generally accepted evidence Cranmer in 1520. broader purpose. His rigorous ...

of this view displayed remarkable prevision of the course anthropological theory has since taken. He anticipated, in particular, functional anthropology by considering "survivals" not as fossil forms in a living culture but as ideas which spring from permanent functional causes. As pointed out by Freud, Crawley expressed certain of his views in terms that are hardly distinguishable from those employed by psychoanalysis.

THEODORE BESTERMAN

Important works: *The Mystic Rose* (London 1902; 2nd ed. rev. by Theodore Besterman, 2 vols., London 1926); *Studies of Savages and Sex*, ed. by Theodore Besterman (London 1929); *Dress, Drinks and Drums: Further Studies of Savages and Sex*, ed. by Theodore Besterman (London 1931).

Consult: Malinowski, Bronislaw, "Primitive Marriage and Kinship" in *Nature*, vol. cxxi (1928) 126–30.

CRÈCHE. *See* DAY NURSERY.

CREDIT. Etymologically the word credit means belief or trust; in its technical usage it has come to be confined to the trust placed in a debtor. Credit, in fact, is best understood as simply another name for debt. The two parties to a debt are called debtor and creditor, and the same relation which from the debtor's standpoint is called a debt is called from the creditor's standpoint a credit.

Debts play a fundamental part in economic relations. Every purchase and sale of goods or of services creates a debt due from buyer to seller. The quotation of a price is an offer acceptance of which gives rise to a debt. It likewise gives rise to an obligation on the part of the seller to deliver the goods or to render the services stipulated, but this type of obligation is not a debt. A debt is a pecuniary obligation; it is expressed as a number in terms of a unit which is called a "money of account." The debt may be discharged immediately by the buyer's delivery of the agreed price in money or it may be left outstanding, to be discharged at a future time. It becomes necessary then to keep an account; hence the expression money of account for the unit in which debts are reckoned.

Debts do not arise only out of purchase and sale of goods and services, but also out of borrowing and lending of money or of pecuniary rights. The borrowing and lending (or hiring) of goods with an obligation to return the same goods are not credit transactions. The obligation connected with it is not a pecuniary obligation and therefore is not a debt. If the goods are not returned, the owner may recover pecuniary damages, and as soon as his right is established a debt is created, but that is not a part of the original transaction. Likewise, if anyone is entrusted with goods for safe keeping he is not a debtor, because his obligation is not a pecuniary one. Even if the goods entrusted to him be money, with the stipulation that he is not merely to return an equal sum of money but to keep and return the identical pieces deposited, that is not a credit transaction. If he were simply a debtor, he would be free to pay the sum due in any form of legal tender he chose, and in the interval could part with the pieces of money he had received.

Debts are legally payable in money. It is essential to have some means established by law for the definitive extinction of a debt, for otherwise a court of law would be unable to prescribe a settlement, and the obligation of debtor to creditor would not be enforceable by law at all. Money is so established by law, and every piece of money is given a value or debt paying capacity in terms of the money of account. Thus the ideas of debt and money of account are more fundamental than that of money in the sense of legal tender currency. Debts cannot be defined in terms of money because money must be defined in terms of debts. But once money is established by law, every debt or pecuniary obligation becomes thereby an obligation to pay money.

In practise, however, it is not always necessary for debts to be discharged in money, which is a convenient medium for small payments but offers considerable trouble and cost in handling, safe keeping and counting when used for large payments. The possible alternative is payment in credit. A debt can be extinguished by being set off against another debt. Two traders doing business together can keep a running account in which the debts and credits of each are recorded, and only the net balance due from one to the other need be paid from time to time. But this method cannot in general be carried very far, because a trader's debtors are not usually the same people as his creditors. If, however, a group of traders made a practise of transferring all their credits to one individual, that individual would be able to set off the debts and credits of every trader and to claim the debit balance due from some so as to make good the credit balance due to the others.

One of the principal functions discharged by

a banking system is to make possible that the debts and credits of the customers of the system be set off or cleared against one another. A customer by assigning his credits to his banker makes the banker his debtor for the amount, and is then in a position to pay his debts by assigning to his creditor sums thus due to him from the banker. Debts due from bankers to their customers and destined to be used in this way are called bank credit.

The use of bank credit as a means of payment requires that some ready method should exist for assigning a debt from one creditor to another. The assignment of debts accordingly assumes a fundamental importance in the history and in the theory of credit. In mediaeval Venice, if anyone wanted to transfer to another a sum held to his credit at a bank, the two would attend in person at the bank and the substitution of the new creditor for the old in the books of the bank would be recorded before witnesses. In the Middle Ages legal recognition was already being given to a less cumbrous method of transfer by documents, called in modern usage credit instruments. If the terms on which a debt was created provided that it could be transferred from one creditor to another without the intervention of the debtor, then this simplified procedure became permissible.

Perhaps the most obvious method of assigning a debt is to embody it in a promissory note, a written promise to pay a specified sum of money, without limiting the promise to any specified creditor. The promise may be simply to pay the bearer of the note whoever he may be, and the debt can be assigned from one creditor to another by simple delivery from hand to hand. Or the name of a creditor may be specified, but accompanied by the alternative of payment to anyone else whom he may designate or order. The creditor specified may then assign the debt to a new creditor or payee by writing and signing on the note a direction to pay to the latter; this is called endorsing the note, because the direction is customarily written on the back of the note. If the creditor simply endorses the note with his signature without naming any new creditor or payee, the note becomes payable to bearer. Promissory notes payable to bearer on demand have acquired a special importance in the form of banknotes. Promissory notes payable to order and transferable by endorsement are extensively used in the United States as instruments of short term borrowing and lending. In most other countries this function has devolved on the bill of exchange.

A bill of exchange is a written order by the creditor (the seller of goods) to the debtor (the buyer) to pay the sum due to the bearer or to a specified person or order. It is thus a more direct means of assigning a debt than a promissory note, since it is originated (drawn) by the creditor instead of by the debtor. If the buyer and seller of goods agree that the latter is to pay not immediately but only after an interval of time, a bill of exchange will be the means of assigning a debt due after that interval. Usage requires in that case that the buyer should recognize the debt by accepting the bill, i.e. writing his signature on the face of it.

In order that full advantage may be taken of the system of bills of exchange, there is required a class of people to act as intermediaries to present the bills to the debtors for acceptance and payment. This function ordinarily devolves upon the bankers. The seller of goods draws a bill on the buyer and makes it payable to his own banker. The banker may himself have an establishment in the place where the buyer is, or he will be in correspondence with some other bank there. He will transmit the bill there to be accepted and paid on maturity (collected). If he has confidence in his customer (the seller), the banker will be willing to discount the bill, i.e. to advance immediately to the customer the value of the bill, less interest calculated for the interval up to maturity (discount). If he does so, he is buying the debt represented by the bill and in effect lending the amount to the customer, but the customer is assumed in law to guarantee the bill in his capacity as drawer.

Whether he discounts the bill or collects it on maturity, the banker is carrying out an "exchange" operation, i.e. exchanging a credit or pecuniary right in one place for one in another; if the bill is drawn on a place in a foreign country it is a foreign exchange operation. Bills of exchange enable debts in different places to be cleared through the banks dealing in the foreign exchange market.

One particular form of bill of exchange, the check, has come into use in modern times as the predominant method of assigning bank credit in large sums. The check is a bill drawn on a banker by a customer and payable on demand. Being payable on demand, it is a means not of borrowing and lending but only of payment. The possessor of bank credit draws checks upon the bank in favor of those to whom he has to make payments; the payees, who in all likelihood also have banking accounts, pass on the checks (endorsed, if payable to order) to their banks. Thus any bank receives checks drawn upon other banks, and it is usual for the banks carrying on business at any center to settle accounts with one another by sending the checks they receive to a central clearing house, where their respective debits and credits are calculated day by day, and net balances are paid either in money or by checks upon a central bank. Checks are used both for payments between people in the same locality and for payments at a distance. For payments between different countries they are first dealt in by the foreign exchange market and then passed on to the place on which they are drawn to be cleared. Thus credit instruments may be divided into two classes: first, promissory notes and bills of exchange, which promise or direct payment at a future date and which are therefore used as vehicles of borrowing; and second, checks and banknotes, which are used as vehicles of payment.

Payment by check or banknote is payment in credit, because it is effected by the transfer of bank credit. It should be mentioned, however, that banknotes, particularly those issued by central banks, are often made legal tender, and are thereby technically constituted money. The distinction between credit and money then becomes obscured. If the note is not legal tender in payments by the bank which issues it, but only in payments by others, it still may be regarded as credit, for it still represents a debt due from the bank. But if it is legal tender in payments by the issuing bank, that bank when asked to pay one note can do so by handing over another, and there is in substance no enforceable obligation at all. This is so even when the bank is obliged to convert its note into gold bullion. For bullion as distinct from coin is not money but a commodity; the delivery of gold bullion is not a payment but a sale; and the obligation, not being pecuniary, is not a debt. In some cases the legal tender notes of central banks are not given the form of credit instruments or promissory notes, but simply show the amount for which they are to pass in payment.

Credit instruments commonly possess the characteristic of being negotiable. In general if anyone assigns his property rights in an object to someone else, he cannot give the recipient a better title than he possesses. If he is selling goods which he has stolen or misappropriated, the purchaser may have to give them up (unless he has bought them in "market overt"). But these rules do not apply to money. When a thief pays stolen money to an innocent person, the latter acquires a perfectly secure title to the money. A negotiable instrument is a credit instrument which in this respect has been put on the same footing as money. The law allows a clear title to any honest recipient, and he is under no obligation to inquire whether the previous holder had a clear title. This privilege belongs to both bills and notes, whether payable to bearer or to order, although they can be divested of it by writing the words "not negotiable" upon them. The effect of negotiability is to facilitate the use of credit instruments as substitutes for money, i.e. as means of payment.

Bank credit is composed of simple debts due from banks. Money is not entrusted to a bank by its depositors in the same way as valuables may be entrusted to a bank for safe keeping, or as money may be placed with a banker on the understanding that he is to act as a trustee. When a customer simply pays in money or checks to his account with the banker, the banker becomes a mere debtor for the amount, and assumes no other obligation to the customer than the agreed terms of the debt. The customer has no say in the use the banker chooses to make of the resources he thus acquires.

Bank credit includes certain other forms besides deposits which can be drawn on by check payable on demand. There are time deposits, employed by the depositors as temporary interest earning investments for idle funds. Again, there are credits granted by a bank which may only be drawn upon by bills of exchange of an agreed type, bank acceptances; they cannot be drawn upon by check or withdrawn by the customer in money. Such a credit is required by a customer who is a buyer of goods and who wishes to authorize the seller to draw a bill. If the bill is drawn on the bank instead of on the customer it will be discounted on favorable terms, because the bank will possess better credit than an individual trader. The document by which a bank authorizes a customer to open a credit is called a letter of credit. A similar term is applied to the document by which a bank enables a customer who is traveling to

draw checks upon its branches and correspondent banks.

A bank has a dual function: in its capacity as debtor it supplies its creditors with the means of payment in the form either of banknotes or of checking deposits; in its capacity as creditor it is a short term lender to traders and others. Short term lending by a bank is effected partly through the discounting of credit instruments (bills and notes), and partly through advances (loans and overdrafts), which are simple book debts recorded in the books of the bank against its customers.

When a bank lends to a customer, it creates credit. Two debts come into being: a debt from the customer to the bank payable at an agreed future date, and a debt from the bank to the customer due immediately and available as a means of payment. Like all debts, such debts are payable, if the creditor so desires, in money. In view of the superior convenience of money as a medium for certain kinds of payment (wages, small retail purchases, railway fares, etc.) every bank must be prepared to pay its obligations in money so far as its customers may require. This condition limits the freedom of banks to create credit as a means of payment, because if they are too lavish they may run short of money. Credit has thus become very intimately linked up with monetary policy. A system of central banking has been evolved under which the banks in any country all rely on a single central bank to supply them with whatever money they may require. The use of metallic coin in circulation, except subsidiary token coin, has been almost entirely superseded by paper currency in which the notes of the central bank play a predominant and in some countries an exclusive part.

Short term lending is performed mainly by banks, but not quite exclusively so. In London there is a highly organized discount market, in which bills are bought and sold by discount houses or bill brokers, to whom the banks lend money at call. The discount houses are accustomed when necessary to borrow from the Bank of England or to rediscount bills, and loans to the discount houses are regarded by the lenders as a highly liquid asset. There are other lenders besides banks, who take advantage of the discount market to gain a higher rate of interest than the time deposit rate allowed by banks on large funds temporarily available. In New York there is a market in call loans to stockbrokers which has something of the same impersonal character, in that loans are regularly made by banks at competitive rates to others than their customers or by business corporations investing temporary surpluses. The call market grew up before the Federal Reserve system was instituted, and the rediscounting facilities now available have made it somewhat less important. Market dealings also exist in the United States for commercial paper (promissory notes) and for bank acceptances.

Side by side with the credit which is organized through banks and quasi-banking institutions or mobilized through credit instruments, there survives the more elementary form of book credit between buyer and seller. It is used not only in dealings between manufacturers, wholesalers and retailers; book credits are created also in sales to final consumers in the form of charge accounts and obligations payable on instalment. Finally, it is not to be overlooked that speculation gives rise to a form of book credit. Thus when a speculator buys commodities, securities or foreign exchange for delivery at future dates he incurs a debt equal to the price for the period of the transaction.

If credit is merely another name for debt, it is equally applicable to the long term debts which play a prominent part in the investment markets of the world. Governments, municipalities, corporations and individuals are accustomed to contract debts involving the payment of capital sums at the end of a considerable period of years, and the payment of interest meanwhile. Such debts are sometimes dealt in through the medium of bonds, payable to bearer or transferable by endorsement, which are credit instruments on the same footing as bills and notes, and the interest is paid by means of coupons or warrants, which are attached to the bond and are cut off when due and presented for payment like checks. Alternatively the rights of the creditors may be recorded or registered in books of account in which any change of ownership has to be entered in order to be effective.

An essential condition of the extensive use of credit is the existence of suitable facilities, practical and legal, for the provision of security for debts. There may be default on a debt either through the fraud or negligence of the debtor, or through the failure of the debtor's assets. To guard against that contingency, the creditor may as a condition of the loan require the debtor to assign him legal rights over some specified asset of sufficient value to cover the

amount of the debt with a margin for the risk of depreciation. If it is possible for him also to take physical possession of the asset, that is an additional safeguard.

When a bank lends to a trader, the borrower usually intends to acquire some marketable goods or securities with the sum lent. If goods in transit are financed by a bill of exchange, it is possible to secure the bill upon the goods by attaching the bill of lading to the bill, so that the holder of the bill is the holder of the title to the goods. But the bill of lading has to be detached when the owner of the goods wishes to sell them, and accordingly this form of security is not usually made use of, except in the interval before the bill of exchange is accepted. The bill, once accepted, becomes the recognized debt of the acceptor, guaranteed by the drawer and also by any intermediate holder who has endorsed it. If some of these parties to the bill are people of unimpeachable credit, collateral security ceases to be necessary. Sometimes notes or bank advances are secured by a lien on goods in warehouse or even in course of production (e.g. growing crops). Sometimes they are secured by bonds, stocks or shares which can be deposited with the lending bank or transferred to it.

The bonds or debentures of a corporation will be secured on the assets of the company. Either a corporation or an individual may provide security by a mortgage on land, buildings or other real property. The creditors of a government usually have to depend on its good faith, but sometimes they endeavor to reinforce their security by getting some government property or source of revenue assigned for the purpose and placed under independent control.

Security is not invariably required for debts. The creditors of a bank are usually content to leave their deposits unsecured. Banks often grant advances or overdrafts without security to customers of unquestioned solidity and probity.

Credit is essential to the economic development attained in the modern world. If we imagine a community without the practise of borrowing and lending, we must suppose every trader to be limited in the scope of his operations by the need to provide cash for all purchases. He must so conduct his business that the maximum need of working capital will not exhaust his resources, and the result will be that, when the need of working capital is at the minimum, he will be encumbered with a large balance of idle money. If he ties up too much of his capital in permanent investment in his business, he may miss lucrative trading opportunities for want of ready cash, or may even be involved in serious embarrassment through unforeseen losses. If on the other hand he keeps a large cash balance, the scale of his normal business is unnecessarily restricted so long as the opportunity of employing the cash does not arise. In the complete absence of credit institutions, every trader's position would be a compromise between these two disadvantages. All capital invested would be irretrievably sunk, and the amount of liquid resources available to cooperate in any important new development would be extremely limited.

It would seem that even in a community without credit institutions joint stock enterprise would still be possible, since a shareholder is not a creditor but a participator. In fact, however, joint stock enterprise could not easily assemble large capital sums without the assistance of credit. It is not usually possible to interest more than a very limited circle of people in a new enterprise, and if capital could only be collected from actual cash balances the amount that they could spare would probably be very small. Credit institutions enable the participators to pledge their existing resources even though these are sunk in fixed capital; moreover, the participators can supplement the capital so raised by pledging the growing assets of the new enterprise. They might, it is true, sell their existing capital assets instead of borrowing upon them; but the market for capital assets could itself hardly exist without credit institutions.

The free functioning of a market requires an adequate concentration of liquid resources in the hands of dealers. The daily turnover of the markets must be large in comparison with the greatest single transaction it is called upon to carry through. If there are a hundred dealers in a market with available liquid resources averaging $100,000 each, then without credit facilities the market could buy and hold $10,000,000 worth of the goods dealt in and no more. Once the limit is reached, buying would come to a dead stop. If on the other hand a dealer can borrow $9000 on the security of $10,000 worth of goods, the limit is thereby raised tenfold to $100,000,000 worth. And if dealers, in addition to the capital which they place directly in the market also have other investments, they may increase their dealings

still further by pledging these investments. If, as is usually the case, the dealers as a body do not extend their transactions to anything like the extreme limit of their credit, every offer for sale will find buyers with extensive reserves of purchasing power; the market functions smoothly and quotes a definite price for the goods dealt in.

In the particular case of financial markets, where the dealings are in stocks and shares, foreign exchange or insurance, dealers must be prepared to buy and sell very large units. Even with the most highly organized credit system, it is only possible to establish effective markets of this kind at a very limited number of great centers throughout the world. Without credit facilities there could be no markets, in the strict sense, at all, and every transaction would be the subject of intricate non-competitive bargaining. It is only in virtue of the existence of adequately organized financial markets that enterprise on any great scale is possible, and credit institutions are an indispensable condition of the whole system.

Credit supplies the modern world with its principal medium of payment. Thereby are secured an economy in the use of the precious metals, a saving of the labor and cost which would otherwise be involved in handling, counting and safe keeping specie, and, more important still, the vital advantage of elasticity in the monetary system. It is true that elasticity lends itself to abuses. Thus one of the essential features of the business cycle, with its undesirable recurrences of trade depression, is a credit cycle, an alternation of credit expansion and credit contraction, manifesting itself in periods first of rising and then of falling prices. But it must not be assumed that an alternation of prosperity and depression would not exist in a community on a purely specie system without credit institutions. On the contrary, the elasticity conferred on the monetary system by credit affords the best hope of avoiding monetary fluctuations by scientific regulation of the currency.

R. G. Hawtrey

See: Debt; Financial Organization; Banking, Commercial; Mercantile Credit; Agricultural Credit; Land Mortgage Credit; Investment; Public Debt; Loans, Personal; Pawnbroking; Instalment Selling; Credit Cooperation; Negotiable Instruments; Acceptance; Bill of Exchange; Check.

Consult: Moulton, H. G., *The Financial Organization of Society* (3rd ed. Chicago 1930); MacLeod, H. D., *The Theory of Credit*, 2 vols. (2nd ed. London 1893–97); Knies, Karl, *Geld und Kredit*, 2 vols. (Berlin 1873–79) vol. ii; Komorzynski, Johann, *Die nationalökonomische Lehre vom Kredit* (Innsbruck 1903); Taylor, W. G. L., *The Credit System* (New York 1913); Hawtrey, R. G., *Currency and Credit* (3rd ed. London 1928); Keynes, J. M., *A Treatise on Money*, 2 vols. (London 1930). See also bibliography following article on Banking, Commercial.

CRÉDIT AGRICOLE MUTUEL. *See* Co-operation, section on France.

CREDIT CONTROL is a term of very recent origin which has come into general use only since the World War in connection with proposals emanating from many different quarters for monetary management, monetary stabilization and similar reforms. It is employed somewhat vaguely, but the general notion underlying all the uses of the term is one in contradistinction to the "automatic" devices for the regulation of credit which were supposed to characterize the working of the pre-war gold standard in its purest form.

Under an "automatic" or "unmanaged" system the quantity of reserve money available for a country's banking system in the shape of legal tender money and deposits at the central bank is determined, according to some more or less rigid formula, by the movement of gold between that country and the rest of the world. Under such a system the authorities of the central bank need, theoretically, do nothing except allow the quantity of credit to be fixed by the movements of gold and the official discount rate to adjust itself to the market rate corresponding to this quantity of credit. The equilibrium of relative price and wage levels and of relative interest rates at home and abroad is thus left to find its own level as the final outcome of the consequences of the fluctuating scarcity or abundance of credit determined by the movements of gold. As contrasted with these methods of laissez faire credit control is used to describe a system in which the central banking authorities deliberately determine, sometimes in anticipation of gold movements and sometimes in disregard of them, both the quantity and the price of credit with a view to the achievement of certain economic objectives, such as price stability or stability of employment and output or stock exchange stability. Although it is admitted that a country under a gold standard cannot persist indefinitely in a policy which disregards gold movements, experience has shown that a financially strong country or one with large gold reserves can ignore their effects for a considerable time.

This clear cut distinction between credit control and its opposite is, however, merely theoretical. In practise no country which has reached the stage of using representative money and bank credit can employ an automatic system of credit regulation; indeed, no banking system of the modern type, such as has existed for a century past in Great Britain, can avoid some amount of credit control. The contrast between the presence and the absence of credit control in the modern sense reduces itself therefore to a difference in methods and degree. The old fashioned system was wont to regulate deliberately the price of credit, that is, the bank rate or discount rate, but to allow the quantity of credit to be determined partly by the movements of gold and partly by the amount of rediscounting at the central bank attracted by the official rate. Moreover, the main objective of the old system was the maintenance of gold convertibility of the country's representative money at the parity fixed by law, and it was reluctant to admit any primary duty, obligation, responsibility or interest in any other matter. The new fashioned system of credit control, on the other hand, employs not merely bank rate policy but every other weapon in the armory of a central bank in order to regulate the quantity and price of credit. It resorts to open market operations, i.e. purchases and sales of assets, chiefly government securities, on its own initiative rather than that of its customers; moral pressure or disciplinary action directed toward member banks and investment houses, particularly those engaged in floating foreign issues; variation within narrow limits of the official buying and selling prices for gold; and operations in the foreign exchange market, including the use of "gold exchange management" methods. Furthermore, the modern exponent of credit control is apt to regard the maintenance of gold convertibility not as the final crown and consummation of a central banking policy but rather as a somewhat irksome limiting condition. It comes to his notice chiefly as something liable to interfere with the attainment of that particular type of economic stability which he regards as the bank's primary objective.

Some critics of modern methods of credit control have maintained that in the end they come to the same thing as old fashioned bank rate policy, inasmuch as the quantity of credit employed is uniquely determined by the rate charged for it, so that little or nothing is really gained by trying in addition to control directly the quantity of credit. It is, however, generally agreed that open market operations allow a more sensitive and delicate control of the monetary machine than is possible by the use of the bank rate alone, which cannot help working by discontinuous jerks. Moreover, such critics are prone to underestimate the independent efficacy of open market policy as a means of credit control.

The historical evolution of credit control has been briefly as follows. Bank rate policy as a method of control was evolved during the nineteenth century, mainly in London, where it originated in the discussions which followed the monetary crisis of 1836–37 and preceded the Bank Act of 1844. Before 1837 it is difficult to find any trace of such ideas—they are not to be found, for example, in the works of Ricardo—of which it is a sufficient explanation to remark that up to the repeal of the usury laws in 1837 the rate of interest was subject to a legal maximum of 5 percent. By 1844 typical reformers, such as Lord Overstone (*Thoughts on the Separation of the Departments of the Bank of England*, London 1844, republished in his *Tracts and Other Publications on Metallic and Paper Currency*, London 1858, p. 237–84), were emphasizing the importance of bank rate policy as a means of regulating the volume of the note circulation. In 1861 in Goschen's *Theory of Foreign Exchanges* (London) the effect of changes in the bank rate as a means of influencing the foreign exchanges was first expounded in a clear and definite manner. The subsequent evolution of ideas about the bank rate as a means of credit control into the form in which they were generally accepted before the war may be traced through Bagehot's *Lombard Street* (London 1873, ch. v), Giffen's "Gold Supply: the Rate of Discount and Prices" (*Essays in Finance, Second Series*, New York 1886, p. 37–88) and Marshall's evidence before the Gold and Silver Commission of 1877–78 (reprinted in his *Official Papers*, London 1926, p. 17–195). A systematic treatment of the theory of the bank rate is, however, difficult or impossible to find; one will search in vain the works of Marshall, Pigou, Taussig or Irving Fisher.

The creation of the Federal Reserve System in the United States in 1913 opened a new chapter in the evolution of credit control. This system was in certain essentials less like the