SERVANTS OF INDIA SOCIETY'S LIBRARY POONA 4

CN AcN

2055

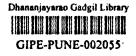
Date of release for loan

This book should be returned on or before the last date stamped below.

An overdue charge of 5 paise will be levied for each day the book is kept beyond this date.

28100 1372	
	· ·

MODERN FINANCE



THE WORLD OF TO-DAY

Books of kindred interest to the present which are ready or will be published shortly in this series include :

- WHY PRICES RISE AND FALL. By F. W. Pethick Lawrence.
- A CAPITAL LEVY AND A LEVY ON WAR WEALTH By Prof. A. C. Pigou.
- FOREIGN EXCHANGE BEFORE, DURING, AND AFTER THE WAR. By T. E. Gregory, Cassel, Reader is Commerce, University of London.

THE WORLD OF TO-DAY

MODERN FINANCE

EMILE BURNS

SECOND EDITION, REVISED

HUMPHREY MILFORD OXFORD UNIVERSITY PRESS LONDON EDINBURGH GLASGOW COPENHAGEN NEW YORK TORONTO MELBOURNE CAPE TOWN BOMBAY CALCUTTA MADRAS SHANGHAI

1922

X6.1.N2 F2 2055

Printed in Great Britain by Hassell, Watson & Viney, id., London and Lylesbury, THE criticisms of practical bankers have enabled me to correct inaccuracies which appeared in the first edition of this book, and to use, in illustration of certain points, typical examples of transactions. I hope that these changes will have made the argument clearer. In attempting to cover this subject in so short a space, it has been impossible to put in every detail or every qualification which might have been made in a longer work. This, I am sure, will not make the book less useful to the general reader, who can turn to some of the standard works for fuller details on any particular point. My aim has been to give a clear understanding of the general working of the financial system.

It is perhaps necessary to point out that the term 'Banks' has been used in this book to cover all specialized financial institutions as well as the Joint-Stock Banks and Private Banks. The development of the financial machine has led to a considerable degree of specialization: financial houses of different kinds—bill brokers, exchange brokers, 'financial firms,' etc.—carry on special classes of business, which the Banks are tending to leave more and more in their hands. But the limitations of space have made it impossible to describe the subdivision of functions within the financial machine, and the term 'Banks' has therefore been used in a general sense to cover all financial institutions.

EMILE BURNS.

December 1922.

CONTENTS

CHAPTER	1					940B
I.	MONEY IN BANKS	• •	•	٠	•	7
11.	INVESTMENT .	•••	•	•	•	11
III.	THE FUNCTION OF	BANKS	IN	STARTI	NG	
	INDUSTRIES .	• •	•	•	•	18
IV.	THE FUNCTION OF	BANKS	IN	RUNNI	NG	
	INDUSTRIES .	• •	•	•	٠	23
v.	THE TENDENCY OF	NDUSTRII	es to	FINAN	CE	
	THEMSELVES .	• •	•	•	•	31
VI.	INTERNATIONAL FINAN	ICE .	•	•	•	37
VII.	PUBLIC FINANCE	• •	•	•	•	50
VIII.	THE CENTRAL BANK	ND THE	CREDI	T SYST	em	54
IX.	MONEY OF ACCOUNT-	AND OF	NO AG	COUNT	٠	61

. 6

MODERN FINANCE

CHAPTER I

MONEY IN BANKS

To most wage-earners money is the notes or coins which they get on Friday and spend on Saturday, or, with luck, on the Monday or Tuesday after. If there is any of it left on the following Friday, this surplus generally has to be set aside to provide for some extraordinary expenditure-boots, clothes, furniture, or something else which the wage-earner or his family needs. The financial operations involved are, on the surface, extremely simple. The wage-earner exchanges his services for coins or notes. and again exchanges the cash for goods. The cash is only the medium through which he exchanges his services for the goods he needs. The medium is not necessary : he might be paid with goods instead of cash. Many wage-earners to-day receive goods instead of cash in part payment for their services. The domestic servant, the seaman, and many other types of wage-earner, receive goods-board and lodging-as a substantial part of the reward for their work. The balance of the reward is given in cash; but even this part is, as a rule, exchanged immediately for goods.

In studying the working of the financial system, we must never lose sight of the fact that every financial transaction, whether it is carried out with a silver shilling or a cheque for a million pounds, ultimately refers to the goods on which modern civilization depends. These goods may be necessaries or luxuries, they may be consumed in an instant—like strawberries and cream—or they may endure for many generations—like the Houses of Parliament. In any case, wherever goods and services are exchanged, the exchange is made easier through the medium of money, which gives the holder of it the power to buy or use, at his discretion, and so far as the money goes, bread and butter, coal and iron, machinery and houses, railways and shipping, pianos and gramophones, and the million other wants of human life.

But the use of money in any particular case, even in such a simple case as that of paying wages, presupposes a large number of operations through which the employer obtained the money with which he pays his workmen. It would be idle to attempt to trace the history of how any particular person obtained a particular sum of money. In order to understand the system of modern finance we must rather inquire into the general processes at work, and we must start from some point in the system which is comparatively simple, and which will be familiar to everyone. We can then trace the other operations which are more complicated and less familiar.

The most obvious starting-point in the financial system is the fact that some people receive more money than they can spend, or than they want to spend at the moment. When they get the money, therefore, they pay it into banks for safe keeping until they can make up their minds what to do with it. And in a very great number of cases the persons who pay their income into banks find that current expenditure has absorbed their last instalment of income by the time their next comes in. But even where this is the case, the bank has had the use of the money, or part of it, for a week or a month; and as there are always a great number of persons paying inand drawing out at different times, and always (with a few exceptions) paying in before they draw out, each bank has a certain amount of money at its disposal all the year round-the difference between the amounts paid in and the amounts drawn out at any moment. This margin is used by the banks in various ways, which are explained later : at this point we are only concerned with it as one of the ways in which money not needed at the

moment is collected together and made available for use in fairly large sums.

It is hardly necessary to do more than point out that what has been said about individuals applies also to firms or companies, or any other associations, such as local authorities, which receive and pay out money from time to time. In all cases, taking one business with another, and one week with another, there is a margin between the amounts paid in and the amounts drawn out; and this margin, added to the margin in the accounts of private individuals, leaves a very considerable sum of money at the disposal of the banks, which is not needed by their customers for immediate expenditure.

But when the account of any one customer—whether an individual or an association—becomes larger than is necessary to meet current expenditure until his next instalment of income is due, he has very little difficulty in finding someone who needs money immediately and is willing to pay for the loan of it. But it is seldom a private transaction; personal friends, though often in need of money, are not regarded by the public as sound investments. The surplus money which any individual or association may have is generally put into the great financial system in an impersonal way, often without any knowledge of who is going to use it or for what purpose it will be used.

The simplest way of putting surplus money into general use is for the customer to withdraw it from his current account at his bank and to open a 'deposit' account. Banks are usually prepared to take any quantity of money in this way, and to pay interest on it as long as it is left in their hands. As a rule, customers are not allowed to withdraw money from their deposit accounts without giving a week's or a month's notice; but this is not always insisted on when the amount is comparatively small. In some cases banks are prepared to pay interest not only on money set aside by a customer for 'deposit,' but on money in current accounts as well. In either case—whether money is on 'deposit' or on current account, and whether the bank is paying interest on it

MODERN FINANCE

or not—the bank has the use of it, and acts in turn just as the individual does. When the amount of money on hand is more than enough to meet the current requirements of customers, the bank looks round to find someone who needs money and is ready to pay for the use of it. The bank may not have to look very far; among its own customers it may find many who are in need of a loan for one purpose or another, and who can give satisfactory assurances that it will be paid back with interest. But if it is a local branch of a large bank, it may have more money than it can make use of in loans to its own reliable customers; and in such cases it will probably pass on the surplus to its parent bank, which in turn will be faced with the problem of what to do with it.

The following chapters will explain how the money accumulated in banks in the ways described gets turned into the channels through which it is used in payment for goods and services actually required. The starting-point of the whole financial machine is the surplus that is not needed for current expenditure; the bank is the institution where surpluses accumulate, and from which they are drawn off to meet urgent needs.

IO -

CHAPTER II

INVESTMENT

In the Bronze Age, or the Golden Age, the enterprising business man would have had very little difficulty in getting together all that he needed to start his business. But civilization and law and order have created a totally different situation. The man who needs land on which to put up his works, stone with which to build them. machinery or tools and the raw materials to be worked up, finds that he cannot get any of these things for the asking. Nor can he find a house in which to live while he is preparing his works, coal and food and clothes to keep him going. As modern industry involves a large number of workpeople, he has also to find houses and food for them. or the equivalent of their needs in money-wages. these things are in the hands of other people, and he cannot take a single step towards increasing production unless he can find some way of persuading the possessors to let him use the materials he needs.

On the other side of the picture, we have seen how money is collected together in large sums in banks, out of the surpluses from the incomes of individuals and associations. These surpluses are not needed at the moment by the persons to whom they belong; and the problem for the man who wants to start a business enterprise of any sort is to persuade the owners of the money at the banks to let him use the money to buy the land, machinery, and materials that he needs before he can start the enterprise, and to pay the wages of his workers before the enterprise shows a return.

If the business is on a very small scale, he may be able to arrange a loan from a bank; that is, the bank may lend a certain sum, out of the general working surplus

that it has-money which belongs to a large number of persons, but which the bank finds from experience they will not draw out before further amounts are deposited. The bank will require 'security' of some sort ; for example, if the money is to buy land and premises, the bank may require a mortgage i on them until the loan is paid off; or the loan may be made on some other less tangible security, such as the personal guarantee of some person whose financial position the bank knows to be strong. The loan will have to be paid off in a certain number of years, and interest will be payable each year on any part of the loan that is not yet paid off. In the whole of this operation the actual owners of the money which the bank lends are not concerned. They know nothing of it, and they get no part of the interest which the bank gains, except in so far as they have a ' deposit ' When, however, the enterprise which it is account. proposed to start is on a fairly large scale, the promoters appeal directly to the money-owning public for financial support. The ways in which they make their appeal are many; the motive to which they make their appeal is one-the desire of those who own money to get more money. The promoters of an industrial venture offer to pay interest on the amount lent. They publish in the press, and circulate through stockbrokers and other channels, an announcement called a ' prospectus,' designed to convince the public that the projected concern is a sound business proposition, and usually offering the investor a choice of several different ways in which he can become an interested party in the success of the concern. An example will make the further explanation clearer.

During the third week of June 1920 Lever Brothers Ltd. advertised throughout the press an 'Issue of 8% Cumulative Preference Shares of £1 each at par'; the following is a much summarized version of the advertisement, showing the essential features :—

¹ A mortgage on property gives the holder of the mortgage the right to sell the property in the event of a loan not being repaid by the agreed date.

INVESTMENT

LEVER BROTHERS LTD.

CAPITAL ISSUED AND FULLY PAID

In 7% Cumulative	es of £1
each	£21,750,000
In 8% Cumulative	
of fI eac	· · 3,567,945
In 20% Cumulative	rdina ry
Shares of	1,500,000
In 20% Cumulative	
Shares of	162,000
In 5% Cumulative	nary
Shares of	718,666
In Ordinary Sl	. 2,280,000
	£29,978,611

Issue of 8% Cumulative A Preference Shares of £1 each at par.

[Here follow the names of the directors, the company's bankers, brokers, solicitors, auditors, etc.]

PROSPECTUS

The present Company of Lever Brothers Ltd. was formed in 1894 to acquire the business of Soap and Glycerine Manufacturers carried on at Port Sunlight. . . . In addition to its business at Port Sunlight, the Company holds interests in over 100 Associated Companies with numerous branches or selling agencies throughout the world. . .

By an agreement dated Jan. 22, 1920, the Company has agreed to purchase the Ordinary Shares in the Niger Co. Ltd. . . . In the opinion of the Directors the above purchase will greatly strengthen the position of this Company, by safeguarding the supplies of West African Oils.

The present issue is made in order to provide a portion of the cash payable in respect of the purchase of the shares in the Niger Co. Ltd., and also to provide further capital for the requirements of the Company's own business.

[Figures, certified by the auditors, are also given, showing that for some years past the company has been so successful that, after paying the dividends on all its preference shares, the company has paid dividends of $17\frac{1}{2}$ % on its ordinary shares.]

This example of an issue of further shares in an already established concern has been chosen because of the wide range the prospectus covers. An issue for a new concern would have a description of the nature of the business, and assurances from auditors, surveyors, etc., that it was likely to be successful. In these days very few issues are for completely new concerns. In most cases an already established firm seeks to develop; or a business formerly owned by a small number of partners blossoms forth into a limited company in order to make an extension for which money is required; and in either case the public is asked to provide the money. The prospectus quoted shows various classes of shares which may require explanation.

Preference shares entitle the owner to receive a dividend at a fixed rate, before the owners of ordinary shares get any dividend at all; similarly, the owners of preferred ordinary rank for dividend before the owners of ordinary 'ordinary' get anything. The exact descriptionspreference, preference A, etc.-are individual to each company; in other companies they might be called 'preference, second preference,' etc., which are more self-explanatory terms. But the word 'cumulative' is general, and implies that if in one year the profits are not enough to pay the fixed rate, the amount not paid is carried forward, gradually mounting year by year, until the profits are enough to pay the whole; and all this while the owners of the following classes of shares get nothing. If, for example (an unthinkable possibility !) Lever Brothers did not make enough profit in one year to pay more than 3% on the 7% cumulative preference shares, which rank first on their list, in that year the

owners of the other shares would get nothing at all. The following year these 7% cumulative preference shares would be entitled to receive not only 7%, but also the 4%by which the dividend had fallen short the previous year —a total of 11%. And, as all the following classes of shares (except the ordinary ordinary) are also cumulative, the owners of each class would be entitled to receive all back pay, as it were, before the next class got anything.

Preference shares are generally, however, not cumulative: they are entitled to a fixed dividend out of profits before the ordinary shares get any dividend; but if the profits do not allow payment of the fixed 5% or 7% in one year, the amount short paid is not carried forward as a first charge on the following year's profits.

There is another form of issue which is not adopted by Lever Brothers—debenture stock. This differs from preference or ordinary shares in not depending on profits, but ranking for payment of a fixed rate of interest as part of the running expenses of the company before any question of profits is considered. Further, it is usually 'secured' by a mortgage (held in the names of specially appointed trustees) on some specific property of the company, such as land or buildings, and in the event of the company's failure, the trustees can sell the property and thus secure for the debenture-holders the return of the money invested.

We must now briefly summarize the advantages and disadvantages of each type of investment. The reason why so many types have been invented must be sought in the psychology of the investors. Some investors want some things, others have other leanings; and so the ingenuity of the company promoter has produced varying types of investment to attract the public. Further, any later issues, say of preference shares, must obviously rank for dividend after the shares of the first issue, or the holders of the original preference shares would strongly object. Thus within each broad type new species are created.

Debentures have the great advantage of security: the money lent is secure (it is usually repayable after a fixed period); the interest is secure, but for these reasons the rate of interest is low. The cautious investor prefers a low rate with security to a higher rate without security.

Preference.—This class, in its various grades, comes half-way between debentures and ordinary, both in security and in rate of interest. The rate of interest which is a secured rate as long as the company makes enough profit—is higher than the rate on debentures, but never reaches the dizzy heights that can be attained by the rate on ordinary. There is, however, one kind of preference which is becoming more frequently used, called 'participating preference.' The dividend on this is at a fixed rate before the ordinary shares get any dividend at all, but after the ordinary shares have got a certain rate (which varies according to the company's articles of association), a further dividend on the 'participating preference' is paid out of any balance of profits still left.

Ordinary.—This class has the great advantage of participating to the full in any balance of profits left after the fixed claims of the debentures and preference have been met. On the other hand, if there is not enough profit to do more than meet those prior claims, the holders of ordinary shares get nothing. In other words, ordinary shares are of a speculative nature; and in this lies their appeal to a certain type of investor.

From the point of view of the company promoter, the type of stock or shares issued, and the rate of interest on each class, etc., are determined by his needs and the advice of his bankers as to the condition of the investor's pocket and mind. In a time (such as the present) when the public is looking for high returns rather than security, and when, in fact, profits are so high and regular that the question of security hardly occurs to the public, there will be few successful issues of debentures, and a correspondingly greater proportion of issues of preference shares at comparatively high rates of interest, or of ordinary shares. At another period the public demand for security might allow the issue of debentures (or preference) at a low rate of interest, which is naturally more desired by the promoters of a concern, who usually hold ordinary shares, and therefore are entitled to the balance of profits after paying the fixed charges on such part of the capital moneys as is not theirs.

The amount of the issues made by each company to investors in preference or ordinary shares is described as the 'issued capital' of the company. The 'authorized capital' is the amount which, under the terms of the company's constitution or 'memorandum of association,' the company is legally entitled to issue. As a rule, companies get legal powers to issue far more than they actually issue, so that in the event of their requiring more capital at any time, they can proceed to make a further issue without going through the lengthy process of obtaining the consent of their shareholders to an alteration in their constitution. Thus Lever Brothers, whose issued capital in June 1920 was under $f_{30,000,000}$, have an authorized capital of no less than $f_{130,000,000}$.

In the first chapter we assumed, for the sake of clearness, that the banks in their operations depended entirely on their customers' money. It is necessary to point out that, like industrial concerns, banks require some capital before they can begin business at all. The issues of capital are made in exactly the same way as issues for industrial concerns.

The money lent by investors has been called the capital of the company, and this is the only name for it. But it is necessary to distinguish between 'capital' in this sense and capital in the sense of the material thingsbuildings, land, machinery, etc.—without which no production can take place. Most of the discussion as to whether capital is or is not essential to any system of society involves a confusion between these two uses of the term.

CHAPTER III

THE FUNCTION OF BANKS IN STARTING INDUSTRIES

THE main function of banks and financial houses. so far as the starting of large new ventures is concerned. is therefore not to provide the capital, but to act as the machine through which other people's money is stored up and transferred to the new venture. But it is usual for the bank which acts as agent for the new venture (either by itself or in conjunction with other banks or financial houses) to guarantee that the money needed will be forthcoming; that is to say, if the advertisements for £500,000 of new money required fail to attract the full amount from the general public, the bank undertakes to provide the balance from its own resources. The bank does not, of course, undertake this liability without charge. The amount of the charge varies in each case according to the nature of the investment offered; for example, an issue to provide additional capital for a concern which is already securely established is more likely to be successful than one to provide capital for a completely new venture. This is due not only to the fact that present shareholders in the successful concern are likely to subscribe largely to the additional issue, and that the investing public already knows the name and standing of the shares, but also to a psychological tendency among investors which is rapidly becoming more marked. A new concern, generally speaking, does not give returns, or at any rate high returns, during the first year or two of its existence. Its prospects for five years ahead may be excellent; but, especially since the war, the tendency to look for quick returns has been very marked, and has resulted in the neglect (comparatively speaking) of issues to finance completely new concerns. The importance of this tendency, and the

effect it has on the concentration of capital in large ventures, and the consequent restriction of new enterprise, are dealt with in chapter V. For the present the point to be noted is that an issue to provide additional capital is more likely to attract the public than an issue to finance a new venture; and therefore the 'underwriters' of the issue—the bank or banks which guarantee to provide the balance, if the amount subscribed by the public falls short of the total required—make a smaller charge to the promoters for the risk they 'underwrite.'

Other factors which govern the charge made by the underwriting banks are the amount of capital seeking investment—the guide to which is the response which the public has made to other issues of the same type and the financial position of the bank itself—whether, owing to a temporary surplus, it would not mind having to put some of the surplus into the issue, or, owing to a temporary shortage, it would find it distinctly uncomfortable to be obliged to make up any shortcomings on the part of the investing public. The current rate of interest, in case it had to borrow the money, and the amount of the risks already underwritten for other issues, are also important in this connection.

The general principle governing the charge for underwriting an issue is that the bank (so far as it restricts its operations to finance, which is the general rule observed by British banks) does not want to run trading risks; it does not want to tie up its resources in industrial concerns, however promising they may be; and it therefore reduces its charges for underwriting issues in accordance with the degree of probability that the public will find the money required, and that the bank itself will not have to tie up its money in the concern. From this it is clear that, at a time when the amount of money waiting for investment is small, banks will not be willing to underwrite new issues; and again, unless the concern for which the capital is required is sound, and the terms offered are likely to appeal to the public, the bank will not underwrite the issue. Hence it is clear that the banks and financial houses as a whole exercise a large degree of control over

new issues; and the traditional conservatism of banks again tends to encourage the extension of an existing concern rather than the starting of a new venture. The whole system has an important social influence, in its tendency to the concentration of capital; and during the war the cautiousness of British banks was contrasted with the comparative venturesomeness of the German financial system, and the need in this country for some State or other support of new ventures was often discussed in the press.

As for the actual charges made for underwriting new issues, these vary from something purely nominal—a fraction of 1%—to substantial amounts of 5% or 10%. There are some notorious cases in which the underwriters of foreign loans have received far higher percentages for collecting from the British public money required for the extravagances of some potentate or government—money that was never seen again. But the percentage charged for underwriting sound industrial issues is comparatively small.

In addition to the charge for underwriting, the bank that handles the issue makes a further charge for commission to cover the actual clerical and management costs involved, and also to cover the use of the bank's name in connexion with the issue. For the fact that banks exercise a kind of censorship over issues means that the handling of an issue by a certain bank is a guarantee that the bank has satisfied itself that the issue is genuine; and therefore, in handling an issue, the bank extends the mantle of its goodwill over the new concern, and makes a corresponding charge. The charges for commission and for underwriting new issues are an important part of the income of banks, and are quite distinct from any income from interest charged on money actually lent.

In some cases the company which is appealing to the public feels so assured of the response that it does not arrange for the underwriting of the issue. In the case of the issue of 8% cumulative preference shares by Lever Brothers in June 1920, the prospectus stated that 'No part of this issue has been underwritten,' although the

21

issue was proposed to amount to $f_{2,000,000}$. This may mean either that Lever Brothers were fairly sure of the public response, in view of the standing of the firm and the high rate of interest offered, or that Lever Brothers did not feel that it was a matter of supreme importance to them to get the whole $f_{2,000,000}$. If the amount subscribed by the public were only $f_{1,500,000}$, Lever Brothers might either not undertake a certain part of the proposed extension, or they might immediately issue a further appeal of a slightly different type—either of debentures, to attract the cautious investors, or of ordinary shares, to attract the more speculative investors, or of some special type, such as short-term bonds (say for five years) bearing an even higher rate of interest than 8%.

Why is it ever important to a company to get a certain sum subscribed? Why is a company ready to pay a bank a substantial charge for underwriting an issue, i.e. for the promise to make up any shortcoming on the part of the public? The reason is that by the time an issue is launched to the public, the company has naturally made all the arrangements for starting on some new venture. It could not, in fact, wait until it had seen the public response before making the contracts which the new venture involves. In the case quoted above of the Lever Brothers issue, the issue was made in June, 'in order to provide a portion of the cash payable in respect of the purchase of the shares in the Niger Co. Ltd.,' which Lever Brothers had undertaken to pay ' by an agreement dated January 22, 1920.' It is clear that if the public failed to provide Lever Brothers with the necessary cash, a serious situation would arise, in which Lever Brothers might be unable to carry out the agreement. Of course, in that particular case. Lever Brothers felt sure that such a situation would not arise; but it is easy to see that, generally speaking, companies cannot afford to run the risk of being unable to carry out their agreements. This is especially the case when new companies are being floated, or when a company (or a local authority) has to find the money to pay off an existing loan, or debentures which fall due for repayment at a fixed date.

The company or authority that is making the issue is glad therefore to insure itself against any such risk; to pay to the bank a fixed sum, in return for which the bank undertakes to ' take up ' any portion of the issue for which the public does not subscribe. In this way banks are constantly becoming temporary investors in companies. But, as already pointed out, English banks are not anxious to tie up their money in industrial or other concerns. The result is that the holding of shares left on their hands in this way is as temporary as possible; they make every effort to pass on the shares to the public whenever an opportunity occurs of doing so without loss. There are notorious cases in which these opportunities have been created in order to get rid of worthless foreign loans; the use of the financial columns of the press to 'boost ' certain shares; a little buying of these shares on the Stock Exchange (by those who want to get rid of them) in order to create a fictitious demand and thus drive up the price; followed by quick sale of the shares at the top price-such are the methods used by the financial concerns in order to get rid, without loss, of issues left on their hands. The more reputable method is to wait until the shares are actually in demand, owing to the success of the company; but as soon as an opportunity occurs, whether the opportunity was artificially created or not, the underwriters get rid of the issues left on their hands : for their business is to turn over money quickly rather than to become shareholders in industrial concerns.

¹ This statement, of course, does not apply to the well-known banks or financial houses. It should also be noted that most of the underwriting of new issues is undertaken, not by banks in the restricted sense, but by specialized financial houses. The reader is reminded that limitations of space have made it impossible to distinguish between the various specialized concerns, and that the term ' bank ' is used to cover all types of financial institutions.

22

CHAPTER IV

THE FUNCTION OF BANKS IN RUNNING INDUSTRIES

THE first chapter described the accumulation of money in banks, and the second and third chapters described the various ways in which the surplus not needed for current expenditure found other uses in starting new enterprises. At the same time, it was pointed out that the 'money' used in these transactions was important because necessaries were owned by various persons, and money is a general title to the use of these necessaries, just as a railway ticket is a particular title to the use of a railway for a certain journey. The present chapter shows the financial machinery at work, not in making provision for new ventures, but in effecting the ordinary transactions of everyday life—the exchange of goods and services through which we live.

The best known and apparently the simplest form of financial transaction is payment for goods by means of a cheque. Messrs. Smith & Co. get 1,000 tons of coal from Messrs. Jones & Co., and in due course pay a cheque for the £2,000, or any other figure which the coal controller thinks at the moment a suitable price. If both Smith and Jones bank with the same branch of Lloyds Bank Ltd., it is clear that the transaction has been extraordinarily simple. When Jones has paid Smith's cheque into his own account, some obscure clerk takes his penquickly, and notes down that Smith's account is minus £2,000, while Jones's is plus £2,000. But whether or not the same bank keeps both their accounts, the transaction is merely a matter of book-keepers' entries. The series of entries may be lengthy; Smith's cheque, drawn on his account at the Liverpool branch of Lloyds Bank. may be paid by Jones into his account with some London

branch of Barclay's Bank, and there may be a long series of entries before the affair is closed. Barclay's clerk will add $f_{2,000}$ to Jones's account; and he will take $f_{2,000}$ from Lloyds Bank account. The 'clearing house' system by which these accounts between banks are settled day by day is described in later chapters; but sooner or later the $f_{2,000}$, which Barclay's clerk added to Jones's account, is taken off Smith's account by a clerk in the Liverpool branch of Lloyds Bank.

The essence of the cheque system is that no money, in the sense of coinage, is involved at any stage. But the example given presupposes that Smith had [2,000 in his bank account-that he had a surplus of this amount over his current needs in other directions. Where, however, a trader has not enough surplus to meet his current needs for trading transactions, the function of the banks is more complicated. Smith, unless he already has some permanent arrangement with his bank, will go round and see the manager. He will explain that the £2,000 which he needs to-day will, in the normal course of his business, be coming in to his account at the beginning of next month ; either as the proceeds of reselling, at a profit, the coal he has bought from Jones, or from some other transaction which has already taken place, but for which he has not vet received payment. If Smith is a new customer, the manager of the bank may ask for proof that the transactions are genuine; he may even require security of some kind; but provided that the manager can be convinced that Smith's business is sound, he will be willing to help Smith by arranging a temporary loan of the £2,000 needed.

The simplest arrangement would be for the bank to allow Smith to overdraw his account, which means that the bank lends him the money, either with or without any fixed date for repayment, but with the assurance that Smith will pay in to his account his receipts from day to day until the overdraft is wiped out. The bank will, of course, charge interest on the amount of the overdraft each day, and it may require the overdraft to be closed by a fixed date; but the whole procedure is simple, and the transaction is closed when Smith's receipts come in.

It is clear, of course, that the bank could only make such an arrangement if its own accounts showed a surplus above its own needs which it could apply to Smith's The bank's surplus at any moment is made up of needs. (I) its capital. (2) its loans from other sources, such as the Bank of England, or the 'deposit accounts' of its customers. (3) the combined surpluses of its customers' current accounts. If we can imagine a bank in its very early stages, it might be quite clear to the manager that he would have a surplus (from all or any of these sources) during the whole of the month or other period before Smith paid back the loan. He could then allow the overdraft without any further complication. The same principle would hold good, even after a bank had been running for years, if the overdraft required was small, and for a few days only, and the manager felt sure that his surplus during those few days was secure.

But when a bank has been in existence for years, and its current surplus (owing to previous loans to Jones and Brown and Robinson) is becoming narrow, the manager may not feel at all sure that the loan of £2,000 to Smith may not involve him in difficulties. If Smith needs the $f_{2,000}$ to pay for coal now; if the coal is to bunker a vessel taking goods to Australia and bringing back a return cargo; then the payments which Smith will receive for freight, though quite enough to pay for the coal and to leave Smith a handsome profit, may be deferred for some months. The transaction may be perfectly sound ; but Smith may not be able to close it in less than six months, and the manager (taking into account his similar transactions with other people) may not feel sure that the bank's surplus will cover all other liabilities during that period. If he is quite sure that it will not cover the loan to Smith in addition to the other liabilities, he may, of course, refuse the business altogether; and the result may be that Iones will not let Smith have the coal. Smith's vessel cannot sail, and that particular trading operation cannot take place. But it is only in a time of serious

financial crisis that a bank would absolutely refuse to give credit to a regular customer for a genuine transaction. Normally, the bank would grant the loan; but if its surplus was narrow, it would make special arrangements to safeguard itself. In a simple overdraft Smith has a liability to pay the bank £2,000, and he may verbally undertake to pay it off within six months. The bank can safeguard itself by getting a written undertaking which can be turned into cash if the bank's surplus happens to be in danger at any time during the six months. The undertaking may be Smith's 'promise to pay,' with or without a further guarantee by some business friend of Smith's whose financial position is above reproach. But the usual form of undertaking to settle trading transactions is the 'bill of exchange.'

A bill of exchange is, in effect, a cheque drawn by one trader on another. Take, again, the case of Jones, who has delivered to Smith $f_{2,000}$ worth of coal, but has not yet been paid for it. Just as the customer of a bank who has paid in to his account $f_{2,000}$ is entitled to draw a cheque or cheques up to that amount on his bank, so Jones, who has 'paid in ' or delivered to Smith $f_{2,000}$ worth of coal, is entitled to draw a cheque on Smith for that amount. The difference between a cheque on a bank and a cheque on a trader is that in the former case there is an extreme probability—for practical purposes certainty —that the cheque will be paid, while there may be any degree of uncertainty as to whether a cheque on a trader will be paid when presented.

The bill of exchange—the cheque on a trader—is similar in form to the cheque on a bank. Taking the coal transaction as an example, the bill of exchange may run:—

(Date . . .

To Smith, Liverpool

At sight

Six months after sight pay to me or my Order, Six months after date

Two thousand pounds for value received.

(Signed) X. Y. Jones.

When the bill of exchange is drawn 'at sight,' it means that Smith must pay it as soon as it is presented; this type of bill is used mainly for international purposes. In most transactions some time—three or six months is given to Smith before he has to pay the bill. If the bill is drawn 'six months after date,' he has to pay it six months from the date of the bill; if it is drawn 'six months after sight,' Smith has to pay it six months after it has been presented to him. In either case the financial usage is to allow a further period of grace of three days beyond the period stated on the bill.

Another point to note is that a bill of exchange is completed when the person on whom it is drawn has acknowledged his indebtedness, and 'accepted' the bill, thereby undertaking to pay it when it becomes due for payment. The procedure of 'acceptance' is for Smith to write his name, with the date, across the face of the bill when it is presented to him; Smith may also state where the bill will be paid when due, i.e. in most cases, at his bank; if the bill runs 'six months after *sight*,' the date of acceptance is the date from which the six months begins to run.

Having thus briefly described the usual form of the bill of exchange, we must now consider what its function is in the general financial system, and the way in which it is used. Its normal and legitimate function is to provide credit in commercial transactions. Take, again, the example of $f_{2,000}$ worth of coal supplied by Jones to Smith; and let us suppose that Jones, though trusting Smith, is himself short of cash. If he were not short of cash, he might give Smith six months' credit, i.e. simply arrange with Smith that the $f_{2,000}$ should be paid in six months' time. But being short of cash, Jones wants the money now; while Smith may be equally short of cash, and may not be able to raise $f_{2,000}$ from his bankers by the overdraft method referred to above.

The bill of exchange provides the solution of the difficulty. For the financial machine (either banks in the narrow sense, or bill-discounting institutions) is always ready to advance money on 'good' bills of exchange, i.e. bills of exchange drawn by one wellestablished firm on another for a genuine business transaction.

The normal procedure would be for Jones to draw a bill of exchange on Smith for, say, $f_{2,000}$, and take it to his bank, which, we will suppose, knows that Jones is trustworthy and that his business is good. As the bill would be made out ' pay to me or to my order,' Jones must endorse the bill, i.e. he must pass on his right to collect the $f_{2,000}$ (which Smith would admit) to the bank. He would therefore write on the back of the bill, ' Pay to the order of Lloyds Bank, Ltd.—X. Y. Jones,' and the bank will then be prepared to advance the money.

In the ordinary loans or overdrafts referred to above, the bank advances a certain sum, and charges interest on it until repaid, the interest being payable at the end of the transaction (or periodically, if the loan is outstanding for a long term). In the bill of exchange transaction, on the other hand, the interest on the £2,000 would be paid at the time the loan was made: the bank would in fact give Jones, not {2,000, but £2,000 less six months' interest. The bill would be. in the financial phraseology, 'discounted,' and the rate at which interest was deducted would be the 'discount rate.' If the rate of interest were 6% per annum, Jones would get £2,000 less approximately £60, or say (1,040 (ignoring the three days' grace, which would in practice be taken into account in calculating the interest).

Thus all parties are satisfied; Smith gets his coal, with six months' credit; Jones gets the cash he needs (subject to interest); the bank employs some of its available surplus money, with a reasonable prospect of getting back from Smith, when the bill falls due, not only the \pounds 1,940 actually advanced to Jones, but the whole \pounds 2,000, which covers its charge for interest.

We must now follow the bill of exchange through the

further adventures it may have before it is finally paid and cancelled. The bank's first act would be to send it to Smith (through its branch or agent, if Smith is in another town) for acceptance, in the way described above; and when that has been done, the bank may hold it for the whole period until it becomes due for payment, when the bill would be taken to Smith's office or bank (as directed by Smith in his acceptance) and presumably paid. This would be the normal course where the bill was comparatively small, and the bank or bill-discounting house had no urgent need of cash during the period of the bill.

But if the bill were for a large amount, and the billdiscounting house experienced a shortage of funds, the bill might be ' re-discounted,' i.e. handed over to another financial institution which would, in its turn, give $f_{2,000}$ less interest for the period which had still to run. Thus, in the example used above, Lloyds Bank, having discounted the six months' bill originally, and given Smith $f_{1,940}$ for it, might after three months re-discount the bill with Barclays Bank. Barclays would give (assuming the same discount rate) £1,970 for it, i.e. £2,000 less £30, or three months' interest at 6% per annum; and when, three months later, the bill fell due for payment, Barclays would collect the full £2,000 from Smith. Thus Lloyds Bank would get £30 interest for the three months during which its money was outstanding, and Barclays would get f_{30} for the second period of three months during which its money was out.

When a bill is re-discounted, it must of course be made payable to the new holder. Just as, in the first discounting, Jones passed on to Lloyds Bank his right to collect the bill from Smith, by endorsing the bill ' Pay to the order of Lloyds Bank,' so Lloyds Bank, if it rediscounts the bill with Barclays, makes a similar endorsement in favour of Barclays.

By a further endorsement, Barclays may pass on the right to collect the bill from Smith to a third bank or agent; and so a bill of exchange may pass through a number of hands, the person in whose favour the bill is last endorsed having the right to collect the £2,000 from Smith when due.¹

That is the bare outline of the ordinary bill of exchange transaction; it is not possible to develop the special features of the foreign bill of exchange, or of the 'accommodation' bill—one drawn not for ordinary business transactions but in order to create a document on which money can be raised. But these special features are not important; all such bills are handled in the general manner described above.

From the point of view of traders, the bill of exchange is important as a means of providing credit for transactions; from the point of view of the banker, it is important as a means of lending money at interest, with the certainty that he will be able to get another bank or discount house to take on the loan if his own bank needs the money. This system gives great fluidity to current financial surpluses. It means that one financial institution can give credit for transactions which it knows to be sound, without worrying too much about its own surplus; in the event of an emergency it can use other people's liabilities (for example, Smith's) in order to settle its own debts. Thus a surplus existing anywhere in the financial world can be drawn upon indirectly by any bank, and used for its customers' trading transactions.

The part which the banks play in industry—the connection between the financial and the industrial system has now been briefly sketched. In the first place banks are the machinery for accumulating surpluses; they are also in part the machinery for using these surpluses, either as agencies for collecting money for special purposes—the getting together of capital for a particular business—or directly as investors, by lending money for shorter or longer periods.

¹ Although we are not concerned with the legal details, it must be pointed out that if Smith fails to pay, and nothing can be got out of him by legal proceedings, the last holder of the bill may recover the $\pounds_{2,000}$ from the previous holder, and so backwards until finally Jones can be made to pay it; thus bills are in effect guaranteed by the endorsers, and therefore are more easily negotiable.

THE TENDENCY OF INDUSTRIES TO FINANCE THEMSELVES

It is common knowledge that industrial concerns show an increasingly rapid tendency to amalgamation and trustification. This is generally thought of in its bearing on prices and production; the Ministry of Reconstruction Committee on Trusts [Report published in April 1919; Cd. 9236] reported :—

'We find that there is at the present time in every important branch of industry in the United Kingdom an increasing tendency to the formation of Trade Associations and Combinations, having for their purpose the restriction of competition and the control of prices.'

But the tendency to concentration among industrial concerns has also important financial effects. In chapter III we pointed out that banks were more willing to arrange for the issue of fresh capital for an old concern than to do the same for a new venture, the shares of which might not be taken up by the public. Similarly, banks will be more willing to make temporary loans-by overdrafts or through bills of exchange—in the case of large, well-established firms, whose financial position is above reproach. In other words, the financial system is throughout conservative, and, relatively speaking, favours the large firm at the expense of the smaller. This favouritism is one of the many factors which have tended to encourage the present concentration of capital, which in turn reacts on the financial system in two important ways.

In the development of large industrial concerns the first step to be noticed is the accumulation of 'reserve.' The system of investment which we have described in chapter II depends on the attraction of money towards a particular concern, thus giving the managers of the concern the 'right to use' the various factors of production. Money is attracted by the offer of interest or dividends; and in theory the holders of the ordinary shares divide among themselves the surplus profits, after payment of the fixed interest and dividends on the debentures or preference shares. It is on this understanding that owners of money invest in ordinary shares.

When the dividend on the ordinary shares is paid, the profits of the company are in this way taken from the company's banking account and distributed to the accounts of its shareholders. This money is thus made available for investment in other concerns, and the profits from one industry flow freely into the financing of other industries.

In recent years, however, there has been an increasing tendency not to distribute yearly the total balance of profits. Some of the profits are distributed, but large amounts are withheld in the company's accounts as a 'reserve.' For some years The Economist has made from time to time an analysis of the reports of important industrial companies published during the preceding twelve months. This analysis shows, among other things. how much of the aggregate profits made by these companies is distributed to the shareholders as dividends and how much is kept by the companies as 'reserves.' The tendency to increase the percentage of profits kept as reserves is shown in the following table, compiled from The Economist of various dates. The Economist in recent years has added a warning that the amount reported as put to reserves is really an understatement, as 'many companies transfer large amounts to special and internal reserves before striking profits.' The table only gives the distribution of avowed profits after these secret reserves have been deducted from the real profits. As the development of these secret reserves is of comparatively recent origin, the tendency to put profits to reserves is even more marked than appears from the table.

Year.	No. of companies.	Ag gregate profits.	Paid out in dividends.		Kept as reserves,		
			Amount.	Percent- age of profits,	Amount.	Percent- age of profits,	
1907.	250	£14,182,000	£11,227,000	79	£2,955,000	21	
1912.	867	260,207,000	£45,267,000	74.7	£14,939.000	25.3	
1914.	909	169,684,000			£18,292,000	26.3	
1916.	932	£86,587,000	£56,148,000	65	£30,439,000	35	
1917.	1,200	£90,760,000	\$57,031,000	63	£33,729,000	37	
1919. Last	1,417	104,667,000	£69,933,000	66.5	£34,734,000	33.2	
3mths. of 1919		£22,660,000	£14,071,000	62	£8,589,000	38	

FINANCIAL TENDENCY OF INDUSTRIES 33

In some industries the average percentage of profits kept as reserves is far higher than the average over all industries. Thus in 1915 the oil companies put 64% of their confessed profits to reserves; in the same year the iron and steel group put 61.4% of confessed profits to reserves.

The importance of this to the financial system is the fact that the profits set aside as reserves are not free for investment in other concerns. The use actually made of the reserve differs very much in different concerns; but. broadly speaking, the first tendency-to invest the money in 'safe' investments, either Government issues or debenture stocks of absolutely reliable companies-has given place to the tendency to use the reserves for the development of the company itself. In other words, the managers of concerns are tending to impose on the shareholders the compulsory reinvestment of profits in the concern that made the profits. It is evident that this process tends to withdraw from circulation through the banks large quantities of money that would otherwise have passed through their hands, both in the stage of distribution to shareholders and in the stage of reinvestment for other industrial developments.

This is not, however, the only way in which the tendency to amass reserves affects the financial machine. When a particular concern has expanded in its own sphere up to a certain point, it tends to use its reserves for buying up other concerns, usually in allied or subsidiary spheres of

industry. A shipping company, after, perhaps, considerable extension in its own sphere of shipping, will use its rapidly accumulating reserves to buy up mines, engineering works, or possibly shipyards. Instead of paying separate laundry concerns for doing its washing. it will buy up or set up for itself a special laundry to do its work. A railway company, instead of buying its engines and carriages from other concerns, will buy up or set up its own constructional shops. The effect of this on the financial machine is to eliminate the services of the banks in effecting the ordinary exchanges of trade. the record of the exchanges being kept in the books of the company instead of in the books of the bank. Instead of Furness, Withy & Co. paying the mining firm of Smith £2,000 for a consignment of coal, and the money being transferred by cheque from one account to the other, a transfer is made in the books of Furness, Withy & Co. from its ship accounts to its mining accounts. Money, even the abstract cheque money used for large transactions such as this, is not used in the process; the financial machine is not required in a transaction in which 'the right to use' is transferred from a company to itself. The transaction may be compared to the transfer of a lettuce from Mr. Furness's garden to Mr. Furness's kitchen: if Mr. Furness is very keen on accounts, he may credit his garden with some fictitious 'value' for the lettuce-say the amount which it would have cost him to buy a similar lettuce—and he may debit his housekeeping account with that amount. But it is clearly an unnecessary process; and the transfer of coal referred to above is of exactly the same nature as the transfer of the lettuce.

In these ways we can see that the rapid extension of concerns which is now taking place is tending, over gradually increasing spheres of trade, to eliminate the financial machinery which assisted trade to develop. In the first place, the retention of reserves in large concerns tends to eliminate the machinery of investment, which depends on the attraction of unattached money; in the second place, the consequent extension of the trading activities of large

concerns tends to eliminate the financial machinery of exchange. What would happen to the financial machine if the present tendency to amalgamation and extension were carried to its logical extreme ? In a sense, speculation on this point is idle ; such a situation could only arise through an impossible degree of amalgamation among industries, or through the complete absorption by the State of all individual ' rights to use.' But the realization of what would happen in such a case brings out vividly the real meaning of 'money' and the purpose of the whole financial machine. As we indicated in earlier chapters, finance is necessary for the complicated transfers of 'rights to use ' from one individual to another. If all 'rights to use ' were concentrated, either in one great combine or in the State, finance as we know it to-day would have no function. The machinery of investment, the attraction of money or rights to use capital (the material things needed for production), would have no place. The great combine or State, controlling the rights, would act in the same way as the great firm now does. Some of the production of one year would be distributed for consumption, just as the firm distributes dividends for current needs; the rest of the production would be set aside as 'capital' for future production, just as the great firm now sets aside its 'reserves.' Similarly, the transfers of goods that take place for the satisfaction of our daily needs would be recorded in various 'accounts' of the great combine or State, just as the great firm now records transfers from one of its departments to another. The financial machinery involved in exchange at the present day would be completely eliminated, in the same way as it is partially eliminated in the transactions of a great firm to-day.

However, even before the tendency that we have noticed is pushed to its logical extreme, certain effects on the financial machinery will be felt. The elimination of the banks in a large part of the operations of trade will have shown itself in two ways. As the amount of profits available for reinvestment in other concerns is diminished by the growth of the amount of profits reserved for use

in particular concerns, so the demand for capital to start new enterprises will be more difficult to meet through the ordinary channels of appeals to the investing public. For a time the banks may try to overcome this difficulty by the creation of credit money ' on an increasingly large scale; but this will have the effect of putting up prices. since the fundamental fact-the ownership of many of the factors of production by companies which desire them for their own use-is not altered, and the creation of credit money merely increases the effective demand for the rest of the factors of production. Thus the value of money measured in terms of goods falls; or, to put it another way, twice as much money is needed to start a new enterprise. When all these tendencies become effective, the rate of interest which the holders of 'free' money demand for loans will be higher; the financial machine, working on a smaller volume of trade (it may be nominally larger, owing to the depreciation of the pound), will be a heavier burden to support; the starting of new industrial concerns will be more difficult : and the extension of the existing giant firms will go ahead more rapidly. It is difficult to say how far the results of this process are responsible for the present financial situation. But it is possible that with the removal of war conditions the situation would have improved, had it not been for the tendencies to which we have referred in this chapter. Their importance in the years immediately ahead of us may be even greater than in the past.

¹ The full meaning of credit money will appear in later chapters; for the purpose of this chapter it may be taken as money lent by the banks which exceeds the amount of money (capital plus customers' money) which they actually hold.

36

CHAPTER VI

INTERNATIONAL FINANCE

In the preceding chapters we have spoken of 'money' without attempting any definition of the term. But it is not possible to deal with the international financial system without touching on 'currency,' and explaining the relations between (say) the English pound and the United States dollar. This involves a careful analysis of the meaning of 'money,' an analysis which the preceding chapters will have helped to simplify.

In the first place, whatever money may be, its uses are fairly clear; it is what is given to the present owners of things that exist in order to persuade them to pass on the ownership to other people or to allow other people to use them. The purchasing power of money is its essential characteristic. This purchasing power is possessed by all the well-known forms of money: by coins, notes, cheques, bills of exchange, postal orders, etc. But it is also possessed by many other things which clearly cannot be called 'money.' A bottle of beer on a hot and dusty road, in a spot far removed from licensed premises, may be the kind of persuasion that no owner of a spare cigar could resist. And, generally speaking, any thing can be used in exchange, or in part exchange, for any other thing. The very act of purchasing an article with money is, from the point of view of the seller, an act of exchange: he exchanges the article for a certain sum of 'money.' The reason why he does it is because he, or someone else to whom he passes on the money, wants to use it for another act of 'purchase.' by which money is exchanged for another article. In other words, money in any form is only a medium of exchange. This almost too obvious statement is necessary in order to bring out a further -

point. The reason why money in any form is accepted as a medium of exchange is simply because it is accepted; it is because the seller of an article knows that he can use the money he gets from the sale in buying other things from other people. In certain circumstances the seller does not know that he can use the money in buying other things. and then he refuses it. A tradesman may be offered a cheque, and unless the buyer has already established confidence, the tradesman will refuse it. In exactly the same way a bank-note may be refused because of the danger (however small) that it may not be genuine, or because (as in many European countries to-day) the inhabitants may have no confidence in the bank or Government that issues it. It is also important, from the point of view of giving money its right place, to realize that even gold coin may be refused. The peasant in some outlying Russian province is said now to refuse gold coin in exchange for his produce, because he knows that he cannot exchange it for the seeds or implements that he needs. He may know that when anyone comes to his village with seeds or implements, that person will refuse to take gold in payment, and will ask for corn or eggs instead. The usefulness of gold, as of any form of money, ultimately depends on people's willingness to accept it as a medium of exchange.

The reasons why a medium of exchange is necessary can be elaborated at great length; but they can be summed up in one word—convenience. From the shell to the sovereign and the note, the cheque and the bill of exchange, the progress of money has always been measured in terms of convenience. Legal sanction may be given to one form of money rather than another: in England silver is legal tender up to f_2 , and bank-notes (and Bradburys) and gold are legal tender up to any amount—in fact they are the only legal tender. But no one, in ordinary business life, ever dreams of using legal-tender money in payment of his debts, except in small transactions in which legal-tender money is more convenient.

The complications of international finance largely turn on the fact that in different parts of the world custom and convenience have set up different 'currencies,' different units of measuring value. The medium of exchange in every modern country is money; but the *denominations* of money vary. There is the pound in this country, the franc in France, the dollar in America, and a host of others.

In ordinary transactions the value of the pound (whether coin or notes or cheques) means its purchasing power at that particular time and place—how much of other things it will buy. In order to get a comparative basis for valuing the pound from time to time, a number of staple commodities are selected, and the 'value' of the pound is determined on the basis of how much a fixed quantity of each selected article, sold wholesale, will cost. Hence we get 'index numbers,' which show the change from time to time in the cost of all the selected items. If the items in 1920 cost more than they did in 1914, the 'index number' rises, and, to express the same thing in terms of money, the value of the pound falls. A similar calculation, made on the basis of retail prices, shows the 'cost of living' at June I, 1920, at 150% higher than the July 1914 level; and hence we can deduce that the value of the pound is now 8s. as compared with 20s. in 1914; that is to say, what could be bought in 1914 for 8s. now costs a pound.

In exactly the same way, instead of buying material objects in this country, we may use the pound to buy French money, or American money, i.e. money in any form which will be accepted by people in France or America in payment for things. The fact that when we buy American money we are in effect preparing to buy things in America, or to pay for things we have already bought there, must never be lost sight of. A pound has a different value from time to time for this purpose—for buying foreign money. This value is called the exchange value of the pound, to distinguish it from the purchasing value of the pound in terms of goods.

The fluctuations in the rates of exchange are, in normal times, dependent on fairly simple causes. As we said just above, when an English trader buys American money, he does so because he wants to buy things in America, or to pay for things he has already bought there. He has to pay (say) \$10,000 in New York for some films that he has imported from there. He (or his bank acting for him) sets out to find someone in England who has \$10,000 in American money, and who is prepared to sell or 'exchange' it for English money.

Who is likely to have American money? There will. no doubt, always be a small quantity of American notes, brought to England by travellers and others; but the quantity is negligible. The persons who will have at any time large enough quantities of 'American money' are the English traders who have exported goods to America. It is true that they do not have this money in American notes, nor do they have it in currency at all; what they have got is a credit in America: that is. someone in America owes them money, and if that someone in America is a bank, they can draw a cheque on the American bank, and that cheque is the equivalent of 'American money '--- it is payable in America in dollars. Usually, of course, the someone in America who owes the money is the trader who imported the goods from England; and in that case the English trader who exported the goods from England would draw a ' bill of exchange ' instead of a cheque; but this bill of exchange is also ' American money '-it is payable in America in dollars. In the jargon of the foreign exchange market, any person in England who is owed money by a person in America is said to have an 'American credit.'

When, therefore, an English trader with a debt in America wants American money with which to pay this debt, he looks for someone in England who has American money in the shape of a credit in America as defined in the last paragraph, and offers to buy this credit, that is, to exchange English pounds here for the dollars payable in America which the credit represents. The rate at which such an exchange is made is expressed in the financial columns of the papers in the number of dollars which *f* can be exchanged for, e.g. ' exchange rate on New York, \$4.87.'

At any time there will be in England a number of persons

with *debts* in America looking for a number of persons with *credits* in America. This process is, in fact, carried out usually by the banks or exchange brokers who act as intermediaries between the traders; and the fact that these banks and brokers have a very elaborate organization results in there being practically one market in which all exchange transactions are carried out. And the rate of exchange in England is governed by the aggregate value of the *debts* in America as compared with the aggregate value of the *credits* in America which are in the market at the time: that is to say, the price at which American dollars can be bought in London depends on the relation between the demand and the supply, in just the same way as the prices of goods depend on demand and supply.

The aggregate values of the credits and debts with any other country will mainly depend on the volume of trade passing from each country to the other; hence it is usual to say that the rates of exchange depend on the trade, or on any balance of trade, between the two countries. But it is clear from the foregoing that this is only true if the word 'trade ' is used in its widest sense. It is not enough to compare the imports of goods from America with the exports of goods to America; there are always many 'invisible' imports and exports, that is, services in respect of which debts and credits exist, but which are not included in the Board of Trade statistics of imports and exports, which relate only to 'visible' material goods. Thus, for example, a ship, owned in England, may carry goods from an American port to any other part of the world, and the American traders may owe the British owner a large sum for freight. This sum does not appear in any statistics of imports and exports ; but nevertheless it gives the British ship-owner a credit in America, and this credit finds its way to the exchange market in just the same way as a credit for British goods exported to America. Before the war credits for the services of British ships were an important factor in the total of ' trade ' between this country and practically every other country in the world. But there are also many other 'invisible ' factors of this type: for example, the services of the British banks, or of individuals, which result in certain people in other countries owing these banks or individuals sums of money, just as if British goods had been sold. One most important factor is the interest or dividends to which British people become entitled as the result of their investments in other countries: for example, the interest to which British investors in United States railways become entitled every year is one of the factors which make up the aggregate of American credits that come on the exchange market in London. The coupons or dividend warrants, which represent dollars payable in America, are exchanged for pounds in London.

To sum up, the exchange rate depends on the supply of and demand for credits with another country; and the volume of demand and supply of credits itself depends on the volume of trade passing between the two countries, 'trade' including not only goods but also all services which have a money value.

We have said that the exchange rates fluctuate in accordance with the supply of and demand for credits. But in normal times the exchange value of the pound could only fluctuate within certain limits. The reason of this was that there was a common denominator to which all the different currencies of the world could be reduced. That common denominator was gold. In each country the currency was founded on gold coinage: that is, notes or other forms of money were convertible into gold coins; and the gold coins were of a fixed weight and fineness. It therefore followed that a pound (or a million pounds) in gold could be sent from here to France, there to be reminted and turned out as gold francs. The actual weight of gold contained in a sovereign always bore a fixed relation to the weight of gold contained in a French gold coin ; this fixed relation is called the par, or the par of exchange. The par between this country and France is expressed by ' {I equals 25.22 francs '; and this means that £1,000 contains the same amount of gold, of the same fineness, as 25,220 francs-1,000 sovereigns = 1.261 20-franc pieces; either quantity can be melted

Hence, the price down and reminted into the other. which a person who wanted 2,522 francs was prepared to pay for them was never more than floo plus the cost of sending one hundred sovereigns across to France. The 'exchange value' of the pound in terms of francs was always approximately 25.22; and it could never vary much from this normal, as if it did, people with payments to make in the other country would send gold sovereigns or gold francs across. The variation from par was limited by the cost of sending the coins across-approximately 7 centimes per pound, to cover carriage, insurance, etc.; so that the exchange value of fI would be 25.15 as a minimum (for if it were at a lower figure it would pay to send sovereigns across) and 25.29 as a maximum (for if it ran to 25.30 it would pay French people to send gold francs to England).

Hence, in addition to 'par,' there were 'gold points' upper and lower, beyond which it paid to ship gold instead of 'buying money.' The whole basis of the international financial system—and indeed of the home financial system —was held to be gold; and there is no doubt that the theory fitted the facts in normal times. But the after effects of the war have rudely disregarded the limits of economic theory: the exchanges do not vary about 'par of exchange,' and 'gold point' has been passed with impunity in every one of the important exchanges; and yet no gold has flowed to put the matter right.

The immediate reason why no gold has passed to put the exchanges right is the fact that all governments have found it necessary to put restrictions on the export of gold.¹ But, again, the reason of these restrictions is the fact that the international trading system has broken down owing to the exigencies of the war. In normal times trade from one country to another was always approximately equal, and any small balance could be righted by a shipment of gold. But now the balances of

¹At the beginning of the war the British Government issued a regulation prohibiting the export of gold in all forms except under licence. This has since been modified, but the general restriction of the export of gold is still in force. trade between countries are on such a scale that the supply of gold is simply inadequate to make up the difference. The removal of restrictions on the export of gold would merely result in a temporary movement of the exchanges towards par, which would be followed by a sudden drop as soon as the gold had all been exported.

The causes of the present state of the exchanges are very much the same as the causes which, in the pre-war period. made the fluctuation between the two gold points." The fundamental factor which determines the exchange value of fI in United States dollars is the amount of trade passing between the two countries. The broad fact is well known that, when the United States has supplied us with more than we have returned, the exchange 'goes against' this country, i.e. a pound in England will buy fewer dollars. In February 1919 a pound was only worth \$3.30, as against the par value (as explained above) of \$4.87. On the other hand, a pound has recently been worth over 60 frances, as against par of 25.22 francs. Broadly speaking, these rates are due to the fact that America has supplied us with more than we have sent to her, while we have supplied France with more than she has sent to us.

But there is also another factor which was practically absent from the influences governing exchange before the war, and that factor is prices. In normal times, when there was plenty of shipping space, and (comparatively speaking) free markets everywhere, the general level of prices in one country could never vary much from the world level. But the war has created both natural and artificial restrictions on trade, with the result that prices in England have risen more than prices in America, and in France more than in England, etc. This means that when Smith, in England, wants to pay Silas P. Warner, in Dakota, for a consignment of wheat, he has to find some Jones, in Manchester, who has a credit in America for cotton goods sold in America. In 1913 these cotton goods might have cost Jones £1,000 to produce; in 1920 the same quantity costs Jones say {2,500 to produce, owing to the level of prices having risen by 150%. Those goods

when sold in America in 1913 produced net proceeds which easily provided \$4,870 for Jones's account, after paying all costs and commissions; but in 1920, prices in America having risen only by 100%, the proceeds of a similar transaction are double \$4,870, that is \$9,740. That is, if Jones sold his credit of \$9,740 in London for $f_{2,000}$ (which would be at f_{1} for \$4.87, the 1913 rate), he would lose f_{500} on the whole transaction. He therefore refuses to sell his credit except at a rate which will bring him in the $f_{2,500}$ which he must have to make a profit. The following table shows the result (the rates are merely illustrative) :—

	Cost of goods, England	Sale value of same	Exchange which pays
	(including profit).	goods, New York.	English exporter.
1913 .	£1,000	\$4,870	\$4 ^{.8} 7
1920 .	£2,500	\$9.740	\$3 ^{.8} 9

Thus we see that the balance of trade and the level of prices are both factors in the present situation of the exchanges. There is also a third factor, which again in normal times has little effect, but is now of great importance. That factor is interest, or the rate of interest on loans or of discount on bills of exchange. In order to make this clear, it is necessary to restate the problem of exchange from a different point of view.

On each side of the water a double process is going ontraders paying money into banks, for remittance to the other side; and the banks paying out money to other traders, money which has been remitted for their credit from the other side. For each f_{I} that the bank in England receives for remittance to America, it does not actually 'remit' anything of greater substance than paper; it tries to find someone in England who is owed money by America, and if it finds him pays him the f_{I} , and sends the document representing the credit (cheque, interest coupon, or bill of exchange) to America for collection. The price in pounds paid in London for \$100 depends on the amount of debts to America and the amount of credits with America. This amount of credits and debts obviously depends on the volume of trade passing between the two countries; and yet no dealer in foreign exchanges knows the actual balance of trade; he merely adjusts his figures according to the demand for, and the supply of, credits immediately realizable on the other side.

But although the dealer does not look beyond the supply and demand for credits, the demand is itself created by the desire to pay cash immediately on the other side. Such a desire arises because payments are due; and yet the money needed for payments in New York can, in fact, be borrowed in New York. When the demand for credits far exceeds the supply, this may be the only way in which payment in New York can be met. Hence the variation in the exchange, although caused by the factors of supply of and demand for credits, may be affected by the fact that money is being borrowed on the other side.

Two points emerge from this: We know that during the war the British Government kept the exchange with America very near to par by borrowing large sums in America. The total of British debts to America was much larger than the total of British credits in America, so far as trade was concerned; but the Government borrowings in America gave us (at a charge for interest) a new class of credits there, and these credits were drawn on from time to time so as to keep the supply of credits equal to the demand.

The second point is this: just as it is possible for a Government to arrange a loan in another country, so it is possible for a bank to do so. Take the example of a bank in Liverpool which has a branch, or an agent, in New York. Smith asks the Liverpool manager to arrange a payment to Silas P. Warner, in New York, of \$1,000. The Liverpool manager may go on to the exchange market, and buy someone else's credit for \$1,000. But he may also decide to keep the whole transaction in his own hands; he may simply instruct his agent or branch in New York to pay the \$1,000 to Silas P. Warner, and to wait until there is a corresponding transaction the other way before it gets back the \$1,000. Now in such a case the agent or branch will charge interest on the amount for the time between its payment to Warner of \$1,000 and the date at which some other American wants to pay a debt in England. The amount of the interest which the bank in America expects is determined by (1) the current rate of interest in New York, (2) the length of time before the loan will be repaid. So much for the transaction from the point of view of the American bank. From the point of view of the English bank which arranges the payment for Smith, it knows that the American bank is going to charge it with the interest as determined above ; and it consequently asks Smith not only for the par equivalent of \$1,000, but also for an additional amount to cover the interest charge. This may work out at roughly $\frac{1}{2}d$. on every pound; so that instead of Smith paying f_{I} for every \$4.87 he owes to Warner, he has to pay fI os, old. As he usually reckons in pounds, he says that for fr he only gets \$4.86; and the report of the exchange rates will read, 'Exchange on New York, \$4.86'-to the pound.

The important point to be noted is that there is no new principle involved. The transaction is the same in essence as the bill of exchange already described; as payment has to be made *now* by the banker in New York, interest has to be paid until the money (derived from the sale of British goods in New York) is repaid to him. The interest (instead of being deducted from the payment which the banker now makes, as in the bill of exchange) is added to the amount which he gets back later on; and it is the amount of the interest which determines the rate of exchange.

Now when the balance of trade is seriously upset, and when consequently the demand for credits exceeds the supply, the banks, and financiers generally, are tempted to make such an arrangement as that just described, instead of going out into the market for credits. If the banks feel fairly sure that the balance of trade will be put right within a measurable time, it may pay them very handsomely to create these credits for a customer instead of buying them. The market rate of exchange (which

it probably charges to the customer) may contain several years' interest. For example, in February 1920 the exchange with America was as low as \$3'30; par is \$4'87: that is, if the banker believes that a year hence the exchange will be at par, an advance of \$3.30 now, for a debt of £I which he can realize a year hence at \$4.87. means interest of \$1.57 on \$3.30, or nearly 50%. same principle applies in speculating in the exchange : a financier, or a humble gambler, may buy credits which he expects shortly to be able to sell again at a higher rate ; if (say) an American in February 1919 bought a f100 credit in America for \$330 (when the exchange was at \$3.30). he might hold it until June 1920, and sell it for nearly \$400. The factor of interest (working through a bank making an advance, which is a legitimate banking transaction) is important when balances of trade are heavy : it exercises, as it were, a limiting effect on the fall in the exchanges, because when the exchanges are at a very low level (the result of the interplay of supply and demand in credits), bankers will find it worth while to create credits. They will only do this, just as speculators will only gamble in credits, in so far as they believe there is likely to be a recovery in trade which will set the balance of trade right, and therefore right the exchanges. It is obvious that there we have a factor which can best be described as psychological. No one can be quite certain that the trade between two countries will right itself within a given time ; but from time to time certain facts may indicate that it will right itself fairly soon. A good example of this is the announcement made by the British Government this spring that it would not renew certain bonds falling due in America in the autumn, but would pay them off. Very soon after that announcement the exchange value of the pound rose from \$3.30 to nearly \$4. There had been no substantial improvement in trade; but this was taken as an indication that British industry was recovering its prosperity, and that the recovery of trade was not incalculably far away in the future.

Summarizing briefly, we may now say that the rate of exchange is due, in normal times, to the balance of trade

between two countries, but that in the present abnormal situation the following factors are also important :---

I. The general level of prices in each country.

2. The willingness of banks to create credits, which depends on (a) the rate of interest current, (b) the time within which the balance of trade will be righted.

3. Psychological factors, which affect the bank's willingness to create credits, and also the actions of speculators in exchange.

It is impossible to say, in any particular case, how much of the deviation from 'par' is due to any one of these causes. They are all in operation, and to some extent they depend upon each other. But the fundamental cause of the present dislocation of the exchanges is the adverse balance of trade; until that is righted there can be no prospect of bringing the exchanges permanently back to par.

CHAPTER VII

PUBLIC FINANCE

Up to now we have been concerned only with the financial system in its functions of starting and running industries both nationally and internationally. The process may be briefly described as book-keeping the changes of ownership of goods or services which take place in the trading business of the world. In the realm of public finance—both national and local—a similar process is at work. In some cases the process is exactly the same as the process already described, the starting and running of privately owned businesses. When the Corporation of Goldhampton decides to start a tramway service, it issues an appeal to the public to lend it the necessary money, and offers to pay interest at the current rate for loans of that class. It is true that the rate of interest is probably fixed, the subscribers of the capital having no right to any surplus such as a private company would pay out in dividends to holders of ordinary shares. It is also true that the corporation will probably guarantee the payment of the interest, whether profits are made or not, and that the loan will be repayable in a certain number of years. But these financial arrangements are often found in issues of 'debentures' by private companies. The method of issue, the commission to the banks, the underwriting charges, will all be much the same as in the case of a private issue; and this will hold good of any commercial enterprise run by a local authority. The same is true of many enterprises run by national authorities--such as State railways or other renumerative works. The financial arrangements are much the same as in the case of privately run enterprise. But there are other classes of work done by both national and local authorities which are 'unproductive,' in the sense that they do not bring in any definite financial return. The system of public education (whether national or local) involves an enormous expenditure of money: that is, payment for the right to use certain goods and services, such as land, buildings, and the services of teachers. The State or local authority pays for these; but it makes no charge (or no commensurate charge) to the children who 'enjoy' the education. There are a vast number of similar unremunerative enterprises carried out by public authorities, ranging from public health services to the defence services of the Army and Navy.

The importance of these from the financial point of view is that the theory of exchange of ownership, on which the financial system was said to be based, appears not to apply. The fact is that the public authority which carries out any such service denies in practice the rights of private ownership.

In order to give these services to the public it must first take them, or their equivalent, from the public. It *compels* the public to provide it with money by means of levying rates and taxes, instead of begging for the money and offering interest as an inducement. As long as the public authority finds it possible to raise enough money by taxation to finance its work, the financial transactions involved are simple. Payment of taxes involves a transfer of money from a private account in some bank to the public account (in the case of national taxes, to the national account at the Bank of England). The public authority then pays its debts (for the purchase of goods and services given without charge to the public) by transferring amounts, by cheque, from the public account to the account of its creditors, and the transaction is closed.

When, however, the public authority, for political or other reasons, does not raise enough in taxes to cover its expenditure, it has to raise the money by means of a loan. Thus the British Government has created 'war loans' to the extent of some $f_{7,000,000,000}$ during the last few years. In so far as the money raised by the loans represented actual surpluses as explained in the first chapter, the financial process was simple. But in fact a very large proportion of the amount was raised, not by attracting surpluses, but by creating credits.

We have seen that the lending of money by a bank to an enterprising business man is an ordinary financial transaction. The bank, conscious of a current surplus, lends the right to use it to an individual who will in the near future, by selling goods he produces or buys, be able to repay the loan. The first step of the banks, when they found that the surpluses in the hands of private individuals, the result of past transactions, was not enough to meet the needs of the Government, was to lend them money for them to buy, not goods on which they would make surpluses, but war loan. The effect of this transaction is to earmark future surpluses on ordinary trading transactions for the repayment to the bank of the credit which it created and lent.

But even this lending on the security of future surpluses did not meet the need, and the banks went a step further, in lending directly to the State, by taking up large quantities of the war loans. In this case the ultimate repayment depends on the State, and since the State makes no surplus from its own production, the repayment involves future taxation on a larger scale, that is, the extension of the State's denial of private ownership. How fast and how far this extension will go depends on political factors which have no direct bearing on the financial system.

Apart from the large long-term loans issued by the State in exceptional times, there is a special type of transaction which is necessary owing to the peculiar character of the State's income and expenditure, which are not only enormous, but are also highly irregular. Even when it was living within its means, the fact that its income largely depends on the income-tax meant that during the first three quarters of the financial year it spent more than it collected, and then righted itself in the March quarter when the income-tax payments came in. At present it never rights itself, and the process is a continuous one; but for the sake of clearness we use what happened in pre-war years as an illustration. From April to December, in pre-war years, the State had therefore to borrow money. This it did by floating promises to pay some months ahead, just as the ordinary business man uses bills of exchange in a similar situation. These public bills, or Treasury bills, are discounted in much the same way as bills of exchange, and provide the State accounts at the Bank of England with ready money. The situation of 'tightness' in the State accounts is now chronic, and Treasury bills are 'renewed' instead of being paid when they fall due. The Treasury bill, instead of being a temporary expedient to tide over a definite period, has now become a continuous system of financing a permanent deficit.

Another method of financing its needs which the State has recently discovered is the issue of notes-Bradburys. As these notes are of value in payment for goods and services rendered, and as they can be produced at small cost. the amount issued to the public is in effect so much money created by the State out of nothing. But it is no more unsubstantial than the loans made to it by the banks. and it is far cheaper. Nevertheless, the issue of notes by the Government, at any rate so far as this country is concerned, has not been made for the purpose of avoiding interest on loans. A certain amount of currency, whether gold, silver, or notes, is necessary for the small transactions of everyday life. As the cost of living rises, it is obvious that more currency must be provided, to avoid an intolerable amount of inconvenience. The amount of currency issued should depend on the demand for it from the public. which the banks report to the Bank of England, and the Bank of England reports to the Treasury. The Treasury responds to the demand, pays the necessary number of notes into the State's account at the Bank of England. and the latter passes them on to the other banks.

The result of the printing of the notes is that the Government is in funds to the amount of the issue; and as the total on issue still exceeds £200,000,000, this result is important; but the reason why the Government has issued the notes is the public's need of currency rather than the Government's need of money.

CHAPTER VIII

THE CENTRAL BANK AND THE CREDIT SYSTEM

In so far as the financial system aims at the reduction of all exchange to book-keeping, it is clear that it must be centralized in one institution. Just as a bank arranges the book-keeping between Jones, Robinson, Smith, and all the other owners and producers, so a central bank is necessary to arrange the book-keeping between the various banks. In England the central bank is the Bank of England, which, though not a State bank, is the State's banker, and has certain privileges and certain functions which give it in practice the standing of a State bank. Its capital is privately owned, and its dividends go to its shareholders; but its public character has been so important that in the situation created by the war its directors have agreed to hand over to the State all profits above the prewar level.

The Bank of England's best-known function is the issue of notes. These notes are in form promises to pay gold ; but in essence they are merely a form of currency, i.e. tokens by which the right to use privately owned goods or services is transferred. The early economists attached great importance to the gold reserve of the Bank of England, and to the proportion which it held to the note issue in the first place, and secondly to the total issues of credit. But the war has accelerated a process which was already at work before—an enormous growth in the volume of trade and credit, corresponding with a rapid extension of the financial machine. The development of the cheque system had already begun to disabuse the public mind of the belief that the 'gold basis' was all-important. The withdrawal of gold from circulation at the beginning of

the war, the suspension of the limit on the bank's right to issue notes, and the large issues of Treasury notes, have not resulted in financial panic; and although everyone knows that the issues of notes are out of all proportion to the gold reserves, this makes no difference to his contentment, because, now as always, he wants things, not coins. As far as transactions within this country are concerned. notes are just as good as gold, and in some ways more convenient, and there is no reason to regret the change from gold. If 'Bradburys' are ever withdrawn, it is very probable that Bank of England notes of similar values will take their place. A reserve of gold for righting a small balance in the exchange of trade between one country and another may be useful; but international balances are now so heavy that the quantity of gold available is practically useless. Nor is it of any advantage to attract gold to this country with a view to increasing the gold available for export; simply because the gold must be paid for by exports, and it would be simpler and cheaper to send any available exports to balance the exchange directly.

The issue of notes is, however, a very small part of the Bank of England's work, although it looms large in its published statements, which are divided into separate accounts for the 'issue department' and 'banking department.' The banking department does the ordinary business of a banker, but its main customers are different in kind from the customers of other banks.

Apart from the State, whose relations with the Bank of England were referred to in the previous chapter, the most important customers of the Bank of England are the other banks. Money that is not needed by the other banks at the moment is paid into their accounts at the Bank of England. It is clear, of course, that the 'money' paid in need not be coins, notes, or any other special form of money. But in bank statements their account at the Bank of England is treated as 'cash'—one item, 'cash in hand and at the Bank of England,' covers the actual cash (coins or notes or cheques) which they have in their vaults, and also their balance at the Bank of England. In exactly the same way, a business firm may count as 'cash' what it has on hand, and also its bank balance. The point is that it is 'money' which is immediately available, as distinguished from investments, money on loan, property, or anything else which is not immediately available for paying a bill.

In normal times, the Bank of England uses the money deposited with it by its customers in much the same way as any other bank would do: it makes loans, or discounts bills, in order to keep its current surplus employed at interest. But the ordinary bank or financial house is concerned, broadly speaking, only with its own financial position; that is, the amount of money it will put out on loan, and the rate of interest or discount it charges, are determined by its own needs. In the case of the Bank of England, policy on these matters is governed by a consideration of the general financial position throughout the country rather than by its own immediate interests. For the Bank of England has it in its power to control the amount of credits issued in Great Britain, and it uses this power in order to meet certain situations-either internal, relating to industrial and financial difficulties. or external, relating to the rates of exchange with other countries.

The Bank of England, in fact, controls the whole financial machine (up to a certain point) through 'Bank rate,' which is the rate, officially announced from time to time, at which the Bank of England will discount bills for other financial houses. The specialized billdiscounting houses rely for their funds, not on ordinary deposits from customers, but on short term loans or deposits at interest from the regular banks. There is always a large number of bills which are re-discounted at the Bank of England by the bill-discounting houses; in times of emergency the Bank of England can increase this number or decrease it.

The way in which the Bank of England is able to restrict credits is by raising the bank rate, an act which has consequences reaching far beyond this country.

In order to appreciate the way in which raising the bank rate affects the financial machine, it is necessary first to develop the statement already made, that the Bank of England is the one central bank, in which all other banks keep their accounts. One of the first principles of the financier, whether he be a banker, a billdiscounter, or just a 'magnate,' is never to allow any money to remain idle. Surpluses, however temporary, are used in lending to the needy, at an appropriate charge. The result is that banks develop their loans up to the highest point within the rather wide limits which they set to themselves. Supposing that the bank has set a limit to its credits of five times its ' cash in hand and at the Bank of England,' its credits are always pretty near to that limit. Any sudden extension of its credits, or depletion of its ' cash in hand and at the Bank of England,' will make it draw in its loans, or stop discounting, in order to keep the proportion right. When the Bank of England raises its rate for loans, the bill-brokers realize that any further new credits to their customers must lead to a new loan from the Bank of England, and that the interest that will have to be paid by the customer must be raised in order to cover the Bank of England's charges and still leave a profit. Therefore the banker tends to raise his charges for loans, and at the same time to select short-term rather than long-term bills to discount. The bill-brokers themselves depend on the banks for their day-to-day finance, and the banks are only willing to lend to them at an increased rate. The result is that bill-brokers hesitate to discount bills, and charge higher discount rates. The whole process normally leads to a reduction in the total volume of credits, and therefore of transactions based on credits. In the same way, the lowering of bank rate results in a drop in the market rates for discount and loans, and a consequent extension It should, perhaps, be noted that bank rate of credits. is almost always, in normal times, considerably above the market rate for discount and loans to safe concerns; on July 2, 1920, when the bank rate was 7%, the market rate for short loans was $5\frac{1}{2}$ %. That this should be so

might be inferred from the fact that a loan by the Bank of England is 'cash' on which, in the normal course of things, the banks build up several times that amount of credit. To put it plainly, it pays a bank to lend \pounds too to three different people at 5%, even though it may have paid 10% for the \pounds too from the Bank of England. As long as credits are being repaid with interest, this process will continue; but in times when, owing to some large business failure or other cause, banks are having to draw on their reserves, and therefore wish to cut down the total of their credits, the market rate for discounting new bills and making new loans may rise to bank rate.

Those who have followed the working of a change in bank rate will naturally want to know why the Bank of England ever changes its rates, and thus affects the whole financial system. The answer is that, as the Bank of England's stability depends on the stability of the other banks who are its customers, it naturally watches a large extension of credit with suspicion, and determines to set bounds to it, just as any other bank may watch its customers' financial position and refuse further loans when any customer's position is doubtful. A further point is that the Bank of England may want, in the interests of itself and the whole financial system of the country, to influence the exchanges with other countries. In describing the balance of trade on which the exchanges depend we pointed out that investments were items in the total of trade, just as wheat and cotton are. If the rate of interest in London is higher than the rate of interest in New York, New York surpluses seeking investment tend to come to London. The raising of Bank rate, therefore, to some extent tends to raise the exchange value of the pound. Silas D. Rockfeller hands the American Bank \$487 for investment in London; that money is paid to Silas P. Warner on account of the debt owed to him by Jones Robinson, of England. In England Jones Robinson pays £100 into his bank : • that money is invested in the name of Silas D. Rockfeller. There is no interest charge involved on

either side, and therefore the exchange is at par. On the same lines, anything which attracts Rockfeller's money to England tends to bring the exchange nearer par, if England is in debt to America.

The bank rate is lowered for the opposite reasons, both national and international.

The relation of the banks to the Bank of England cannot be fully appreciated without realizing the relation of the banks to each other. This relation has already been partially described or hinted at. Each bank gets paid into it by various customers cheques on the other banks; on the other hand, cheques on itself have been paid into the other banks. In all large centres, therefore, a 'clearing house' has been established, at which every day the banks cancel out the cheques against each other. If f1,000 in cheques on Barclay's have been paid into Lloyds, and f1,000 in cheques on Lloyds have been paid into Barclay's, the easiest process is to exchange the cheques and call it quits. In practice there is always a margin which is settled by transfers from one account to another at the Bank of England-formerly by actual cash payments. Hence it comes about that if one bank has been lending money more freely than other banks, it will find more of its cheques presented to it through the other banks than it has received of cheques on those It will then have to provide cash, or a transfer banks. from its account with the Bank of England, in order to meet the cheques. As long, however, as all banks are lending at roughly the same rate, the cheques coming in from both sides tend to be nearly equal, and in the long run balance. This results in a tendency for all banks to adopt more or less the same terms in lending money and the same principles for loans.

The Bank of England waits and sees and holds the stakes. Temporary debts of one bank to another are met by an adjustment of accounts so long as the debtor bank has funds with the Bank of England; and, failing funds in its own right, the debtor bank borrows from the Bank of England. The clearing houses reduce the transactions between the banks to mere balances; the Bank of

MODERN FINANCE

60

England reduces those balances to book-keeping. A transfer of £100 from Lloyds' to Barclay's account in the Bank of England may be the ultimate adjustment of a thousand large-scale transactions between the customers of both banks.

CHAPTER IX

MONEY OF ACCOUNT-AND OF NO ACCOUNT

THE historical development of money is a subject which cannot be dealt with in this small book. But the description of the financial system as it exists to-day in a highly developed world has involved references to many of the points with which the historical treatment of money would deal. We have seen throughout the reference to material things, the stuff of everyday life, and the use of a complicated mechanism which serves, and yet conceals, the fundamental exchange and barter by which nations and individuals live. Coins or other symbols as a medium of exchange, useful for small transactions which are too numerous and too frequent to record in books, have proved useless in the larger and more subtle transactions of the modern world. For these larger transactions the world has gone back to barter, but barter of a strange character. Through coins the world got the idea of a general, impersonal barter, the exchange not of one particular thing for another particular thing, but of particular things for general things, through the medium of coins with which general things could be obtained by a second process of barter. The large-scale transactions of the modern world preserve this general character. A cargo of coal is exchanged, not for flax, or coins, or notes, but for 'money of account'-for the right to use anything or everything in the world up to a certain limit.

This 'money of account,' being nothing but a right to use, is capable of indefinite propagation through a system which is called credit. The credit system depends for its existence on the fact that all people are not using all their rights all the time. It depends for its development on the large accumulation of rights in banking institutions, which are thus able to be continuously passing on to new applicants such rights as are not at the moment in use. This credit system, although capable of indefinite propagation, is restricted in practice by conventions among bankers, whereby credit is not allowed to exceed ' cash in hand' by more than a certain proportion. It is possible, however, that this convention is meaningless; the fact that a loan from the Bank of England counts as ' cash in hand ' for the purpose of creating credits suggests that the convention is a survival of a time when coins had not been superseded by ' money of account.'

The development of the credit system has helped to make clear the distinction between money and capital. Money is a legal right to use capital, which is the collection of objects (including living things, such as those called 'labour' and 'ability') through which man lives his life, both of the body and of the spirit. This legal right can be created by bankers and dealers in finance, and passed on by them (for a consideration) to those who want to use the 'capital' that already exists.

This capital is essential to industry. The right to use capital is also essential—the idle mill is like the buried talent. The capital exists, the right to use capital exists, and can be further created. On the other hand, we have seen another principle at work—the limitation of the private right to use capital, which the State makes through taxation. Further, the State is constantly restricting the private right to use capital in the interests or supposed interests of the community.

How much of the financial system would remain if the State, by a progressive system of taxation, took over from their present owners all the factors of production? It is clear in the first place that the whole machinery of credit would go. This machinery is essential in a community in which the rights to use capital carry with them no obligation to use it, and in which those who want to use idle capital do not always have the right to use it. It is not essential in a community in which the right to use capital is conferred by law and not by exchange of money. With the credit system the whole machinery of interest, bills of exchange, mortgages, and loans would disappear. But it is not likely that money would disappear. The convenience of a universal right as compared with a particular right (such as is conferred by a bread ticket), especially in a highly complex civilization, would ensure the retention of money. The money might not be of gold or silver—paper might be found more convenient but some sort of general medium of exchange would be found indispensable. The cheque system might be retained; but it is likely that the banks (or whatever similar institutions were then called) would become the institutions for recording the production and consumption of goods, instead of recording the production and consumption of money, the right to use goods.

In such a community the amount of money issued would be dependent on the production of things; so that the value of the pound (or whatever was then the unit of money) would be stable, as the amount issued of units of the right to use would correspond with the number of units of production.

To sum up, the financial system, useful as a means of getting over the hindrances to production and use which are involved in the system of private ownership, is no more essential to industry and use of the products of industry than are the stock and share certificates issued by a company. In the working out of its own potentialities the financial system has elaborated the creation of credit. with the result from time to time of the creation of credit money out of all proportion to the goods that exist. The scattering broadcast of rights to use things that do not exist leads to competition among those who really want to use things, with the result that prices increase enormously and the unit of money falls in value in terms of the things we need. In this way comes the reminder that the whole of the system is an abstraction; and that the abstraction is founded, not on gold coins, but on the quantities of necessaries. When this fact is fully realized, the financial system may be remodelled. In the meanwhile, it strides boldly forward, superb in its knowledge that,

MODERN FINANCE

64

for the moment, through it we live and move and have our being.

SOME BOOKS FOR FURTHER READING

GENERAL

The Meaning of Money. Hartley Withers. (John Murray, 6s.) Money and the Mechanism of Exchange. W. S. Jevons. (Kegan Paul, 75. 6d.)

BANKING AND CREDIT

Lombard Street. W. Bagehot. (Out of print.) Currency and Credit. R. G. Hawtrey. (Longmans, 151.)

INDUSTRIAL FINANCE

The Evolution of Modern Capitalism. J. A. Hobson. (Walter Scott, 75. 6d.)

FOREIGN EXCHANGES

International Finance. Hartley Withers. (John Murray, 6s.)

Economics. An Introduction for the General Reader. H. Clay. (Macmillan, 45.6d.) Contains valuable chapters on Finance.

