. | 2d. | gr. | 53% |
| Seigniorage | | 4d. | | 1% |
| <i>Brassage</i> or mint charges | 18s. | 6d. | | 46% |
| Total | 40s. | | gr. | 100% |

Mites:

| | | | | |
|---------------------------------|------|-----|-----|------|
| Mint price | 21s. | 2d. | gr. | 47% |
| Seigniorage | | 4d. | | 1% |
| <i>Brassage</i> or mint charges | 23s. | 6d. | | 52% |
| Total | 45s. | | gr. | 100% |

Deschamps de Pas, 'Essai sur l'histoire monétaire des comtes de Flandre,' *op. cit.*, VI, 230-32.

²⁰Gaillard, *op. cit.*, p. 102, No. XLV.

²¹Pure silver was 12 deniers fine. The denier was further subdivided into 24 grains.

²²The mark troy being equal to 245 grams, the figure of 3.55 grams is obtained by dividing 245 gr. by 69. By taking $\frac{37}{72}$ of 3.55, one obtains the figure of 1.82 grams.

²³The figure of 134 is obtained by dividing 69 by $\frac{37}{72}$. Another good example is the ordinance of July 16, 1384 (Gilliodts, *Inventaire*, IV, 122). This ordinance provided for the coinage of double groats, $\frac{1}{2}$ *argent-le-roi*, at the rate of 50 in a mark troy, standard silver. On this basis 100 double groats or 200 single groats were coined from a mark troy *argent-le-roi*. The equivalent of 200 groats is 16s. 8d. gr. This figure agrees with the ordinance which fixed the price of the mint for one mark troy *argent-le-roi* at 14s. 4d., the seigniorage at 1s. gr., and the mint charges at 1s. 4d. gr.

²⁴Gilliodts, *Inventaire*, V, 589.

²⁵1.89 grams = $245 \div 130$; 0.71 grams = 0.375×1.89 grams.

²⁶The figures in columns 1, 2, 6, 7, and 8 are based on the data given in the ordinance. The figures in column 3 are obtained by dividing 245 grams by the corresponding figure given in column 2. The figures in column 4 are obtained by multiplying the corresponding figure in column 3 by the fraction in column 1. The figures in column 5 are obtained by dividing 245 grams by the corresponding figure in column 4. The accuracy of the table can be checked by multiplying the figure in column 5 by the value of each denomination. The product of this multiplication should give the equivalent of the values in column 6. Thus 4 groats \times 84 = 338 groats = 28s. 2d. gr.

²⁷This procedure was not always followed. Thus, after the raise of January 1390, the groats of former issues were allowed to remain in circulation, but at reduced rates. Some of those groats could only be accepted for 20 mites, another kind was rated as low as 2 sterlings or $\frac{1}{3}$ of a groat. See Gilliodts, *Inventaire*, IV, 123.

²⁸van Werveke, *Stadsfinanciën*, pp. 139-42.

²⁹*Ibid.*, p. 145 and *idem*, 'Munthervorming,' *op. cit.*, p. 337.

³⁰*Idem*, *Stadsfinanciën*, p. 145.

³¹*Ibid.*, p. 145 and *idem*, 'Munthervorming,' *op. cit.*, p. 337.

³²*Loc. cit.*

³³In 1407, the silver content of the groat was raised from 1.07 grams to 1.17 grams. In 1409, the silver content was further increased to 1.25 grams *argent-le-roi*.

³⁴van Werveke, *Stadsfinanciën*, p. 139.

³⁵Babelon, *La théorie féodale des monnaies*, p. 45.

³⁶Laurent, *La loi de Gresham*, p. 14. The mint of Bruges was not reopened until January 22, 1390, when the claims of the French kings were entirely forgotten as far as Flanders was concerned.

³⁷See, for example, the ordinance of Louis de Male, December 14, 1361, art. 2 (*Hansisches Urkundenbuch*, III, 355-56, No. 583 and Gilliodts, *Cart. de l'Estaple*, I, 241, No. 317). This ordinance forbade the giving or accepting in payment of any money other than Flemish currency or the coins of the king of France. The money-changers were, of course, always allowed to buy foreign coins as bullion.

³⁸John Maynard Keynes, *Monetary Reform* (New York, 1929), p. 162. Henri Laurent mentions this theory as an unquestionable truth in his article, 'Crise monétaire et difficultés économiques,' *op. cit.*, p. 156.

³⁹The rise of the price level after 1450 was probably due not only to debasement, but also the increased production of the German silver mines. As there was certainly no increase, but rather a decline, in the use of money substitutes, increased production of the mines was likely to have a more direct effect on the quantity of money and on the price level. Cf. John U. Nef, 'Silver Production in Central Europe, 1450-1680,' *JPE*, XLIX (1941), 585-86.

⁴⁰Hubert Van Houtte (ed.), *Documents pour servir à l'histoire des prix de 1381 à 1794* (Brussels, 1902), pp. 9-10.

⁴¹In 1357, the fullers of Hulst, a small town in northern Flanders, were granted an increase of wages, because everything had greatly risen in price (*aensiende dat alle dinghen zere*

verdiërsi zijn). Espinas and Pirenne, *Recueil de documents relatifs à l'histoire de l'industrie drapière en Flandre*, II, 709, No. 593. Cf. van Werveke, 'Muntpolitiek,' *op. cit.*, pp. 4-5.

⁴²Espinas and Pirenne, *Recueil*, III, p. 378, No. 726; p. 384, No. 729. Cf. Pirenne, *Histoire de Belgique*, II, 199 and van Werveke, 'Muntpolitiek,' *op. cit.*, p. 6.

⁴³Espinas and Pirenne, *Recueil*, II, 540 f., No. 496.

⁴⁴van Werveke, 'Muntpolitiek,' *op. cit.*, p. 11.

⁴⁵*Ibid.*, p. 15. Cf. Laurent, 'Crise monétaire,' *op. cit.*, p. 158.

⁴⁶Oresme was a staunch advocate of monetary stability and was strongly opposed to any debasement of the currency except in great emergencies. See Nicole Oresme, *Traictié de la première invention des monnoies*, ed. L. Wolowski (Paris, 1864), pp. 26, 60-61. ✓

⁴⁷van Werveke, 'Munthervorming,' *op. cit.*, p. 343 and n. 1.

⁴⁸Gilliodts, *Inventaire*, III, 134.

⁴⁹Except when there was an agreement to the contrary (see *ibid.*, p. 134, and van Werveke, 'Munthervorming,' *op. cit.*, p. 343).

⁵⁰Gilliodts, *Inventaire*, III, 134.

⁵¹Laurent, *La loi de Gresham*, pp. 169-71, No. 24.

⁵²Espinas and Pirenne, *Recueil*, I (1906), 668-69, No. 206.

⁵³*Ibid.*, pp. 297-98, No. 122: '... hoc hemlieden die loen ghemindert was ende ghevalueert mids den verandrene van den munten.'

⁵⁴The date of the decision is February 12, 1397 (*loc. cit.*).

⁵⁵The subject of price and other rigidities in the Middle Ages has received little attention up to now, save for a short article by N. S. B. Gras, 'The Growth of Rigidity in Business during the Middle Ages,' *American Economic Review*, XXX (1940), suppl., 281-89.

⁵⁶John Maynard Keynes, *The General Theory of Employment, Interest, and Money* (New York, 1936), p. 307.

⁵⁷Jacob Viner, 'Review of Eli F. Heckscher, *Mercantilism*,' *The Economic History Review*, VI (1935), 101.

⁵⁸In 1381, Duke Wenceslas and Duchess Jeanne of Brabant stated in a report that their mint had been closed for more than three years, because they were not allowed by their subjects to debase the currency (Laurent, *La loi de Gresham*, p. 121, No. 3). At a meeting of the Estates in 1381, Duke Wenceslas left the delegates with the choice of three alternatives: (1) the delegates should allow him to debase the currency, (2) or to close the mint, (3) or they could take over the mint themselves and try to run it (*ibid.*, pp. 33-34). After the reform of 1389-1390, Philip the Bold experienced great difficulty in finding a master of the mint. In 1400, he had to offer two hundred nobles as an inducement to Barthélémy Thomas (Deschamps de Pas, 'Histoire monétaire des comtes de Flandre,' *op. cit.*, VI, 129-30). Cf. Laurent, *La loi de Gresham*, p. 68. The table published by Gaillard (*Recherches sur les monnaies des comtes de Flandre*, II, 168-69) which covers with some gaps the period from 1346 to 1383 shows that there were great variations in the output of the Flemish mint. During certain years no silver at all was coined and the mint was frequently operated at a loss (*ibid.*, docs., Nos. 22, 23, 25, and *passim*). See also Laurent, *La loi de Gresham*, pp. 56-57. In 1438, the money-changers were ordered to deliver a given quantity of bullion to the mint 'in proportion to the importance of their exchange dealings.' The purpose of this ordinance was evidently to keep the mint supplied with bullion (Deschamps de Pas, 'Histoire monétaire des comtes de Flandre,' *op. cit.*, VII, 118).

⁵⁹Arthur Layton Funk, 'The Movement of Reform and Revolt in Mid-Fourteenth Century France' (Unpublished Ph.D. dissertation, Dept. of History, The University of Chicago, 1940), p. 38.

⁶⁰As early as 1300, Dubois saw that debasement made exports of goods more profitable. Arthur Eli Monroe, *Monetary Theory before Adam Smith* [Cambridge, Mass., 1923], p. 30.

⁶¹Funk, *op. cit.*, p. 40: 'It seems clear, however, that because of the method of operation in the mints, the currency could not remain stable.'

⁶²The mints of the counts of Flanders were frequently operated at a loss. See Gaillard, *Recherches sur les monnaies*, pp. 63, 68, and *passim*.

⁶³This was the opinion expressed by Pierre Dubois as far back as the year 1300 in a memoir submitted to Philip the Fair, King of France (Monroe, *Monetary Theory before Adam Smith*, p. 29). Cf. Funk, *op. cit.*, p. 42: 'Actually, debasement seems to have been practiced only under the greatest pressure, when no other solution was available,'; and Bernardo Davanzati, 'Lezioni delle monete' in *Scrittori classici italiani di economia politica, Parte Antica*, Vol. II (Milan, 1804), p. 40.

⁶⁴Jacob Viner, *Studies in the Theory of International Trade* (New York, 1937), pp. 206 f, 378.

⁶⁵The technical expression is *accorder une crue aux marchands* and is found in a great number of ordinances of the counts of Flanders and the dukes of Burgundy of the House of Valois. It is not true, as Laurent asserts, that the country with the highest seigniorage charges will change in its favor the distribution of bullion (*La loi de Gresham*, p. 11). Exactly the opposite is true: the higher the charges, the less bullion will be attracted.

⁶⁶Marc Bloch, 'Ecrits sur la monnaie,' *AHES*, X (1938), p. 361.

⁶⁷Such establishments existed not only in Bruges, but in other Flemish cities as well. See Bigwood, *Régime*, I, 423-25.

⁶⁸Gilliodts, *Inventaire*, I, 300 f., No. 237.

⁶⁹*Loc. cit.*

⁷⁰*Loc. cit.*

⁷¹*Loc. cit.*

⁷²Bigwood, *Régime*, I, 422.

⁷³It seems that hallmarked silver bars were chiefly used by the conservative and backward Hanseatic merchants. They did not give up the use of silver bars as a means of payment until late in the fourteenth century. See Luschin von Ebengreuth, *op. cit.*, p. 182.

⁷⁴Edler, *Glossary of Business Terms*, 'Vantaggio,' p. 310 and 'Aggio,' p. 25.

⁷⁵Gilliodts, *Inventaire*, I, 301 and ordinance of 1309, art. 8.

⁷⁶In 1316-1317 the mite was worth $\frac{5}{9}$ of a denier *parisis*. See van Werveke, *Gentsche stadsfinanciën*, p. 146.

⁷⁷Pegolotti, *La Pratica della Mercatura*, p. 243: 'Di cambiora manesche a contanti, da ciascuna delle parti $\frac{1}{4}$ di grosso tornese d'ariento del centinaio di reali.'

⁷⁸*Ibid.*, p. 247.

⁷⁹Bigwood, *Régime*, I, 428 and Simone Poignant, *La foire de Lille: contribution à l'étude des foires flamandes au moyen-âge* ('Bibliothèque de la Société d'Histoire du Droit des Pays flamands, picards et wallons,' VI; Lille, 1932), p. 134.

⁸⁰Ghent, Municipal Archives, Chartres et Documents, No. 561, ordinance of October 12, 1433, arts. 6 and 15.

⁸¹Gilliodts, *Inventaire*, V, 384. On this basis, the commission of the money-changer was $\frac{1}{288}$ or $\frac{1}{276}$ of the total of each exchange transaction.

⁸²*Loc. cit.*

⁸³*Ibid.*, pp. 544, 548.

⁸⁴*Groot Placcaet-Bocck*, I, 2594.

⁸⁵Endemann, *Studien*, I, 105.

⁸⁶de Roover, 'Ruyelle,' *op. cit.*, p. 27. According to the cash book of Guillaume Ruyelle, he had in cash on March 30, 1370, £45 14s. 7d. gr. The next day on April 1, 1370, he reopened his cash book with £47 7s. 5d. gr. The only explanation for this difference of £1 12s. 10d. gr. is that it originated in fees on exchange transactions.

⁸⁷Collard de Marke Ledger No. 4, fol. 30, account of Jehan de Concorighe. The amount of £151 5s. 5d. gr. is made up of two deposits, one of £72 18s. 9d. gr. and one of £78 6s. 8d. gr.

⁸⁸Collard de Marke Ledger No. 2, fol. 15: 'Zegres Onin li Jouenes me doit l'avantaige de 30fb en or en conte blanc argent.'

⁸⁹*Ibid.*, Ledger No. 4, fol. 188. See also the account of Forteguerra (Ledger No. 4, fol. 124) and that of Davin Tedaldin (*ibid.*, fol. 76).

⁹⁰Ledger No. 4, fol. 103. The amount of £215 4s. 3d. gr. charged to Roulof Rabonne was made up as follows:

| | £ | s | d | gr. |
|--------------------------------------|------|---|---|-----|
| 510 <i>moutons</i> at 51 groats..... | 108 | 7 | 4 | |
| 800 francs at 31 groats..... | 103 | 6 | 8 | |
| in silver currency, 13 groats..... | | 1 | 1 | |
| agio or fee..... | 3 | 9 | 2 | |
| Total..... | £215 | 4 | 3 | gr. |

⁹¹*Ibid.*, fol. 320.

⁹²See, for example, the account of Jehan de Courtrai, l'orfèvre, Ledger No. 4, fol. 1. When the widow of Diederic Urbaens failed, one of the creditors lodged a claim for five ounces of gold (Bruges, Municipal Archives, Chartes politiques, No. 445).

⁹³Ledger No. 4, fol. 315.

⁹⁴*Ibid.*, fol. 3^v and Ledger No. 5, fol. 3^v.

⁹⁵Ledger No. 4, fol. 3^v.

⁹⁶The dealings between Collard de Marke and the mint can be summarized in the following way:

| Account of Thumas Sarlande | | | | |
|---|-----|-----|----|-------|
| | | £ | s | d gr. |
| Due to Thumas Sarlande for money lent before Christmas 1368..... | Cr. | 400 | - | - |
| Several shipments of bullion to the mint in March and April 1369 as recorded in the 'papier de le monnoie'..... | Dr. | 501 | 19 | 7 |
| Balance outstanding on May 20, 1369..... | Dr. | 101 | 19 | 7 |
| Coins delivered by the mint about August 1, 1369..... | Cr. | 51 | 19 | 7 |
| Balance due from Thumas Sarlande on December 24, 1369..... | Dr. | 50 | - | - |

⁹⁷Bigwood, *Régime*, I, 389; Gilliodts, *Inventaire*, V, 19; Z. W. Sneller, *Deventer, die Stadt der Jahrmärkte* ('Pfungstblätter des Hansischen Geschichtsvereins,' XXV; Weimar, 1936), p. 112; *idem*, 'Het wisselaarsbedrijf in Nederland vóór de oprichting der stedelijke wisselbanken,' *op. cit.*, p. 493.

⁹⁸Gaillard, *Recherches sur les monnaies*, I, 23, No. XIII, October 31, 1299; Gilliodts, *Cart. de l'Estaple*, I, 93, No. 132; Bigwood, *Régime*, I, 426. Art. 3 provided that 'nuls marchands, ne cangieres, ne autres hoirs ne puist achateir argent ne billon, ne cange tenir; c'est à entendre ke toutes les canges soient abatues.'

⁹⁹Bigwood, *Régime*, I, 401; II, 304 f., No. XX.

¹⁰⁰L. F. Salzman, *English Trade in the Middle Ages* (Oxford, 1931), pp. 20-21. It was illegal in England to charge any fee for the exchange of English coins and to bring non-current foreign coins into circulation. Such coins were to be sold as bullion to the Royal Exchanger. This office already existed in 1223. It was originally created to supply the Mint with bullion and to regulate petty exchange. Later efforts by the Plantagenets and the Tudors to extend the royal monopoly and to bring the trade in bills of exchange under the control of the Royal Exchanger were unsuccessful. Cf. Pegolotti, *op. cit.*, p. 255.

¹⁰¹The facts are given in de Roover, 'Ruyelle,' *op. cit.*, pp. 38-41 and Bigwood, *Régime*, I, 229-31.

¹⁰²Baudouin de Vos is called by Louis de Male 'nostre amé vallet' in a public document. See Gaillard, *Recherches*, II, 119, No. LIII, dated August 4, 1357.

¹⁰³The monetary ordinances of the fifteenth century having been drafted with more care

than those of the preceding century, frequently refer to the money-changers and merchants (*marchans et changeurs*) who bring bullion to the mint.

¹⁰⁴A mintmaster of Philip the Bold, Simon de la Faucille, complains of the fact that the monetary ordinances are disobeyed ('et le peuple n'obeist pas aux ordonnances'). See Laurent, *La loi de Gresham*, pp. 74, 77; Gilliodts, *Inventaire*, III, 131 (ordinance of December 20, 1389) and *ibid.*, V, 537 (ordinance of October 13, 1467).

¹⁰⁵Laurent, *La loi de Gresham*, p. 74.

¹⁰⁶Cf. Tawney, Intro., Wilson, *Discourse on Usury*, p. 93.

¹⁰⁷Such a case is mentioned in a document published by Gilliodts, *Inventaire*, VI, 466.

¹⁰⁸Bruges, Municipal Archives, Municipal Account, 1366-1367 (n.s.), fol. 16. These are the names of the money-changers who were fined: (1) Colaerde van Maerc, (2) Jakemaerde van Rouc, (3) Stevene van der Meersch, (4) Gillisse Uten-Hove, (5) Pietre de Pottere, (6) Janne van Maerc, (7) Janne van Donc, (8) Janne Huerle, (9) Janne Ruwele.

¹⁰⁹Gilliodts, *Inventaire*, IV, 184 and *Cart. de l'Estaple*, I, 381, No. 455.

¹¹⁰Gilliodts, *Inventaire*, IV, 186 f., and *Cart. de l'Estaple*, I, 381, No. 455.

¹¹¹*Ibid.*, p. 457, No. 549.

¹¹²Gilliodts, *Inventaire*, VI, 466.

¹¹³Vatican Library, Vat. Lat. MS 4828, fol. 114: 'E fecevisi uno ordine che ciascuno banchiere a cui ne capitasse ne dovesse dare el pregio ch'era messo, poi taglarle, e metterle in zecca, acciò vi fusse abbondanze delle tre monete dette che v'anno il corso' (italics mine, date ca. 1460).

¹¹⁴Uzzano, *La pratica della mercatura*, chap. xlvi, p. 156; Florence, Bibl. Naz., Codice Palatino 601: Aritmetica [ca. 1450], fol. 71: 'A Brugia sono buoni que' danari ragionevolmente il magio e giugno e di dicenbre insino ½ giannaio perchè in questi tempi vi sono le migliori fiere di tutto l'anno e quando non apare di nuovo senpre in que' tempi vi sono buoni, ma quando vi vanno navi di Levante che sieno ricche senpre allora vi s'alargha perchè gli Alamanni e paesani vi traghono a chonprare e lascianvi assai danari chontanti e chosì in questo chaso vi si alarghano e' danari;' *Libro di mercatantie et usanze de' paesi*, p. 168: 'A Bruggia è una fiera di marzo [emend to read "maggio"] che vi gitta gran charo e al giungnio e al dicenbre per ispaccamento di navi.'

¹¹⁵Uzzano, *op. cit.*, p. 155: 'Firenze fanno sempre miglioramentoe di denari, Settembre fino a Gennaio sono buoni, e questo è per molte paghe anno a fare ai [text has only "i" by mistake] Contadini, che danari entrono in comune ed escono de' banchi.'

¹¹⁶*Ibid.*, p. 155: '[I denari] uscissono de' banchi e de' cambiatori.'

¹¹⁷The account book of Vicko van Geldersen, a Hamburg merchant of the fourteenth century, contains a great many entries relating to the shipment of coins from Hamburg to Bruges. See *Das Handlungsbuch Vickos von Geldersen*, 101, Nos. 624, 627, 629, 631, 632, 633; p. 102, No. 643; p. 103, Nos. 648, 651, 654; p. 104, No. 659, and *passim*. In Venice, all the deposit banks failed in 1499 except one, the Agostini bank. A few months later, the German merchants complained before the doge that, as a result of these bank failures, they had no market for their silver and *that bullion was not finding its way to the mint*. See Frederic C. Lane, 'Venetian Bankers, 1496-1533: a Study in the Early Stages of Deposit Banking,' *JPE*, XLV (1937), 196. In the fifteenth century English statutes prescribed that the Merchants of the Staple should accept only gold, and no bills of credit, in payment of English wool. This gold was then coined into English nobles at the mint of Calais. The nobles, however, did not stay in England, but were re-exported by English importers of continental goods. The result was that English nobles could easily be bought at the exchange in Bruges and that the mint of Calais was soon left without any supply of bullion. To remedy this situation, Parliament passed another act forbidding the export of bullion! See Eileen Power, 'The Wool Trade in the Fifteenth Century,' *Studies in English Trade in the Fifteenth Century*, eds. Eileen Power and M. M. Postan (New York, 1933), p. 82.

¹¹⁸There is at least one unquestionable example in the Collard de Marke account books. On December 27, 1368, a customer named Raoul Doucemin withdrew £8 1s. gr. in cash for export to Brabant (*pour porter en Braibant*). See Ledger No. 4, fol. 26.

Chapter 13

BANK DEPOSITS AS MONEY

AS we have seen, it had become customary in Flanders, by the second quarter of the fourteenth century, for merchants and private individuals to deposit with the money-changers any cash which was not immediately needed. The latter did not keep all this money safely locked up in their chests but used the greater part of it for their own purposes. This was not a breach of confidence. The money-changers were indeed expected to meet every demand for repayment at the first request. But the specific coins originally placed on deposit need not be returned, only their equivalent in money. In short, by the fourteenth century, the money-changers had expanded their business to include deposit banking.

The question may now be asked: when and how did this evolution take place? There is, unfortunately, only scant information available for the period prior to 1300. However, there is scarcely any doubt that the growth of banking in Flanders was influenced by the evolution of financial institutions in Italy and went through the same stages of development, but with a considerable lag. In Italy, deposit banking was well developed by 1200, and presumably before.¹ *Bancherii* are mentioned in Genoa as early as the twelfth century, although the word, at that time, may have been used loosely and without precise connotation, like the expression *tafetiers* in the Low Countries.² This expression seems to have been a general term for money-dealers and money-lenders of every description, as all of them transacted their business at a table, desk, or bank.³ It is quite possible that, in the beginning, *bancherius* had the same vague and general meaning. Be that as it may, it is beyond question that money-changing in Italy as well as in Flanders was the starting-point of deposit banking.⁴ The money-changers took the first step in this direction when they began to accept money and valuables for safekeeping in their coffers or strongboxes, as did some of the monastic orders, especially the Knights Templars.⁵ Such deposits were, of course, regular deposits, and the money-changers who accepted them were simply bailees or depositaries obligated to restore the specific monies or valuables entrusted to their care. As all deposits were not withdrawn at the same time, money-changers soon found out that they would run little risk if they invested for profit some of the money given to them for safe-keeping. The ease with which coins could be interchanged further encouraged such a practice.⁶ The Italian notarial records give one the impression that, at first, the depositors neither gave their formal consent nor even knew what was going on.⁷ Later—

and this final step completed the evolution—they knew but did not care, so long as they could get their money back at a moment's notice or dispose of it by assignment. Bank deposits thus became transferable claims to a given sum of money. The result of this final change was that bank deposits were increasingly used as a means of payment and thus turned out to be a substitute for specie.

The Lille grant of 1294 and the Bruges account books of the middle of the fourteenth century show us deposit banking as an existing institution, but do not explain how it came into being. There is, fortunately, one very important document which throws some light on this problem of origins. This document concerns Liège and not Bruges, but this does not matter very much as business methods presumably varied little within the narrow boundaries of the Low Countries. The Liège document is a statute of the *frairie* or brotherhood of the money-changers and dates from the year 1315 (n. s.).⁸ The text was prepared from information supplied by trustworthy persons (*bones gens de foid*) and by the oldest members of the gild (*les anchines cambges*).⁹ Consequently, the statute refers to customs and rules which, in 1315, had been in force for a long time. They probably date back to the middle of the thirteenth century and possibly even further. The statute emanated from the municipal authorities. Its purpose was to uphold the good reputation of the money-changers of Liège, to define their duties, and to provide penalties for any offense against professional ethics. Those duties were twofold. (First) of all, the money-changers were expected to do their best in order to maintain a sound currency. In the second place, they were expected to keep securely and to return faithfully at the first request any money, jewelry, plate or other valuables which were entrusted to them for custody (*en comandiese*).¹⁰

If the owners of such goods complained to the gild officials (*les maîtres delle cambge*) that a money-changer refused to release any property held in custody, he was notified that he had three days in which to comply.¹¹ If after three days the property had not been restored, the recalcitrant money-changer became liable to a fine equal to the amount of the deposit or the value thereof in currency. The gild authorities had, further, the power to suspend the offender for six weeks (*trois quinzaines*). If at the end of this period he still refused to pay the fine and to surrender what he unlawfully retained, he was deprived of his membership in the brotherhood of the money-changers, and court proceedings were initiated without further delay. Any fines collected as a result of such action were to be shared equally by the brotherhood, the city treasury, and the Mayor of Liège in behalf of the municipal court of justice.

These drastic measures, the authorities declare in the statute, are taken because the exchange of Liège is and ought to remain the strongbox of the good people of the city ('que la cange de la cité de Liège doit estre et est huge de

bonnes gens'). In other words, the coffers of the money-changers of Liège were the favorite place of safe-keeping for valuables belonging to the well-to-do people in the community.

It is clear that the statute of Liège does not contain a single word from which one could draw the inference that the money-changers of that city were doing banking. The document deals only with monies and valuables entrusted to them for custody or *en comandiese*. This is the *commenda sive depositum*,¹² the *depositum regulare* of Roman law, the Italian *accomanda*.¹³ The conclusion is that, in the thirteenth century, the money-changers of Liège were also depositaries or safe-keepers of monies and valuables, but not yet deposit bankers. *

During that same period, the money-changers of Bruges were already taking the final step and it is possible that the statute of Liège was a measure sponsored by the older and more conservative members of the *frairie* in order to counter the same tendency. It is difficult to say whether the money-changers, after becoming deposit bankers, continued to be custodians of valuables. Most probably they did, but the Bruges account books do not give any clue to this problem. This is quite natural. Banks today still perform the same function of safe-keeping, but they do not keep a record in their ledgers of what customers put into their safety-deposit boxes.

Once the money-changers had extended their activity to deposit banking, it ceased to be true that funds were deposited with them primarily for reasons of safe-keeping.¹⁴ Neither did people have money on deposit at the exchange (*en change*) in order to get a small return on idle cash. Today, in some European countries the banks pay a small interest on demand deposits, but the rate is usually very low and varies in accordance with the state of the money market. This does not seem to have been the practice in the Middle Ages. In the Collard de Marke and Guillaume Ruyelle account books, there is nothing which would indicate that interest was paid to depositors. When the widow of the money-changer Diederick Urbaens failed, sometime between 1340 and 1350, the sureties claimed that they were not liable for any debts on which interest was paid.¹⁵ These accounts appeared to be *wesegheld* or money belonging to orphans which was invested by their guardians in the exchange banks. These investments certainly were not subject to sudden withdrawal and we would call them today 'time deposits.' In fact, the statement of the debts of Diederick Urbaens' widow mentions only one such deposit. It had been carried on the books for a long time, and interest payments were in arrears for three years when the crash occurred.

As the public did not have money on deposit with the money-changers either for reasons of safe-keeping or for the sake of a return, we must look for some other motive which explains why people were willing to part with their pennies and to run the risk of losing them in the failure of a bank. This ✓

motive is fortunately not hard to find. It is for reasons of convenience that people of today often prefer to have money in the bank rather than in their till, their purse, or their strongbox. In many circumstances it is more convenient to pay by check than to pay with cash. Because of the disorderly state of mediæval currency, the convenience of having an account at the exchange (with a money-changer) was even greater than is today the convenience of having an account at the bank.¹⁶ In the Middle Ages, of course, there were no checks, but their place was taken by a system of book-transfers which achieved the same purpose.

book transfers ✓
 Mediaeval trade would have been greatly hampered if it had been necessary for all payments to be made in cash. The Venetian Senator Tommaso Contarini goes even so far as to say that trade would have been well-nigh impossible.¹⁷ Because of the great variety of coins in circulation, it was not practical to pay out or to receive large sums without expert advice. If a money-changer were called in for consultation, he would charge a fee for his services. It should also not be forgotten that there existed no banknotes of large denominations in the Middle Ages. As a result, money-telling, when large sums were involved, represented a considerable waste of time.¹⁸ This is not a small matter as one may be inclined to think. The businessmen of yesterday, as well as those of today, were pressed for time and were therefore glad to take advantage of the book-transfer system devised by the money-changers. This system allowed local payments to be made with a stroke of the pen.¹⁹ Moreover, the books of the money-changers were public records and there was no need to give acquittance, to have witnesses, or to draw up legal instruments.²⁰ This facility was great, indeed, and it is not surprising that it was extensively used—just how extensively it is difficult to determine.

Living in a time when banks in large cities have thousands of customers, we are likely to lose our sense of proportion and to forget that even the largest mediæval cities were comparatively small. The population of Bruges, in the fourteenth and fifteenth centuries, was somewhere between 35,000 and 45,000 inhabitants. This is not a wild guess. Bruges did not expand beyond her mediæval walls until the beginning of the twentieth century. At that time the population barely exceeded 56,000 inhabitants; consequently, it could not have been larger in the Middle Ages.²¹ According to the cadaster of 1580, there were in Bruges about 8,400 houses. If we assume that each house was occupied by a family of five, we obtain a figure of 42,000 for the total population.²² In 1580, many houses stood empty because of the city's decay, but this figure of over 40,000 might be valid for the end of the fifteenth century. In 1340, the Bruges militia numbered 6,044 men. On the basis of this figure, a Belgian scholar has arrived at a total of 35,000 inhabitants for the middle of the fourteenth century.²³ This estimate may be a little low. At any rate, with a population of

about 40,000 souls, Bruges was a large city according to mediaeval standards. In Northwestern Europe, only near-by Ghent, Paris, and perhaps London, were larger than Bruges.

It is, of course, not possible to produce complete statistical data which would give us an accurate idea of the number of people who had a bank account and of the size of mediaeval banks. For Bruges, we have only a few figures and they are all for the middle of the fourteenth century. At that time, there were fifteen or sixteen money-changers, according to both the municipal accounts and the Collard de Marke ledgers. Let us now accept the above figure of forty thousand for the total population of Bruges. On this basis, if one person out of every hundred had a bank account, each money-changer would have carried on his books an average of twenty-five accounts. If the proportion were one in fifty, the average would have been fifty accounts. If the ratio were raised to one in twenty-five, the average money-changer would have had as many as one hundred accounts. This simple arithmetic shows at once that we should not expect banking on a large scale in fourteenth-century Bruges, and that an exchange-bank was a relatively small business, as were also most mediaeval industrial enterprises. It is possible that as the number of money-changers decreased in the fifteenth century some concentration took place, and that the average bank was somewhat larger than previously. In order to be complete, it should perhaps be pointed out that one thing ties in with another and that—besides the volume of available business—the lack of office space, the smallness of the clerical staff, and imperfect and clumsy methods of accounting were other factors which set definite limits to the size of mediaeval banks.

The transition from average figures to actual figures always presents some difficulties, because deviations from the average may be considerable. This is also true in the present instance. As we have seen, a few money-changers secured a lion's share of the business, while others just managed to survive and had presumably few customers. Figures for one money-changer, consequently, do not mean much unless we know whether he belongs to the top or to the bottom stratum.

When Diederick Urbaens' widow failed, sometime between 1340 and 1350, her records showed that she owed money to twenty-six depositors, but fifteen more creditors presented claims which were not recorded in the books owing either to neglect or to fraudulent intent.²⁴ In any case, forty-one depositors were affected by the bankruptcy. The liabilities also included balances due to other money-changers, one time deposit, and two debts originating in commercial transactions. Forty-one is not, of course, a very impressive figure, but the widow of Diederick Urbaens might have belonged to the class of money-changers who had a hard struggle for existence and whose business was below the average size.

The financial statement found in the binding of Guillaume Ruyelle's ledger shows that on May 24, 1370, there were in all eighty-two accounts open in the ledger; sixty credit balances originating in deposits and twenty-two debit balances representing overdrafts.²⁵ The latter figure does not include four drawing or special accounts: one in the name of Guillaume Ruyelle himself, two in the name of *Medmyselle*, his wife, and the last in the name of Hannekin Ruyelle, his cousin and chief assistant. If the information given in the municipal accounts is at all reliable, it appears that Ruyelle was doing a little better than most of his colleagues in so far as securing volume or getting customers was concerned. The above figure of eighty-two probably was slightly above the average.

Collard de Marke, we know from his extant account books, was doubtless one of the three or four most important money-changers of Bruges in the period from 1366 to 1369. His figures, consequently, must be above the average. An analysis of his accounts confirms that he had perhaps more customers than most of his colleagues. The figures are given in Table 12.

A glance at this table will disclose that the business of Collard de Marke was on the upswing during the period from 1366 to 1369. The first ledger starts on April 6, 1366, with approximately 134 balances carried over from a preceding ledger which is not extant. The last of the extant ledgers opens with 305 balances posted from the previous ledger, No. 4. This figure of 305 is certainly above the average number of accounts which other money-changers carried on their books at any one time. Otherwise one person in eight would have had a bank account in fourteenth-century Bruges. It goes without saying that such a ratio is absurdly high. But there is, nonetheless, little doubt that having a bank account was far more common than one would expect at such an early date.

This point can be further illustrated by a different set of figures. Up to now it has been pointed out how many accounts there were open on the books of different money-changers at a given date, but no attempt has yet been made to give an idea of the importance of the movement of funds which were handled by them in the daily course of their business. As may be seen from Table 12, the liabilities of Collard de Marke to his depositors grew in a few years from £2,310 9s. 2d. to £5,575 6s. 1d. groat. These figures represent considerable sums in view of the fact that the purchasing power of money was extremely high and that the groat, on which the Flemish pound was based, was still in the middle of the fourteenth century a heavier coin than the English sterling on which the English monetary system rested.

The journal of Collard de Marke gives the best idea of the number of transactions per day. Under the date of December 27, 1368, the journal contains only six entries: five, totalling £115 1s. groat and one entry of one hundred

francs dou Roy or French francs.²⁶ On December 29, only four transactions are recorded making a total of £109 8s. 7d. groat, but the next day there are thirty-nine items entered, representing a total of £609 14s. 4d. groat. No entries are made under the date of December 28, the Feast of the Holy Innocents, of December 31, a Sunday, and of January 1st, 1369, Circumcision. No business was transacted evidently on Sunday and on Circumcision, but December 28 was not a holiday and the absence of any entries for that date can only be explained by the fact that Collard de Marke may have had more than one journal in use. On February 27, 1369, there are thirty-two entries in the journal which total £785 18s. 1d. groat and one item of 400 francs.²⁷ As this amount corresponds to £51 13s. 4d. groat at the rate of 31 groats per franc, the total for the day is £837 11s. 5d. groat.²⁸ It is possible that December 30 and February 27, both close to the end of the month were especially busy days. These figures may not impress a modern reader, but they are high, if one considers that the mediaeval exchange-banks were small affairs, run by the proprietor and a couple of clerks.

Thirty-three customers calling in one day: how much time was required to take care of them? Even five minutes per customer would have meant two hours and three-quarters. Surely many customers stayed longer than five minutes, especially when any counting of money was involved. There were probably other callers during the day who simply wanted exchange and did not have bank accounts. The likelihood is that mediaeval money-changers and their clerks were rather busy all day long.

In order to complete the picture, it is possible to give one more figure which is not devoid of significance. Collard de Marke's ledger No. 4, which happens to have been more thoroughly examined than the others and covers a period of about five months from December 24, 1368, to May 20, 1369, contains close to eleven hundred accounts.²⁹ This is amazingly high, even if it is true that most of these accounts were of a transitory character and were closed and balanced within a few days—after two or three transactions. As we have seen, only three hundred and five accounts were still open when ledger No. 4 was closed and the remaining balances were transferred to a new ledger. One should also consider that a number of individuals might have had accounts at several exchange-banks. Eleven hundred is nevertheless a surprising figure if one keeps in mind that there were in Bruges sixteen money-changers, and that the population did not exceed 45,000 souls.

Professor Frederic C. Lane, who has made a special study of Venetian banking, states that the Lippomani bank, when it failed in 1499, owed money to 1,248 depositors of whom 700 were Venetian nobles.³⁰ The Venetian *banchi di scritta* were thus considerably larger than the Bruges exchange-banks of the fourteenth century. But it should not be overlooked that, in 1499, there were

Money-Changers

TABLE 12
 ACCOUNTS OPEN IN THE LEDGERS OF THE BRUGES MONEY-CHANGER
 COLLARD DE MARKE ON FIVE DIFFERENT DATES
 CREDIT BALANCES OR DEPOSITS

| Ledger | Date | Number of Balances | Aggregate Deposits | | | Average Balance | | |
|--------|-------------------|--------------------------|-----------------------|----|---|--------------------|----|---|
| | | | £ | s | d | £ | s | d |
| No. 1 | April 6, 1366 | 85 | 2,310 | 9 | 2 | 27 | 3 | 8 |
| No. 2 | April 19, 1367 | 136 | 5,566 | 8 | 3 | 40 | 18 | 7 |
| No. 3 | April 10, 1368 | 121 | 5,071 | 4 | 4 | 41 | 18 | 3 |
| No. 4 | December 24, 1368 | 171 | 4,605 | 16 | 5 | 26 | 18 | 8 |
| No. 5 | May 20, 1369 | 188 | 5,575 | 6 | 1 | 29 | 13 | 1 |

DEBIT BALANCES OR OVERDRAFTS

| Ledger | Date | Number of Balances | Aggregate Deposits | | | Average Balance | | |
|--------|-------------------|--------------------------|-----------------------|----|----|--------------------|----|----|
| | | | £ | s | d | £ | s | d |
| No. 1 | April 6, 1366 | 49 | 660 | 10 | 2 | 13 | 9 | 7 |
| No. 2 | April 19, 1367 | 59 | 1,405 | 12 | 10 | 23 | 16 | 6 |
| No. 3 | April 10, 1368 | 91 | 1,478 | 10 | 0 | 16 | 4 | 11 |
| No. 4 | December 24, 1368 | 115 | 2,611 | 18 | 2 | 22 | 14 | 3 |
| No. 5 | May 20, 1369 | 117 | 2,553 | 11 | 9 | 21 | 16 | 6 |

SUMMARY

| Ledger | Date | Total | Deposits | Overdrafts |
|--------|-------------------|-------|----------|------------|
| No. 1 | April 6, 1366 | 134* | 85 | 49 |
| No. 2 | April 19, 1367 | 195 | 136 | 59 |
| No. 3 | April 10, 1368 | 212 | 121 | 91 |
| No. 4 | December 24, 1368 | 286 | 171 | 115 |
| No. 5 | May 20, 1369 | 305 | 188 | 117 |

*The totals for April 6, 1366, are incomplete because of the omission of a few illegible items. The above figures also do not include any balances in French francs, *lions d'or*, or units other than £, s, and d groat, Flemish money. Such items are few in number and can be neglected.
 Source: Bruges, Municipal Archives, Collard de Marke Ledgers.

only four, instead of sixteen, deposit banks in Venice: the Garzoni, the Lippomani, the Pisani, and the Agostini. Moreover, Venice was perhaps three times as large a city as Bruges. Professor Lane figures that in Venice one person out of every thirty had a bank account. In Bruges the proportion might be a little lower in the fourteenth century, but not very much: perhaps one out of every thirty-five or forty persons. The Collard de Marke account books corroborate these figures by giving the impression that having a bank account was very common. Certainly, every merchant, every broker, every innkeeper, and every *drapier* had one, and probably also a good many high-class retailers such as *merciers*, *furriers*, and *goldsmiths*, not to mention nobles and other persons who were not in business.⁸¹ Presumably only the poor had no dealings

Handwritten ledger entries in a historical script, likely Flemish or Dutch. The page is divided into several sections by horizontal lines. The text is dense and includes various numerical figures and names. A large diagonal line is drawn across the middle of the page, possibly indicating a section break or a correction. The entries appear to be accounts or transactions, with some lines starting with names like 'Jakop van Lefinghe' and 'Jakop van le Fine'. The script is cursive and characteristic of the 16th or 17th century.

A PAGE FROM THE LEDGER OF COLLARD DE MARKE

This page has the accounts of Forteguerra di Forteguerra (the Lucchese merchant-banker) of the widow of Jakop van Lefinghe, and of the wife of Jakop van le Fine (Bruges inn keeper). From the original in the Bruges Municipal Archives.

TABLE 13
CREDIT BALANCES IN THE COLLARD DE MARKE LEDGERS

| Frequency Distribution | Ledger No. 1 April 6, 1366 | | | Ledger No. 2 April 19, 1367 | | | Ledger No. 3 April 10, 1368 | | | Ledger No. 4 December 24, 1368 | | | Ledger No. 5 May 20, 1369 | | |
|---------------------------|-------------------------------|-------------------|---------------------|--------------------------------|-------------------|---------------------|--------------------------------|-------------------|---------------------|-----------------------------------|-------------------|---------------------|------------------------------|-------------------|---------------------|
| | Number of Balances | Per Cent of Total | Cumulative Per Cent | Number of Balances | Per Cent of Total | Cumulative Per Cent | Number of Balances | Per Cent of Total | Cumulative Per Cent | Number of Balances | Per Cent of Total | Cumulative Per Cent | Number of Balances | Per Cent of Total | Cumulative Per Cent |
| Below £5 groat..... | 12 | 14.1 | 14.1 | 12 | 8.8 | 8.8 | 18 | 14.7 | 14.7 | 26 | 21.0 | 21.0 | 39 | 20.8 | 20.8 |
| £5 and under £10..... | 17 | 20.0 | 34.1 | 19 | 14.0 | 22.8 | 21 | 17.2 | 31.9 | 24 | 14.0 | 35.0 | 23 | 12.2 | 33.0 |
| £10 and under £15..... | 11 | 13.0 | 47.1 | 27 | 19.9 | 42.7 | 17 | 14.0 | 45.9 | 27 | 15.8 | 50.8 | 25 | 15.4 | 48.4 |
| £15 and under £20..... | 7 | 8.2 | 55.3 | 12 | 8.8 | 51.5 | 8 | 6.5 | 52.4 | 13 | 7.6 | 58.4 | 19 | 10.1 | 58.5 |
| £20 and under £25..... | 7 | 8.3 | 63.6 | 12 | 8.8 | 60.3 | 9 | 7.4 | 59.8 | 15 | 8.8 | 67.2 | 14 | 7.4 | 65.9 |
| £25 and under £30..... | 5 | 5.9 | 69.5 | 6 | 4.4 | 64.7 | 7 | 5.8 | 65.6 | 10 | 5.9 | 73.1 | 7 | 3.7 | 69.6 |
| £30 and under £35..... | 2 | 2.4 | 71.9 | 9 | 6.7 | 71.4 | 4 | 3.3 | 68.9 | 8 | 4.7 | 77.8 | 6 | 4.8 | 74.4 |
| £35 and under £40..... | 2 | 2.4 | 74.3 | 1 | 7 | 72.1 | 2 | 1.6 | 70.5 | 4 | 2.3 | 80.1 | 7 | 3.7 | 78.1 |
| £40 and under £45..... | 8 | 9.4 | 83.7 | 5 | 3.7 | 75.8 | 4 | 3.3 | 73.8 | 8 | 4.7 | 84.8 | ..... | ..... | 78.1 |
| £45 and under £50..... | ..... | ..... | 83.7 | 5 | 3.7 | 79.5 | 1 | 8 | 74.6 | 4 | 2.3 | 87.1 | 6 | 3.2 | 81.3 |
| £50 and under £100..... | 12 | 14.1 | 97.8 | 12 | 8.8 | 88.3 | 17 | 14.0 | 88.6 | 16 | 9.4 | 96.5 | 26 | 13.9 | 95.2 |
| £100 and under £200..... | 1 | 1.1 | 98.9 | 10 | 7.3 | 95.6 | 10 | 8.1 | 96.7 | 4 | 2.3 | 98.8 | 7 | 3.7 | 98.9 |
| £200 groat and above..... | 1 | 1.1 | 100.0 | 6 | 4.4 | 100.0 | 4 | 3.3 | 100.0 | 2 | 1.2 | 100.0 | 2 | 1.1 | 100.0 |
| Total..... | 85 | 100.0 | ..... | 136 | 100.0 | ..... | 122 | 100.0 | ..... | 171 | 100.0 | ..... | 188 | 100.0 | ..... |

Source: Bruges, Municipal Archives, Account Books of Collard de Marke

Bank Deposits

TABLE 14
FREQUENCY DISTRIBUTION OF THE BALANCES DUE TO DEPOSITORS LISTED IN
RUYELLE'S STATEMENT OF MAY 24, 1370

| Balance due | Number of Balances | Per Cent of Total | Cumulative Per Cent |
|-------------------------------|--------------------|-------------------|---------------------|
| Below £5 groat..... | 25 | 41.7 | 41.7 |
| £5 and under £10 groat..... | 15 | 25.0 | 66.7 |
| £10 and under £15 groat..... | 4 | 6.7 | 73.4 |
| £15 and under £20 groat..... | 5 | 8.3 | 81.7 |
| £20 and under £30 groat..... | 2 | 3.3 | 85.0 |
| £30 and under £40 groat..... | 3 | 5.0 | 90.0 |
| £40 and under £50 groat..... | 1 | 1.7 | 91.7 |
| £50 and under £100 groat..... | 4 | 6.7 | 98.4 |
| £100 groat and above..... | 1* | 1.6 | 100.0 |
| Total..... | 60 | 100.0 | |

*The balance above £100 was a balance of £167 groat due to Vidua Mathes.
Source: de Roover, 'Ruyelle,' *op. cit.*, pp. 92-95.

with one of the exchange-banks in the course of a year. These remarks are valid only for the middle of the fourteenth century, as we have no data concerning either the preceding or the succeeding period. With regard to the latter it seems that banking in the Low Countries suffered a setback during the fifteenth century.

The Collard de Marke account books and, to a lesser extent, the Guillaume Ruyelle ledger contain thousands of names and it would be an enormous, if not impossible, task to identify them all. It is, furthermore, questionable whether the results would be proportionate to the effort. They are likely to be almost exclusively of local and antiquarian interest, but to contribute woefully little to a better understanding of the development of banking institutions, which is our main concern. The statistical method fortunately supplies additional proof that the clientele of our Bruges money-changers was not restricted to a few big accounts of important merchants and bankers, but was recruited at large among the moderately well-to-do. Nothing shows this better than the prevalence of small accounts. According to the statement of May 24, 1370, Guillaume Ruyelle owed on this date a total of £943 14s. 6d. groat to sixty depositors, or an average of £15 14s. 7d. groat per depositor.³² On the other hand £69 2s. 2d. groat were receivable from twenty-two individuals who had overdrawn their accounts. The average overdraft amounted thus to £3 2s. 10d. groat.³³ The figures for Collard de Marke are given above in Table 12.

As this table shows, there are considerable variations in the average from one date to another. On April 10, 1368, the average balance was £41 18s. 3d. groat. By December 24, 1368, this figure had fallen to £26 18s. 8d. groat but it went up again and reached £29 13s. 1d. groat on May 20, 1369. These fluctuations

TABLE 15
BALANCES ABOVE FORTY POUNDS GROAT ACCORDING TO RUYELLE'S
STATEMENT OF MAY 24, 1370

| Names of Depositors | Amount of Balance | | | Per Cent of Total |
|---|-------------------|----|----|-------------------|
| | £ | s | d | |
| 1. Vidua Marthes | 167 | 0 | 0 | 17.8 |
| 2. Nicolay Amenati | 99 | 0 | 0 | 10.5 |
| 3. Hatse Tedeledin | 79 | 11 | 4 | 8.4 |
| 4. Jacob Ranckelos | 55 | 8 | 8 | 5.9 |
| 5. Michiel Venise | 51 | 0 | 0 | 5.4 |
| 6. Joris de Matsenare | 45 | 10 | 11 | 4.8 |
| Total | 497 | 10 | 11 | 52.8 |
| Total of the balances due to depositors | 943 | 16 | 6 | 100.0 |

Source: de Roover, 'Ruyelle,' *op. cit.*, pp. 92-94.

probably reflect changes in the conditions of the money market. There was apparently a contraction of the volume of bank deposits followed by an expansion. It might be objected that averages of about thirty or forty pounds groat are a little too high to justify the statement that small accounts predominated. However, an arithmetic average is unduly influenced by a few large items and is therefore sometimes misleading. Table 13 has been prepared to correct these defects. It is based on the Collard de Marke ledgers and shows the distribution according to size of the balances due to depositors at different dates or, more precisely, each time a ledger was closed and a new one begun.

From Table 13 it appears at the first glance that, at each of the given dates, the majority of the balances are below twenty pounds groat. In all cases, more than 95 per cent of the deposits are below two hundred pounds groat, from 88 to 98 per cent are below one hundred pounds, and from 74 to 87 per cent are below fifty pounds.

In the case of Guillaume Ruyelle a table similar to Table 13 has been prepared on the basis of the data given by a financial statement of May 24, 1370. This table shows that 41.7 per cent of the deposits are not higher than five pounds, 66.7 per cent are below ten pounds, and 81.7 are below twenty pounds groat. There is only one balance exceeding one hundred pounds groat. These figures are in a lower range than those of Collard de Marke. Ruyelle not only had fewer customers than his competitor, but they belonged to a less wealthy class and had less money on deposit at the exchange. This fact confirms what has been said before about the respective importance of our two money-changers.

While the vast majority of deposits were small, it appears, however, that the few big accounts provided most of the funds with which both money-changers operated. In the case of Guillaume Ruyelle, his statement of May 24, 1370, which includes sixty items, reveals that the six largest accounts, or one-

TABLE 16
LIST OF FOURTEEN ACCOUNTS WITH BALANCES ABOVE FIFTY POUNDS GROAT
ON APRIL 6, 1366, ACCORDING TO COLLARD DE MARKE'S LEDGERS

| | £ | s | d groat |
|--|-------|----|---------|
| 1. Jehan van Tinneskin | 243 | 12 | 0 |
| 2. Franchoys Villain | 118 | 4 | 6 |
| 3. Pierre de Leurent | 96 | 12 | 0 |
| 4. Hannebaut Lommclin | 92 | 8 | 7 |
| 5. Jehan Moens (money-changer) | 80 | 18 | 0 |
| 6. Simon Ongeriet | 72 | 12 | 0 |
| 7. Pietre van Erke | 60 | 0 | 0 |
| 8. Olivier van den Berghe | 59 | 6 | 4 |
| 9. Sire Gorres Wandelaire | 58 | 7 | 11 |
| 10. Pierre van Comme | 55 | 17 | 0 |
| 11. Jehan Gonsalles | 55 | 6 | 1 |
| 12. Lambesin d'Alost | 51 | 1 | 0 |
| 13. Cristoffe Pelerin | 50 | 0 | 0 |
| 14. Jehan Auls and Jehan van Tinneskin | 50 | 0 | 0 |
| Total | 1,144 | 5 | 5 groat |

Source: Collard de Marke Ledger No. 1.

tenth of the total, brought in more money than the remaining fifty-four (Table 15).

In Collard de Marke's case, conditions were much the same, and a minority of big accounts were the main source of working capital. On April 6, 1366, fourteen accounts with balances of fifty pounds groat and upward represented 49 per cent of the total liability to depositors, or £1,144 5s. 5d. groat of a total of £2,310 9s. 2d. groat (Tables 12 and 16). The next year did not bring much improvement. More than half of the total liability to depositors was made up of sixteen accounts, each having a credit balance of over one hundred pounds groat (Tables 12 and 17). These conditions remained unchanged up to 1369. When on May 20, 1369, a new ledger was started, a total of £5,575 6s. 1d. groat due to depositors was divided among 188 items not including two items in French francs and one in *escus vies*, or old écus. Out of these 188 items, thirty-five items—each of fifty pounds groat or above—added up to £3,374 3s. 11d. groat. In other words, less than 20 per cent of the depositors were responsible for over 60 per cent of the aggregate deposits.

It is clear from these figures that the solvency of the Bruges money-changers depended largely upon the continued support of a few customers. The danger came less from a run by small depositors than from the sudden withdrawal of a few important accounts. This condition was a serious weakness. If some of the principal customers suddenly decided to withdraw their funds, the resulting drain would soon exhaust a money-changer's cash reserves. These could not readily be replenished because in the Middle Ages there were no negotiable instruments and no facilities for rediscounting. The smaller the bank, the greater was the reliance on a few big customers and the greater became the danger involved in losing them. Collard de Marke, who in 1369 had

TABLE 17
LIST OF SIXTEEN ACCOUNTS WITH CREDIT BALANCES ABOVE ONE HUNDRED
POUNDS Groat ON APRIL 19, 1367, ACCORDING TO
COLLARD DE MARKE'S LEDGERS

| | £ | s | d groat |
|---|-------|----|-----------|
| 1. Jakoppe van le Fine | 290 | 7 | 4 |
| 2. Sire Pierre Rougenelle | 282 | 13 | 8 |
| 3. Sire Jehan de Castillon | 266 | 10 | 8 |
| 4. Estievene Bieke | 259 | 17 | 10 |
| 5. Sire Jehan van de Nacre (van den Acker) | 230 | 0 | 0 |
| 6. Sire Tiram Empereal (Imperiali) | 228 | 9 | 4 |
| 7. Pierre Cousin | 177 | 4 | 5 |
| 8. Louis de Robiert | 160 | 11 | 6 |
| 9. Sire Jakes Matenaie (Metteneye) | 143 | 18 | 9 |
| 10. Jakoppe van de Niede | 131 | 11 | 5 |
| 11. Raoul de Coumines | 129 | 0 | 7 |
| 12. Fortegerre (Forteguerra di Forteguerra) | 120 | 0 | 0 |
| 13. Sire Manuyel Prouvende | 110 | 3 | 2 |
| 14. Jehan Ninescat | 107 | 16 | 4 |
| 15. Demiselle Isoie | 103 | 15 | 8 |
| 16. Franche Villain | 103 | 13 | 3 |
| Total | 2,845 | 13 | 11 groat* |

*The total liability to depositors was £5,566 8s. 3d. gr.
Source: Collard de Marke Ledger No. 2.

more than thirty important customers, could better afford to lose three than Guillaume Ruyelle, who had only six. As is the case today, small banks had less resilience than big banks. Perhaps the final conclusion should be that there were too many banks in fourteenth-century Bruges.

Besides the size of the balances maintained by depositors at a given date, there exists still another criterion according to which the customers of our money-changers can be divided into different groups. This other classification may even prove to be more useful for further analysis. Even a cursory examination of the Collard de Marke and Guillaume Ruyelle ledgers cannot fail to disclose the fact that some of the customers had dormant accounts, that some others had active accounts, and that still others had accounts which remained open for a short time only. The accounts of those in the first group are mainly overdrafts and will receive attention in the next chapter dealing with loans. The third group is very numerous and is made up of casual customers. Usually things happened in the following way: a new account was opened to a person who was made creditor for a given sum by transfer from an existing account; such a person did not as a rule become a regular customer, but ordinarily disposed of his credit in the course of a few days with the result that his account was closed and balanced after a brief period of existence. Such transitory accounts are those of individuals who either did not usually have a bank account or else had one with a money-changer other than Guillaume Ruyelle or Collard de Marke.

The first type is illustrated by the following case found in the ledger of Guillaume Ruyelle. On May 16, 1369, a new account was created in the name

of a certain Jan de Keyser and an amount of six pounds groat was written to his credit by transfer from another account.³⁴ Already the next day the account was closed, because Jan de Keyser collected all that was standing to his credit. It is likely that he did not have a bank account, otherwise he would not have collected his money in cash, but would have asked to transfer it to his account at the exchange. This method of settlement is exemplified by another case which is interesting because it involved the lombards of St Gilles parish. On March 5, 1369, an account was opened to them in Collard de Marke's ledger No. 4 and they were given credit for an amount of £29 1s. 4d. groat transferred from the account of a Conrart Boin Adone.³⁵ This arrangement did not suit the lombards because they had a bank account, not with Collard de Marke, but with the money-changer, Jacob Reubs. Consequently, they gave instructions to adjust the matter. In pursuance of these orders, the account of the lombards was closed on March 7th (two days after having been opened), and the amount of £29 1s. 4d. groat was written off and transferred to the credit of Jacob Reubs, who probably made in his own books whatever adjustments were necessary. In the Collard de Marke and Guillaume Ruyelle ledgers there are hundreds of cases similar to the two which have just been described. Their frequency explains why the Collard de Marke ledger No. 4, for example, contains as many as 1,100 accounts of which only 305 were still open when a new ledger was started.

There are, however, a few transitory accounts which should be set apart from the rest. These are the accounts of foreigners who did not take up residence in Bruges, but stayed there only for a short while. Collard de Marke had a few of such accounts. Some of them were those of Spanish and Portuguese shipmasters who would open an account for the time they were in port. A good example is the account of a Jehan Diese de Castille, *mestre de naves*, which remained open from February 21 to March 17, 1369.³⁶ On the latter date, Jehan Diese collected the balance in cash, probably before sailing. Another group of accounts of the same type were those of the Hanseatic merchants. Their commercial methods were backward in comparison with those of the Italians, who maintained permanent branches or correspondents in Bruges. The lack of such an organization among the Germans compelled them not only to operate on a smaller scale but to travel constantly back and forth between Bruges and their home towns.³⁷ Of course, each trip gave rise to a separate and short-lived bank account.

It is quite clear that the business which the money-changers got from casual customers did not afford a basis broad and secure enough upon which to run a bank. Only the regular customers who had active accounts provided the foundation on which rested the whole system of book-transfers created by the money-changers. Although some of the regular customers were allowed to

overdraw their accounts, most of them maintained fair-sized balances which, of course, moved up and down, but in general a decrease in one balance tended to be offset by an increase in another.³⁸

In order to avoid any apparent contradiction, it should, perhaps, be pointed out that the group of regular customers included all the big customers whose importance in supplying the money-changers with working capital has been emphasized before. Consequently, the two classifications overlap, but only to a certain extent because all regular customers were not necessarily big customers.

What the social or economic background of the regular customers was is not hard to guess, but difficult to determine by exact historical methods. The reason is that the business or profession of the customers is rarely indicated in our only sources, the Collard de Marke and Guillaume Ruyelle account books. However, as far as can be ascertained, it seems that the group of regular customers consisted of the business men in the community: the native merchants, the broker-innkeepers, the drapiers, the resident Italians, not excepting the lombards whose current account was handled by the money-changer Jacob Reubs.³⁹ The Hanseatic merchants also had bank accounts,⁴⁰ but they were not as a rule regular customers for the reasons stated above.

In 1369 Collard de Marke had about seventy to eighty regular customers. Their names recur constantly in the ledger and their accounts, far from being closed and balanced after a few transactions, had frequently to be carried forward, because the allotted space—sometimes a whole page, sometimes half-a-page—had been filled.

The regular customers made extensive use of the existing transfer system. They probably followed the policy of making all local payments by assignment on their bank accounts. As most of the time the assignees did not care to collect their credits in cash, but preferred to have money in the bank, most payments between business men were made by 'writings only' through the banking system.⁴¹ One result was that payments within the group of regular customers simply brought about a shift in balances, but did not affect the total volume of bank deposits. As is the case today, the size of individual deposits varied according to individual choice and decisions, but the aggregate volume of bank deposits obeyed certain economic laws and was determined by the state of the money market. Only today, we would add: 'and also by the policy of the central bank and the monetary authorities.'

These conclusions are fully borne out by the Collard de Marke and Guillaume Ruyelle account books. An examination of these manuscripts reveals the striking fact that book-transfers by far outnumber cash transactions.⁴² It is difficult to give any exact ratio, but it would certainly be unbelievably high if it could be computed. The habit of assigning money on deposit to a creditor apparently goes back to the beginnings of banking in the Low Countries. The proof is to

X

be found in a statute of Douai, enacted in 1248, which consequently antedates the Lille grant of 1294 by more than forty-five years.⁴³ According to this statute, any one who pays a creditor by assignment on a money-changer without having sufficient funds exposes himself to banishment and to a fine of fifty pounds.⁴⁴ The same penalties are imposed upon any money-changer who does not return any deposits of money at the first request.⁴⁵ One should be on guard against hasty conclusions: there is nothing in the above statute implying that banking existed in thirteenth-century Douai. Nor does the statute contain any reference to book-transfers. It only proves that it was fairly common to pay by assignment and to deposit money with a money-changer, but it is not even clear whether such deposits were regular or irregular deposits. It is certain, however, that such practices were conducive to the settlement of debts by book-transfer, if the debtor and the creditor each had a bank account.

In the Collard de Marke and Guillaume Ruyelle account books we are confronted with a fully developed system of book-transfers. This system made it possible to settle accounts without the employment of specic, not only when both the debtor and the creditor were customers of the same money-changer, but also when they were customers of different money-changers. This arrangement presupposes, of course, some organization of inter-bank relations so as to facilitate such settlements. In substance, such an organization had to perform the same functions as our modern clearing system.

In order to understand the mediaeval banking system, it is necessary to realize that it differed in some essential particulars from any modern system. In the Middle Ages there were no negotiable instruments and no checks. These two essential differences have been properly stressed in the studies which Professor Usher has devoted to mediaeval banking, and especially in his article on the primitive bank deposit, which appeared a few years ago in the *English Economic History Review*.⁴⁶ The check was replaced by an oral order which had to be delivered in person and was recorded by the banker in his journal under the dictation of the customer, so to speak. This is undoubtedly the reason why in several of van Reymerswael's paintings the banker is shown writing in an account book while another man, seated beside him, is clearly telling him what to put down. The act of dictating is portrayed by facial expression and gestures of the hands. It is therefore not unlikely that the scene represents a money-changer receiving an oral order of transfer. But perhaps an economic historian does not have the privilege of borrowing his argument from picture galleries.

It would be futile to hunt in the Bruges account books for any specific reference to the use of the oral contract in lieu of checks. The municipal statutes are equally silent on the subject. The lack of explicit mention need not, however, be deplored too much, as there is plenty of circumstantial evidence proving

that orders to make transfers on the books of a bank were given by word of mouth. The existence of this practice in Italy and at the fairs of Champagne is established beyond any doubt by a number of texts. A comparison of the account books of Collard de Marke and Guillaume Ruyelle with similar Italian manuscripts shows that these two money-changers kept their books and conducted their business according to methods borrowed from the Italians. There is no reason why the Bruges money-changers should not have taken over the oral contract with all the rest. Their accounting procedure eludes all logical explanation, unless one assumes the existence of either oral contracts or endorsed checks. As the endorsement of commercial paper is not older than the seventeenth century, the other alternative is the only remaining possibility.

The oldest known document which gives some insight into mediaeval banking routine dates from the year 1200 and consists of a series of testimonies collected by a Genoese notary in connection with a lawsuit. From what the witnesses had to say, it appears that ordering a transfer from one's bank account to the account of someone else involved going in person to the bank. If checks had been in use, people could have saved themselves such a trip.⁴⁷

The next document which sheds some light on our problem concerns the Italian money-changers who, in the thirteenth century, had established themselves at the fairs of Champagne.⁴⁸ The way in which they dealt with their clientele is described in a manuscript called *Les Coustumes, stulle et usaiges des Foires de Champagne*.⁴⁹ The relevant passage begins with the statement that the merchants of Italy and Provence who visited the fairs were accustomed to deposit their monies at the exchange and to make all their payments through the medium of a money-changer (*par le greffe de tel changeur*). If, for instance, one of those merchants bought cloth from a Malines cloth-dealer for the value of one hundred pounds, the buyer would not pay in cash, but would persuade the seller to accept an 'assignment in bank'.⁵⁰ Both would then go to the exchange and the buyer would *tell* his money-changer to write the sum of one hundred pounds to the credit of the cloth-dealer from Malines. These instructions would be carried out forthwith in the presence of both parties to the contract (*présent l'un et l'autre*).

From this description it is clear that book-transfers were made on the strength of an oral order, the assignor and the assignee both being present. The text imparts some further information. We learn that the money-changers used wax tablets instead of parchment and kept the accounts of their customers in bilateral form, the debits on one side and the credits on the other. The Bruges money-changers Collard de Marke and Guillaume Ruyelle did not use wax tablets any more, but they had adopted the bilateral form for their ledger accounts so that they knew exactly how they stood with each customer.

The text of the *Us et Coutumes* of the fairs of Champagne has come down

to us through a copy made in the seventeenth century by an *avocat* of Provins named Michel Caillot.⁵¹ This copy is believed to be once removed from a lost original which was written about 1368 but described conditions existing at the end of the thirteenth century when the fairs of Champagne were still in full swing.

* The Flemish merchants visited the fairs regularly all through the twelfth and thirteenth centuries and of necessity came frequently in touch with the Italian money-changers. Through these contacts, the Flemings undoubtedly became acquainted with the oral order of assignment, the settlement of debts by book-transfer, the current account in bilateral form, and the whole technique of deposit banking. From Champagne these practices probably spread first to French Flanders and thence farther north, to the Flemish-speaking part of the county and to Brabant, in the wake of the expanding cloth industry. It is therefore more probable that deposit banking was introduced into Bruges by native merchants who learned the technique from the Italians at the Champagne fairs than by the Italian merchant-bankers who set up permanent branches in Bruges, but not before the close of the thirteenth century.

* All through the Middle Ages the law merchant was partial to the oral contract, and checks or *polizze*—as they were called in Italy—were regarded with suspicion as being tainted by fraud.⁵² They did not come into general use until the sixteenth century and only after having overcome considerable opposition.⁵³ Venice was one of the most conservative business centers. As late as 1526 the Senate promulgated a statute which forbade the bankers on the Rialto to make any transfers in their books, except in the presence of both parties concerned.⁵⁴ Still later, in 1584, while the Senate was contemplating the creation of a public bank, a tentative statute was drafted which provided in article 31 that nothing was to be entered in the books of the public bank on the strength of a verbal order given beforehand (*parola data*) or of a written command (*polizza*), but that all entries were to be made in the presence of the client or of his lawful attorney.⁵⁵ In other words, all entries were to be made under the eyes of the client or of his proxy and during—not outside—office hours. This provision was incorporated into the statutes of the Banco di Rialto, founded in 1587,⁵⁶ and of the Banco del Giro, founded in 1619. The regulation voiding all *polizze* or checks remained in force until the eighteenth century, and only orders given by word of mouth (*a viva voce*) were considered valid according to a contemporary text.⁵⁷

Even in the Low Countries, the oral order of assignment seems to have survived up to the beginning of the seventeenth century. The municipal authorities of Amsterdam, for certain reasons which will be discussed later, were at that time very ill-disposed toward deposit banking or *het kassiersbedrijf*, as it was called. In order to abolish this obnoxious institution, several ordinances were issued which forbade any one to accept deposits or to settle debts by trans-

fer in accordance with orders given by word of mouth or otherwise (*overwijsinge bij monde ofte andersints*).⁵⁸

One result of the oral order of assignment was that the entry in the books of the bank was the only evidence of the contract.⁵⁹ It is, therefore, not surprising that bank journals were considered in most Italian cities as public or notarial records and that great pains were taken to ensure their authenticity. As Luca Paciolo, a writer on mathematics and bookkeeping in the last decade of the fifteenth century, expresses it: 'The assignment in bank (*la ditta di banco*) is like the act of a notary, because such an assignment is guaranteed by public authority.'⁶⁰ In Genoa the clerk who kept the journal or *manuale notularum bancorum* had to be an imperial notary.⁶¹ In Florence the statutes of the Arte del Cambio required all members to make entries in their books before a customer left the premises.⁶²

The journal had to be kept strictly according to chronological order, without blanks and without erasures.⁶³ The use of Arabic figures was not allowed, because it was thought that they could be easily falsified. All amounts had, therefore, to be written in Roman numerals. The tearing out of leaves from the journal was viewed with great suspicion. If it could be proven that such action was fraudulent in intent, the offender not only laid himself open to heavy fines imposed by the guild authorities, but his case was reported to the *Signoria* or municipal government.⁶⁴ The same rules were in force in many other Italian cities and have left their imprint on modern commercial law. The journal kept according to the above principles is still mandatory in Belgium and in other European countries whose codes are derived from the Code Napoleon and the 'Ordonnance du Commerce' of 1673. The law, however, is unworkable under modern conditions and is practically disregarded with the connivance of the courts. Jurists and accountants have been at a loss in trying to understand why so much emphasis was placed on the journal and so little on the ledger which is, after all, the key-book in any well-conceived system of bookkeeping. The problem is nearly solved if one considers the fact that the journal was originally a notarial and chronological record of otherwise oral agreements.

From the legal standpoint conditions in Flanders, where there was little statutory law, were entirely different from those in Italy. The law merchant was still uncertain and in a process of elaboration. It is, therefore, very much open to doubt whether, in Bruges, the journals of the money-changers enjoyed recognition as public records.⁶⁵ But whether or not such was the case makes no practical difference. In case of need the money-changer could always be called upon to testify in court with regard to any transaction which he had witnessed and had entered into his books. Furthermore, the *échevins*, who were at the same time the city's administrators and the judges of the local court, were either business men themselves or connected with the business world. They

were always willing to be guided by business practice and to sanction it in their court decisions.⁶⁶ The law merchant, as Professor Postan has pointed out, is often but another name for the custom of the merchants.⁶⁷

To what extent the account books of the money-changers were to be received as evidence in court was a problem which could not fail to come up some day or other and which actually did come up in connection with the failure of Diederic Urbaen's widow, previously mentioned. A number of creditors including three money-changers, Jan van der Capelle, Jan Moens, and sire Evrard Goederic, lodged claims for which no entries were found in the books of the bankrupt.⁶⁸ Her sureties countered these claims by rejecting all liability for the reason that 'no record was found in the papers [books] of the exchange.' That such a contention was made proves at least two things. First, it was up to the money-changers' customers to see that each transaction was duly recorded in their presence. In the second place, it seems that the 'papers' of the exchange were the sole evidence, as no mention is made of vouchers or receipts which the creditors could have used in order to establish their claims. One of the claimants was not even sure of the amount which was due him, but it was somewhere between £3 10s. 5d. and £5 10s. groat. Unfortunately, we do not know whether or not the municipal court accepted the point of view of the bankrupt's sureties. Probably not, since all the means of establishing the truth had not been exhausted. For example, the three money-changers could produce their own books which deserved as much credence as the 'papers' of the bankrupt. Whatever decision was reached, the case brings out the informal character of mediaeval banking procedure and the serious shortcomings of a system based on the spoken word. Apparently Paciolo was aware of these drawbacks when he advised the merchants to play safe and to require a voucher for each deposit regardless of the fact that the public character of bank records made such a formality superfluous.⁶⁹

As an entry recorded in the journal was on a par with an agreement contracted before a notary, several historians have expressed the opinion that the journal entries had to give full particulars or, at least, to state the *causa* or purpose of each transaction.⁷⁰ Such a rule, indeed, was embodied in a Genoese statute of the fourteenth century, but probably remained a dead letter as appears from surviving records of the period.⁷¹ The State Archives of Genoa contain a number of journals or *manualia notularum* and cash books or *cartularii capsiae* once belonging to the Lomellini bank; the ledgers are missing. The surviving series of journals and cash books covers with some gaps a period extending from 1386 to 1433.⁷² In these Lomellini journals the profession of clients is rarely mentioned and there are only occasional references to the purpose of a given transaction such as *pro vino* (for wine), *pro nauulo* (for freight), *pro pensione*

domus (for rent), *ex mutuo* (for a loan), or *pro cambio de* Barcelona, Famagusta, etc.⁷³ Full details are never given. The same remark applies to the journals and ledgers of the famous Bank of St George, which are also preserved at the State Archives of Genoa and extend over the period from 1408 to 1445.

The Lomellini journals are of special interest to us because of their close resemblance to the two extant journals of Collard de Marke. The only difference is that the Lomellini kept their books in Latin, whereas Collard de Marke used French.⁷⁴ Otherwise, in shape, appearance, method, and wording they are almost identical.⁷⁵ The great number of book-transfers as compared with cash transactions is another common feature. In both the Lomellini and the Collard de Marke journals, the form of the entries is very condensed and is reduced to bare essentials. In the case of a book-transfer, the only information supplied is the name of the assignor, the name of the assignee, and the amount transferred.

Even the journals of the Bank of St. George, which was a quasi-public institution, do not give any more details than those of the private Lomellini bank or of the Bruges money-changer Collard de Marke.⁷⁶ Identity in accounting procedure is a sign of identity in methods of doing business. The banking practices in Bruges, therefore, did not differ in any important respect from those in Genoa and elsewhere in Italy and the Mediterranean world.

The predominant use of the oral order instead of checks and the importance assumed by the journal as a public record determined the way in which business was handled by mediaeval banks. Administrative details, as a result, took a form which is rather unfamiliar to us. They can best be grasped by following the accounting procedure step by step. As today, this procedure was different for each type of transaction, but all transactions of the same type were handled in the same way. One or two examples of each will consequently suffice. Bank deposits do not give rise to a great number of different types of transactions. In all there are only four possibilities: 1) the placing of money on deposit; 2) the withdrawal of funds either by the depositor himself or by someone else; 3) the transfer of credit from one account to another, if the assignor and the assignee each has an account with the same money-changer; 4) the transfer of credit, if the assignor and the assignee have bank accounts with different money-changers. This fourth possibility raises, of course, the whole question of inter-bank relations.

Money can be deposited by a client himself or by someone else in his behalf. The first possibility can be illustrated by the following case. On December 29, 1368, one of Collard de Marke's regular customers, Medemiselle de Rudevorde, who apparently was the proprietor of an inn patronized by foreign merchants, made a deposit of 540 francs and twelve *lions d'or*, equal to £72 0s. 7d. gr. in money of account. As a result the bookkeeper entered in his journal that

£72 0s. 7d. groat were due demiselle de Rudevorde for 540 francs and twelve lions deposited by her in cash. The exact text of the entry is as follows:

doy le demiselle de Rudevorde par lui contet
pour 540 francs et 12 lion..... 72 lb.—7d. gr.⁷⁷

Par lui contet ('counted by him or her') is a standard formula used in both the Collard de Marke and the Guillaume Ruyelle ledgers to indicate a cash transaction. The kind of coins in which payment was made is specified here, but such a mention is exceptional in the Collard de Marke account books. It will also be noticed that the rate of conversion of the francs and the *lions d'or* into groats, the money of account, is not given.

The above journal entry was subsequently posted to the ledger and the sum of £72 0s. 7d. gr. was written to the credit of Medemiselle de Rudevorde's account, as appears in the following excerpt. The reader will notice that there is little difference in the wording of the journal and the ledger entries.

| Dr. | Medemiselle de Rudevorde ⁷⁸ | Cr. |
|---|--|-----|
| Medemiselle de Rudevorde me doit par le reste de nos contes dou fuelliet 339 de men autre papier 107 lb. 9s. 6d. gr. etc., etc. | doy par lui contet 29 en décembre pour 540 francs et 12 lion, somme 72 lb. 7d. gr. etc., etc. | |

He will also see that Medemiselle de Rudevorde's account is overdrawn and starts with a debit balance of £107 9s. 6d. gr. carried over from a preceding ledger.

It did not make much difference from the banker's point of view whether money was brought in by the client himself or by someone else acting as his agent. In the Collard de Marke account books the name of such a third party is always recorded, probably for the latter's protection, in case the payment were denied later on. Evidently the customer, to whose credit the amount deposited was placed, did not have to be present. He did not even need to be notified, as the transaction was usually carried out in pursuance of his own instructions. Such was generally the case when employees, factors, or *varlets* made deposits to the account of their employers. For example, on May 11, 1369, Collard de Marke received a deposit of 40 pounds groat made in his master's behalf by Jehan Teste, a factor of the Lucchese merchant Forteguerra di Forteguerra. The journal records this transaction as follows:

doy Fortegere par Jehan Teste contet..... 40 lb. gr.⁷⁹
(I owe Forteguerra, paid by Jehan Test')

This item is also found, of course, in the ledger on the credit side of Forteguerra's account:

| Dr. | Forteguerra di Forteguerra ⁸⁰ | Cr. |
|----------------------------------|---|-----|
| Fortegerre me doit etc., etc. | doy Et par Jehan Teste contet 11 en may 40 lb. gr. p. etc., etc. | |

The withdrawal of funds by the depositor himself did not raise any legal problems or practical difficulties. Such withdrawals were naturally charged against the depositor's account. The standard formula used both by Collard de Marke and Guillaume Ruyelle was *par lui contet* ('paid by him'). The withdrawal of funds by someone other than the depositor did, however, involve some difficulties. These were overcome by breaking the rule which required the personal presence of the client and by allowing him to act through an attorney. The Collard de Marke and the Guillaume Ruyelle account books abound in examples of payments made to the wife, the factors, the *varlets* (messengers or employees), or the partners of customers. As Professor Usher has pointed out, such a practice was not inconsistent with the principle of the oral contract, but this principle was further extended by considering as valid any order given orally by a lawful representative of the client.

Mediaeval business men were practical and expediency was more important than red tape. It is certain that a formal power of attorney was not always necessary. Money could be taken out by any one who was known to the money-changer as the regular agent or proxy of a depositor. As a safeguard against any breach of trust the name of such an agent always appears in the account books and the formula *par lui contet* is replaced by phrases like these: *par se femme contet*, *par sen varlet contet*, or *par sen compaignon* ['partner'] *contet.*⁸¹ For example, the account of Guillaume Ruyelle in the Collard de Marke ledgers includes several items relating to collections made by Hannekin, Ruyelle's cousin and assistant. Here is a typical entry referring to such a transaction: 'Willem Ruyelle me doit: par Hanekin sen cousin contet 7 en décembre [1369] 50 frs. frs.'⁸²

Another good example is afforded by the following case. On December 27, 1368, the employee or *varlet* of a certain Raoul Doucemin of Commines withdrew in his master's behalf the amount of £8 1s. groat which was paid out to him in currency of Brabant. Then entry in the journal reads as follows: 'Raoul de Coumines me doit par sen varlet contet, en monnoie de Braibant 8 lb. 12d.'⁸³ The corresponding entry in the ledger is a little more detailed: 'Rauol Doucemin me doit: par Jehan sen varlet contet 27 jours en décembre, pour porter en Braibant 8 lb. 12d.'⁸⁴ It appears therefrom that Raoul de Commines and Raoul Doucemin were evidently one and the same person, that his *varlet's* name was Jehan, and

that foreign currency was needed for a trip to Brabant, possibly for a visit to the Cold Mart at Bergen-op-Zoom. This entry is one of the very few in which the purpose of the transaction is indicated.

Today one may take money out of a bank account by simply cashing a check signed by the depositor. Mediaeval banking practice did not permit this procedure. Withdrawals could be made only by the depositor, and not by a stranger unless the depositor or his agent was actually present and gave his consent. The transaction was thus equivalent either to a withdrawal by the depositor himself—as he had to be present anyhow—or to an ordinary book transfer.

The payee often wanted to make a further assignment or to dispose of his credit partly by a withdrawal of cash and partly by assignment. In such a case, mediaeval money-changers found it expedient to open to the payee a temporary account which recorded all the transactions carried out in accordance with his instructions. This procedure can best be understood by giving an example. On May 2, 1369, a Bruges merchant, Jan van den Vagheviere, who was not a regular customer of the money-changer Guillaume Ruyelle, was assigned an amount of £10 13s. 4d. groat by a certain Jan Barkin, probably an Englishman. For the sake of convenience, a new account was opened to the assignee, because he wanted to collect only £2 3s. 4d. groat of his credit in cash and to dispose of the balance of £8 10s. groat by assigning it to another Englishman named Jacob Tolbin. These orders were carried out forthwith, so that Jan van den Vagheviere's account with Guillaume Ruyelle was opened, closed, and balanced all in one day. As this account is short, it will be reproduced here. In order to avoid any confusion, the reader is reminded of the fact that Ruyelle does not observe the conventional rules and puts debit to the right and credit to the left instead of the opposite.

| Cr. | Jan van den Vagheviere ⁸⁵ | Dr. |
|---|--------------------------------------|--|
| Jan van den Vagheviere debeo 10 lb. 13s. 4d. par Jan Barkin 1e 2e de may (1369) | | debet Item 8 lb. 10s. par Jacop Tolbin 1e 2e de may Item 2 lb. 3s. 4d. par li conteit 1e 2e de may |

As this account shows, the whole transaction involved three steps: a transfer of credit from Jan Barkin's to Jan van den Vagheviere's account, a withdrawal of funds by Jan van den Vagheviere himself, and a transfer from his account to that of Jacob Tolbin. The effect was the same as if Jan Barkin had made out two checks payable to Jan van den Vagheviere: one for £2 3s. 4d. groat which was cashed immediately by the payee, and another for £8 10s. groat which he did not collect, but passed on by endorsement to Jacob Tolbin.

Thus the peculiarities of mediaeval banking practice explain at least in part why



THE MONEY-CHANGER AND HIS CUSTOMER
by Marinus van Reymerswael
From a painting in the Royal Gallery, Windsor Castle

so many transitory or temporary accounts are to be found in the Collard de Marke and Guillaume Ruyelle ledgers. These accounts introduced greater flexibility into the system, facilitated the circulation of bank deposits, and fulfilled to some extent the same function as the modern endorsement of checks.

As this example already shows, the book transfer was the most efficient and easiest way of using bank deposits as a means of payment. When the assignor and the assignee each had an account with the same money-changer, the procedure was simple and did not involve any problem at all. In the Collard de Marke and Guillaume Ruyelle ledgers the number of transfers from the account of one customer to that of another runs into the thousands. All these transfer entries are exactly alike and, as has been stated, are very much condensed. As a result, the Bruges account books contain an array of names, dates, and figures which are invaluable for the history of banking, but cast little light on any other aspect of mediaeval trade.

Because of this uniformity one example picked out at random from among thousands of similar items will be quite sufficient. On March 28, 1369, Collard de Marke's journal records the following entry relating to a transfer of forty pounds groat from the account of Guillaume Raipondi, the Lucchese merchant-banker, to that of another Lucchese, Forteguerra di Forteguerra:

Guillaume Raiponde me doit par Fortegerre 40 lb. gr. or⁸⁶

As previously explained, such a transfer was entered into the journal under the eyes of both parties or of their agents. The entry was then posted to the debit of the account of Guillaume Raipondi and to the credit of that of Forteguerra:

| | | |
|---------------------------------|----------------------------------|-----|
| Dr. | Guillaume Raipondi ⁸⁷ | Cr. |
| Willaume Raiponde me doit | | |
| | | |
| Et par Fortegerre | | |
| 28 en march 40 lb. or | | |

| | | |
|--------------------|---------------------------|-------------------------------------|
| Dr. | Forteguerra ⁸⁸ | Cr. |
| Fortegerre me doit | | doy |
| etc., etc. |  | ..... |
| | | Et par Willaume Raiponde |
| | | 28 en march 40 lb. gr. or |

Sometimes the same amount was transferred several times. A good example of successive transfers is found in Guillaume Ruyelle's ledger. A regular customer named Gyllis Lauwers assigned on July 28, 1369, an amount of four pounds groat to a certain Jan de Vleins who was not one of Ruyelle's clients. Consequently, the above sum was credited to a new account opened in the payee's name. This

account did not exist for long, as Jan de Vleins ordered the four pounds groat to be transferred to a certain Goes van Werkene who did not have an account, either. In accordance with these instructions Jan de Vleins' account was closed and the said sum of four pounds groat was written to the credit of another newly created account, this time in the name of Goes van Werkene. This account was short-lived, too, as the latter had the four pounds collected the same day by one Simoen Evelbaren, probably his agent.⁸⁰ To sum up, the said four pounds were assigned in one single day by Gillis Lauwers to Jan de Vleins, by Jan de Vleins to Goes van Werkene, and by Goes van Werkene to Simoen Evelbaren who finally collected them in specic.⁹⁰ Such a rapid succession of transfers is only possible when assignments can be effected without time-consuming legal formalities; it presupposes either the existence of endorsable instruments or else a system of oral contracts combined with book transfers which, in a devious way, accomplishes the same results.

This transfer system was so perfected that it allowed not only the transfer of credit from one person to another when each had a current account at the same bank, but also when the two had accounts at different banks. This arrangement was made possible by all the money-changers of Bruges having accounts with each other. In the Collard de Marke ledgers the accounts with other money-changers of Bruges are grouped together in a separate section. In ledgers two and four there are fourteen such accounts. This figure tallies with information gathered from other sources concerning the total number of money-changers who were in business at that time.⁹¹

As was to be expected, some of these accounts were more important than others: the accounts of the most successful money-changers were also the most active, especially those of Jacob Reubs and Pieter van Oudenaerde. It was not uncommon to have several debit and credit items posted to these two accounts in one single day.

Accounts with the smaller money-changers were settled from time to time, but at irregular intervals, by paying off the balance due to them or by collecting whatever was outstanding.⁹² This method of settlement was adopted, for example, between Collard de Marke and Guillaume Ruyelle. The relations between the former and his two main competitors Jacob Reubs and Pieter van Oudenaerde were, however, on an entirely different basis. Settlements in specic were rarely resorted to. As a rule accounts remained open year in and year out, the balance being forwarded from one page to another and from one ledger to the next. From time to time two of these money-changers would reckon with each other and bring their balances into agreement if any discrepancies were discovered. Unfortunately, we do not know exactly what procedure was followed. It is quite possible that adjustments were made on the basis of a statement of account which one money-changer sent to the other. One thing is certain, such statements should

Bank Deposits

not be thought of as neatly written copies of the ledger accounts but as rough summaries hastily jotted down on scraps of paper. A couple of these scraps were found in the Collard de Marke ledgers but could not be identified owing to the absence of any guiding reference.

The accounts of Pieter van Oudenaerde (Pierre d'Audenarde) and of Jacques Reubs cover pages and pages in the Collard de Marke ledgers. Whenever the allotted space was filled, the balance was transferred and the account continued on the first blank page. Sometimes such transfers coincide with one of those periodical checkings which have just been discussed. When this is the case, special mention is made that the two parties were in agreement on the balance. For example, on April 30, 1369, Pieter van Oudenaerde's account starts with the following entry: 'doy pour le reste de nos contes dou fuellet [317] contet à sen varlet 30 en avril.'⁹³ The *contet* here does not stand for a payment in cash, but the text should be read as follows: 'I owe [Pieter van Oudenaerde] for the balance of our accounts, reckoned with his *varlet* on April 30.' The *varlet* or employee probably brought with him some kind of a memorandum which was then compared with Collard de Marke's ledger.

The following summaries of the accounts of Jacques Reubs and Pieter van Oudenaerde cover a period about five months, from Christmas 1368 to May 19 (Pentecost), 1369. These summaries will give the reader some idea of the importance of inter-bank accounts and of the volume of clearing payments. It will be observed that the balance of the account of Pieter van Oudenaerde is always in his favor, whereas Jacques Reubs has sometimes a favorable, and sometimes an adverse, balance. Money-changers could thus draw on each other's resources. This practice gave a little elasticity to the mediaeval banking system.

Luckily for us the only extant ledger of Guillaume Ruyelle covers the same period as one of Collard de Marke's complete sets composed of journal, ledger, and alphabetical index. Therefore we have the account of Collard de Marke in Guillaume Ruyelle's ledger and the corresponding account of Guillaume Ruyelle in Collard de Marke's ledger.⁹⁴ It is necessary, of course, to have the accounts of two banks, if one wishes to study the process by which an individual having money standing to his credit in one bank could transfer this money to the credit of another individual in another bank.

Let us take as an example the transfer on March 16, 1369, of an amount of £6 16s. groat from the account of France de Busschere, a customer of Guillaume Ruyelle, to the credit of Tideman Geismar, a customer of Collard de Marke. Judging by his name, France de Busschere was probably a native Fleming, but we have no other information concerning him. As for Tideman Geismar, he was an important Hanseatic merchant who owned some real estate in Lübeck and traded chiefly with Sweden, but sometimes also with Flanders. He was not one of Collard de Marke's regular customers, but he had opened a bank account—as

Money-Changers

TABLE 18
SUMMARY OF THE ACCOUNT OF THE MONEY-CHANGER PIETER VAN OUDENAERDE
IN COLLARD DE MARKE'S LEDGER No. 4
(December 24, 1368 — May 19, 1369)

| DATES | Fol. of Ledger | DEBITS | | | CREDITS | | | BALANCES | | | | | |
|----------------------------------|----------------------|--------|----|----|---------|----|----|----------|---|---|--------|----|----|
| | | £ | s | d | £ | s | d | Debit | | | Credit | | |
| | | | | | | | | £ | s | d | £ | s | d |
| December 24, 1368 .. | | | | | 82 | 11 | 2 | | | | 82 | 11 | 2 |
| Jan. 24, 1369 .. | 301 | 691 | 7 | 1 | 610 | 6 | 0 | | | | 1 | 10 | 1 |
| Jan. 29, 1369 .. | 305 | 79 | 12 | 6 | 89 | 13 | 7 | | | | 11 | 11 | 2 |
| Feb. 20, 1369 .. | 305 | 359 | 3 | 1 | 426 | 8 | 11 | | | | 78 | 17 | 0 |
| Feb. 15, 1369 .. | 309 | 141 | 2 | 0 | 62 | 5 | 0 | | | | | | |
| March 3, 1369 .. | 309 | 673 | 10 | 10 | 719 | 17 | 2 | | | | 46 | 6 | 4 |
| March 6, 1369 .. | 311 | 64 | 17 | 4 | 75 | 10 | 8 | | | | 56 | 19 | 8 |
| March 15, 1369 .. | 311 | 506 | 8 | 2 | 643 | 3 | 4 | | | | 193 | 14 | 10 |
| March 19, 1369 .. | 313 | 287 | 6 | 1 | 337 | 19 | 0 | | | | 244 | 7 | 9 |
| March 24, 1369 .. | 314 | 571 | 10 | 3 | 549 | 9 | 1 | | | | 222 | 6 | 7 |
| March 26, 1369 .. | 315 | 186 | 3 | 11 | 33 | 13 | 0 | | | | 69 | 15 | 8 |
| April 21, 1369 .. | 315 | 617 | 17 | 6 | 548 | 16 | 8 | | | | | 14 | 10 |
| April 28, 1369 .. | 317 | 343 | 17 | 0 | 380 | 5 | 2 | | | | 37 | 3 | 0 |
| May 14, 1369 .. | 320 | 285 | 7 | 0 | 331 | 3 | 7 | | | | 82 | 19 | 7 |
| May 19, 1369 .. | 323 | 258 | 0 | 3 | 309 | 4 | 5 | | | | 134 | 3 | 9 |
| Balance to be carried forward .. | | 134 | 3 | 9 | | | | | | | | | |
| Total .. | | 5200 | 6 | 9 | 5200 | 6 | 9 | | | | | | |

Source: Bruges Municipal Archives, Collard de Marke Ledger No. 4.

TABLE 19
SUMMARY OF THE ACCOUNT OF THE MONEY-CHANGER JACQUES REUBS
IN COLLARD DE MARKE'S LEDGER No. 4
(December 24, 1368 — May 19, 1369)

| DATES | Fol. of Ledger | DEBITS | | | CREDITS | | | BALANCES | | | | | |
|----------------------------------|----------------------|--------|----|----|---------|----|---|----------|----|----|--------|----|----|
| | | £ | s | d | £ | s | d | Debit | | | Credit | | |
| | | | | | | | | £ | s | d | £ | s | d |
| December 24, 1368 .. | | | | | 77 | 16 | 4 | | | | 77 | 16 | 4 |
| December 26, 1368 .. | 300 | 875 | 16 | 10 | 683 | 8 | 7 | 114 | 11 | 11 | | | |
| Jan. 17, 1369 .. | 303 | 165 | 12 | 1 | 271 | 17 | 6 | 8 | 6 | 6 | | | |
| Feb. 5, 1369 .. | 303 | 392 | 17 | 11 | 330 | 4 | 8 | 70 | 19 | 9 | | | |
| Feb. 15, 1369 .. | 308 | 286 | 15 | 4 | 395 | 4 | 5 | | | | 37 | 9 | 4 |
| Feb. 17, 1369 .. | 308 | 161 | 1 | 2 | 141 | 16 | 4 | | | | 18 | 4 | 6 |
| March 6, 1369 .. | 309 | 950 | 9 | 5 | 919 | 0 | 8 | 13 | 4 | 3 | | | |
| March 28, 1369 .. | 312 | 954 | 5 | 3 | 1191 | 1 | 5 | | | | 223 | 11 | 11 |
| April 12, 1369 .. | 316 | 645 | 4 | 8 | 495 | 7 | 4 | | | | 73 | 14 | 7 |
| April 20, 1369 .. | 318 | 372 | 11 | 5 | 330 | 0 | 3 | | | | 31 | 3 | 5 |
| April 28, 1369 .. | 318 | 343 | 17 | 2 | 231 | 14 | 4 | 80 | 19 | 5 | | | |
| May 12, 1369 .. | 320 | 533 | 17 | 8 | 470 | 7 | 8 | 144 | 9 | 5 | | | |
| May 19, 1369 .. | 322 | 273 | 9 | 2 | 420 | 15 | 8 | | | | 2 | 17 | 1 |
| Balance to be carried forward .. | | 2 | 17 | 1 | | | | | | | | | |
| Total .. | | 5958 | 15 | 2 | 5958 | 15 | 2 | | | | | | |

Source: Collard de Marke Ledger No. 4.

was customary among the Easterlings—while he was staying in Bruges during the winter and spring of 1369.⁹⁵

It is likely that Tideman Geismar had sold some Baltic products to France de Busschere. Instead of paying in cash, the latter told his banker Guillaume Ruyelle to place the above amount of £6 16s. gr. at Geismar's disposal. Accordingly the £6 16s. gr. were charged to France de Busschere's account and written to the credit of a new account in the name of Tideman Geismar.⁹⁶ The latter, however, wanted to have this money in his own bank account at Collard de Marke's. What procedure was followed from then on, we really do not know. It is probable that Tideman Geismar had to call into Ruyelle's office one of the messengers or clerks of his own banker and in the presence of both the messenger and Geismar, the latter's newly opened account was cancelled and the account of Collard de Marke was credited with £6 16s. gr.⁹⁷ The parties to this last transaction then walked over to the office of Collard de Marke, who wrote down in his journal: "William Ruelle me doit par Tildeman Gismar 6 lb. 16s."⁹⁸ The result of this entry was the debiting of Ruyelle and the crediting of Geismar with the said sum. It is perhaps well to add that all these transactions took place on the same date, March 16, 1369, as is evident from the records of both money-changers.

This description might convey the impression that the whole process was rather cumbersome and involved a considerable waste of time. One has to consider, however, that the offices of the money-changers were all located in the same vicinity—in the Waterhalle or near it. The exchanges were close together in other mediaeval cities, too, and for the same fundamental reason: the convenience of the customers.

The process which has just been described can be presented in abridged form by giving only the sequence of book transfers. This presentation simplifies matters considerably and will make them clear, if there is still any confusion in the reader's mind.

Bookkeeping of Guillaume Ruyelle

First transfer:

| | |
|------------------------------|---------------|
| Dr. France de Busschere..... | £6 16s. groat |
| Cr. Tideman Geismar..... | £6 16s. groat |

Second transfer:

| | |
|---------------------------|---------------|
| Dr. Tideman Geismar..... | £6 16s. groat |
| Cr. Collard de Marke..... | £6 16s. groat |

Bookkeeping of Collard de Marke

Third transfer:

| | |
|----------------------------|---------------|
| Dr. Guillaume Ruyelle..... | £6 16s. groat |
| Cr. Tideman Geismar..... | £6 16s. groat |

Today the debtor would simply give a check to the creditor who would endorse it and send it to his bank. The check would then be collected from the debtor's bank by way of the clearing house. The check, today, circulates in the opposite direction from the mediaeval book transfer.

It has been contended that the possibilities of a book-transfer system were rather limited without a centralized clearing system.⁹⁹ The Bruges account books do not substantiate this contention. They show that a book-transfer worked perfectly without centralized clearance if there was cooperation among the banks within the system and if they opened accounts to each other. In mediaeval Bruges specie payments within the local banking system were thus largely eliminated. This fact did not escape the attention of contemporaries who talked about 'the Exchange,' meaning the local banking and transfer system as a whole and not any exchange or bank in particular.¹⁰⁰

Although mediaeval law and business practice in general favored the use of oral rather than of written orders of payment, some exceptions had to be made in dealing with public authorities or with non-resident customers. The oral order was inadequate in the one case and not feasible in the other.

It is obvious why it was not feasible to enforce the rule requiring the personal presence of the depositor in the case of customers who were out of town or even residing abroad. Non-resident depositors were frequently Hanseatic merchants who had returned to their homeland but who, for some reason or other, had left money on deposit with a money-changer or with a broker-innkeeper. The account book of Vicko van Geldersen, a merchant and cloth-dealer from Hamburg, who traded with Bruges contains a number of entries which show that assignments on money deposits in Flanders were currently bought and sold. Here is a typical entry from his account book, which is kept in a scarcely readable mixture of bad Latin and Low German:

Heyne vamme Haghene tenetur 17 lb. gr. et 3 Vlamesche schilde, dat lb. gr. vor 5mk. et 1s., de ik em afcofte des ersten mydwekens in der vasten [March 7, 1375], unde dat is rede ghelt unde steyt by her Evert Ghudenrik.¹⁰¹

This entry tells us that, on the first Wednesday in Lent 1375, Vicko van Geldersen bought from one Heyne vamme Haghene Flemish exchange for an amount of seventeen pounds groat and three Flemish *écus* at the price of five marks and one shilling per pound groat. These pounds and these *écus* are said to be on deposit (*steyt*) in ready cash (*rede ghelt*) with the Bruges alderman, sire Evrard Goederic. In other words, the text clearly refers to a deposit payable on demand. The whole transaction, consequently, corresponds to the purchase of a sight draft on Bruges. The entry in the account book does not mention explicitly how Vicko van Geldersen disposed of the money assigned to him. Probably it was collected by his Bruges agent, at that time a relative named Vicko Elbeke Junior, and ap-

plied toward a purchase of Flemish cloth. Indeed, it appears from another entry on the same page of the account book that this agent sent several shipments to Hamburg about this same time.¹⁰² Though the business of Vicko van Geldersen was by no means specialized, he was a regular importer of cloth which he sold in Hamburg both at wholesale and at retail.¹⁰³

The fact that collections were often made by agents is further illustrated by another entry:

Dominus Albertus de Gheldersen tenetur 20 lb. gr., dese rede stad by her Erverd Ghudenrik in Flanderen, de em Albert Hoyers afcofte achte daghe vor lichtmissen [January 26, 1375]. Desse 20 lb. gr. heft Make Screyge unfanghen.¹⁰⁴

According to this entry, a certain Albert Hoyers bought from Dominus Albertus van Geldersen, a member of the Hamburg city council and a distant relative of Vicko, an amount of twenty pounds groat in Flemish money. As in the previous case, this money is said to be on deposit with Evrard Goederic, but the entry this time contains the additional statement that collection was made by Make Screyge. On the other hand, there is no mention of the price of the pound groat.

This Make Screyge, like Vicko Elbeke Junior, was van Geldersen's agent in Bruges. According to the account book, he bought cloth for the amount of £32 7s. 3d. groat and pepper for the amount of £7 14s. 2d. groat.¹⁰⁵ His purchases, consequently, totalled £40 1s. 5d. groat. They were paid partly with the above-mentioned twenty pounds groat and partly with another twenty pounds, payable at mid-Lent (March 29), 1375, which Vicko van Geldersen had bought from his uncle Albert Luneborch.¹⁰⁶ As for the remaining seventeen groats, the agent Make Screyge paid them out of his own pocket and was later reimbursed by his principal. The only point which remains obscure in the whole transaction is the relationship in which Albert Hoyers stood toward Vicko van Geldersen. There are two possibilities: either Albert Hoyers bought the twenty pounds groat from Albert van Geldersen on his own account and resold them to Vicko, or else Hoyers simply acted as a broker between the other two. This second possibility is more likely.¹⁰⁷

As these two examples clearly show, the draft on Bruges, whatever its diplomatic form, was collected in each case by someone who was the agent or the certain attorney of the assignee (the *certain commis* of French, and the *gecommitteerde* of Flemish, documents).¹⁰⁸ There was no need for an order clause,¹⁰⁹ but all the component requisites for a bill of exchange were present. At least four persons were involved: 1) the drawer, assignor, or seller of foreign exchange—Heyne vamme Hagbene in one case and Dominus Albertus van Geldersen in the other; 2) the payor or drawee, the Bruges alderman Evrard Goederic; 3) the

payee, Vicko van Geldersen's agent—Vicko Elbeke Jr. or Make Screyge; 4) the remittor or assignee Vicko van Geldersen, who, by remitting local currency, gave consideration for the draft or 'letter of assignment.' The transaction, it is important to note, merely involved the transfer of title to a sum of money available abroad.

Vicko van Geldersen's account book contains a number of similar entries relating to purchases of Flemish exchange, but they are more laconic and give less detailed information than the two texts which have been quoted. Only one more entry concerns Evrard Goederic.¹¹⁰ Three others refer to money entrusted to one Juncvrouwe Tise in Bruges.¹¹¹ Only one of these entries presents any interest; it states that Vicko van Geldersen has twelve pounds groat on deposit with Juncvrouwe Tise, probably in his name, but the money is said to belong to one Vicko Sankenstede.¹¹² Juncvrouwe Tise, for all we know, might have been the landlady with whom the Hamburg merchants usually boarded when they were in Bruges. The fact that money was placed on deposit with Evrard Goederic is rather puzzling. The entries in the Hamburg account book date from 1375, but we know from other sources that Goederic withdrew from the money-changing business fourteen or fifteen years before. He is last mentioned as a money-changer in the municipal account for the fiscal year 1359-1360 (n.s.). His name is omitted two years later from another list and he has no clearing account in the Collard de Marke ledgers. The most plausible explanation is that Goederic did not retire entirely from business, but took up brokerage or trading. As we shall see, there was a tendency on the part of the Bruges innkeepers and brokers to act as cashiers for foreign merchants and thus to encroach upon the functions performed by the money-changers.

The examples just given may not be considered quite satisfactory, because we are so uncertain about the real nature of the business of Evrard Goederic and Juncvrouwe Tise at the time of the entries in Vicko van Geldersen's account book. Fortunately, there is plenty of evidence to show that money-changers outside Bruges often held deposits for non-residents.¹¹³ This was the situation in Frankfort-on-the-Main whose fairs attracted merchants from far and wide.¹¹⁴ South Germans trading with Venice not infrequently had money on deposit in the Rialto banks and paid their Venetian creditors by transfer from their bank accounts.¹¹⁵ In 1485 the Antwerp money-changer Jacob van den Bloke testified before the court in Bergen-op-Zoom that he had received an amount of one hundred pounds Flemish from two merchants of Cologne in behalf of (*tot behouff van*) a John Brouck, grocer of London. The money-changer promised to pay out the said amount, either in Antwerp or in Bergen-op-Zoom, to the said John Brouck or—and this is significant—to his proxy (*gemachtigde*).¹¹⁶ Not only merchants, but smaller towns sometimes had bank deposits in more important cities. In 1426 the towns of Kampen and Deventer in the dominions of the Bishop of

Utrecht had money standing to their credit at the exchange of Cologne, probably in joint account, because Kampen sent a messenger to Deventer with a proposal to transfer this money to Bruges.¹¹⁷

As Vicko van Geldersen's account book and these other examples prove, non-residents used to 'set over' or to sell their claims on money deposited abroad with a money-changer, a broker, or a host. Such assignments obviously could be implemented only by making out a draft or a written order of some kind. As far as North-Western Europe is concerned, apparently only two of such documents have come down to us. The extant specimens are not very good and have nothing to do with Bruges, but they are important because no others are known to exist. The more satisfactory of the two texts is a letter close given under seal by which a certain Henrik Knop confesses that he has received an amount of 165 marks in local currency from the money-changer Hoyger in Lübeck. In exchange the latter is to receive in Stockholm 330 marks Swedish which are said to be on deposit in ready cash with a Jacob Kron. The document dates from October 31, 1349, and is attested by two town-councillors as witnesses.¹¹⁸ The second document is of 1378.¹¹⁹ According to its contents a certain Hinrich Wulf of Stralsund declares to all concerned that he has sold sixty-five marks Prussian to a Johannes von der Este and requests Johannes Dyssowe of Danzig to pay this amount in cash on presentation of the letter.¹²⁰

The two documents vary greatly in wording and from the point of view of diplomatic structure (one is a letter close, the other is a letter patent).¹²¹ These dissimilarities prove that, in Northern Europe, commercial instruments had not yet assumed a crystallized form by the second half of the fourteenth century. In both cases there is, however, a noticeable tendency toward greater brevity. All redundant legal phraseology, so common in mediaeval charters and deeds, is left out. Another point of resemblance is that both documents take the form of a bill obligatory. Emphasis is laid, not on the request to pay, but on the maker's obligation and on the sale of exchange which motivates that request.¹²²

The drawee who held the deposit was probably the drawer's partner, host, commission-agent, or correspondent. Most likely his obligation to honor the bill arose from the sale of consigned goods or from collections made in behalf of his partner, guest, principal, or fellow-merchant. It is certain that there were no banks in either Stockholm or Danzig, which in the fourteenth century were still backward business centers.

In Northern Europe business methods were still primitive as compared with those of Italy and the Mediterranean trading centers, where genuine bills of exchange and other forms of drafts were in general use by the end of the fourteenth century. Two good examples of drafts payable by money-changers rather than payable by merchant-bankers have been found: one in a Genoese, and another in a Spanish, document of the year 1392. The Genoese document is an

order to pay directed by Niccolo Lomellini, temporarily residing in Savona, to the bookkeeper of the bank 'Benedetto Lomellini e Percevallo de' Vivaldi' in Genoa. The order, dated September 21, is made out in the name of one Gregorio Squarzafico and is payable on the following first of October.¹²³ The Spanish document is a bill of exchange drawn on October 26, 1392, for an amount of £17 10s. Barcelonese by Guillem de Muntbru, mintmaster of Majorca, on his colleague, a money-changer named Luques of Barcelona.¹²⁴ The bill was not payable on sight, but two months after date.

In Venice, by the beginning of the fifteenth century, some further progress had been made. The transfer banks (*banchi di scritta*) apparently encouraged their customers to make use of written assignments which were payable in bank, i.e., by book transfer (*contadi di banco*). These perhaps even circulated from hand to hand. A decree of the Senate dated September 25, 1421, put a stop to this practice. Because the banks did not keep adequate reserves behind demand deposits, the assignments were not readily convertible into cash. As a result they sold at a discount and had a depressing effect on the rates of exchange.¹²⁵

An exception to the general use of oral contracts had also to be made in the case of dealings with public authorities. Even in the Middle Ages the principle was firmly established that public money could not be spent without a warrant signed by the city treasurer or some other responsible official. Moreover, a receipt was generally required, because public accounts were subject to audit and each item of expenditure had to be supported by an appropriate voucher. The municipal finances of the Flemish cities, for example, were placed under supervision from the end of the thirteenth century onward and accounts were rendered each year in the presence of commissioners appointed by the Count of Flanders.¹²⁶

The Bruges money-changers were never fiscal agents of the city or of other administrative bodies, as was sometimes the practice elsewhere, chiefly where there was a municipal exchange or a publicly-owned bank.¹²⁷ A notable example is the Bank of Deposit established in Barcelona by a city ordinance of December 14, 1400.¹²⁸ This bank served as a fiscal agent for the city of Barcelona and the province of Catalonia, as well.¹²⁹ The bank was also the sole legal depositor of money which was subject to litigation or was being administered by trustees, executors, or guardians. Similar conditions prevailed in Strasbourg where the exchange was also a municipal agency.¹³⁰ In the Low Countries the *stadwissel* or 'municipal exchange' of Brussels was entrusted with the collection of the city's revenue and with the payment of most expenditures.¹³¹ In Lille, also, the exchange was a depository of public funds.¹³² The same seems to have been true in Marseilles.¹³³ In Italy, private bankers were sometimes entrusted with the management of public funds and an historian has recently been able to reconstruct the budget for the town of Piacenza for the fiscal year 1356-1357 from the records of a local money-changer.¹³⁴

Although such practices were not followed in Bruges, one should not jump to the conclusion that the money-changers of this city never handled any public funds nor maintained any business relations with the local authorities. The latter sometimes needed foreign currency, when municipal officials had to go abroad on a diplomatic mission.¹³⁵ Naturally the necessary currency was supplied by the money-changers. They even occasionally made payments in behalf of the city.

In 1330 an amount of eighteen hundred pounds *parisis* or one hundred fifty pounds groat which Bruges owed to the powerful Peruzzi Company was paid by assignment on the exchange of Jan Cortscoef (*in cambio Johannis dicti Cortscoef*).¹³⁶ The transaction itself is less important than the manner in which it was carried out. The formality of the whole procedure contrasts sharply with the casualness which characterized dealings between private individuals. Jan Cortscoef evidently had to submit accounts to the city treasurers; hence the transaction had to be surrounded with all possible legal safeguards. Angelo de Montaquerelli, the local representative of the Peruzzi, was consequently requested not only to give quittance in due form, but also to prove that he had the necessary authority to act as the certain attorney of his principals. Both the receipt and the power of attorney are still preserved in the Bruges Municipal Archives. The receipt is made out directly to the two city treasurers—not to the money-changer—and is sealed with their seals and that of the Peruzzi Company—not with Montaquerelli's personal seal.¹³⁷ Apparently the presence of the two parties was still required despite the use of written documents.¹³⁸ The receipt is further attested by several witnesses and authenticated by a cleric named Jan Cramme, an apostolic and imperial notary.¹³⁹ The date is August 17, 1330. The power of attorney dates from the preceding twelfth of May. It was drafted in the city of Florence where the headquarters of the Peruzzi Company were located. The document is made out in the name of all the partners of the firm 'Tommaso dei Peruzzi & Co.' of Florence.¹⁴⁰ Both a general and a special power of attorney was bestowed upon Niccolo dei Peruzzi and Angelo di Montaquerelli who were given the necessary authority to represent the firm in Bruges and more especially to deal with the local municipal government. The instrument is signed by a notary public named Dino Manetti and his signature is acknowledged by the abbot of San Severino in the name of the bishop of Florence. The bishopric's seal is appended to the document by two silk cords. Public authorities, in the past as well as in the present, were not very businesslike. If a deed were required to validate each transaction in the ordinary course of business, it is clear that banking and trade would be well-nigh impossible.

The Bruges money-changers sometimes also held public funds as farmers of the excise taxes on wine, beer, and mead. These taxes were in the Middle Ages the most important single source of revenue of the Belgian municipalities.¹⁴¹ In

1369 and 1370 the duties on those three commodities yielded nearly three quarters of the aggregate income of the city of Bruges.¹⁴² The tax on wine alone represented more than fifty per cent of the total. This proportion may sound almost incredible, but it has been proved that the consumption of wine per capita was four times as great in the Middle Ages as it is today.¹⁴³

Contrary to what one would expect, the farming of the excise taxes did not involve any advances to the city treasury. The farm did not have to be paid beforehand, but was apparently payable in installments, as the proceeds of the tax came in. This is at least the impression which one gathers from the records of Guillaume Ruyelle.

The tax on the consumption of wine—by far the most important of the excise taxes—was farmed out four times a year to the highest bidder, each time for a period of thirteen weeks. Tax-farmers were not infrequently money-changers, but other people of means also made bids. During the period from 1367 to 1372 Guillaume Ruyelle was awarded three contracts: one for the second quarter of 1367, another for the first quarter of 1368, and a third for the third quarter of 1369.¹⁴⁴ The money-changer Jacob Reubs had his bids accepted on four occasions during the same period. Some other successful bidders were rich brokers like Jacob Metteneye and Clais van der Beurse (or de la Bourse). A Jacob van de Walle who farmed the tax on wine for the last quarter of 1371 is mentioned in the Collard de Marke account books as a furrier.

According to the municipal accounts, Guillaume Ruyelle was the farmer of the excise duty on wine during the third quarter of the year 1369 or for thirteen weeks beginning the 3rd of July. This term is within the period covered by his ledger. Though it does not contain any explicit indication concerning this undertaking, a comparison of Ruyelle's accounts with those of the city yielded unexpected results and provided some clues which made it possible to trace the transaction.¹⁴⁵ It appears that Guillaume Ruyelle's cousin and assistant was in charge of the collection of the tax. He also paid the city-treasurer sire Jehan van Artrike. According to Ruyelle's ledger the total paid was £969 11s. groat. According to the municipal account, the city received only £929 11s. groat or £11,154 11s. 8d. *parisis*. The difference of forty pounds groat might very well have been a 'present' to sire Jehan van Artrike, the city treasurer. According to Ruyelle's ledger, total collections amounted to £1139 5s. groat. This figure less £969 11s. groat gives a gross profit of £169 14s. groat or nearly fifteen per cent. Net profit is more difficult to determine, since the ledger entries do not give any detailed information regarding the collection costs. The ledger accounts wind up with a credit balance of £23 15s. 9d. groat, which should represent net profit, if all entries were correctly made. However, as there are probably some omissions, the above figure is at best only an approximation and may even be entirely wrong. If the amount of £23 15s. 9d. groat were correct, it would show that the

net profit was very low and barely exceeded two per cent of the aggregate proceeds.

In Bruges the local court frequently caused money in litigation to be deposited at the exchange and to be kept there pending the court's decision.¹⁴⁶ Such money evidently was impounded in a special account and could be released only by order of the court. Funds were sometimes also bailed to a money-changer in order to provide for the payment of the expenses of a lawsuit or of the charges for 'room and board' of an imprisoned debtor.¹⁴⁷ In case of the bankruptcy of the money-changer, it seems that the court or, in other words, the municipal government, was responsible and had to make good the loss suffered by whomever had a rightful claim to the deposit.¹⁴⁸

Official business, however, remained a factor of minor importance. The Bruges money-changers, therefore, had to rely on a steady flow of private deposits. These deposits were attracted and retained because of the ease with which they were transferable and could be used as a means of payment. The effect, from the point of view of an economist, was that a circulation of bank deposits took the place of circulation of coin. This substitution probably went a considerable way, since many payments among business men were apparently made by assignment in bank.¹⁴⁹ The use of specie was thus reduced to a large extent. Such a condition did not pass unnoticed. In Italy, at least, the public authorities were aware of the fact that bank deposits were part of the circulating medium. As early as 1421 a Venetian document distinguishes between two kinds of money and uses the expression *contadi di banco* for bank money and *denari contadi* for coin.¹⁵⁰ Later one finds even the phrase *moneta di banco* which is a literal translation of 'bank money.'¹⁵¹ The use of such expressions implies a clear recognition of the fact that bank deposits are money and perform the function of money.

NOTES TO CHAPTER 13

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1200
1 This appears from a study of Professor Robert L. Reynolds of the University of Wisconsin on a Genoese lawsuit in the year 1200 ('A Business Affair in Genoa in the Year 1200: Banking, Bookkeeping, a Broker, and a Lawsuit,' *Studi di storia e diritto in onore di Enrico Besta* [Milan, 1938], II, 167-181). This study proves the following points:

- ✓ a) that it was customary for merchants to have a bank account.
- ✓ b) that they could borrow from bankers on short-term by overdrawing their accounts.
- ✓ c) that credit on the books of a bank was transferable.
- ✓ d) that there existed some kind of inter-bank arrangement which allowed Mr. A, customer of bank X, to transfer money to the credit of Mr. B, customer of bank Y.

In my opinion the study of Professor Reynolds is of outstanding importance for the early history of banking. Margaret Winslow Hall's article ('Early Bankers in the Genoese Notarial Records,' *The Economic History Review*, VI [1935], 73-79) really does not contain conclusive evidence concerning the existence of banks in twelfth-century Genoa, although such existence may be presumed.

²Miss Hall admits that *bancheiros* at first was synonymous with *cambitor*, money-changer, and that banks were referred to as money-changing tables, not as places for the transaction of general financial business (*op. cit.*, p. 73). Professor Usher remarks that 'In many parts of Italy, the term "banker" appears at an early date, but, unfortunately, without assured accuracy in usage' ('Origins of Banking: the Primitive Bank of Deposit, 1200-1600,' *The Economic History Review*, IV [1934], 400).

³See, for instance, the ordinance of December 20, 1389 (Gilliodts, *Inventaire*, III, 132). This ordinance enumerates: 'hosteliers, couletiers, merciers, taverniers, changeurs, uscriers, taftettiers.' See also the ordinance of October 13, 1467 (*ibid.*, V, 540 f.).

⁴Margaret Hall rightly emphasizes this point (*op. cit.*, p. 73 and *passim*) and justly criticizes Monsieur Sayous for minimizing the role of the money-changer (*ibid.*, pp. 76, 78). According to Sayous, deposit banking also grew out of money-lending and the *banquiers de crédit*, rather than the money-changers, were instrumental in this development. See his article, 'Les opérations des banquiers italiens en Italie et aux foires de Champagne pendant le XIIIe siècle,' *Revue historique*, CLXX (1932), 2, 6, 21. Conditions in Flanders do not bear out this theory.

⁵Regarding this custom, see, for instance, Edler, 'Accomanda,' *Glossary*, p. 20. On the knights-templars, the standard work is Léopold Delisle, *Les opérations financières des Templiers* (Paris, 1889).

⁶Sayous, 'Opérations des banquiers italiens,' *op. cit.*, p. 11.

⁷*Ibid.*

⁸The text is published in the appendix to Hénaux, 'Les banquiers liégeois au XIVe siècle,' *op. cit.*, p. 327.

⁹*Ibid.*, p. 328.

¹⁰*Ibid.*, p. 327.

¹¹*Ibid.*, p. 328. The description given by Hénaux (*ibid.*, p. 322) concerning the procedure followed from then on, is not quite accurate.

¹²Sayous, 'Les opérations des banquiers italiens,' *op. cit.*, p. 10.

¹³Edler, *Glossary*, p. 20.

¹⁴Bigwood, (*Régime*, I, 430) writes: 'La situation sociale des changeurs, leur compétence particulière, la confiance qu'ils inspiraient ont amené des particuliers à leur confier des fonds. Ils estimaient avec raison qu'ils étaient plus en sûreté dans le coffre de ces spécialistes dont les locaux devaient être aménagés pour y recevoir et y conserver de la monnaie.' This was only true as long as the money-changers had not become deposit bankers. Bigwood, in general, underrates the importance of the money-changers and does not emphasize their banking activity.

¹⁵See Appendix No. I.

¹⁶Julius Landmann, 'Banking (History of Commercial),' *Encyclopaedia of the Social Sciences*, II, 427. Statements like the following by Endemann are consequently untrue: 'Depositen wurden um der Theilnahme am Gewinn willen am liebsten bei einem Wechslerbankier gemacht.' (*Studien in der romanisch-kanonistischen Wirthschafts und Rechtslehre*, I, 425).

¹⁷Elia Lattes, *La libertà delle banche a Venezia dal secolo XIII al XVII* (Milan, 1869), p. 120. The speech of Tommaso Contarini was pronounced on December 28, 1584, and is published *in extenso* by Lattes.

¹⁸*Ibid.*; cf. Sneller, 'Wisselaarsbedrijf in Nederland,' *op. cit.*, pp. 487-488. In July, 1608, ¹⁶⁰⁸ the municipal authorities of Amsterdam issued an ordinance which forbade banking or *het kassiersbedrijf* altogether. The merchants immediately protested against this measure. They pointed out that they could not get along without *kassiers* or bankers for several reasons, one of them being the time wasted in counting money, if all payments were to be made in cash. See J. G. van Dillen (ed.), *Bronnen tot de geschiedenis der wisselbanken (Amsterdam, Middeburg, Delft, Rotterdam)* [The Hague: Nijhoff, 1925], Part I, p. 15, No. 18: Request dated between July 12 and July 29, 1608.

¹⁹E. Lattes, *op. cit.*, p. 120. Contarini uses this very expression: '. . . et siccome col mezzo del banco, in un momento nel qual si muove la penna sopra i libri, si satisfa al comprador et al venditor. . . .'

²⁰*Ibid.*

²¹Cf. Letts, *op. cit.*, p. 22.

²²This cadaster has been published in full by Gilliodts ('Les registres des "Zestendeelen"', *op. cit.*). According to his text, the number of houses is given separately for each district:

| | |
|--------------------------|--------------|
| District of St. John | 1,055 houses |
| District of St. Donatian | 1,362 |
| District of Notre Dame | 1,672 |
| District of St. James | 1,824 |
| District of St. Nicholas | 1,397 |
| Scarmers | 818 |
| Outside the walls | 207 |
| Total number of houses | <u>8,335</u> |

The estimate of 8,400 allows for a certain amount of duplication due to the fact that some houses built in courtyards have the same number as those fronting on the street.

²³Jos De Smet, 'L'effectif des milices brugeoises et la population de la ville en 1340,' *RBPH*, XII (1933), 636. The estimate of Häpke (*op. cit.*, p. 175) who sets the total population at 50,000 is probably too high.

²⁴Appendix No. I. The first list actually contains twenty-seven names, but one of them, Jan Moens, is a money-changer. His name should therefore be dropped from the list for this purpose. The second list has eighteen, including three money-changers, which reduces the number of depositors to fifteen.

²⁵See de Roover, 'Ruyelle,' *op. cit.*, pp. 92-95, doc. No. 7. The list of debit balances includes 28 items, but items 2, 20, 23, 24, 27 should be dropped because they certainly do not relate to customers' accounts.

²⁶See Appendix No. III.

²⁷See Collard de Marke Journal No. 2.

²⁸*Ibid.*

²⁹The author has made out a filing card for every account in this ledger and his collection contains about 1100 cards.

³⁰Lane, 'Venetian Bankers,' *op. cit.*, pp. 189-190.

³¹The rector of St James, one of the Bruges parish churches (*Mesire Curet de Saint Jakes*), even had a bank account. See Collard de Marke Ledger No. 3, fol. 7.

³²de Roover, 'Ruyelle,' *op. cit.*, pp. 93-94. The total given on p. 94 is £946 17s. groat, but item 61 amounting to £3 2s. 6d. should be subtracted.

³³*Ibid.*, pp. 94-95. The figure of £69 2s. 2d. is obtained as follows:

| | £ | s | d |
|----------------------------|-----|-----|----|
| Total debit balances..... | 661 | 14 | 10 |
| Deduct: | | | |
| No. 27 Item folio..... | 562 | 14 | 6 |
| No. 2 Willame Ruyelle..... | 8 | 10 | 3 |
| No. 20 Medimysele..... | 9 | 5 | 9 |
| No. 23 Hannekin Ruwel..... | 6 | 0 | 0 |
| No. 24 Medimyselle..... | 6 | 2 | 2 |
| | | 592 | 12 |
| | | 69 | 2 |
| Total..... | | | 2 |

³⁴de Roover, 'Ruyelle,' *op. cit.*, p. 79, Table No. 10.

³⁵Collard de Marke, Ledger No. 4, fol. 112:

Les Grands Cahorsins

| Dr. | Cr. |
|--|--|
| Les grans Caoursins par Jakoppe Reups 7 en march....£29 1s. 4d. | doy par Conrart Boin Adone 5 en march.....£29 1s. 4d. |

The corresponding entry in Jacob Reups' account (Ledger No. 4, fol. 310, Cr.) reads as follows: 'Item par les grans lonbars 7 en march £29 1s. 4d.' These entries prove that *Grans Caoursins* and *Grans Lombars* had the same meaning. The fact that the lombards of Bruges had an account with the money-changer Jacob Reups is confirmed by a document published by Bigwood (*Régime*, II, 352). The estate of the lombard Jacques Maucegas, which escheated to count of Flanders in 1363, included an amount of £332 groat placed on deposit at the exchange of Jacob Reups ('lesquels lis dis lombards recevoient et comptoient sur le change Jacop Reubz'). Bigwood (*ibid.*, I, 316) writes erroneously '... investis dans l'office du changeur Jacques Reups.' This statement should be emended to read *déposés au change de Jacques Reups*. It is unlikely that the lombards were partners of Jacob Reups.

³⁶Collard de Marke Ledger No. 4, fol. 98:

Jehan Diese de Castille, mestre de naves

| Dr. | Cr. |
|--|---|
| Jehan Diese, mestre de naves me doit que je li fay conte ou fuellet 126..... 15 lb. 8s.11d. | fol. 98 doy par Lukin de Karle 21 en février..... 15 lb. 8s.11d. |
| Jehan Diese de Castille me doit par Jehan Senches de Liseguere à l'ostel Sire Jakoppe Matenaie 17 en march..... 30 lb. gr. Et par lui contet à ce jour.. 5 lb. 8s.11d. | fol. 125 ^v [126] doy par Abram Parvesin 16 en march..... 20 lb. gr. Et par Lukin de Karle dou fuellet 98..... 15 lb. 8s.11d. |

³⁷To use the terminology of Professor Gras, the Hanseatic merchants were still in the traveling stage, while the Italians had already reached the sedentary stage of mercantile capitalism. See Gras, *Business and Capitalism*, chap. II, pp. 27-66, and chap. III, pp. 67-119. On this same topic, the reader should also consult the important study of Gunnar Mickwitz, 'L'economia medievale nei paesi baltici e nei paesi mediterranei,' *Rivista internazionale di scienze sociali*, XLVI (1938), 813-824.

³⁸This is not necessarily true if one single money-changer is considered, but applies to the exchange as a whole (the local system of exchange-banks).

³⁹These are a few of Collard de Marke's principal customers:

Native Merchants: Sire Jacques de Visch, Jan van den Vagheviere, Sire Jehan Bonin [burgo-

master of Bruges], Conrart Boin Adone, Jehan Bregelay (Briselaye), Sire Jehan Makaire, Bau-
duin van Assenede.

Brokers-Innkeepers: Sire Jakemes Matenaie (Metteneye?), Medimyselle de Rudevorde, Jakoppe
van le Fine, Raoul Doucemin (de Coumines), Ernout Poultus, Jehan van der Leke, demisselle
Isoie.

Drapiers: Willem van de Neke.

Furriers: Jehan van de Walle.

Goldsmiths: Jehan de Courtrai.

Italians: Nicolas Ammanati, Dimenche Cucul (Zondaghe de Florentijn), Sire Tiram Enperial
Jakemon Fabe, Lucadine, Forteguerre, Lukin de Karle, Hancbaut Lommeclin, Dine Malapris,
Otebon de Marin, Barde Menchine, Marco Morosini [Venetian], Galigo da Piastre, Jehan de
Priolle, Willaume Raiponde, Lois Robiert, Thumas Sarlande, Pierre Scandillon, Aubiert Spingle
(Spinelli), Davin Tedaldin, Pierre Teste. This Dimenche Cucul's real name was probably
Domenico Cocchi.

⁴⁰Rudolf Häpke, *Der deutsche Kaufmann in den Niederlanden* ('Pfungstblätter des Han-
sischen Geschichtsvereins' [Leipzig, 1911]), p. 10: '. . . mit der Zeit wurde es freilich auch
üblich, den Barvorrat "in den Wechsel" zu legen, d. h. bei einer der zahlreichen Banken
arbeiten zu lassen.'

⁴¹This phrase 'by writings only' is found in Thomas Mun, *England's Treasure by Forraign
Trade* (London, 1664), chap. IV, p. 42. (Also reprinted by the Economic History Society
[Oxford: Basil Blackwell, 1933], pp. 16-17.) In Venice, to transfer credit on the books of the
banks was called *scrivere e girare in banco*. See G. Luzzatto, 'Les banques publiques de
Venise (siècles XVI-XVIII),' in *History of the Principal Public Banks*, ed. by J. G. van Dillen
(The Hague, 1934), p. 41.

⁴²I have emphasized this point from the very first, as far back as 1929, when I started
working on the Collard de Marke account books. See de Roover, 'Les livres de comptes de
Collard de Marke,' *op. cit.*, p. 30, and 'Guillaume Ruyelle,' *op. cit.*, p. 29; Carman, 'Flemish
Accounting of the Fourteenth Century,' *op. cit.*, p. 117.

⁴³Espinas, *La vie urbaine de Douai*, II, 157.

⁴⁴*Ibid.*, III, 70, *pièce just.* No. 100, art. 1, 2.

⁴⁵*Ibid.*, art. 3.

⁴⁶Usher, 'The Origins of Banking,' *op. cit.*, pp. 410 ff. The oral contract has been men-
tioned casually by several historians, but none of them have seen its full importance as clearly
as Professor Usher. See Goldschmidt, *Universalgeschichte des Handelsrechts*, p. 324; Sieve-
king, *Die Casa di San Giorgio*, p. 46 [330] (S. talks about an oral or a written order); André-E.
Sayous, 'Les opérations des banquiers de Gênes à la fin du XIIe siècle,' *Annales de droit com-
mercial français, étranger et international*, XLIII (1934), 291, 295; Luzzatto 'Les banques pub-
liques de Venise,' *op. cit.*, p. 41; Lane, 'Venetian Bankers,' *op. cit.*, p. 190; Emmanuel Vogel,
'Der Giralverkehr in den oberitalienischen und den deutschen Handelszentren bis zum aus-
gehenden Mittelalter,' *VSWG*, XXXI (1938), 3.

⁴⁷Reynolds, 'A Business Affair in Genoa,' *op. cit.*, pp. 170-171.

⁴⁸That the money-changers at the fairs of Champagne were Italians is clearly established by
a document published by Bigwood, *Régime*, II, 302. This document mentions the following
money-changers: Rochin Bonnenseigne (Buoninsegna), Renier Compain (Compagni), Renier
dou Pas (Pazzi)—all of Florence.

⁴⁹Bourquelot, *Etudes sur les foires de Champagne*, pp. 300, 352-354.

⁵⁰This expression is used by Gerard de Malynes, *Consuetudo vel lex mercatoria or the An-
cient Law-Merchant* (London, 1622), p. 335.

⁵¹I owe this information to the kindness of Dr. Elizabeth Chapin Furber, author of *Les
villes des foires de Champagne des origines au début du XIVe siècle* (Paris, 1937).

⁵²Usher, 'The Origins of Banking,' *op. cit.*, p. 416.

⁵³It is doubtful whether the written orders of assignment published by Bensa (*Francesco
di Marco da Prato*, pp. 352-358) should be considered as real checks. Treasury orders, war-

rants, and similar documents issued by public authorities clearly cannot be considered as such. Real checks do not appear before the late sixteenth century. Goldschmidt (*op. cit.*, p. 326) gives the text of several early examples. Cf. Ernst Ludwig Jäger, *Die ältesten Banken und der Ursprung des Wechsels* (Stuttgart, 1879), p. 21.

⁵⁴Elia Lattes, *op. cit.*, p. 91, n. 8.

⁵⁵*Ibid.*, p. 107, Project of a statute for the first public bank in Venice, December 28, 1584.

⁵⁶*Ibid.*, p. 113 (decree of April 11, 1587).

⁵⁷Charles F. Dunbar, 'The Bank of Venice,' *QJE*, VI (1892), 389.

⁵⁸van Dillen, *Bronnen*, Part I, p. 1, No. 2, Ordinance of June 2, 1604. The same prohibition was renewed on July 12, 1608 (*ibid.*, p. 12, No. 14) and on June 4, 1621 (*ibid.*, p. 47).

⁵⁹This was already so in thirteenth-century Genoa. See Raffaele Di Tucci, *Studi sull'economia genovese del secolo decimosecondo: la banca privata* (Turin, 1933), p. 120: 'Ma già la polizza, o *charta*, almeno per le riscossioni dirette nel banco, non era necessaria, ed era sufficiente, per l'accertamento di un debito o di un credito, l'annotazione sul cartulario.'

⁶⁰Paciolo, *op. cit.*, fol. 206: 'E pero è da notar che con lo bancho te poi communamente impaciare da te; ponendovi denari per piu tua sigureçça, ovvero, per modo de deposito a la giornata, poter con quelsi far tuoi pagamenti chiari a Piero, Giovanni, e Martino, perchè la ditta del bancho è comme publico istrumento de notavo, perchè son per li domini assicurati . . .' [italics mine]. Paciolo refers to Venice, but the same was true of Genoa (Sieveking, *Casa di San Giorgio*, p. 47 [331]), and of most Italian cities (Usher, 'Origins of Banking,' *op. cit.*, p. 410, n. 3).

⁶¹Thomas de Castellino, the bookkeeper of the Bank of St. George, called himself 'notary and bookkeeper of the bank, (*notarius et scriba*). The same was true of the bookkeepers of private banks. See Sieveking, *Casa di San Giorgio*, p. 47 [331], n. 1. By way of comparison, the projected statutes of the Banco di San Ambrosio in Milan (1593) also provided that the same credence should be given to the books of the bank as to notarial instruments (Jäger, *op. cit.*, p. 42). In Barcelona, too, the journals of the public bank, established in 1401, were kept by notaries (Usher, 'The Origins of Banking,' *op. cit.*, p. 411).

⁶²Alberto Tofani, *Alcune ricerche storiche sull'ufficio e la professione di ragioniere a Firenze al tempo della repubblica* (Florence, 1910), p. 43.

⁶³Usher, 'Origins of Banking,' *op. cit.*, p. 411.

⁶⁴Gandi, *op. cit.*, p. 97. In Venice, as early as 1348, a money-changer who was guilty of tearing out leaves from his journal was debarred from the practice of his profession (Elia Lattes, *op. cit.*, pp. 29-30).

⁶⁵Notaries had made their appearance in Flanders as early as the thirteenth century. Although this new institution spread rapidly—in Bruges there was a notary from 1304 onward—it did not assume an importance comparable to that which it enjoyed in Italy. Notaries in the Low Countries were clerics and derived whatever authority they had from imperial and apostolic commissions. The main function of these early notaries was to prepare diplomas and other official documents. H. Nélis, 'Les origines du notariat public en Belgique [1269-1320],' *RBPB*, II (1923), 267-277 and Jean Yernaux, 'Les notaires publics du XIIIe au XVIe siècle, spécialement au Franc de Bruges,' *Bulletin de la Commission Royale d'Histoire*, LXXXII (1913), 111-82. Yernaux points out that, according to the rules, only unmarried clerics in the minor orders were eligible to the office of notary: in fact, most Bruges notaries were priests.

⁶⁶This is a general impression which one gets by going through the two volumes of Gilliodts-van Severen's *Cartulaire de l'E staple*. On several occasions, foreign and native merchants were consulted on trade customs.

⁶⁷M. M. Postan, 'Private Financial Instruments in Medieval England,' *VSWG*, XXIII (1930), p. 71.

⁶⁸See Appendix No. I.

⁶⁹Paciolo, *op. cit.*, distinctio 9, tractatus 11, fol. 206.

⁷⁰Sieveking, *Casa di San Giorgio*, p. 46 [330]; Vogel, *op. cit.*, p. 3; Usher, 'The Origins of Banking,' *op. cit.*, p. 411.

⁷¹Sieveking has to admit this fact in a footnote, but it is not clear why he states in the text that the rule was effective (*Casa di San Giorgio*, p. 46, n. 5).

⁷²Genoa, State Archives, *Registri Banchariorum*, sala 24. This room contains several journals or *manualia*—not only one, as is stated erroneously by Alessandro Lattes—an almost complete series of cashbooks from 1390 to 1433, and one earlier volume for the year 1386.

⁷³Alessandro Lattes, 'Gli antichi registri dei banchieri genovesi,' *Rivista del diritto commerciale*, XVII¹ (1919), 616. Moreover, I had an opportunity to examine the Lomellini material during a visit to Genoa in 1938.

⁷⁴See Sieveking, *Casa di San Giorgio*, p. 46, n. 5.

⁷⁵This is a general impression based on the fact that I myself have been able to compare the Bruges with the Genoese material.

⁷⁶Sieveking (*Casa di San Giorgio*, p. 46, n. 5) gives a good example of such an entry relating to a transfer of twenty lire from the account of Cristoforo Cataneo (assignor) to that of Juliano de Ventimilia (assignee). The journal entry reads as follows: 'Christoferus Cataneus pro Juliano de Ventimilia £20.' Examples from the Collard de Marke journals will be given in the next pages.

⁷⁷Collard de Marke Journal No. 2, fol. 7.

⁷⁸Collard de Marke Ledger No. 4, fol. 38. See Appendix No. II, Account 19.

⁷⁹Collard de Marke Journal No. 2, fol. 109.

⁸⁰Collard de Marke Ledger No. 4, fol. 124. See Appendix No. II, Account 18.

⁸¹*Ibid.*, fol. 79, account of Willaume Raiponde: 'Willaume Raiponde me doit—Et par sen compaignon contet 25 en février.' See Appendix No. II (17). Cf. Journal No. 2, fol. 7, December 27, 1368: 'Pierre Rougenelle me doit par Dimenche sen compaignon contet.' See Appendix No. III.

⁸²Collard de Marke Ledger No. 5, fol. 385, account of Willem Ruyelle.

⁸³Collard de Marke Journal No. 2, fol. 7. See Appendix No. III.

⁸⁴Collard de Marke Ledger No. 4, fol. 26.

⁸⁵de Roover, 'Ruyelle,' *op. cit.*, p. 78, Table No. 9.

⁸⁶Collard de Marke Journal No. 2, March 28, 1369, fol. 82.

⁸⁷Collard de Marke Ledger No. 4, fol. 79. See Appendix No. II, Account 17.

⁸⁸*Ibid.*, fol. 124. See Appendix II, Account 18.

⁸⁹de Roover, 'Ruyelle,' *op. cit.*, pp. 34-36. The assumption made in these pages that there must have existed some kind of written document circulating by indorsement is, of course, entirely wrong. While preparing my Ruyelle study, I was greatly puzzled by some of the entries, as I did not know about Professor Usher's work and the existence of oral, instead of written, commands to pay.

⁹⁰For the supporting evidence, see *ibid.*, p. 75, Table No. 6, and p. 79, Table No. 10.

⁹¹The following money-changers all have accounts in Ledger No. 2: (1) Pietre d'Oudenarde, (2) Jehan de Courtray, (3) Jehan van Donc, (4) Jehan Eurle, (5) Jehan van Marc (6) Estievenes van dre Miers (Steven van der Meersch), (7) Jehan Mons (Moens), (8) Pietre le Potre, (9) Stasin Quatouc, (10) le demisielle Rapesart, (11) Jakoppe Reups, (12) Jakemes de Rouc, (13) Willaume Ruyelle, (14) le demisielle de Witte. Note that the list includes two women.

The following money-changers have accounts in Ledger No. 4: (1) Pietre d'Oudenarde, (2) Jehan van Donc, (3) Jehan Eurle, (4) Jehan van Marc, (5) Estievene van dre Miers, (6) Jehan Moriel, le cangeur, (7) Pietre le Potre, (8) le demiselle Rapesart, (9) Clais Rapesart, (10) Jehan Reups, (11) Jakoppe Reups, (12) Jakes de Rouc, (13) Willem Ruyelle, (14) le demiselle de Witte.

⁹²This method was certainly *not always* used, as Emmanuel Hugo Vogel ('Der Giralverkehr im Mittelalter,' *op. cit.*, p. 4) seems to imply.

⁹³Collard de Marke Ledger No. 4, fol. 320. See Appendix No. II, Account 12.

⁹⁴Two corresponding accounts have been published twice: once by de Roover, 'Ruyelle,'

op. cit., p. 70; and the second time by Carman, 'Flemish Accounting of the Fourteenth Century,' *op. cit.*, p. 122.

⁹⁵Wilhelm Koppe, *Lübeck-Stockholmer Handelsgeschichte im 14. Jahrhundert* ('Abhandlungen zur Handels- und Seegeschichte,' Vol. II, Neumünster in Holstein, 1933), pp. 132, 136, 194-195, 235, 250; Collard de Marke Ledger No. 4, fols. 26^v and 84.

⁹⁶de Roover, 'Ruyelle,' *op. cit.*, pp. 30-31 and 72, Table No. 3, for the accounts of France de Busschere and Tideman Geismar.

⁹⁷*Ibid.*, p. 70, Table No. 1, and Carman, *op. cit.*, pp. 117, 122.

⁹⁸de Roover, 'Ruyelle,' *op. cit.*, p. 69.

⁹⁹J. G. van Dillen, 'De girobanken van Genua, Venetië en Hamburg,' *Tijdschrift voor Geschiedenis*, XLII (1927), 36.

¹⁰⁰In Bruges it was common to talk about money placed on deposit 'at the exchange' (*in den wisselle*). See Bigwood, *Régime*, I, 432; Gilliodts, *Coutume*, I, 517; and Sneller, 'Het wisselaarsbedrijf in Nederland,' *op. cit.*, p. 496, No. 2. In Dutch the expression *leggen in cambio* was used, which is the same as the Flemish *leggen in den wissel* (*ibid.*, p. 497). The Liège statute of January 1315 (n.s.) talks about *la cange de la cité de Liege*, although there were certainly several exchange offices (Hénaux, *op. cit.*, p. 327). The officials of the brotherhood (*frairie*) were significantly called 'the masters of the exchange' (*li maistres delle cambge*) (*ibid.*, p. 328). In Italy *pagare in banco* was a commonly used expression.

¹⁰¹*Das Handlungsbuch Vickos von Geldersen*, p. 106, item 684.

¹⁰²*Ibid.*, item 688.

¹⁰³*Ibid.*, p. xxv. Vicko van Geldersen was called a *Wandschneider* or cloth-dealer.

¹⁰⁴*Ibid.*, pp. 92-93, item 563.

¹⁰⁵*Ibid.*, item 560. Make Screyge became later an important merchant. In 1386 he entered the Hamburg city-council. He was elected burgomaster in 1390 and died in 1419 (*ibid.*, p. 36, n. 10).

¹⁰⁶The text of this entry is as follows: 'Luneborch tenetur 20*lb.* gr., de ik em cofte to twelften [Epiphany, January 6, 1375], tho mydvasten [March 29, 1375] to betalende. Desc 20*lb.* heft Make Screyge unfanghen.' (*Ibid.*, p. 92, item 562.) The editor gives erroneously the first of April as the date for Mid-Lent 1375 (*ibid.*, p. 92, n. 9).

¹⁰⁷It is possible that Albert Hoyers was a brother-in-law of Albertus van Geldersen, who was the husband of a Tybbe Hoyeri (*ibid.*, p. xiii). Albert Hoyers himself became a member of the Hamburg city-council (*ibid.*, p. 45, n. 9). He was in close relations with Vicko van Geldersen and at least once acted as his agent in Flanders (*ibid.*, p. 110, items 714 and 715). Both were creditors of the dukes Wenceslas and Albert of Saxony and Lüneburg and of the duke Bernhard of Brunswick and Lüneburg (*ibid.*, pp. 185-186, Appendix item 1).

¹⁰⁸Cf. André-E. Sayous, 'L'histoire universelle du droit commercial de Levin Goldschmidt et les méthodes commerciales des pays chrétiens de la Méditerranée aux XIIe et XIIIe siècles,' *Annales de droit commercial français, étranger et international*, 1931, p. 320; Brunner, 'Brügger Schöffensprüche zur Geschichte des Wechselrechts im fünfzehnten Jahrhundert,' *op. cit.*, p. 13. In Latin documents one often finds the expression *certus missus* or *nuncius*.

¹⁰⁹If necessary, it could be replaced by a power of attorney.

¹¹⁰*Handlungsbuch Vickos von Geldersen*, p. 104, item 665.

¹¹¹*Ibid.*, p. 92, item 561; p. 103, item 648; p. 104, item 667.

¹¹²*Ibid.*, p. 104, item 667.

¹¹³Collard de Marke had a great many foreign customers, but it is impossible to tell from his records whether or not they were residing in Bruges.

¹¹⁴Kriegk, *op. cit.*, p. 339.

¹¹⁵Heinrich Sieveking, 'Aus venetianischen Handlungsbüchern: ein Beitrag zur Geschichte des Grosshandels im 15. Jahrhundert,' (Schmoller's) *Jahrbuch für Gesetzgebung, Verwaltung und Volkswirtschaft im Deutschen Reich*, XXVI (1902), 200.

¹¹⁶Sneller, 'Het Wisselaarsbedrijf in Nederland,' *op. cit.*, p. 497, n. 3.

¹¹⁷*Ibid.*, p. 497.

¹¹⁸Max Neumann, 'Geschichte des Wechsels im Hansagebiet bis zum 17. Jahrhundert,' supplement to *Zeitschrift für das gesamte Handelsrecht*, VII [Erlangen, 1863], p. 119. Neumann publishes the following text: 'Ik, Hinrik Knop, bekenne des, dat ik hebbe upgeboret unde entfangen van Hoygere Wesselere hundert unde vive unde sestich mark an lubescheme pagimente, dar he wedder vore entfangen schal tho deme Stockholme drehundert mark unde dertech mark zwedesch in alsodaneme pagimente also dar ghenge unde gheve is. Dit vor benamede gelt schal eme bereden Jacob Kron van den seshundert unde sestich marken de ik, Hinrik Knop, unde Alvin van deme Stene van eme koften; tughe desser dink sint her Johan Plescowe unde her Seghebode Crispin, rathmanne; ghegheven an dem jare Godes 1349, in deme hilghen avende Alle Godes Hilghen. . . .'

¹¹⁹*Ibid.*, p. 122. As date Neumann gives 1328 in the document, but 1378 in the reference. The later date is probably correct.

¹²⁰*Ibid.*, p. 122. 'Wythlich sy alle den ghuden luden de dessen bref sen adder horen lesen, dat ich, Hinrich Wulf, to Demezunde [Stralsund] hebe vorcroft-eneme erbarn manne vorbenamet Johannes von der Este also vele also 65 mark prusch de schal eme antworden Johannes Dyssowe un bedde jo leve um dat jy dessen man to entrecht alse vort wanner he dar cumt; wente ic hebbe alse mit eme auflosset dat hy det gheld rede vinden schal, to ever bewysinghe un tho ever betuchnisse so hebbe ic min ingheseghel vor dessen bref ghehanghen, schreve to Demesunde 1378.'

¹²¹This seems to suggest that the letter under seal tended to displace the more formal letter patent. Later the letter close itself was to give way before the informal letter missive.

¹²²On the importance of this point, see Freundt, *op. cit.*, I, 64-77.

¹²³Sievekings, *Casa di San Giorgio*, p. 235 [519], Appendix III, item 1.

¹²⁴André-S. Sayous, 'Les méthodes commerciales de Barcelone au XIVe siècle, surtout d'après des protocoles inédits de ses archives notariales,' *Estudis universitaris catalans*, XVIII (1933), 234-235, Appendixes I and J. The text is also given in another article of Sayous, 'Les méthodes commerciales de Barcelone au XVe siècle,' *Revue historique de droit français et étranger*, 4th series, XV (1936), 277.

¹²⁵The text of the decree which was published by Elia Lattes (*op. cit.*, pp. 47-50) is very obscure and confusing. Contrary to the editor's assertions (*ibid.*, pp. 50 f.), it is not clear from the text whether the *contadi di banco* were certificates of deposit issued by the *banchi di scritta* or assignments made out by the depositors. Cf. Alessandro Lattes, *Il diritto commerciale nella legislazione statutaria*, p. 206; Edler, 'Contado di Banco,' *Glossary*, pp. 85-86; Erwin Nasse, 'Das venetianische Bankwesen im 14., 15. und 16. Jahrhundert,' (Conrad's) *Jahrbücher für Nationalökonomie und Statistik*, XXXIV (1879), 337. The text of the decree of 1421 makes better sense if compared with the provisions of the decree of November 26, 1526, 'ordinationes circa bancos a scripta,' arts. 5, 12, 13, and 16 (E. Lattes, *op. cit.*, pp. 90-92). The purpose of both the decree of 1421 and the one of 1526 was to prevent the depreciation of bank money and the existence of a premium (*lazo*) on cash. See Edler, 'Lazo,' *Glossary*, p. 151.

¹²⁶van Werveke, *De Gentsche Stadsfinanciën*, pp. 67 f.

¹²⁷'Municipal exchange' (*stadwissel*) does not necessarily mean public ownership. In Brabant, it was simply a title given to the exchange which handled the municipal business and was exempt from certain taxes. In Strasbourg, on the contrary, the *Stadtwechsel* was a public agency.

¹²⁸Usher, 'Banking in Barcelona,' *op. cit.*, p. 132, and *Early History*, I, 270.

¹²⁹*Ibid.*, pp. 134-5.

¹³⁰Cahn, 'Der Strassburger Stadtwechsel,' *op. cit.*, pp. 44-65.

¹³¹Bigwood, *Régime*, I, 404: 'Jusqu'en 1503 la ville confiait à un changeur qu'elle désignait à cet effet et qui devait être cautionné par des bourgeois, les revenus de Bruxelles. On payait également à son change les amendes judiciaires.'

¹³²Benoit, 'Le "Beauregard" de Lille,' *op. cit.*, p. 17.

¹³³André-E. Sayous, 'Les transferts de risques, les associations commerciales et la lettre de

change à Marseille pendant le XIVe siècle,' *Revue historique de droit français et étranger*, 4th series, XIV (1935), 491.

¹³⁴Tommaso Zerbi *La banca nell'ordinamento finanziario visconteo, dai mastri del banco Giussano, gestore della tesoreria di Piacenza, 1356-1358* (Como, 1935), p. 118.

¹³⁵Gilliodts, *Cartulaire de l'Estaple*, I, 183, No. 244.

¹³⁶Gilliodts, *Inventaire*, I, 423.

¹³⁷*Ibid.*, I, 423, No. 347.

¹³⁸Usher, 'The Origins of Banking,' *op. cit.*, pp. 418 f.

¹³⁹Jan Cramme is listed among the notaries doing business in Bruges during the fourteenth century. See Yernaux, *op. cit.*, p. 161.

¹⁴⁰Gilliodts, *Inventaire*, I, 422, No. 347. This partnership was formed on November 1, 1324. The list of partners included in the power of attorney corresponds to the one given by Sapori, 'Storia interna della compagnia mercantile dei Peruzzi,' *op. cit.*, p. 22.

¹⁴¹de Roover, 'Ruyelle,' *op. cit.*, p. 42, n. 1. Cf. van Werveke, *Gentsche Stadsfinanciën*, p. 219.

¹⁴²de Roover, 'Ruyelle,' p. 43, n. 2.

¹⁴³Hans van Werveke, 'Le commerce des vins français au moyen-âge,' *RBPH*, XII (1933), 1100; de Roover, 'Ruyelle,' *op. cit.*, p. 44.

¹⁴⁴*Ibid.*, pp. 89 f., doc. No. 4.

¹⁴⁵Full evidence based on the figures of Ruyelle's ledger and of the municipal accounts will be found *ibid.*, pp. 46-52.

¹⁴⁶Bigwood, *Régime*, I, 432; Gilliodts, *Coutume*, I, 517 and *Cart. de l'Estaple*, II, 448, No. 1422, March 29, 1514.

¹⁴⁷*Ibid.*, II, 178 f., No. 1120, December 9, 1468.

¹⁴⁸*Ibid.*, II, 448, No. 1422.

¹⁴⁹This expression is used by Gerard de Malynes, *Consuetudo vel lex mercatoria or the Ancient Law-Merchant*, p. 335.

¹⁵⁰Usher, 'The Origins of Banking,' *op. cit.*, p. 400.

¹⁵¹Luzzatto, 'Les banques publiques à Venise,' *op. cit.*, p. 41. Adam Smith also used the expression 'bank money' in the meaning of credit on the books of a public bank such as the banks of Amsterdam, Hamburg, Venice, and Genoa. He made a distinction between 'bank money' and 'the common currency of the country' or coin. See Adam Smith, *The Wealth of Nations* (New York: The Modern Library, 1937), Book IV, chap. iii, pp. 445 f.

Chapter 14

LOANS AND INVESTMENTS

BY organizing a system of payments which was, in most cases, more expedient than the slow telling of imperfect coins, the money-changers performed a service of outstanding usefulness to the business community. They apparently received no compensation for this service, although it entailed additional expenses which were far from negligible. These expenses had to be met in one way or another. Money-changers could only do so by finding an income-yielding use for some of the money entrusted to their care, but they had to keep enough cash on hand to avoid being short of funds in case of unforeseen and sudden withdrawals. This principle is called the fractional reserve principle and is still today the 'ABC' of commercial banking.

Bank management largely consists in putting into effect a policy which conforms to this guiding principle. Managerial problems, consequently, arise only in connection with the making of loans and investments. Accepting deposits and making transfers are not transactions which give rise to any managerial problems. The role of the banker remains purely passive and consists merely in the carrying out of instructions given by his customers, largely a routine procedure which can easily be delegated to an employee, as the job requires only a knowledge of book-keeping and some proficiency in simple arithmetic. As we have seen, the mediaeval money-changers were sensible enough to leave to their staff all the clerical work. They themselves were thus free to turn their attention to the managerial problems arising from their loans and investments policy.

How to use the resources which the depositors placed at the money-changer's disposal was the most important problem. Such a problem exists whenever and wherever banks operate on a fractional reserve principle. This problem does not exist, of course, in the case of a public bank which operates with a one hundred per cent cash reserve—like the Bank of Amsterdam in its early years—or which is restrained from making any loans to private individuals, but has to invest all its excess reserves in the public debt. A good example of a bank of the latter type is the municipal bank of Barcelona, formally opened for business in January, 1401.¹

As the money-changers of Bruges kept only part of their liabilities in cash and, consequently, operated on a fractional reserve principle, they had to manage their business in such a way that they neither became insolvent nor ran out of cash. Insolvency arises from bad loans and poor investments with the result that assets no longer cover liabilities. The bank is no longer able to pay its debts and goes bankrupt. Inasmuch as most liabilities are demand obligations, insufficiency of

cash is often due to lack of liquidity, that is to say, in an emergency assets are tied up and cannot promptly be converted into cash. Insufficiency of cash may also be due to over-expansion of credit so that the reserve has been allowed to fall dangerously low. Whatever the cause of the trouble, insufficiency of cash, if acute, must lead either to bankruptcy or to a more or less prolonged suspension of specie payments.

The purpose of this chapter is to examine how our Bruges money-changers tried to cope with this crucial problem of finding a suitable use for the financial resources which were at their disposal. It should be realized that personal ability is not the only factor to be considered. Other factors beyond the individual's control also deserve consideration. The mediaeval credit structure had serious flaws. We should, therefore, be aware of the fact that several avenues open today were closed to the banker in the Middle Ages.

Credit can be extended and investments made according to different methods. These methods vary considerably between the United States and Europe, and differences are still greater between the practices of today and those of the Middle Ages. In order to avoid any confusion or misunderstanding, it appears necessary to clarify a number of concepts.²

The method of extending credit against interest-bearing promissory notes is distinctly an American practice which is unknown in Europe. As this practice was probably also unknown in the Middle Ages, it does not have to be considered here. In Europe, on the other hand, credit is often extended by discounting commercial paper and by writing the net proceeds to the credit of the borrower's account. Under certain conditions such paper can be rediscounted at the central bank. In the Middle Ages, however, there were no central banks and no facilities for rediscounting. Moreover, the lack of negotiable instruments, as we have seen, was a serious gap in the mediaeval credit structure. While the bill of exchange was not unknown, it was not endorsable and involved speculation on the exchange.³ If the account books of Collard de Marke and Guillaume Ruyelle are reliable guides, the Bruges money-changers, as a matter of fact, did not speculate on the exchange and had no correspondents abroad.

The overdraft, which is regarded with some disfavor in the United States, is, on the contrary, quite popular on the other side of the Atlantic. European bankers are in the habit of granting a line of credit (*ouverture de crédit*) to their customers who are thus allowed to overdraw their accounts up to a stated limit. In Europe an overdraft (*avance en compte courant*) may be secured by collateral or even by a mortgage on the borrower's real property. A perusal of the Collard de Marke and Guillaume Ruyelle ledgers indicates that they contain a good many overdrawn accounts. Also in mediaeval Italy⁴ and in Barcelona⁵ the overdraft seems to have been the usual way in which bankers extended credit to their customers; only the Bank of St George in Genoa and, presumably, the private bankers of

that city followed a different system, which, as far as we know, is without parallel elsewhere. In the ledgers of the Bank of St George there are two sets of accounts: the *rationes ad numeratum* or current accounts for all obligations subject to call and the *rationes temporum* to which were posted all entries relating to items not immediately due or collectible.⁶ Credit was often created by debiting a *ratio temporum* and crediting a *ratio ad numeratum* with the same amount. Thus a claim maturing at some future date was the counterpart of a debt falling due immediately. Some of the loans granted in this way were secured by *loca* or shares in the Compere of St George, the association of state creditors.⁷ If such a loan was not repaid at the appointed time, the *loca* would be forfeited. The transaction might be considered as a remote ancestor of the modern time loan. The Genoese system gave rise to other types of loans;⁸ but a thorough discussion of this topic lies outside the scope of our inquiry. The case of Genoa shows, at any rate, that allowance should be made for regional differences.

The overdraft differs from other loans in that the obligation of the debtor is determined by the debit balance of his account in the bank's ledger. In the Middle Ages no other documents or supporting vouchers were necessary, as no entry in the books of the bank could be made without the customer being present or represented by his lawful attorney.⁹ The only prerequisite was the banker's willingness to let the customer overdraw his account. Otherwise entries would be made in the usual form as described before.¹⁰

The most serious disadvantage of the overdraft is that it is not a self-liquidating loan, but may stay open on the books for an indefinite period of time. Thus the banker supplies the borrower permanently with part of his working capital or stock in trade. As a result, it is often impossible to force the liquidation of overdraft loans in times of stress. These are the conditions today. There is no reason to believe that they were different in the Middle Ages.

For Bruges the Collard de Marke and Guillaume Ruyelle account books are practically the only available source of information concerning the loan and investment policy of the local exchange banks. The ledgers of Collard de Marke, the more important of the two money-changers, reveal that the number of overdraft loans kept pace with the expanding volume of his business and grew from forty-nine on April 6, 1366, to one hundred seventeen on May 20, 1369 (Table 20). It also appears that most overdrafts were for small amounts according to figures based on the balances due from customers on five different dates between April 1366 and May 1369. From 38.5 to 49 per cent of these debit balances are below five pounds groat, from 47.8 to 73.5 per cent below ten pounds groat, and from 69.5 to 83.9 per cent below twenty pounds groat. Outstanding balances above fifty pounds groat represent only from 7.7 to 15.2 per cent of the aggregate; but the figure of 7.7 per cent recurs on two different dates. The figures given by Guillaume Ruyelle's financial statement are even more striking. This statement

Money-Changers

TABLE 20
DEBIT BALANCES IN THE COLLARD DE MARKE LEDGERS

| Frequency Distribution | Ledger No. 1 April 6, 1366 | | | Ledger No. 2 April 19, 1367 | | | Ledger No. 3 April 10, 1368 | | | Ledger No. 4 December 24, 1368 | | | Ledger No. 5 May 20, 1369 | | |
|---------------------------|-------------------------------|-------------------|---------------------|--------------------------------|-------------------|---------------------|--------------------------------|-------------------|---------------------|-----------------------------------|-------------------|---------------------|------------------------------|-------------------|---------------------|
| | Number of Balances | Per Cent of Total | Cumulative Per Cent | Number of Balances | Per Cent of Total | Cumulative Per Cent | Number of Balances | Per Cent of Total | Cumulative Per Cent | Number of Balances | Per Cent of Total | Cumulative Per Cent | Number of Balances | Per Cent of Total | Cumulative Per Cent |
| Below £5 groat..... | 24 | 49.0 | 49.0 | 26 | 44.0 | 44.0 | 35 | 38.5 | 38.5 | 41 | 35.6 | 35.6 | 48 | 41.0 | 41.0 |
| £5 and under £10..... | 12 | 24.5 | 73.5 | 7 | 11.9 | 55.9 | 20 | 22.0 | 60.5 | 14 | 12.2 | 47.8 | 21 | 18.0 | 59.0 |
| £10 and under £15..... | 4 | 8.3 | 81.8 | 5 | 8.5 | 64.4 | 11 | 12.2 | 72.7 | 17 | 14.8 | 62.6 | 12 | 10.2 | 69.2 |
| £15 and under £20..... | 1 | 2.1 | 83.9 | 3 | 5.1 | 69.5 | 10 | 11.0 | 83.7 | 11 | 9.6 | 72.2 | 7 | 6.0 | 75.2 |
| £20 and under £25..... | 1 | 2.1 | 86.0 | 3 | 5.1 | 74.6 | 2 | 2.2 | 85.9 | 9 | 7.8 | 80.0 | 5 | 4.3 | 79.5 |
| £25 and under £30..... | 2 | 4.2 | 86.0 | 2 | 3.4 | 78.0 | 1 | 1.0 | 86.9 | 5 | 4.3 | 84.3 | 3 | 2.6 | 82.1 |
| £30 and under £35..... | 1 | 2.1 | 90.2 | 2 | 3.4 | 81.4 | 1 | 2.2 | 89.1 | 3 | 2.6 | 87.8 | 5 | 4.3 | 86.4 |
| £35 and under £40..... | 1 | 2.1 | 92.3 | 1 | 1.7 | 83.1 | 2 | 2.2 | 91.3 | 1 | 1.0 | 87.2 | 4 | 3.4 | 90.6 |
| £40 and under £45..... | 3 | 5.6 | 92.3 | 1 | 1.7 | 84.8 | 1 | 1.0 | 92.3 | 6 | 5.2 | 93.9 | 5 | 4.3 | 96.6 |
| £45 and under £50..... | 1 | 2.1 | 97.9 | 5 | 8.5 | 93.3 | 4 | 4.4 | 96.7 | 6 | 5.2 | 99.1 | 2 | 1.7 | 98.3 |
| £50 and under £100..... | 1 | 2.1 | 100.0 | 4 | 6.7 | 100.0 | 3 | 3.3 | 100.0 | 1 | 1.0 | 100.0 | 2 | 1.7 | 100.0 |
| £100 and under £200..... | 1 | 2.1 | 100.0 | 4 | 6.7 | 100.0 | 3 | 3.3 | 100.0 | 1 | 1.0 | 100.0 | 2 | 1.7 | 100.0 |
| £200 groat and above..... | 1 | 2.1 | 100.0 | 4 | 6.7 | 100.0 | 3 | 3.3 | 100.0 | 1 | 1.0 | 100.0 | 2 | 1.7 | 100.0 |
| Total..... | 49 | 100.0 | ..... | 59 | 100.0 | ..... | 91 | 100.0 | ..... | 115 | 100.0 | ..... | 117 | 100.0 | ..... |

Source: Bruges Municipal Archives, Account Books of Collard de Marke.

reveals that twenty-two customers were allowed to overdraw their accounts. Out of these twenty-two accounts, nineteen have balances below five pounds groat, two between five and ten pounds groat, and one only above fifteen but below twenty pounds groat.¹¹ The average is £3 2s. 10d. gr. Collard de Marke's average, as is to be expected, is considerably higher. It varies between a minimum of £13 9s. 7d. gr. on April 6, 1366, and a maximum of £23 16s. 6d. gr. on April 19, 1367. Except on April 10, 1368, the average is much closer to the maximum than to the minimum. With both money-changers the average overdraft is considerably less than the average deposit (Table 12). One should, however, not lose sight of the fact that averages are unduly influenced by a few large items. In Collard de Marke's case then, half the overdrafts are below ten pounds groat with only one exception when the ratio is 47.8 per cent or slightly less than half.

The prevalence of small debit balances leads to some interesting conclusions. It seems that the Bruges money-changers were eager to retain the good-will of their customers and, therefore, were rather lenient in letting them overdraw their accounts as long as trifling amounts were involved. Such favors were not usually abused, and overdrafts were in general promptly repaid. However, each of the Collard de Marke ledgers contains on the first and second pages a number of inactive accounts which probably represent distressed or frozen loans. There are not many such accounts and the total of overdue claims is small. Of course, such accounts should not have been left open on the books, but should have been written off as a loss. The existence of a few dubious or uncollectible items does not alter the fact that overdrafts of limited amount and of short duration cannot bring about a state of insolvency because the credit risk is rather well divided among many small items. There is only a remote possibility that a considerable number of debtors would fail to live up to their obligations at the same time.

Small overdrafts, consequently, are not objectionable from the standpoint of good management. The question is whether the same applies to overdrafts of sizable amount: let us say of fifty pounds groat or more. An audit of the Collard de Marke account books shows that these overdrafts are few in number but of considerable importance (Table 21). On April 19, 1367, and on May 20, 1369, nine overdrafts of fifty pounds groat or more represent respectively 64 and 53 per cent of the total loans outstanding among Collard de Marke's customers. At another date, December 24, 1368, thirteen overdrafts with debit balances exceeding fifty pounds groat account for 57.3 per cent of the aggregate loans while the remaining 42.7 per cent is spread over 102 different items (Table 22).

The four customers who, on April 6, 1366, owed balances exceeding fifty pounds groat are Jakes or Jakemart de Wallers, Medemiselle de Rudevorde, Jehan van Tinneskin le père, and Lambesin de Jaghere or Diagre.

Medemiselle de Rudevorde was one of Collard de Marke's regular and most important customers. The fact that her account was very active all through the

TABLE 21
LIST OF OVERDRAFTS ABOVE FIFTY POUNDS GROAT ON FIVE DIFFERENT DATES
ACCORDING TO COLLARD DE MARKE'S LEDGERS
On April 6, 1366

| | £ | s | d groat |
|-----------------------------------|-----|----|---------|
| 1. Jackemart de Wallers | 121 | 0 | 0 |
| 2. Lambesin de Jaghere | 87 | 12 | 11 |
| 3. Jehan van Tinneskin | 64 | 0 | 6 |
| 4. Medemiselle de Rudevorde | 52 | 3 | 7 |
| Total | 324 | 17 | 0 |

On April 19, 1367

| | £ | s | d groat |
|---------------------------------------|-----|----|---------|
| 1. Sire Ector Jucamiel | 141 | 6 | 0 |
| 2. Lambesin de Jaghere | 138 | 9 | 4 |
| 3. Jackemart de Wallers | 121 | 0 | 0 |
| 4. Bette Dougardin | 115 | 0 | 0 |
| 5. Pierre de Leurent | 97 | 14 | 1 |
| 6. Medemiselle de Rudevorde | 91 | 16 | 8 |
| 7. Jehan van de Walle | 73 | 12 | 7 |
| 8. Simon Ongcriet | 61 | 17 | 2 |
| 9. Jehan van Tinneskin, le pere | 56 | 11 | 4 |
| Total | 897 | 7 | 2 |

On April 10, 1368

| | £ | s | d groat |
|--------------------------------------|-----|----|---------|
| 1. Jackemart de Wallers | 178 | 6 | 5 |
| 2. Lambesin le pere de Jaghere | 121 | 19 | 9 |
| 3. Jehan van de Walle | 100 | 1 | 6 |
| 4. Sire Jehan de Rudevorde | 94 | 11 | 7 |
| 5. Georges Wandelaire | 61 | 7 | 2 |
| 6. Gilles de Dec | 55 | 3 | 10 |
| 7. Pietre de Gérard | 53 | 9 | 2 |
| Total | 664 | 19 | 5 |

On December 24, 1368

| | £ | s | d groat |
|---|-------|----|---------|
| 1. Jehan vande Walle | 220 | 13 | 2 |
| 2. Galigo da Piastre (Italian) | 163 | 0 | 0 |
| 3. Jackemart de Wallers | 158 | 6 | 5 |
| 4. Thumas Sarlande (Italian) | 119 | 12 | 0 |
| 5. Carot de Galbert (Italian?) | 111 | 2 | 9 |
| 6. Lambesin de Jaghere | 107 | 9 | 7 |
| 7. Medemiselle de Rudevorde | 107 | 9 | 6 |
| 8. Pietre van le Fine | 95 | 9 | 7 |
| 9. Georges Wandelaire | 89 | 14 | 2 |
| 10. Marke Mourisin (Venetian) | 88 | 12 | 8 |
| 11. Jehan de Concorighe (Italian) | 88 | 7 | 11 |
| 12. Gilles le Clerc dou Dam | 74 | 16 | 6 |
| 13. Jehan de Quantin | 71 | 17 | 11 |
| Total | 1,496 | 12 | 2 |

On May 20, 1369

| | £ | s | d groat |
|--------------------------------------|-------|----|---------|
| 1. Lambesin de Jaghere | 383 | 1 | 9 |
| 2. Jehan van de Walle | 256 | 8 | 10 |
| 3. Willame Raiponde (Lucchese) | 165 | 16 | 10 |
| 4. Jackemart de Wallers | 164 | 5 | 5 |
| 5. Galigo da Piastre (Italian) | 93 | 9 | 10 |
| 6. Thumas Sarlande (Italian) | 86 | 15 | 3 |
| 7. Thumas de Gotier | 80 | 0 | 11 |
| 8. Willem van de Nienoede | 67 | 11 | 1 |
| 9. Pietre Sucrebout | 50 | 12 | 2 |
| Total | 1,348 | 2 | 1 |

Source: Bruges, Municipal Archives, Account Books of Collard de Marke.

TABLE 22
RELATIVE IMPORTANCE OF OVERDRAFTS EXCEEDING FIFTY POUNDS Groat ON FIVE DIFFERENT DATES
ACCORDING TO COLLARD DE MARKE'S LEDGERS

| Date | Number of Overdrafts Exceeding Fifty Pounds | Total Number of Overdrafts | Per Cent of Total | Total of Overdrafts Exceeding Fifty Pounds Groat | | Aggregate Overdrafts (Pounds Groat) | | Per Cent of Aggregate |
|-------------------|---|----------------------------|-------------------|--|------|-------------------------------------|-------|-----------------------|
| | | | | £ | s d | £ | s d | |
| April 6, 1366 | 4 | 49 | 8.2 | 324 | 17 0 | 660 | 10 2 | 49.2 |
| April 19, 1367 | 9 | 59 | 15.2 | 897 | 7 2 | 1,405 | 12 10 | 63.8 |
| April 10, 1368 | 7 | 91 | 7.7 | 664 | 19 5 | 1,478 | 10 0 | 45.0 |
| December 24, 1368 | 13 | 115 | 11.3 | 1,496 | 12 2 | 2,611 | 18 2 | 57.3 |
| May 20, 1369 | 9 | 117 | 7.7 | 1,348 | 2 1 | 2,553 | 11 9 | 52.8 |

Source: Bruges, Municipal Archives, Account Books of Collard de Marke.

period covered by the extant ledgers may serve as an indication that her business was of some importance. She owned an inn which was patronized by foreign merchants, chiefly Germans,¹² and probably combined this trade with that of broker and commission agent, as was customary in Bruges.¹³ As one would expect, the balance of Medemiselle de Rudevorde's account fluctuated a great deal, but was consistently on the debit side up to sometime between Christmas 1368 and Pentecost 1369, when the scales tipped over in her favor. On May 20, 1369, Medemiselle de Rudevorde had an amount of £97 11s. 8d. gr. standing to her credit.¹⁴ The ledger entries give no clue as to how she was able to pay off her indebtedness. It may be that the money came from the proceeds of a sale, but the best guess is that the money really belonged to some of her guests. In Bruges it was customary for foreign merchants staying at an inn to entrust their money to their host for purposes of safekeeping.¹⁵

That Medemiselle de Rudevorde's guests undoubtedly followed this practice appears from a charter of Louis de Male dated September 8, 1374. This charter describes 'Joncvrauwe Edele van Ruddervoorde' as being insolvent and greatly in debt to several Hanseatic merchants who had given her money 'in good faith' (*ter goeder trauwen*).¹⁶ The conclusion is that Medemiselle de Rudevorde must have failed sometime between the summer of 1369 and September 8, 1374. Collard de Marke presumably went bankrupt during the same period. The two events may be interrelated, but the surviving records do not disclose whether the failure of the bank caused the failure of Medemiselle de Rudevorde or the other way around. Without more information it is impossible to decide whether or not Collard de Marke was wise in extending credit to Medemiselle de Rudevorde.

We are less well informed about the business of Lambesin de Jaghere, another of Collard de Marke's principal debtors. His account, like that of Medemiselle de Rudevorde's is very active but is constantly overdrawn. On April 6, 1366, Lambesin de Jaghere owed Collard de Marke an amount of £87 12s. 11d. groat.¹⁷ A year later this amount had risen to £138 9s. 4d. groat.¹⁸ On April 10, 1368, the outstanding balance was reduced to £121 19s. 9d. groat¹⁹ and dropped further to £107 9s. 7d. groat by Christmas 1368,²⁰ but within the next five months Lambesin de Jaghere's debt grew to £383 1s. 9d. groat.²¹ The ledger entries do not give any information which would enable us to explain this sudden jump.

A rapidly increasing debt to a bank may mean one of two things: either borrowing in order to finance expansion or else borrowing in order to cover up losses and to replenish a dwindling working capital. Which one of these two alternatives applies in the case of Lambesin de Jaghere can only be guessed. In 1379, he was made to contribute to the forced loan which was levied on all wealthy citizens.²² In 1382, he was one of several officials who collected a war contribution from the Hanseatic merchants after the battle of Roosebeke.²³ On those two dates Lambesin de Jaghere was thus one of the leading citizens in the

community. It is, therefore, unlikely that he would have failed or lost heavily a few years before, as few people recover quickly, if at all, from such a blow. The loan from Collard de Marke probably served to finance a commercial venture about which no inkling is given in the ledger records.

The account of Jakes de Wallers, unlike those of Medemiselle de Rudevorde and Lambesin de Jaghere, is not an active, but a dormant, account. The balance changes little over protracted periods of time. This immobility might lead to the mistaken inference that the loan to Jakes de Wallers was one of those dubious claims which have been referred to in a preceding paragraph. But a memorandum entry in the front of the earlier of the two extant journals hints at something quite different. This entry mentions 'li compagnie de Jakes de Wallers' and refers in this connection to letters of payment or bills of exchange from Brittany.²⁴ This word Brittany is the clue to the whole mystery. In all probability the 'compagnie de Jakes de Wallers' was some kind of a partnership formed for the trade in French wine from the Loire region or in salt from the island of Oléron, or perhaps even for the purpose of dealing in both of these commodities. An entry in one of the ledgers gives further support to this theory. Under the date of April 10, 1368, Collard de Marke records that Jakes de Wallers owes him a balance of £178 6s. 5d. gr. carried over from a preceding ledger and arising from a settlement which took place on November 10, 1367, 'before he [Jakes de Wallers] left for Brittany.'²⁵ Consequently, the balance of Jakes de Wallers' account is not an overdraft at all, but represents the money invested by Collard de Marke in this Brittany venture. Jakes de Wallers was presumably the active partner who traveled back and forth, while Collard de Marke was the investing partner who stayed at home but who, from a distance, probably kept an eye on the conduct of the venture. As this example shows, it may sometimes be difficult, in practice, to draw a line between a loan and an investment regardless of the fact that such a distinction may be clear from a legal point of view.

Sire Georges de Wandelaire (de Wandelaar) was another of Collard de Marke's customers who, at times, borrowed substantial amounts by overdrawing his account. On April 10, 1368, he had thus exceeded his credit to the extent of £61 7s. 2d. gr.²⁶ This debt rose to £89 14s. 2d. gr. on December 24, 1368.²⁷

Sire Georges de Wandelaire—he is consistently given the title of *sire* or *heer*—was apparently someone of importance in fourteenth-century Bruges. He played a prominent role in the civil strife which troubled Flanders from 1379 to 1385.²⁸ In the early phase of the struggle, sire Georges de Wandelaire was a member of several diplomatic missions which represented the city of Bruges at peace conferences held in Tournai (November 1379) and Lille (January 1380).²⁹ In 1380 Georges de Wandelaire was chosen to fill the office of city treasurer.³⁰ Two years later the municipal government bought from him the

horse on which rode Gérard de Saint-Omer, carrying the standard of Bruges, at the disastrous battle of Beverhoudsveld (May 4, 1382).³¹ When in the summer of 1383, Bruges was threatened again by a sudden advance of the enemy,³² sire Georges de Wandelaire and one Gilles Honin were commissioned to supervise the digging of a new moat and the building of additional defenses.³³ Georges de Wandelaire was still alive in the nineties; he is mentioned in the records as *échevin* or alderman in the years 1392, 1394, and 1397.³⁴

These miscellaneous details about the life of sire Georges de Wandelaire are not particularly relevant to our purpose. They show only that he wielded considerable influence in the oligarchical government of Bruges. There is, however, no doubt that he could not have been successful in politics, had he not been successful in business, too. Oligarchies as a rule are not much impressed by demagogic oratory, and achievement is necessary to keep up prestige.

Jehan van de Walle, another customer who was granted a line of credit, is described as a furrier (*pelletier*) in the Collard de Marke ledgers.³⁵ As the laying in of a supply of furs involved considerable expense, it was necessary to possess some capital in order to practice this trade. In Bruges the furriers were among the wealthier crafts together with the gold- and silversmiths, the mercers, the fishmongers, and the butchers.³⁶ Most likely only a select group of tradesmen, in particular those whose trade involved an outlay of capital, could get credit accommodation from a bank. The rank and file of the craftsmen, if they needed financial assistance, had to borrow from the lombards by pawning their cloth, their supplies, or even their tools. Moreover, petty craftsmen, as they had little or no money invested in their trade, had no occasion to borrow except for consumption purposes. The money-changers, for reasons which will be given later, were not very much interested in this type of loans.

Jehan van de Walle's debt to the bank, instead of expanding and contracting, as one would expect in a seasonal trade like the fur trade, increased steadily from £30 0s. 4d. to £256 8s. 10d. groat over the period covered by the Collard de Marke ledgers (Table 21.) Such a steady increase arouses suspicions, and we would very much like to know what use was made of the proceeds of the loan. Jehan van de Walle's account is not a very active account.³⁷ One wonders, therefore, whether its balance does not represent an investment, this time in the fur trade, rather than a loan.

The Bruges sources give very little information about Pieter Sucrebout, a customer who, according to the financial statement of May 20, 1369, owed on that date an amount of £50 12s. 2d. groat to the bank.³⁸ On the preceding twenty-fourth of December there was only a balance of three pounds groat standing to his debit.³⁹ A certain Pieter Sucrebout, presumably the same person as Collard de Marke's customer, participated in 1380 in the campaign against Ghent as *hoofman* or captain in the Bruges militia.⁴⁰ This little detail, however, is not

very helpful in settling the question whether Pieter Sucrebout deserved to be granted a line of credit.

Several of Collard de Marke's customers who were allowed to overdraw their accounts were Italian merchants or merchant-bankers. The members of the Lucchese colony in Bruges, in particular, seem to have favored Collard de Marke with their patronage: he handled the bank accounts of Forteguerra di Forteguerra, Jaquemard Faba, Guillaume Raponde or Rapondi, Galigo da Piastre,⁴¹ and Davin Tedaldin or Tedaldini. Another regular customer was Thumas Sarlande who was in some way closely connected with the master of the mint Jehan Terminiel or Interminelli, another Lucchese, but the entries in the Collard de Marke ledgers do not disclose what this connection really was.⁴² Important accounts are also those of the Italian merchants Mark Mourisin or Marco Morosini (from Venice), Nicolas Ammanati (from Pistoia), Dine Malapris, and Nicolas Boin Acourt or Bonaccorsi (from Florence or Lucca).

The accounts of these Italian merchants are usually very active ones. Unlike the Easterlings, the Italians were accustomed to make use of bank facilities in their homeland and as far as practicable made all their payments by transfer from their bank accounts. The example of the Italians most likely influenced the paying habits of other people and induced them also to open bank accounts.

From the point of view of sound banking, the loans to the Italian merchant-bankers were far from being as objectionable as some of the investment loans which have just been discussed. As these merchants were either heads or representatives of powerful international business houses, they did not rely on bank loans to supplement their working capital, but their balances with the local exchange-banks were likely to fluctuate in sympathy with the state of the money-market, the exchange-rates, and the movement of international trade. The Italian merchant-bankers dealt extensively in bills of exchange, engaged constantly in arbitrage, and maintained balances with correspondents in all important financial centers. If these balances, for example, were at a low ebb, such a situation would affect the exchange rates. Under such conditions, it might become profitable to ship bullion abroad rather than to purchase bills of exchange in order to build up the depleted foreign balances. Conversely, the Italian merchant-bankers might decide to bring bullion into the country if they needed money in Bruges, but had idle balances with correspondents abroad. The Italian merchant-bankers, because of their foreign connections, thus held a strategic position in the money market. How imports or exports of bullion affected the financial condition of the local exchange banks has been discussed in a preceding chapter, and there is no need to dwell upon this topic here.

The Collard de Marke ledgers yield little or no information concerning the mechanism of the money market. A cursory examination of the accounts of the Italian merchant-bankers does show, however, that they were constantly buying

* or selling gold. Between December 24, 1368, and May 20, 1369, a period of diminishing tension in the money market, the sales of gold coins to Collard de Marke seem to have been more numerous than the withdrawals of funds.⁴³ If this impression were correct, it would elicit the conclusion that bullion from outside was pouring into Bruges, thus relieving the existing strain on the money market.

This inquiry into Collard de Marke's loan policy is on the whole rather disappointing. No information at all is available about a number of the borrowers and, when some information is given, it is often irrelevant or inconclusive.⁴⁴ A few facts do, however, stand out. Almost all loans were unsecured overdrafts or fiduciary loans. The majority of them were for small amounts and did not constitute a potential threat to the solvency of the bank. It is a well-known fact that mediaeval people had little regard for maturity dates.⁴⁵ Judging by the Collard de Marke ledgers, depositors—with the connivance of the banker—were equally casual about drawing on their bank account without having sufficient funds. In most cases this carelessness seems to have been due to overtrading.⁴⁶ Mediaeval society suffered from a shortage of capital and borrowing was made difficult because of the usury prohibition and the lack of an adequate organization of credit.⁴⁷ People were, therefore, inclined to skimp on the most unprofitable form of wealth: money. Merchants and dealers often did not keep enough cash on hand, so they had trouble in meeting maturities. Either the creditor had to wait or the banker was asked to allow an overdraft.⁴⁸

* In so far as can be ascertained from our survey, only persons owning property and having a standing in the community were given open credit for substantial amounts. The proceeds of such advances were obviously used by the borrowers in order to expand their business. In other words, bank loans were made for production, and not for consumption, purposes. The borrowers—with one possible exception, Medemiselle de Rudevorde—appear to have been safe credit risks. In spite of all these good features, Collard de Marke's credit policy is not above criticism. Big overdrafts were few in number but absorbed a considerable proportion of the bank's resources. Such overdrafts were by no means temporary advances, but were in fact investment loans or even outright investments, as has been revealed by our investigation in one or two instances. For our purpose legal distinctions between what constitutes a loan and what constitutes an investment do not matter very much. Whatever the legal form adopted, the banker practically entered into partnership with the borrower and furnished him permanently with working capital. The danger of tying up funds is obvious, if one considers that the banker's main liability was made up of deposits payable on request.⁴⁹ However, it would be unfair to accuse Collard de Marke of mismanagement, at least as far as his loan policy was concerned. One should not forget that mediaeval banks were seriously handicapped by the absence of a

discount market for commercial paper and of facilities for rediscounting. Lack of liquidity was a distinctive feature of the primitive bank of deposit in the Low Countries as well as in other parts of Europe.⁵⁰

As already explained, no interest was paid by the money-changer on demand deposits. Strangely enough, it seems that no interest was charged on loans, either. Nowhere do the Collard de Marke and Guillaume Ruyelle account books contain any reference to interest paid on debit balances. If we may believe the Venetian senator Tommaso Contarini, the *banchi di scritta* of Venice did not charge anything either, if a merchant of good repute wanted to make assignments 'beyond the amount standing to his credit.'⁵¹ The bankers are willing to render this service, Contarini explains, 'because it does not involve any disbursement of specie,'⁵² and 'because they know that the merchants support the movement of trade whether in money or in goods.'⁵³ These utterances make it clear that temporary advances were often granted without charge in order to retain customers. As Contarini correctly points out, a transfer bank could extend credit without any immediate loss of specie simply by making an entry on the books, debiting the account of one customer and crediting the account of another. Contarini does not mention, however, that such a transaction would lower the reserve ratio of the bank, lead to an expansion of bank deposits, and result in the creation of additional purchasing power, or of additional money, which is practically one and the same thing.⁵⁴ *

Mediaeval banks were not philanthropic institutions. If they charged no interest on their loans, they had to find some other way of covering their expenses and of making a profit.⁵⁵ The Collard de Marke account books disclose that the Bruges money-changers, instead of charging interest on outstanding balances, took their profit under the form of fees for the exchange of gold for silver and vice versa. The accounts of the Italian merchant-bankers contain a number of debit entries relating to such fees.⁵⁶ It is also quite possible that customers who had overdrawn accounts paid higher fees than others or received less favorable prices for bullion sold to the money-changers. But there is no evidence to support this supposition. As for investment loans and outright investments, there is little doubt that interest was charged under some concealed form.⁵⁷ Presumably the banker received a share in the profits of the venture. How this share was computed the available records do not reveal. The division of profits was probably determined according to a special agreement in each case. In the late Middle Ages the rate of return on productive investments varied from 8 to 15 per cent.

The adopted solution offered the additional advantage of evading the canonist prohibition of usury. The canonists objected to the lending of money for certain gain (Fr. *à gain certain*, Fl. *om seker gewin*), but did not disapprove of the investment of money in a business venture for a share in profit or loss (Fr. *à gain*

TABLE 23
 ABRIDGED FINANCIAL STATEMENT OF GUILLAUME RUYELLE
 MAY 24, 1370

| RESOURCES | Amount (Pounds Groat) | | | Per Cent of Total |
|-------------------------|--------------------------|----|----|----------------------|
| | £ | s | d | |
| Cash: in till..... | 15 | 10 | 5 | 1.6 |
| in vault..... | 262 | 11 | 10 | 27.7 |
| Loans (overdrafts)..... | 69 | 2 | 2 | 7.3 |
| Investments (?)..... | 562 | 14 | 6 | 59.5 |
| Total of assets..... | 909 | 18 | 11 | 96.1 |
| Deficit..... | 36 | 18 | 1 | 3.9 |
| Total..... | 946 | 17 | 0 | 100.0 |
| LIABILITIES | | | | |
| Due to Depositors..... | 946 | 17 | 0 | 100.0 |

Source: R. de Roover, 'Ruyelle,' *op. cit.*, pp. 92-95.

et à perte, Fl. op gewin oft verlies). Thus putting money 'in adventure' was tantamount to a partnership and was not censored by the usury laws. The money-changers had to inspire confidence in their depositors and, therefore, had to confine themselves to legitimate business. Open or even secret violation of the usury laws would have undermined that confidence, because only the principal of a loan was recoverable at law. Furthermore, money lent on usury was subject to confiscation irrespective of other penalties. Several of the Bruges municipal accounts of the fourteenth and fifteenth centuries contain lists of fines collected from people who had been convicted of usury in the city court. In going through these lists I have found only one money-changer, a man named Jan Moreel or Jehan Moriel.⁵⁸ According to the Collard de Marke account books, his business was not very important. Jan Moreel, presumably, became a shady money-monger because he had not succeeded in earning a living by reputable and legal means.

Collard de Marke and Guillaume Ruyelle, the two money-changers whose business records have come down to us, did not follow the same loan policy. Guillaume Ruyelle placed even less emphasis on loans and more on investments than did his colleague. According to Ruyelle's financial statement of May 24, 1370, overdrafts amounted on the aggregate to only £69 2s. 2d. gr., whereas a total of £946 17s. groat was due to depositors.⁵⁹ The ratio of loans to deposits was thus less than 10 per cent (Table 23). The reserve ratio—cash to deposits—was 29.3 per cent.

These two totals are itemized on the original statement and may be considered accurate, since the figures of the statement and those of the ledgers have been collated and correspond. There is, however, one item of £562 14s. 6d. groat which, on the original, is added to the receivables but cannot be traced to the ledger

and does not represent a ledger balance. The inclusion of this item is explained by the words 'Item folio' in the narrative column. The explanation can have only one meaning: the amount of £562 14s. 6d. groat is the aggregate of several items listed in detail on another complementary statement which is no longer extant. It is a reasonable surmise that the items in question were recorded separately because they referred not to loans but to investments, and because they were not taken from the extant ledgers, which concerns only Ruyelle's banking business but from some other account book. We know from frequent references in the ledgers of Collard de Marke that he did not use the same books for his banking business and his commercial undertakings. It is probable that Guillaume Ruyelle followed the same procedure.

If this explanation concerning the puzzling item of £562 14s. 6d. groat is accepted, the assets of Ruyelle's bank were made up as follows: cash reserve (including money in till and in vault), £278 2s. 3d. gr.;⁶⁰ loans (mainly overdrafts), £69 2s. 2d. gr.; and investments, £562 14s. 6d. gr. The major part of the bank's resources were thus invested directly in trade.

Incidentally, a glance at the summary statement (Table 23) will also show that assets do not cover liabilities and that there is a deficit of £36 18s. 1d. gr. In other words, Guillaume Ruyelle had made some bad investments and had lost not only the whole of his capital but money belonging to his depositors besides. If this analysis is correct, he was virtually bankrupt on May 24, 1370. Indeed, we know from other sources that Guillaume Ruyelle failed in the summer of 1370 and that some of his property was sold in pursuance of bankruptcy proceedings during the fall of the same year.⁶¹

According to the financial statement of May 24, 1370, the assets of Ruyelle's bank were distributed in the following proportion: 29.3 per cent of outside liabilities was kept in specie as a reserve, 59.5 per cent was directly invested in trade, only 7.3 per cent was applied to loans, and 3.9 per cent represented the excess of outside liabilities over assets. The assets were probably only the business assets and did not include any of the real estate which Ruyelle is known to have possessed.

We are not so well informed about Collard de Marke's financial condition, since no contemporary statement of assets and liabilities or any sort of balance sheet has come down to us. It is not possible to reconstruct such a statement from the available data. It has been possible, though, to compute the ratio of loans to demand liabilities at five different dates between April 6, 1366, and May 20, 1369, inclusive. As is apparent from Table 24, this ratio fluctuates between a minimum of 25.2 per cent and a maximum of 56.7 per cent. These percentages are both well above Ruyelle's 7.3 per cent, but are not quite high enough to warrant the conclusion that Collard de Marke stressed loans rather than investments. On the contrary, there is not the slightest doubt that, also in his case,

a substantial part of the money belonging to depositors plus his own capital was directly invested in trade.

As has been explained before, Collard de Marke kept track of his commercial dealings in separate books. None of these have survived, but we know of their existence from occasional references in the extant ledgers. The account books thus referred to are a *papier des dras*⁶² and a *petit papier des drapiers*.⁶³ There is consequently no doubt: Collard de Marke combined the trade in cloth with the management of a transfer bank.

As the *papier des dras* and the *petit papier des drapiers* are lost, it is not possible to go into great detail concerning Collard de Marke's cloth business. Fortunately, some information, although not very much, can be gathered from the extant records.

Collard de Marke was apparently engaged in the cloth trade, but not in the manufacture of cloth. From the records it is clear that he bought most of the cloth in the province of Hainaut, especially in the manufacturing centers of Valenciennes and Maubeuge, from local *drapiers* or cloth manufacturers, who presumably concentrated on production, but were not in a position to market their product advantageously.⁶⁴ The cloth purchased in Hainaut was then transported to Bruges and sold there in the cloth hall, mostly to foreign merchants.⁶⁵

Collard de Marke himself was probably not a native of Bruges but of the province of Hainaut. This circumstance would explain why he had connections in, and traded with, this region. Such an assumption rests on the following clues: de Marke or de Marque is a Walloon rather than a Flemish name; the name, moreover, is not found among the leading families of Bruges; frequent misspellings of Flemish names in the extant account books suggest that the atmosphere in Collard de Marke's office was French.⁶⁶

That Collard de Marke had business interests in Hainaut is also shown by the fact that several non-resident customers were living in that region. As previously stated, the accounts of non-residents are grouped together in the rear of each ledger. Significantly, most of them have French-sounding names and those whom I have been able to identify were from Valenciennes or Mons, which were respectively the principal city and the capital of Hainaut.⁶⁷ Such is the case with Thierry Brochons who has a very active account in each of the extant ledgers. On February 12, 1369, this Thierry Brochons received credit for a shipment of 1,200 French francs in specie which he had sent to Bruges by one Collard le Brun, butcher of Valenciennes.⁶⁸ Furthermore, Brochons is the name of a well-known family of Valenciennes and some of its members had a stake in the woolen industry. In 1346, one Walter Brochons was among the *Treize Hommes de le Halle*, an official body with regulating power over the cloth trade.⁶⁹ Another citizen of Valenciennes who has an account in the Collard

TABLE 24
RATIO OF LOANS TO DEPOSITS ACCORDING TO THE COLLARD DE MARKE
LEDGERS ON FIVE DIFFERENT DATES

| Ledger | Date | Ratio of Loans to Deposits | Loans (Pounds Groat) | | | Deposits (Pounds Groat) | | |
|--------|-------------------|----------------------------------|-------------------------|----|----|----------------------------|----|---|
| | | | £ | s | d | £ | s | d |
| No. 1 | April 6, 1366 | Per Cent 28.6 | 660 | 10 | 2 | 2,310 | 9 | 2 |
| No. 2 | April 19, 1367 | 25.2 | 1,405 | 12 | 10 | 5,566 | 8 | 3 |
| No. 3 | April 10, 1368 | 29.2 | 1,478 | 10 | 0 | 5,071 | 4 | 4 |
| No. 4 | December 24, 1368 | 56.7 | 2,611 | 18 | 2 | 4,605 | 15 | 4 |
| No. 5 | May 20, 1369 | 45.8 | 2,553 | 11 | 9 | 5,575 | 6 | 1 |

Source: Bruges, Municipal Archives, Account Books of Collard de Marke.

de Marke ledgers is Jehan Moyses or Moyset. From 1358 to 1363 he was *prévôt de la ville*, a position equivalent to that of mayor.⁷⁰ This Jehan Moyses must have been very wealthy, because in 1361 Louis de Male sold him crown jewels with the option of repurchasing them a year later for 6,000 florins.⁷¹ Another non-resident customer is described in one of the Collard de Marke ledgers as 'Lottier de Tournay demorant à Mons en Hainnaut.'⁷² A cursory examination of the accounts of non-residents gives the impression that not all entries were based on banking or credit operations, but that some might have originated in commercial transactions connected with Collard de Marke's cloth business.⁷³

As Collard de Marke could not very well assume the direction of a bank and look after other ventures at the same time, the management of the cloth business was entrusted to a partner named Pietre van le Fine.⁷⁴ It is a plausible assumption that this partner was in charge of the purchases and, for this purpose, traveled back and forth between Bruges and Hainaut. While he was on a trip the selling could conveniently be supervised by Collard de Marke himself with the help of an employee, because in Bruges the offices of the money-changers and the two cloth halls were all located on or near the Grand' Place.⁷⁵ It should perhaps be added that no cloth could be displayed and sold outside the cloth halls which had been especially built for the purpose.

As no partnership agreement has survived, nothing can be said about the relation between the two partners or about their respective shares in the common venture. The amount which Collard de Marke had invested in the partnership with Pietre van le Fine was rather considerable and certainly exceeded five hundred pounds groat.⁷⁶ Greater accuracy cannot be attained because of the many gaps in the available records. The two partners reckoned with each other from time to time, preferably in the presence of a third party who could be called on to witness in case of need.⁷⁷ Pietre van le Fine, it appears from a marginal note in the last of the extant ledgers, died in the summer of 1369.⁷⁸ No exact date is given. There is a possibility that Collard de Marke became en-

tangled in serious difficulties, when he tried to wind up the affairs of his partnership with Pietre van le Fine. Mediaeval merchants, except the Italians, often relied too much on their memory and accounts were slovenly kept. Such conditions were likely to breed trouble in the event of sudden death.

The policy of making direct investments in trade was not peculiar to Collard de Marke and Guillaume Ruyelle. Other money-changers of Bruges followed the same course. In 1326, according to the toll records of Calais, the principal importers of English wool were three Bruges merchants. One of them was also a money-changer.⁷⁹ A few years later, in 1369, the burgomasters and aldermen of Bruges protested to the municipal authorities of Lübeck against the arbitrary seizure on the high seas of a cargo of meat and herring belonging *jointly* to two citizens of Bruges Jacob de Visch and the money-changer, Jacob Reubs, frequently mentioned in the Collard de Marke account books. This shipment was being accompanied by a servant of the two partners named Arnold Hont.⁸⁰

The close association of banks and business, far from being prevalent in Flanders alone, was a widespread evil. 'In nearly all regions,' writes Professor Usher, 'bankers commonly had considerable sums invested in trade.'⁸¹ It is not that the danger of such investments was entirely overlooked; but mediaeval bankers, it must be recognized, had little choice. The lack of discountable commercial paper, the canonist objection against the taking of interest, and the legal impediments resulting therefrom, left the bankers no other alternative but to seek a profitable use for surplus funds through the direct participation in commercial ventures.

The fate of the mediaeval transfer banks thus rested on the shaky foundation of long-term investments and short-term liabilities. No wonder that attempts were made at an early date to buttress the tottering walls of the mediaeval credit structure. The regulations on banking of the Venetian Republic give perhaps the best picture of the efforts which were made in this respect. In 1374, a statute was passed which forbade banks to trade in speculative commodities such as iron, copper, and tin.⁸² In 1403 banks were enjoined by another statute not to devote to trade more than one and a half times the amount of their holdings of government obligations.⁸³ In other words the earning assets of a transfer bank were to be invested three-fifths in trade and two-fifths in the public debt.⁸⁴ This regulation was made necessary, it is stated in the preamble to the statute, 'because the *banchi di scritta* were in the habit of trading overseas for excessive sums, thus exposing their depositors to great risks.'⁸⁵ At the end of the sixteenth century practically the same argument was adduced by Contarini in his discourse in favor of the establishment of a public bank. Private bankers, his argument runs, cannot afford to be simply custodians of the money entrusted to them, but have to invest it in trade in order to make a profit.⁸⁶ Such investments are not only

risky, but immobilize funds which will not be available, if there is a run on the bank.

In Flanders, regulations on banking were far less numerous than in Venice. Flemish ordinances have not touched upon the matter under discussion except for one important provision which is included in the privileges wrested from Mary of Burgundy after the death of Charles the Bold (1477). This provision restated the obligation of the money-changers to give bond and, further, forbade them 'to deal in commodities or to be partners to such dealings, either at home, or overseas, or beyond the mountains.'⁸⁷ In other words, henceforth, the money-changers were not supposed to make any direct investments whether in domestic or in foreign trade. How the money-changers were going to make profits is a point which is not elucidated. The restriction placed on the activity of the banks probably remained a dead letter as did many of the other concessions which Mary of Burgundy was forced to grant in order to gain time and to appease an aroused populace. The populace, for once, could be appeased with proclamations and did not give much thought to their enforcement. There existed in Flanders no administrative machinery by which banking control could be made effective. The already overburdened municipal authorities certainly were not in a position to take up additional duties. In Venice, at least, there was a special body of bank-examiners, the *provveditori sopra banchi* who saw to it that the decrees of the Senate were complied with by the Rialto banks.⁸⁸ In Genoa the supervision of the banks was a function delegated to the *Officium Mercantie* in the fourteenth, and to the *Officium Banchorum* in the fifteenth, centuries.⁸⁹

The privileges granted by Mary of Burgundy were supposedly designed to redress the grievances of the public against the administration of Charles the Bold.⁹⁰ The demand for drastic regulation has, therefore, some significance. Apparently the public had been sorely hit by repeated bank failures and ascribed these failures to misguided investments on the part of the banks.

Because economic development in the Low Countries was considerably slower than in Italy, the analysis of the Bruges records sheds some light on the moot question of the early origins of banking.⁹¹ As loans were less important than investments, the Bruges exchange banks—and the same applies to mediaeval transfer banks elsewhere—cannot be regarded primarily as specialized credit institutions.⁹² To pretend that banking developed out of money-lending is a preconception which seems logical enough a priori, but which is not confirmed by any documentary evidence.⁹³ All banking apparently developed out of exchange transactions. At a later stage the decisive factor in the development of commercial banking seems rather to have been the change from regular to irregular deposits. Banking functions are unmistakably performed whenever cash reserves represent only a fraction of demand liabilities, and whenever bank deposits become transferable and are used extensively as a substitute for money.⁹⁴

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Creation of additional purchasing

From the point of view of the economist it does not make any difference whether the resources of a bank, except the specie reserve, are utilized to finance trade in a direct way, by forming partnerships, or in an indirect way, by making loans.⁹⁵ Both methods have the same effect: the creation of additional purchasing power.

Legal writers naturally make a great deal of the distinction, which is essential for them, between partners and creditors, because these two classes of claimants have different rights in case of liquidation or of bankruptcy. But the economic historian does not care much about this question of equities and priority rights. A mediaeval bank interests him only as a going concern or as part of a banking system. What happens to defunct banks may be of great interest to the student of the history of law, but it is of minor interest from the point of view of the economic historian. For this reason he cannot accept the criterion of legal writers who contend that a banker is not a banker, if he is simultaneously engaged in trade and does not confine himself to lending.⁹⁶ Such a lack of specialization was the rule rather than the exception in mediaeval times.⁹⁷ Moreover, it is impossible to draw a clearly marked dividing line between loan contracts and partnership agreements. Many contracts cut across the boundary line⁹⁸ and the jurists have wrangled over them ever since the Middle Ages.⁹⁹

Some Genoese partnership agreements of the twelfth century mention bankers appearing as parties to the contract. It is highly significant that the banker is always the investing, and never the traveling or active, partner.¹⁰⁰ Most of the contracts were concluded for overseas voyages, but the voyages were to nearby ports and hence did not involve great risks or a prolonged immobilization of funds.¹⁰¹ Bankers appear also as lenders in a number of loan contracts, but these are less numerous than are the partnership agreements. In two contracts of the year 1200, an interest rate of five pennies per month or twenty per cent a year is stipulated.¹⁰² No interest is mentioned in other contracts, but is certainly present under a disguise.¹⁰³ Most probably the borrower obligated himself for an amount greater than the one actually received. This assumption is based on the fact that, in at least one contract, the debtor explicitly relinquishes in advance the *exceptione non numeratae pecuniae*,¹⁰⁴ i.e., the debtor promises that he will not go to court and repudiate his debt, in whole or in part, by taking an oath that he has not received in full the amount for which he is bound by contract.¹⁰⁵

The similarities between banking in Bruges during the fourteenth century and banking in Genoa at the end of the twelfth century are certainly striking, despite the difference in time and place. Interest, in fourteenth-century Bruges, continued to be carefully concealed and the bankers continued to divide their surplus funds between lending and direct investment in trade, but with emphasis on the latter.¹⁰⁶ As it was a practical impossibility to run a bank and to attend to other business at the same time, bankers in Bruges as well as in Genoa, con-

power -

fined themselves to the role of investing partners.¹⁰⁷ Management or travel was always left to the other party. Such was the relationship between Collard de Marke and his partners, Jakes de Wallers and Pietre van le Fine. 'Investing partner' does not mean 'sleeping or dormant partner.' In the Middle Ages, the investing partner, who supplied the major part of the capital, usually retained the right to interfere if something went seriously wrong. Nevertheless the choice of a reliable person as active partner was very important, because the investing partner was not always at hand to prevent mistakes. Frequently the success or failure of a venture depended upon the active partner's judgment and ability, chiefly in foreign parts.

The Bruges money-changers did not make loans secured by the pledge of personal property, they did not lend extensively to public authorities, and they did not discount bills of exchange. Why? An attempt will be made to answer this question in the following paragraphs.

The money-changers did not engage in pawnbroking, because they were not licensed to do so. Pawnbroking, as we have seen, was the monopoly of the lombards. Besides this fundamental reason, there were other factors which contributed to exclude the money-changers. Their offices, the reader will remember, were small and did not have any facilities for the storage of pawned articles. Pawnbroking, moreover, was socially in disrepute. As deposit banking rests on confidence, the money-changers could not disregard the feelings of the public and had to restrict the scope of their activity to legitimate business. The lombards also lent mostly to people of small means who wanted cash for consumption purposes and had no use for bank credit. This small-loan business did not appeal to the money-changers. They realized that their business depended upon an active movement of trade. They, therefore, tried to promote business activity by lending only to merchants or by participating directly in commercial undertakings.

In Italy, too, there was a clear demarcation between pawnbroking and deposit banking. In Florence, for example, the Jewish pawnbrokers who, after 1437, were given a monopoly to the exclusion of all Christians,¹⁰⁸ were allowed to lend only on pledges (*sul pegno*) but were not supposed to make any loans *ad scriptam* or under the form of overdrafts.¹⁰⁹ The Venetian transfer banks did sometimes grant credit with jewelry as security, but collateral other than gold or silver was probably not acceptable.¹¹⁰ Another exception is Strasbourg where the municipal exchange banks lent money on pledges, apparently small sums on which interest was computed per week from one Monday to the next.¹¹¹

The Bruges money-changers occasionally advanced money to the city of Bruges, but only in great emergencies. In 1304, the money-changer Janne van Ghent lent one hundred pounds for the campaign in Hainaut.¹¹² The following year the money-changers as a group made another contribution toward the

prosecution of the war against France.¹¹³ In 1359, they advanced an amount of £2,400 8s. *parisis* or £200 0s. 8d. gr. at the urgent request of the municipal authorities.¹¹⁴ Three years later, the City of Bruges was again in financial straits and had to make another appeal for financial aid. This time she succeeded in raising 3,780 pounds *parisis* or 315 pounds groat of which the lombards contributed 480 pounds *parisis* or forty pounds groat and the money-changers 3,300 pounds *parisis* or 275 pounds groat. In 1366 the city of Ghent still owed 2,275 florins on an original amount of 3,020 florins to the heirs of the deceased Bruges money-changer Tideman Bloumeroot.¹¹⁵

On the whole the city of Bruges relied little on the money-changers. This source was only tapped in last resort. Bruges borrowed more often from the Italian merchant-bankers, but this method had the disadvantage of being expensive. Most long-term financing was done by selling life-annuities and rent-charges to private individuals.¹¹⁶ Bruges like other Flemish cities favored this method all through the Middle Ages.

Life-annuities, it is obvious, were not a desirable investment for a money-changer. As for rent-charges, the return on them was so low that they were not desirable either. Besides, there was no organized market for them as there is today for government securities. To these remarks, it should perhaps be added that the money-changers were not financially strong enough to lend amounts as large as those which the Italian merchants, on several occasions, were able to supply. For all these reasons the money-changers did not play any conspicuous role in public finance. Their loans to the count of Flanders were even less numerous than those to the city of Bruges. The only known transactions of this kind are mentioned in the accounts of Philip the Good. Between 1422 and 1428 these accounts contain several references to the repayment of loans to two Bruges money-changers, Colin Lefèvre and Antonin de Vivalda.¹¹⁷ The latter very probably belonged to the Genoese banker's family of that name.

With regard to public finance, conditions in Italy were very different from those prevailing in Flanders. The assets of the Italian transfer banks commonly included investments in the public debt. One should not overlook that public administration, including finance, was more developed in the Italian city-states than in Flanders.¹¹⁸ In Genoa, for instance, the public debt was divided into shares (*loca*) which were secured by liens on specific sources of revenue.¹¹⁹ Sales were registered in transfer books. In Flanders a similar organization simply did not exist. The Flemish cities enjoyed a somewhat better credit standing than the mediaeval rulers, but not as high a standing as the Italian republics.¹²⁰

The main function of the Bruges exchange banks was to facilitate local payments by a system of book transfers. Collard de Marke and Guillaume Ruyelle, it is clear from their account books, did not deal in bills of exchange

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book transfers

and did not have correspondents abroad. The local character of the business of the Bruges money-changers is not altered by the fact that they had a number of non-resident customers. Collard de Marke and Guillaume Ruyelle never undertook to remit money abroad. They did not go beyond the carrying out of instructions by making local payments for outside customers.¹²¹ It often happened that bills of exchange, instead of being paid in cash, were paid by an assignment in bank.¹²² Obligations between a buyer of foreign exchange and the seller of a draft payable abroad could be settled in the same way. In both cases the money-changer only came in as the recorder of the transaction. No discounting was involved. Nor was there any credit extended, except if bank credit was being used to buy or to honor a bill of exchange. A good example of the payment of a matured bill by means of a book transfer is given in the Collard de Marke account books.¹²³

On March 6, 1369, one Jakemon Franche had to pay a bill of exchange (*un cange*) of five hundred Florentine florins to a certain Boin Account (Bonaccorsi) of Lucca whose agent in Bruges was apparently Jakes de Gérard (Gherardi).¹²⁴ Jakemon Franche provided for the payment of this bill at maturity in the following way. A few days before, on February 28, an amount of four hundred French francs at the rate of 31½ groats apiece, or equivalent to £52 10s. gr. in money of account, was transferred to his credit from the account of Jakemon de Blaudain, another customer. On March 6, Jakemon Franche made a deposit of ten pounds groat in cash. This payment brought his total credit to an amount of £62 10s. gr. representing the equivalent of five hundred florins, the face value of the bill, at the rate of 30 groats apiece. This amount of £62 10s. gr. was then written to the credit of Jakemon de Gérard, representative or attorney of the payee,¹²⁵ and charged to the payor Jakemon Franche, whose account was cancelled in the process.

A transaction of this type obviously did not involve any extension of credit. But suppose that the payor or drawee did not have sufficient funds to pay the bill when it became due. In such a case the money-changer could allow him to overdraw his account. It is to be observed that a transaction of this sort would not differ in any important respect from an ordinary overdraft. As the entries in the Collard de Marke account books rarely give any particulars, I have not been able to discover a clear case involving a bill of exchange which was honored with the proceeds of a bank loan, although the practice must have been fairly common. The Collard de Marke account books contain at least one example of a loan being used, not to pay a draft, but to pay a letter obligatory, the mediaeval ancestor of our promissory note.

On several occasions Collard de Marke agreed to be surety or pledge for the debt of one of his customers. In the fourteenth century the letter obligatory, *chirographe* or *escrit obligatoire*, was still used to some extent as an instrument for witnessing debts. In Flanders the letter obligatory was a deed drawn up in

the presence of two aldermen and not a letter under private seal like the English bond described by Professor M. M. Postan.¹²⁶ Surety contracts took the form either of co-debtorship or of an independent suretyship. In the first case, the surety was bound jointly with the principal debtor, but had the right of recourse against him either by virtue of a special proviso in the letter obligatory itself¹²⁷ or by virtue of a separate contract.¹²⁸ In the second case, the surety was liable only if the principal debtor failed to pay.¹²⁹ Of these two forms co-debtorship was by far the most common in Flanders.¹³⁰ It is this form which is found in the Collard de Marke account books.

According to a memorandum in the journal it appears that Collard de Marke was surety or pledge for one sire Jehan Baille and was jointly bound with him 'to refund and to pay' an amount of seventy-five pounds groat to an Italian named Boucasin Peluc.¹³¹ This obligation was recorded in *une finanche* (a loan embodied in a letter obligatory) due April 20, 1369.¹³² On the day of maturity the principal debtor sire Jehan Baille did not have enough money standing to his credit to pay his debt. The seventy-five pounds in question were nevertheless charged against his account¹³³ and credited to sire Jehan de Concorighe who was presumably the representative or attorney of the creditor Boucasin Peluc. On May 19, sire Jehan Baille's account had a debit balance of £31 4s. 11d. gr. which was carried forward to the next ledger.¹³⁴ On the same date Jehan de Concorighe had still £73 11s. 1d. groat out of the seventy-five pounds groat remaining to his credit at the bank.¹³⁵

A few points should be stressed. The case shows how credit transactions could be cleared by book transfer without the bank losing any cash. There is manifestly no discounting involved, but the case presents an analogy with acceptance credit. Whether as surety or as acceptor, the banker is primarily liable for the obligation of his customer, but, theoretically, has the right to take recourse against him if he fails to provide the necessary funds at maturity. In practice, arrangements for credit accommodation are usually made in advance between the banker and his customer.

Two other cases of suretyship recorded in the Collard de Marke account books are less interesting than the transaction which has just been discussed. In one case, Collard de Marke was surety for an amount of two hundred pounds *parisis*, at twenty groats a pound, which Jakemon de Blaudain owed to one Gilles de Loo of Roulers as the result of a compromise (*une pais*) concluded on March 10, 1369. It had been agreed that Gilles de Loo had the right to ask for payment at any time after Palm Sunday or March 25, 1369.¹³⁶ Actually a settlement did not take place until April 7, 1369, when an amount of £16 13s. 4d. gr., equal to two hundred pounds *parisis*, was transferred from Jakemon de Blaudain's account to the credit of Gilles de Loo of Roulers.¹³⁷ The latter was not a regular customer of Collard de Marke's and withdrew immediately £8 6s. 8d. gr., or half the above

amount, in cash. The balance was still standing to his credit when a new ledger was started on May 20, 1369.

The second case relates to an affair in which Collard de Marke was surety for six hundred francs which one of his customers, Jehan de Rudevorde, had to pay in Paris on March 22, 1369, to a Florentine named Bietremins de le Carde. The local representative of the creditor was apparently a Lucchese named Bielnar de Baudouce.¹³⁸ It is certain that Collard de Marke did not undertake to remit the above sum to Paris. On March 6, 1369, the equivalent of six hundred francs or £77 10s. gr. was transferred from Jehan de Rudevorde's account to the credit of Jehan de Quantin and, on the same day, from Jehan de Quantin's to the credit of the Italian Lois de Robiert.¹³⁹ The entries in the ledger do not give any clue as to the purpose of these two transfers. The whole transaction did not involve any extension of credit as the debtor Jehan de Rudevorde was able to supply the necessary funds on March 6, several days before maturity.

The account books of Collard de Marke and Guillaume Ruyelle contain many examples of overdrafts but not a single example of discounting. One must conclude that neither bills of exchange nor other instruments, such as letters or bills obligatory whatever their nature, were discountable. Conditions in Italy were similar to those existing in Bruges. As Alessandro Lattes, a prominent student of the history of commercial law, writes in one of his most important books: 'The Italian private banks [that is, the Italian exchange banks] were deposit and transfer banks, but never performed the more modern function of discount.'¹⁴⁰ *

There is no evidence either that Collard de Marke or Guillaume Ruyelle extended credit to their customers by buying their bills of exchange. Not a single instance has been found among the thousands of entries recorded in the books of those two Bruges money-changers. Neither did they have any correspondents in foreign parts to whom bills could have been sent for collection. In this respect conditions in Italy were the same as in Flanders. In Italy, too, the local transfer banks did not as a rule practice the *cambium per litteras* or have a network of correspondents abroad. The only important exception to this rule is perhaps that of the Venetian *banchi di scritta* which extended credit to customers either by allowing them to overdraw or by buying their foreign bills. But this is one of those exceptions which confirm the rule. *

The lack of negotiable instruments was perhaps a serious shortcoming of the mediaeval banking system but its great weakness was not there. A much more serious defect was that the rigidity of the credit structure was greatly increased by the lack of an elastic currency. Today central banks can expand or contract their circulations of notes. By rediscounting operations it is possible to substitute bank notes for bank deposits if there is a demand for more hand-to-hand currency. But, in the Middle Ages specie was the only form of currency. Any increase in the demand for more currency on the part of the public resulted, therefore, in ✓

an immediate and often drastic reduction of the cash reserves of the banks. Under those circumstances it is only natural that they tended to keep their cash reserves well above a level which is considered safe today. In other words, the reserve ratio of mediaeval deposit banks was in general higher than the reserve ratio of commercial banks today.

The reserve ratio of Guillaume Ruyelle was 29.3 per cent on May 24, 1370. Probably this figure is fairly representative. The reason is that banks have to keep in step. An individual bank can expand less, but not more, than the other banks in the same system. There is no reason to doubt that this economic law also operated in the Middle Ages. As we have seen, all the money-changers of Bruges were in account with each other. If one of them expanded more than the others, he would soon be warned against over-expansion by the rising adverse balances of his accounts with other banks. If this warning remained unheeded, his competitors were sure to ask for a settlement in cash of the balances due to them. Such an action was likely to result in the rapid exhaustion of the specie reserves of the un-cooperative money-changer and would thus compel him to contract or to stop expanding.

There is little accurate information available concerning the financial condition of mediaeval banks as very few bank statements have reached us. According to a summary statement published by Professor Usher, the Bank of Barcelona maintained on January 23, 1433, a cash reserve of £105,781 15s. 3d. *Barcelonese* against aggregate demand and short-term liabilities totalling £358,053 4s. 6d. *Barcelonese*. These figures give a reserve ratio of 29.5 per cent.¹⁴¹ The famous bank of St George in Genoa operated on a much lower ratio. According to the first statement prepared by the bank on January 1st, 1409, after nine months of operation, the cash reserves barely exceeded three thousand florins against liabilities to depositors of about forty or forty-five thousand florins.¹⁴² The reserve ratio was consequently less than ten per cent. Such a ratio was below the safety limit. It is not surprising that the Bank of St George repeatedly ran out of cash and had to suspend specie payments.¹⁴³ The trouble was due both to over-expansion and to a mistaken monetary policy which the government expected the bank to carry out.¹⁴⁴

The rigidity of the mediaeval banking system was still further aggravated by the fact that the assets of deposit banks were not convertible into cash without loss and without delay. Forced liquidation, chiefly of a stock of commodities, was likely to be disastrous in times of monetary stringency and of low prices. The consequence was that the banks placed all their hopes in their cash reserves rather than in their ability to cancel loans and to realize on their investments. As contraction of earning assets was difficult, if not impossible, the cash reserves were likely to suffer the brunt of the fluctuations in the money market. If the pressure on the banking system became too great, the money-changers were sure

to clamor for debasement of the currency. And they were right: debasement was often the only way out.¹⁴⁵ History sometimes repeats itself. In 1935, the threatening collapse of the Belgian banks, too deeply engaged in industry, was among the chief causes of the devaluation of the franc. After all, 'devaluation' and 'debasement' are only different names for the same thing. Both devices involve a lowering of the standard by reducing the gold or silver content of the monetary unit.

Figures based on the Collard de Marke account books shed some light on the behavior of mediaeval banks in the face of changed conditions in the money market. These figures give us the aggregate loans, the aggregate deposits, and the ratio between the two on five different dates (Table 24). For three consecutive years this ratio varied little from one year to the next and stood at 28.6 per cent on April 6, 1366, at 25.2 per cent on April 19, 1367, and at 29.2 per cent on April 10, 1368. On December 24, 1369, however, there was a sudden jump from 29.2 to 56.7 per cent. As Table 24 shows, this increase was due to the fact that Collard de Marke continued to expand his loans while his deposits were falling off. Loans increased from £1,478 to £2,611 while deposits dropped from £5,071 to £4,605 groat. This demand for cash may have been due to a seasonal movement of funds. Money in Bruges was usually tight during December and the first half of January.¹⁴⁶ But the amplitude of the fluctuations seem to justify the conclusion that unusual stringency prevailed in the money market. In any case, there were two ways in which Collard de Marke could meet the emergency: either by curtailing drastically his investments or by sacrificing his cash reserves, as the above figures show plainly that he did not contract his loans. It is highly improbable that he was able or willing to liquidate his commercial undertakings. We must therefore come to the conclusion that the scarcity of money in the winter of 1368 resulted in a severe drain on Collard de Marke's cash reserves and presumably on those of the other money-changers in Bruges. The above figures even suggest that the situation must have been for a while extremely critical.

The succeeding months probably brought some relief to the money market. By May 20, 1369, Collard de Marke's financial condition had greatly improved. Our figures indicate that the ratio of loans to deposits had come down to 45.8 per cent. This improvement was due to the combined action of a contraction in the volume of loans and an expansion in the volume of deposits. All other things remaining equal, the net result must have been a substantial increase in Collard de Marke's cash reserves.

If this analysis is correct, it confirms that mediaeval bankers, in an emergency, relied on their cash reserves rather than on a contraction of their loans or a liquidation of their investments. One may question the wisdom of Collard de Marke's policy of expansion in the face of a tightening money market. Perhaps it was wise to lend freely. Curtailment of credit often precipitates a panic. What-

ever the individual bank might or could do in order to weather the storms, the fact remains that the mediaeval banking system as a whole was not very flexible. As it did not bend under the strain, it had to break. Such breakdowns were not a rare occurrence.

If banks are considered as business institutions, the direct investment of their resources in mercantile ventures is evidently bad, since it involves an immobilization of funds and precludes an adequate division of risks. From the point of view of the economy as a whole, it does not make any difference how the banks use their resources as long as they operate on a fractional reserve principle. Transferable deposits not only are money substitutes, but *deposit banks create credit or purchasing power by their lending or investing activities*. It does not matter in the least whether the borrower gets currency or is given credit on the books, or whether the investments are made in foreign trade or in local ventures. The process is more devious or complicated in one case than in the other, but the ultimate result in each case is the same: additional money gets into circulation through the operation of the banking system.

That deposit banking had inflationary effects in the Middle Ages as well as today is a truth which does not rest on any documentary evidence but is arrived at by economic analysis. A satisfactory demonstration may be found in almost any American textbook on Money and Banking. However, the principle of credit expansion is not always understood in foreign countries or by persons with no training in economic theory. For the benefit of readers who are not professional economists, let us suppose that the Bruges money-changers operated on a 25 per cent reserve ratio (which is plausible) and that one of them received a new deposit of sixteen pounds groat. Of these sixteen pounds groat, the money-changer would, of course, add four pounds to his cash reserve and lend or invest the remaining twelve pounds. Let us suppose further that he allowed one of his customers to overdraw his account to the extent of twelve pounds in order to pay the customer of another money-changer. Twelve pounds would now be added to the latter's deposits. This second money-changer would now be in a position to expand by adding three of the twelve pounds to his cash reserves and by lending or investing the remaining nine pounds. Thus new deposits would be created in his own or other banks. In theory this process would repeat itself until the original sixteen pounds were used as backing for sixty-four pounds of transferable bank deposits. The economists call this phenomenon 'the principle of multiple expansion.'¹⁴⁷

As bank deposits, in mediaeval Bruges, were extensively used as a means of payment, they replaced coin to a considerable extent and represented certainly a large fraction of the total monetary circulation. The displaced coin, there is no doubt, went abroad with the result that the supply of money in the mediaeval world as a whole was artificially increased.¹⁴⁸ Furthermore, since bank deposits

were only partly backed by specie, the requirements of the Bruges trade *ceteris paribus* would have necessitated a much larger supply of coin if there had been no banks. To conclude, the exchange banks created purchasing power, or money, as effectively as if they had been granted the privilege of issuing notes.¹⁴⁹ *

This is supported by the history of Venetian banking. Venice suffered repeatedly from the over-expansion of bank deposits with the result that bank money depreciated as would paper money if issued in excessive quantities.¹⁵⁰ On several occasions the banks were allowed to suspend specie payments but inconvertible bank money continued to circulate in the books of the Rialto banks. In the sixteenth and seventeenth centuries the Venetian Republic even used bank money extensively as a means of war finance. Bank deposits ceased to be convertible in specie, bank credits were then created against government loans, and war materials were simply paid by assignment in bank instead of specie. The result was a real inflation of the circulating medium.¹⁵¹ Over-expansion of bank deposits has the same effect as the over-issue of paper money. Essentially there is little difference between bank deposits and bank notes. Both are fiduciary money resting on the confidence of the public in the solvency of the banks. *

As we shall see in the next chapter, it is not impossible that the financial advisers to the dukes of Burgundy were aware of the fact, or at least suspected, that the money-changers of Bruges usurped monetary functions by their banking transactions. This truth strangely enough had to be rediscovered after five centuries by the Belgian Government which is the successor to the traditions of the House of Burgundy. It is only in the *Rapport au Roi* which precedes the Royal Decree of July 9, 1935, that the Belgian Government officially admitted that the banks of deposit *de facto*, if not *de jure*, performed the functions of a bank of issue, and that bank notes and transferable bank deposits were fundamentally identical. *bank of issue* The relevant passage of the *Rapport au Roi* is very much to the point and is worth quoting as a conclusion to this chapter:

Le rôle prépondérant que jouent, dans la plupart de nos institutions de crédit, les engagements à vue représentés par des dépôts ou par des promesses formelles d'avances en compte, leur confère en fait, sinon en droit, le caractère de banque de circulation. Les crédits sont accordés sous forme d'inscription en compte. D'autre part, par le jeu des virements et des compensations, la circulation des dépôts à vue a pris un caractère monétaire en tous points analogue à celui qu'avait à l'origine la circulation des billets au porteur.

La science économique a, depuis longtemps déjà, fait ressortir l'unité foncière de la circulation de monnaie légale, telle qu'elle existe dans la plupart des Etats modernes sous forme de billets et d'engagements à vue de l'institut d'émission, et de la circulation scripturale des dépôts et d'autres engagements à vue des banques particulières.

De grandes différences existent, sans doute, entre ces deux circulations, mais

elles relèvent bien plus de l'aspect légal et juridique que de la réalité économique à laquelle l'État ne peut pas, le voulût-il, rester étranger.¹⁵²

* The *Rapport au Roi* contains one mistake. Bank notes did not precede transferable bank deposits, but bank money under the form of transferable bank deposits existed in Italy and Flanders long before there were any notes.

NOTES TO CHAPTER 14

¹Usher, 'Banking in Barcelona,' *op. cit.*, pp. 135 f., and *Hist. of Deposit Banking*, I, 271.

²I refer here to the fact that an American scholar was unfairly criticized by a French reviewer who misunderstood the meaning of 'overdraft' and 'transfer of credit' and did not know about the American practice of loans secured by promissory notes. See AHES, V (1933), pp. 498 f.

³Of course, bills of exchange could be used in an indirect way as a credit instrument. For example, bills of exchange could be purchased with bank credit instead of with cash. On this topic, see Usher, 'The Origins of Banking,' *op. cit.*, p. 415.

⁴*Ibid.*, pp. 414-415, n. 2. The Venetian senator Tommaso Contarini in his speech of December 28, 1584, in favor of the creation of a public bank, clearly referred to the overdraft when he mentioned that bankers would accommodate their friends by simply granting them credit without any disbursement of cash or coin (*di denaro*). See E. Lattes, *op. cit.*, p. 125, No. 42. His brother, Alessandro Lattes (*Il diritto commerciale*, p. 209) asserts that loans were frequently (*per lo più*) secured by pledges of personal property (*sopra pegno*) or by letters obligatory, but he adds immediately that one of the most common forms of lending was to open a line of credit without security (*credito allo scoperto*, Fr. *crédit à découvert*). The two statements seem contradictory to me. I doubt very much whether loans secured by pledges or by letters obligatory were as common as A. Lattes assumes.

⁵Usher, 'Banking in Barcelona,' *op. cit.*, p. 129, and *Hist. of Deposit Banking*, I, 33 f.

⁶Cf. Sieveking, *Casa di San Giorgio*, p. 49 [333].

⁷*Ibid.*, p. 56 [340].

⁸Chiefly in connection with the farming out of certain taxes.

⁹A good example is given by Sieveking (*Casa di San Giorgio*, p. 48 [332]). The archbishop of Genoa Jacopo Fieschi had an account with his relative, the banker Antonio Fieschi. Money was deposited to the credit of this account or withdrawn from it, not by the archbishop himself, but by his 'factor' or servant. When the archbishop died in 1397, it was found that the account at the bank had been overdrawn to the extent of £100 17s. The archbishop's heirs tried to repudiate this debt by questioning the authenticity of the bank's records, but the *Officium Mercantie* or Commercial Court decided that the entries in the books were to be considered as satisfactory evidence and that the estate of the deceased was to be charged with the balance due to the Fieschi bank.

¹⁰Usher, 'The Origins of Banking,' *op. cit.*, pp. 414 f.; *idem*, 'Banking in Barcelona,' *op. cit.*, p. 129.

¹¹de Roover, 'Ruyelle,' *op. cit.*, pp. 94 f. The items above ten pounds and below fifteen pounds are: Willaume Danoubel £14 15s. 1d. gr. and Jehan de Boghemakere £10 2s. 5d. The only item above fifteen pounds is a debit balance of exactly nineteen pounds groat due from a Segher Gherart.

¹²Gilliodts, *Cart. de l'Estaple*, I, 274, No. 355.

¹³Ehrenberg, 'Makler, Hosteliers und Börse in Brügge,' *op. cit.*, p. 414.

¹⁴Collard de Marke Ledger No. 5, May 20, 1369, fol. 50.

¹⁵Ehrenberg, 'Makler, Hosteliers und Börse,' *op. cit.*, pp. 423-28.

¹⁶Gilliodts, *Cart. de l'Estaple*, I, 274, No. 355.

¹⁷Collard de Marke Ledger No. 1, fol. 14.

¹⁸Ledger No. 2, fol. 21.

¹⁹Ledger No. 3, fol. 23.

²⁰Ledger No. 4, fol. 20.

²¹Ledger No. 5, fol. 34.

²²Gilliodts, *Inventaire*, II, 349-53.

²³*Hanserecesse*, II (Leipzig, 1872), 412, No. 342, sec. 5. Date: May 1, 1387.

²⁴Collard de Marke Journal No. 1, April 19, 1367-April 10, 1368.