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THE MECHANISM OF EXCHANGE

THE MECHANISM OF EXCHANGE

A HANDBOOK OF ECONOMICS

(CURRENCY, BANKING AND TRADE)

BY

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PREFACE TO THE FOURTH EDITION

This book was originally planned as an elementary text-book on the section of Economics with which it deals, but the writer's idea of a text-book has always been that it should illustrate theories by facts and statistics, and give the reader an idea of how the theories have developed or been applied under changing conditions. As it was first published in March 1917, it was then necessary to show how the financial convulsions which marked the outbreak of War had affected the Mechanism of Exchange. In subsequent editions (1919 and 1927) the narrative was carried through the post-war period, and now it is necessary to add an account of the Aftermath of the War in the events of 1929–33.

Now that England has definitely gone over to the majority as a whole hog protectionist country it seems rather futile to go on stating the stereotyped arguments for and against protection. For the time being these have become prehistoric; and when the world does at last realize the madness of the present orgy of trade restrictions of all kinds, the arguments for the return to Free Trade will be based not so much on general principles as on our actual experience of the results of Protection. That part of Chapter XV has therefore been omitted; it can be re-written when the question again becomes practical politics.

The Statistical Appendix has been revised and brought down to date. A few of the old tables have been dropped out as no longer of sufficient interest and in other cases the basis or form of the table has been changed, while several new tables have been added. Three new diagrams have also been added dealing especially with the banking situation.

The penalty of attempting to keep such a book up to date is that it is out of date almost before it leaves the printer's hands. The main object, however, of giving these statistics is

to teach the student where to find them and to continue them for himself. That will be particularly necessary in coming years in view of the further changes which are certain to take place.

In such a book as this there is very little room for discussion of abstract theory. In this edition therefore no attempt has been made to enter into the controversy which has been raging about over-saving and under-expenditure, because so far no clear results have emerged from that controversy which are likely to be of use to the layman or the class of students for whom this book is intended.

JOHN A. TODD.

CITY SCHOOL OF COMMERCE, LIVERPOOL,
15 *September*, 1933.

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CHAPTER I

INTRODUCTORY

The meaning of exchange value.—Money the means of exchange.—Prices and value.—Possible effect of the mechanism of exchange upon values.

THE various economic problems dealt with in this book are comprised under one general heading, the Mechanism of Exchange. Economics may be defined (somewhat elliptically[1]) as the Science of Exchange Values or the science of prices, which are exchange values expressed in terms of money. Money in the widest sense of the word, including metallic money, paper money, bankers' money, and the credit system, is the means of exchange. The essential purpose of exchange is the determination of the relative values of different commodities to each other, and these values are for convenience expressed in terms of money as prices. The use of money, however, as a means of exchange must not be allowed to obscure the fact that the real value of any commodity is not the amount of money for which it is exchanged, that is to say its price, but the amount of other commodities which can be obtained now or later on in exchange for that money. Price is only a means of expressing the relative value of two commodities by comparing them, not directly with each other, but indirectly through the universal third commodity, money. For instance, it is more convenient in discussing the relative value of a pound of tea and a pound of sugar to say that the one is worth *2s. 6d.* and the other worth *6d.* than to say that the one is worth five of the other.

The object of Exchange.

Meaning of Price.

[1] The full definition, founded on Marshall's, should be 'the science of the motives or notions of value which actuate men in the acquisition and use of wealth'. See *Science of Prices*, chap. i, p. 2.

Money is therefore the standard of value, the means by which the value of different things is measured against each other, just in the same way as the relative height or weight or age of things is measured, not by comparing them with each other, but by describing each of them in terms of certain accepted standards known as feet, pounds, or years.

But the use of such standards of measurement involves a serious responsibility; the standards must be accurate and especially they must be as nearly as possible invariable, and uniform. It does not matter in the least what the exact standard is, but it must be always and everywhere the same.

Meaning of a standard.

Thus it does not matter at all what is the exact length of the standard of measurement called one foot, or how many feet it is decided to call one yard. But it is absolutely essential that all foot rules and yard measures should be of exactly the same length and that they should always remain the same length. One draper cannot be allowed to keep a shorter yard stick than his neighbours, because that would be cheating his customers. The whole point about a standard measure is that it must be publicly known, and certain, so that when that standard is used in any bargain the buyer knows exactly what he is receiving, and the seller what he is giving.

The application of these requirements to the standard of value, that is to say to money as the measure of values, is not so obvious, but it is just as necessary as in the case of any other standard. In the first place, all coins of the same denomination must be of the same value; we cannot have different sovereigns in circulation some of which contain more gold than others, otherwise it would never be possible to measure the price paid for an article without knowing which kind of coin was tendered in payment. This is an obvious necessity, but there is another much more difficult test to be applied to the efficiency of money as a measure of value. The value of a perfect money must be the same everywhere and always, and that is a very difficult thing to secure. The

The value of money.

real value of money is its purchasing power, the quantity of goods for which a certain quantity of money can be exchanged, and as a matter of fact it is almost impossible to prevent that purchasing power of money varying from one place to another, and especially from one period to another. But such variation is fatal to the perfection of money as a standard of value. It is just as if a draper kept an elastic yard stick which was longer at one time than at another; or, to take a more practical illustration, as if the builder of a huge bridge used a steel measuring chain which expanded and contracted with the variation of temperature from day to day. Both stone and metal vary greatly with changes of temperature, especially in a climate with extremes of heat and cold such as Egypt or India, and it is necessary in the construction of large engineering works to make the most elaborate calculations to prevent the accuracy of the work being thrown out by these variations.

A variable standard.

The difficulty in the case of money is perhaps greater than with any other standard, because it is now known that its value does vary greatly from time to time,[1] and these variations are inevitable under any monetary system which has yet been invented. From 1873 to 1914 the value of money had first risen and then fallen again; during the War and post-war period the cycle was reversed and on a much larger scale; and the results of these movements have been sometimes disastrous and always very inconvenient. For these variations in the general level of prices result in an actual disturbance of the relative values of commodities to each other. Suppose for example that a man sells certain goods to-day for money and lays the money by; but later on he finds it necessary to sell this money again, or in other words to use it in the purchase of other goods. In the meantime the value of money has fallen, that is to say the price of commodities in general has risen, and he cannot now buy so many commodities of any kind with his money as he could have done at the time when he sold his original goods. The effect is to alter the relative

Effect on values.

[1] See Table III in the Appendix.

value of the goods he sold and the goods he now wishes to buy, for he finds that he gets fewer of the latter for his own than he expected. The relative value of the goods he sold and those he now wishes to buy has been altered by the change in the value or purchasing power of the money which was used as the means of exchange. It is as if his yard stick had contracted.

Knowing then that such changes in the standard of value may take place, it is necessary that the character of money and its work should be carefully studied so as to find out the nature of money, how it does its work, why these changes in its value take place, and if possible how to modify or prevent them, and that is the underlying object of this book. The mechanism of exchange must be studied in all its forms, for the comparatively simple expedient of using metallic money as the means of exchange has developed into a marvellous and most complicated system of using all kinds of different things as money, including even pieces of worthless paper, which yet under certain conditions seem to serve the purpose of money extraordinarily well. Finally, a system of credit and banking has been developed which may be described as a system of doing money's work without the use of any form of actual money at all. All this complicated machinery must be carefully examined to see how it works, and what are its effects on the main purpose of it all, which is the exchange of goods against goods; and this is to be the connecting thread which will run through the whole argument of the book. It is an attempt to see how all the different forms of money or money substitutes have come into existence, how they are used, and whether they fulfil satisfactorily their main function as the means of exchange, a means of expressing the relative value of commodities, for money is only a means to that end. Economics is not the science of wealth in the sense that it teaches men only how to make or spend money; it is the science of values, the study of the relative values of all the different commodities and services which men spend

The money system.

The science of values.

their lives in producing and consuming, in rendering and receiving. These and not the money are the real subject-matter of its study. This branch of the science is therefore, in a sense, subsidiary, but it is of the greatest importance and interest. It is the side of economics which deals most directly and exclusively with the problems of the business world, and which therefore appeals most directly and forcibly to the commercial man. Economics was described by Marshall as the science of everyday life, and in this branch of the subject the fitness of the description is peculiarly apparent.

CHAPTER II

THE HISTORY OF EXCHANGE

The place of exchange in production.—The development of exchange.—Its advantages.—The essentials of exchange.—The trader class.—Means of transport.—Money breaks up barter into sale and purchase.

IT was customary among the older economists to treat exchange as a separate branch of Economics from production, dividing up the subject into Production, Exchange, and Distribution, and later on Consumption was added as a separate branch of the subject. This method of treatment had its advantages in clearness and convenience of arrangement, but it must not be allowed to conceal the fact that in reality exchange is a part of the process of production. Production means the creation not of things but of utilities. Man cannot create matter, any more than he can destroy it. He cannot make anything except out of something else; he cannot make a piece of wood, but he can make a table out of a piece of wood. This idea is expressed in the definition of production as the creation of utilities. Man cannot make things, but he can make things useful, and it is clear that the process of making a thing useful is not complete until some person is found who can make use of the thing. In other words, the process of production is not complete till a purchaser is found for the article. This is very clearly seen in the case of perishable articles, such as fruit grown at a distance from any market. Thus it may be said that the complete process of production involves three stages: (1) change of form or production in the narrowest sense of the term, as the farmer produces wheat or the carpenter produces the table; (2) change of place or transport, as the miner digs the coal or iron out of the mine and

Meaning of Production.

Its three stages.

brings it to the smith, or the ship brings Canadian wheat to Liverpool to be made into flour and bread in England; and (3) change of ownership, as the merchant finds purchasers for the goods offered by all the producers. Under modern conditions every one of these parts of the process is equally essential, for all the nations of the world are dependent upon each other for their food and clothing, and in every civilized community each individual is dependent upon all his fellows for the necessities as well as the comforts and even luxuries of life.

In the early forms of civilization, however, when the family or the tribe was the unit of society, and these units were small and self-contained and mainly nomadic, there was practically no exchange because there was no need for it. Every member of each tribe was engaged in the same occupation, and therefore produced the same commodities as his neighbours. There was a certain amount of division of labour, especially between the sexes, and in the primitive form of the tribal craftsmen who performed certain work for all the members of the tribe in consideration of a share of their produce. But when a chance encounter brought the tribe into contact with a friendly tribe from another country, real opportunities arose for something like exchange in the modern sense of the word, because these other tribes, coming perhaps from a different district or country, would possess things which the others had not, and would greatly desire those things which to the first tribe were commonplace and therefore of little value. Exchange under these conditions was natural, being equally advantageous to both parties. Thus exchange was in the first place inter-tribal or international rather than local. It probably arose from the custom of making conciliatory gifts to a possibly hostile tribe met by the way, and it came to be regarded as a matter of course that the gifts must be mutual: each tribe expected to receive a gift of at least equal value to what it had given. Gradually journeys came to be undertaken purposely with a view to the possibility of such meetings and the resulting exchanges.

Primitive exchange.

With the settling down of nomadic tribes in fixed localities which marked the development of agriculture, and the growth in size of the settled communities, the division of labour became more necessary. As the size of the community increased there was enough work of a particular kind, such as the smith's or the shoemaker's, to employ one man's whole time in making such things for the community. There were also the hunters and the fighting men who went abroad, while the husbandmen remained at home to cultivate the crops.

Division of labour.

Under these conditions exchange of the different products was essential, and as the village developed into the town and the town into the nation, exchange became wider and more universal. Nowadays in Western countries no one ever makes any complete thing for himself, and with the development of the factory system of production by machinery hardly anybody makes a complete article with his own tools or machinery out of his own materials. Every one makes for exchange, and the complexities of exchange have increased as fast as the development of specialization and the growth of division of labour.

While many features of this wonderful modern system may be deplored, it has certainly enormous advantages. The great wealth of which the modern world disposes, meaning not merely the wealth in money of certain individuals, but the widespread distribution among all classes of society of the comforts of civilization, would have been utterly impossible in any other way. For the advantages of exchange are just those of the division of labour. Exchange is indispensable to the modern system of organization of production to which the enormous production of wealth is due. But in this vast system there are many producers who seem to take no active share in the production, those who merely pass things from hand to hand, middlemen as they are called slightingly, whose right to a share in the produce is sometimes questioned. It must be made clear, however, that there is no ground for this distinction. Every person who is really necessary to the process of exchange, including the finding of a consumer for the goods produced, is

Advantages of exchange.

justly entitled to a share of the produce. The middleman is just as much a producer as the farmer, as long as he is necessary. Of course, a superfluous middleman is as useless as a second farmer would be ploughing up ground already sown, and growing another crop on top of the first. A middleman who has somehow contrived to insinuate himself between the producer and the consumer without serving any necessary purpose in bringing them together is altogether indefensible, and there are doubtless many such people in certain countries or certain trades, but they are probably the exception rather than the rule. The utility of the genuine middleman who facilitates exchange is as undeniable as the advantages of exchange itself. By exchange every man is able to barter his own surplus produce for things which form the surplus of others, but which are of great value to him. The mutual gain of subjective utility to both parties underlies every act of exchange, and this applies just as much to exchanges between individuals of one country as to exchanges between different countries. Exchange leads to the full utilization of the productive capacity of every man or of every nation, thus securing the maximum total production for the nation and the world.

Middlemen.

The development of exchange and the growth of the modern trading system with its elaborate mechanism of exchange involves three essentials: (1) the formation of a class of merchants or traders to act as middlemen between the producers and the consumers; (2) the development of the means of transport, both for long and short distances, including the carriage of commodities, like wheat or raw cotton, across half the world, as well as the door-to-door delivery of daily household supplies by a retail shop; and (3) the invention of money as a means of exchange.

As already suggested, trade was at first not local but inter-tribal or international, that is to say it was carried on with foreigners, and as in those days foreigners meant enemies, trade was at first characterized by all the methods of war rather than of peace, each party doing his best to cheat or rob the

The trader class.

other, either in the course of bargaining or by more flagrant violence. The merchant of the early days carried his life as well as his goods in his hands. The risks of trade were great, and the profits had to be correspondingly high.

Another interesting feature of the evolution of trade is the change from the early trader seeking his customer to the modern system of retail shopkeeping where the customer seeks the trader. This had its effect on the character of the goods which were the objects of trade. In the early days these were naturally confined to goods of considerable value in proportion to their weight or bulk, and not of a fragile or perishable nature, so that they were capable of being carried long distances, such as brick tea carried mostly on camel-back from China by the overland route through Siberia into Persia, India, and latterly all Europe.

Their functions.

The advantages of the modern trader class may be illustrated by considering the extent to which townspeople nowadays are dependent upon the system of wholesale and retail traders for the supply of their ordinary daily food. The shopkeeper and the wholesale warehouseman form the link between the producer, perhaps in a distant country, who has neither time, opportunity, nor knowledge to seek retail customers, and the consumer who cannot seek the different producers, spread all over the world, from whom he would buy what he wants. In fact, new wants have been created by the extraordinary development of the system of supply, which brings all the products of every country in the world and puts them down almost at our doors to tempt us to buy. Taking the contents of an ordinary grocer's shop for example, it would exceed the limits of the average customer's knowledge of geography even to know where the places are from which the different goods come. Again, these wholesale traders deal in large quantities, so that they are able to buy much more cheaply than the ordinary retail customer could possibly do, because it is easier and more economical for the producer to deal with one large consumer than to seek many small buyers. In some trades, as, for

example, the Indian tea trade, attempts have been made to sell straight from the gardens to the home consumer, but the volume of trade which has resulted is comparatively small. Lastly, the wholesale trader and the shopkeeper maintain large and varied stocks, enabling the customer to select whatever he wants and at whatever time he likes. The ordinary householder does not require to lay in a large stock beforehand, because whenever he runs out of anything he can buy at once from the shop near at hand. The shopkeeper undertakes the duty and runs all the risks of keeping stock, which in the case of perishable goods is considerable, and may involve heavy loss at times.

Transport.

The considerations which affect the development of the means of transport are (1) the great distances to be traversed, leading to cost of carriage, which may be heavier than the value of the goods will justify; (2) the nature of the goods themselves; fragile goods, for example, may suffer heavy loss by breakage in transit, which must be covered by a correspondingly higher price for those which survive the journey; (3) the development of the available methods of transport. This in most Western countries has followed a fairly regular routine, viz. first the sea or large rivers, then roads and canals, then railways. In the East, however, long-distance transit was by overland routes probably for many centuries before the sea was ever attempted, even in the case of countries like India, which had a large seaboard. The Nile in Egypt is probably the most striking case of the main line of transit of a country being from the earliest days chiefly by water, and Egypt made no attempt to develop land transport to any great extent for many centuries, nor sea transport for still greater ages.

Money v Barter.

The last stage in the development of exchange is the invention of money and the breaking up of barter into sale and purchase. Barter means the direct exchange of goods for other goods, and seems to offer the simplest and most direct method of arriving at the relative value of the goods which are compared directly with each other. But even in the most primitive

societies this method of exchange involves great difficulties in practice. It may be easy enough to determine the relative value of the commodities to be exchanged, but this is only half the difficulty. For before any exchange can take place three conditions must be fulfilled. In the first place, there must be two people each of whom wishes to dispose of the very thing that the other wants, which is a very unlikely coincidence. In the second place, the things which they desire to exchange must be of equal value; and finally, both must be desirous of making the exchange at the same time. As the result of the practical impossibility of securing this triple coincidence, it is often found that even where the custom of barter is general it has to be made trilateral instead of bilateral to make it possible at all. *A* exchanges his goods with *B* for something which *A* himself does not want but *C* does. Thus *A* gets what he wants from *C* by giving him *B*'s goods in exchange. But all these difficulties are solved by the introduction of a universal third commodity called money as the means of exchange. Every man, instead of exchanging his goods directly for those of others, sells his goods for money with which he buys other goods of whatever kind from whatever person in whatever quantities and at whatever time he likes. Thus money breaks up the single act of barter into two separate acts of barter, one of goods for money, called sale, and the other, which may be far apart in time and place from the first, of the same money for other goods, called purchase.

But although these two processes are now separated, the relation between them must not be forgotten. Every purchase implies a prior sale, and every sale points to a future purchase. The essential fact is that every man lives by exchanging his products or services for the products and services of others. The ultimate object of production is not sale, but exchange of the product for other commodities, and the ultimate consumption of these others. Hence the point emphasized in the previous chapter, that the real value of any commodity is not the amount of money for which it can be sold, but the amount

Double barter.

of other commodities for which through the medium of money it can be exchanged. Price is simply a means of expressing the exchange value of things. The real exchange value of goods is the amount of all other commodities in general for which they can be exchanged through the medium of money.

CHAPTER III

MARKETS

Markets and market price.—Meaning of a market.—Law of markets.—Local *v.* world-wide markets.—Short *v.* long markets.—The Stock and Produce Exchanges.

IN the previous chapters it has been explained that the subject-matter of this book is the mechanism of exchange, the means by which the prices of commodities are paid. It does not come within its scope to explain in detail how these prices are fixed. For that reference may be made to the writer's companion volume *The Science of Prices* which deals with the theory of value. Here it must suffice merely to state the result of that theory in the most general terms, namely, that the price of any commodity is fixed by the opposing forces of supply and demand working upon each other in a more or less competitive market. The market price of any commodity is the price which, under the existing conditions of supply and demand, either for the time being or over longer periods, balances or equates supply and demand, the price at which the amount offered for sale is just equal to the amount demanded; in other words, the price at which the buyers will be willing to buy just as much as the sellers are willing to sell. It is obvious that the quantity which the buyers are willing to take and the quantity which the sellers are willing to give both depend upon the price asked or offered; that indeed is the essence of the economic laws of supply and demand, which may be very briefly indicated in the two statements that the higher the price the smaller will be the demand and the greater the supply, while, conversely, the lower the price the smaller will

Theory of value.

Market price.

be the supply and the greater the demand. The fixing of market price by the balancing of these two opposing forces is like a man bearing two weights (which may be unequal and may vary) on a pole slung across his shoulder; to make the weights balance he must move the pole back or forward on his shoulder till he finds the one point at which owing to the principle of leverage they will be exactly equal for the time being. In practice this market price or equilibrium price is arrived at more or less blindly by competition of buyers and sellers in the market, and the point at which the price is fixed depends largely on the conditions and character of the market.

In order to understand the mechanism of exchange it is therefore necessary to discuss more fully the idea underlying the word 'market', for the market is as it were the arena in which the forces of supply and demand carry on their continual struggle over prices. The organization and methods of operation of the world's markets are therefore an essential part of the mechanism of exchange.

Meaning of market.

The popular idea of a market is a place or a building where the buyers and sellers of a particular commodity meet to carry on their trade. But among business men the word is used in a much wider sense which is nearer to its economic meaning. They speak of the market for cotton, for example, as meaning something quite different from the actual building of the cotton market or exchange. A market in the economic sense of the term means the whole area over which the consumers and producers of a commodity are spread. The essential feature of a market is that within the area of the market there is free communication between the producers and the consumers, both in the sense that buyers and sellers alike are well informed as to what the others are doing, and also in the sense that the commodity itself can be moved easily from one part of the market area to another, in response to the varying conditions of supply and demand in different parts of the area. Thus it means that if prices are cheaper in one part of the area than in another, the buyers can go to the cheap place to buy, while on

Free communication.

the other hand the sellers can remove their supply to the district where better prices are obtainable. The result of this free communication in the double sense is to prevent any variation of prices in any part of the market area; in other words, in a really perfect market, in the economic sense of the term, the price of the commodity must be the same all over the area of the market. In Western markets the spirit of public competition makes the seller advertise his prices in order to tempt customers to buy from him rather than from some one else. This publication of prices is the essence of the Western methods of competition; by it the consumers can compare the prices of all the different merchants and select the cheapest. The natural and inevitable result of this system is to preserve the uniformity of price throughout the whole area of the market. No one will buy goods from one dealer knowing that another is willing to sell the same kind of goods at a cheaper price; just as no dealer would be so foolish as to charge a high price knowing that his neighbour was offering to sell the same goods at a lower price. Thus competition in the market produces uniformity of price; hence Jevons's Law of Markets or Law of Indifference says, *In the same market there cannot be two prices for the same commodity.* But this does not go to the root of the matter so well as Marshall's definition of a market as *any area in which the buyers and sellers are in such free communication that prices tend to equate easily.* The root of the matter is free communication, publication and comparison of prices, and easy transference of supply or demand.

Uniformity of price.

Jevons's Law of Markets.

So far for the theory of a market. It has next to be explained that markets differ very greatly in two respects, which may be described as space and time. A market may be small or large, it may be short or long, and the nature of prices in the market will depend largely on these different conditions of the market. It is necessary therefore to discuss the considerations which affect the extent of a market in these two senses of space and time.

Area and duration of market.

(1) Space. A market may be so small as to include only the

dwellers in one small village or town, or even in one district of a large town, or it may be so large as to include the whole world, such as the market for cotton goods, which is as nearly world-wide as that of any commodity in the world. The difference depends mainly on the nature of the commodity. To command a wide market a commodity must be (*a*) an object of universal demand, like wheat or cotton. The market for commodities which are only thought desirable by a comparatively small number of people or by certain races must be confined to the area in which they live. It would not be easy, for example, to dispose of a stock of betel-nut in England or of heavy furs in Southern India. Extent of a market.

(*b*) It must be easily described, sampled, or graded, so that a man proposing to buy a certain lot of the commodity may have it described to him exactly by letter or telegram, or by word of mouth in a way which he can understand readily and without any doubt as to what the seller is offering. This makes it possible to buy and sell without actually seeing the goods in bulk, so that it becomes possible to deal in such goods across half the world by post or cable. Thus wheat can be sold by sample, and cotton is continually sold by description on certain standard bases; but one could hardly buy a horse without actually seeing it.

(*c*) It must be portable; its value must be fairly high in proportion to its bulk or weight, so that the cost of transport is not excessive. Thus wood for building purposes is very expensive in Egypt, yet in the backwoods of New Zealand it costs a great deal of money to destroy good wood so as to clear the land for cultivation. The cost of transport makes it absolutely impossible to transfer the wood from one part of the world where it is worth less than nothing because there is no 'market' for it, to another where it would be of great value. Portability.

(*d*) It must be durable, that is to say neither fragile nor perishable, so that transport over long distances, which involves considerable time, and perhaps rough handling, may be possible. The English meat trade, for example, has been absolutely revolutionized by the development of cold storage in ships, Durability.

which makes it possible to carry fresh mutton from Australia or meat from the Argentine to England, with the result that the whole world is now almost one market for meat, and the wholesale prices of meat in these distant parts are approximately the same as in London, allowing for the cost of carriage.

Duration of a market.

(2) Time. A market may be very short in the sense that the supply and demand which are taken into account in fixing the price are necessarily only the quantity immediately available for sale, or the quantity which can be consumed to-day; or it may be very long in the sense that the consumers can either buy to-day or wait till to-morrow, or they can buy enough to-day to satisfy their requirements for the next six months, because the commodity will keep perfectly well. On the other hand, the sellers in a 'long-period' market, as Marshall calls it, are not dependent on the immediate supply because they know that further supplies are coming, nor are they forced to sell to-day because again the commodity can be kept for a better market in the future if prices now are not satisfactory. These considerations as to the duration of a market also depend

Nature of commodity,

largely upon the nature of the commodity. Thus (*a*) it depends upon whether the commodity is perishable or not. In the case of fish, for example, the seller must obviously take what price he can get to-day because the fish will be bad to-morrow; while on the other hand the housewife cannot purchase any more than her household can consume in a day, no matter how cheap the price at which the fish is offered, because the surplus would not keep beyond to-morrow.

of demand,

(*b*) The length of the market depends on the probable duration of the demand for the commodity. Is it a thing which is likely to remain in constant demand, like wheat or other food products, or is it something for which the public have merely a temporary need, something which has become the fashion for the time being, or for which they have taken a passing fancy?

and supply.

(*c*) Is the supply limited to the existing stock, like some unique curiosity or work of art, or is it a regular crop, capable of

being estimated in advance and relied upon as a regular periodic supply (though the exact amount may vary from year to year), like the world's wheat or wool crops; or again, is it a case of manufactured goods of which the supply can be increased to any extent required, like the increased supply of munitions in the world during the war?

World's markets.

These, then, are the conditions which have led to the development of the world's great markets in such commodities as wheat, wool, cotton, iron, steel and copper, and other necessaries of life, the demand for which is practically universal, while their production extends over very large parts of the whole globe. It is necessary next to consider the lines upon which these great markets carry out their world-wide operations, for their methods are all very much alike and are all more or less framed upon one model, that of the most world-wide market of all, the market for money. The methods of trading in the world's great staples, both in actual purchases and sales and in the special branch of trading for future requirements which is called speculation, have all grown up round the methods of the Stock Exchange, which is the centre of the world's market for capital. The primary function of the Stock Exchange is to create a market for capital, to find capital for the formation of new companies, to buy and sell stocks and shares of existing companies, and to float and deal in government loans and stocks.

The Stock Exchange.

The main fact about the whole of the regulations and methods of the Stock Exchange is that they are all directed to one end, viz. to make it possible to do the largest amount of business in the shortest time. All kinds of special arrangements have been invented or gradually perfected, the primary object of which is to expedite and facilitate business, and as the result of this development of expeditious methods the amount of business which can be put through in a short time is almost inconceivably large. On a busy day in a large stock or produce exchange millions of pounds' worth of shares or goods may change hands in a few minutes. The mainspring

of the whole system therefore is the necessity of doing business quickly and at the same time safely, that is to say without uncertainty as to the business done, which would lead to disputes and litigation.

The broker's position. In the first place, then, it is part of this policy that the privilege of trading on the Stock Exchange is confined to certain members who are carefully chosen because they are believed to be reliable men, and who are required to lodge securities for large sums against the possibility of their being unable to meet their obligations to their fellow members. For it is the essence of the stockbroker's position that while he is really acting for some one else, by whom he is merely paid a commission, in dealing on the Exchange for his clients he is personally responsible to his fellow brokers for the due fulfilment of the contracts of sale or purchase made by him on behalf of his clients. Under no other system could the business of the Exchange possibly be carried on with the desired speed. It would be impossible to carry on business with the necessary rapidity if on every sale the seller had to be furnished with the buyer's name, and then had to consider whether the proposed purchaser would be good for the price. The market might be up or down several points before he had time to make up his mind, and then it would be too late to reject the bargain. If the bargain is to be closed immediately by the mere calling out of a price and a wave of the hand as acceptance, the seller must have a guarantee that the purchaser is good, and such a guarantee can only be given by implication by the buying broker. Thus every broker is dealing on the Exchange practically as a principal, and takes upon himself the whole responsibility for all his clients' obligations.

The Settlement. Again, the same necessity for rapid operation and the enormous turnover of the Exchange is partly responsible for the system of periodic settlements. Shares may be changing hands at various prices from hour to hour and from day to day on the Exchange, and it was therefore found necessary, instead of carrying out and settling each transaction separately, executing

a formal transfer of the shares and paying over the price, to have one day every month, or oftener, upon which all the transactions during the previous month would be settled simultaneously, the shares being transferred direct from the first seller to the last buyer. An elaborate system has grown up on the lines of the Bankers' Clearing House for entering up the credits and debits of each broker and settling the accounts between them at each of these periodical 'settlements', as they are called. See p. 94.

Punctual payment on the fixed settlement days is absolutely essential. If a broker does not meet his obligations, he is posted as a defaulter. These periodical settlements have therefore the further advantage of keeping the brokers advised (to a certain extent) of the position of their fellows with whom they are dealing. If there is anything wrong with a broker's financial position, it should be at once revealed by his failure to meet his contracts at the next settlement.

Borrowing on securities.

But it is not always possible for brokers or their clients to take up their purchases promptly on the settlement day. A system has therefore been developed under which those who require to borrow money in order to pay for their purchases can do so. Thus banks grant loans to their own clients, whether brokers or private persons, on the security of shares deposited with the bank. The customer must find a certain amount of cover, that is to say, he must pay part of the price of the shares himself, borrowing only part from the bank, so that the value of the shares lodged as security exceeds the amount of the loan. If the shares fall in the market, the bank will call on the borrower to provide more cover, in other words, to pay in a sum to reduce the loan, or lodge further securities, thus preserving the margin between the value of the shares and the amount of the loan. But as the banks can only do a limited amount of this business, a special class of brokers has grown up on purpose to do it. They are called contango brokers, and are practically pawnbrokers of shares. If a stockbroker cannot pay for his shares, he borrows money

Contango brokers.

from a contango broker, who takes up the shares, or carries them over, as it is called, for the actual purchaser till next settlement. The charge made for doing so is really interest on a loan, but it is called the contango rate, or carry-over rate.

Speculating on differences.

Unfortunately, the facilities thus provided for genuine investment business have led to the development of an entirely different class of business which is less desirable. This is speculation, buying and selling shares, not with the intention of holding them as an investment, but simply in hope of turning them over again at a profit. The contango system has enabled people to enter into this kind of business on a large scale, because, as they can borrow the greater part of the price, they are tempted to buy a larger number of shares than they could possibly pay for. This has given rise to the system known as speculating on differences, which means buying shares which one does not want to hold, and cannot possibly pay for, in the hope of being able to re-sell them soon at a profit, or selling shares which one does not possess in the hope of being able to buy in again later on at a lower price.

'Bull' and 'bear'.

The former is what is called a 'bull' transaction, the object being to force up the price of shares, the latter a 'bear', which has the reverse object. Were this process confined to one settlement it would not do very much harm, but when, owing to the carry-over system, brokers are enabled to carry on open speculative accounts from month to month, it leads to considerable mischief and artificial movements in the prices of shares which are due to manipulation by interested speculators. Many of the brokers themselves make a business of speculating in this way on their own account, as well as for clients, and it is in this kind of business that fortunes are made—and lost—on the Stock Exchange.

Its economic position.

It is difficult to see any real economic advantage to the community in this kind of transaction, but, unfortunately, it is hardly possible to restrict or prevent it without interfering too much with the necessary liberty of genuine investment business.

A Produce Exchange,—Cotton.

The principles upon which the business of a highly developed produce exchange is conducted are practically the same as those of the Stock Exchange. The Liverpool Cotton Exchange may be taken as an example.

Grading system.

The first step in the development of a wide market for any commodity is the adoption of a system of grading so that the goods sold may be easily described and recognized with certainty, without the actual inspection of the goods themselves, or even of samples. Thus different kinds of cotton are described by well-known trade names and graded according to quality, so that if one wishes to buy or sell, the particular goods offered can be described to a nicety and the price fixed accordingly. In the event of any dispute arising as to whether the cotton supplied is of the quality described, experts acting as arbitrators between the parties examine it and give a final decision. This system enables transactions to be put through by letter or cable between parties far apart and in the shortest possible time, so that the volume of business done is enormous, and the identity of price, which is the essence of a market, is secured and maintained.

Spot sales *v.* futures.

Cotton may be bought and sold either for actual delivery, known as 'spot' or 'forward' sales, or in the form of 'futures', that is to say, contracts or sales ahead, which may be intended to cover actual future requirements or merely speculative purchases. The economic position of such speculative dealings in actual commodities is more defensible than in the case of stocks and shares. Under modern conditions, anticipation of future needs is the essence of business enterprise. Every manufacturer must make goods for a future demand, which it is his business to estimate accurately. It follows that, as he is dependent on the future selling price of his goods, he must consider the probable future price of his raw materials. The considerations upon which the future price of cotton depends are very complicated, involving both the future supplies and the amount of the future demand, and the increasing specialization of modern business has led to the development

Advantage of skilled anticipation.

of a class of experts who devote themselves entirely to the study of these conditions. The intelligent anticipations of these experts serve a useful purpose, because by raising or lowering the present price in view of the future conditions which their experience enables them to foresee, they can actually modify the present market conditions so as to mitigate the future fluctuations. Thus a cotton broker or importer, foreseeing a short supply from the next crop, raises his price, thus tending to check the present demand and spin out the supply as far as possible to meet the expected shortage. Without such skilled anticipation the present demand at a low price might exhaust the supply, causing a sharp rise in price later on when the deficiency of the crop manifested itself in a short supply. Thus, anticipation tends to check the fluctuations of price, which are bad for trade.[1]

Unfortunately, the theoretical advantages of the system are considerably diminished by the entrance into the market of outsiders who, not having the expert knowledge of the real dealer, merely gamble in futures. The fixing of price therefore becomes more or less of a contest between these two classes, in which needless to say the skilled expert generally scores.

[1] See *The Marketing of Cotton* by the present writer. Pitmans. 1933.

CHAPTER IV

THE FUNCTIONS OF MONEY

The functions of money.—Its evolution.—How the precious metals came to be chosen as money.—Their advantages.—Development of the modern form of coinage.

So far money has been referred to in broad terms as the means or medium of exchange. It is necessary now to analyse its functions more carefully and in fuller detail. These functions may be described as threefold, thus:

(1) Money is the means or medium of exchange. It breaks up barter into sale and purchase. Goods instead of being exchanged directly for other goods, are exchanged for money, which again is exchanged for other goods. Money thus becomes the universal third commodity for which all goods are exchanged. Medium of exchange.

(2) As everything is exchanged for money, money becomes the common measure or common denominator of value. Thus exchange value becomes price, which is simply exchange value expressed in terms of money. Common measure of value.

In order to fulfil these two functions properly, the essential quality of money is that it must be universally acceptable, because its value depends on common consent to accept it in payment for goods, that is to say, to give goods in exchange for it. Every one is willing to take money in exchange for his goods because he knows that others will in turn be willing to take the money in exchange for their goods. Hence Walker's[1] definition of money as 'that which passes freely from hand to hand in full payment for goods, in final discharge of indebtedness, being accepted equally without reference to the character or credit of the person tendering it, and without the intention on the part of the person receiving it, himself to consume or Universal acceptability.

[1] *Dict. Pol. Econ.* 'Money.'

enjoy or otherwise use it than by passing it on sooner or later in exchange'.

Store of value.

(3) Money is also the standard of deferred payment or register of debt. All contracts or obligations implying an undertaking to be fulfilled at a future time are usually expressed in money values though in reality they relate to goods or things of value. Thus if a manufacturer borrows raw materials to make into goods, and is unable to pay for them until later on, his obligation is not to return an equal quantity of raw materials at the period fixed, but is expressed in terms of an obligation to pay a certain sum of money, based on the present money value of the raw materials borrowed.

Stability of value.

The one quality essential to enable money to fulfil this function properly is stability of value. If the value of the money changes in any way during the period of the loan, it is obvious that either the creditor or the debtor will be prejudiced by the change.

The process of evolution by which men have gradually come to choose what are known as the precious metals to fulfil these functions of money is most interesting, not only as a piece of the history of the development of civilization, but also as showing how the character and functions of money itself have been developed. Thus the use of money as merely a means

Primitive means of exchange.

of exchange is comparatively a late development. At first the thing accepted in exchange was necessarily some commodity which possessed intrinsic value, though it might happen that it was something for which the receiver had no personal use at the time. But he knew that he would want it later on, or that when he wanted something else he would easily be able to exchange it for the things he wanted, because this particular commodity which he had received in the first exchange was generally desired by other people. Thus one can imagine a total abstainer being willing to accept payment of his goods in bottles of whiskey, for which he has no use himself, because he knows that when he comes to require other goods, the whiskey commands a certain value in the eyes of most men

which will make them accept it in exchange. But one could hardly imagine the use of such a means of exchange in a community of total abstainers. The idea of regarding the medium of exchange as only a means to an end, and therefore not requiring any intrinsic value in itself, as long as people even by mere convention are willing to accept it because every one else is willing to do so, is the highest development of the modern use of money, and is the basis of the theory of the value of paper money and other forms of money which are in themselves entirely worthless.

The highest development.

At first, then, men naturally chose for the means of exchange something familiar and generally recognized as useful or desirable in itself. Thus among primitive savages shells would naturally appeal to them as money, because if they did not require to re-exchange them at once, they could in the meantime employ them as ornaments by hanging them round their necks, and so get some use out of them. A similar idea lies at the root of the practice in India of investing spare funds in the purchase of silver bangles and ornaments for the women folk. The same idea may be recognized in the purchase of diamonds in the west. The money is put to a good use in the meantime, and it is there immediately convertible into other forms of goods when necessity arises. Instead of getting interest on it from the bank, one gets the use of it in the form of ornaments to be admired in daily use.

Value in use.

Among early nomadic tribes cattle, sheep, and other animals were a natural form of means of exchange because they were universally desirable, and also for another reason because they were self-portable as it were; when the tribe moved from place to place the 'living money' moved with them, and even served to carry their other forms of movable wealth, their various goods and chattels. Many other things have been recorded as the accepted means of exchange, such as rice in parts of India, cacao among the aboriginal Mexicans, oil in the Ionian Islands, rock salt in Abyssinia, wampum money in the early days in New England, tobacco in Virginia and Maryland,

Early forms of money.

tea blocks at the old Russian fairs, dates among the tribes of Northern Africa, beaver and sealskins in Arctic regions, and so on, all of them being articles which in the first place possessed intrinsic value. It was for the same reason that metals were first employed as the means of exchange, for metals were at first among the most precious things available to semi-civilized races. The early use of copper in Egypt, for example, which it is said was indeed the very mainspring of the rise of the earliest Egyptian civilization, would naturally suggest the use of copper articles or ingots as a most convenient medium of exchange, a commodity always desirable and of great use in itself. From these early days the choice of metals as money has become universal, the only change being that as the baser metals, so called, became more common, the choice has gradually risen to those metals of higher value which have come to be known exclusively as the 'precious' metals, namely, gold and silver. It must be remembered, however, that these are not by any means the most precious metals, and it is therefore necessary to consider why they should have come to be so universally adopted as the best material for coinage.

Early use of metals.

Precious metals.

Their first advantage lies in the fact of their universal desirability, which is due to their intrinsic beauty, and the multiplicity of their possible uses as ornaments and otherwise. But another reason for their value is their comparative scarcity, and an interesting way of realizing this is suggested by considering whether, setting aside their modern relative value, gold is really any more beautiful or more desirable in any way than silver. As a matter of fact it is doubtful whether gold always was more valuable in men's eyes than silver, and it is easy to imagine that in a country like Southern India, where in the old days gold was comparatively plentiful but there was no native supply of silver, a traveller arriving with a stock of silver for sale would easily have been able to obtain more than an equal quantity of gold in exchange for it. But in modern times the world's supply of silver is so much greater than that of gold,[1] and the cost of production of

Their value.

[1] See Table I in the Appendix.

silver is so much less than that of gold, that gold has without any difficulty achieved the higher position, and is likely to retain it. But another aspect of the question is shown by the fact that other metals still more precious than gold have been tried as the basis of metallic money, especially platinum in Russia during the nineteenth century, but without success. What then are the peculiar qualities of gold and silver which have made them so outstandingly desirable as the raw material of the world's money supply? They may be tabulated as follows:

(1) Facility of transport or portability, because they possess large value in proportion to their bulk and weight, hence their value differs little from one place to another, because the cost of carriage is comparatively small. The price of gold therefore is roughly the same all the world over, because if its supply were excessive in one country and deficient in another it would very quickly be carried from the one country to the other. Thus the value of gold at the mine in South Africa is only a comparatively small fraction less than the value of refined gold in London, because the cost of refining it and forwarding it to London is only a trifle compared with its total value, which is nearly £4 per ounce. Even silver of course compares very unfavourably with gold in this respect, so much so for example that in many of the United States silver dollars are not in use at all, though they are the principal coin of the country, but are replaced in actual currency by paper dollars. It would be intolerable to have to carry about any large sum in silver. Portability.

(2) Durability. Hence the value of gold varies very little from time to time. Gold does not depreciate e.g. by rusting, though kept for an infinite time. It is therefore very desirable for use as ornaments, and ancient Egyptian ornaments made of gold are in existence to-day which are six thousand years old, and are in almost as perfect condition as the day they were first worn. For the same reason gold and silver are the most desirable forms in which to keep treasure from one age to another, especially gold, which under proper conditions does not even tarnish with keeping. Durability.

Durability is very important for another reason. Gold, once it is found is not consumed, like wheat for instance. It remains more or less permanently in existence, though in the case of ornaments and coinage a certain proportion of its weight is gradually lost by wear in use. But on the whole, gold once brought into the world remains available for permanent use, with the result that each new supply is added to the existing stock, and the sum-total is constantly increasing. This has been expressed by saying that the world's supply of gold is a stock not a crop, and this is of the greatest importance in reducing the tendency to fluctuation in value which would result from variations in the supply if that were dependent upon the annual production. If wheat, for example, were used as money its value would vary enormously from year to year, according to the amount of each year's crop. But with gold it is not so; the annual output though now very large is small compared with the accumulated total which remains from all the world's production throughout past ages. The annual production of all the goldfields in the world was before the War about twenty-three million ounces (troy) of fine gold, worth nearly a hundred million pounds sterling.[1] Probably from one-half to two-thirds of this went into coinage every year. But the total amount of gold in existence in the world as coin and bullion was estimated at over two thousand millions sterling,[1] so that the annual addition to the stock was less than five per cent. of the total. If the annual crop of gold were doubled it would only make a difference of four and a half per cent. per annum in the world's stock, which is of course considerable, but nothing at all compared with what the effect would be if the world were dependent on its annual supply of gold for its whole requirements.

World's gold supply.

Uniformity. (3) Identity of quality. There is no necessity for sampling, grading, or description of the quality of particular lots of gold, as in the case of wheat, cotton, or other goods. All pure gold is the same, and it is only necessary to ascertain the standard of the metal, in other words the proportion of alloy to pure

[1] See Table I.

gold (for gold is scarcely ever handled in the absolutely pure state), in order to be able to state its exact value. There is no difference of quality between different samples of gold from different countries. All pure gold is the same.

Difficulty of counterfeiting.

(4) Difficulty of counterfeiting. Imitations of gold are easily detected by a very simple and infallible test, and the exact ascertainment of its standard by assaying is comparatively easy.

Mechanical advantages.

(5) Gold and silver are very easily handled from the point of view of the mechanical difficulties of producing a good coin. They are easily melted down, beaten, rolled, or drawn out into thick or thin sheets, pieces, or wires. In technical terms they possess great fusibility, ductility, and malleability. They are also almost infinitely divisible. A piece of gold can be beaten out into a layer so thin that it would be blown away by a breath, and this foil may be cut up into the most minute pieces, yet the whole thing can be brought together again and melted down into an ingot of the original weight. Compare this with a diamond, for example, the value of which disappears completely when it is cut up, or with the difficulty of handling harder metals such as platinum. These were found so difficult as coinage material that they finally had to be abandoned even by Russia, which had the advantage of producing the metal in her own country, and made great attempts to introduce their use.

Divisibility.

Stability of value.

(6) Stability of value. In this respect it will be found that the precious metals are far from perfect as a means of exchange, yet they are probably much better than anything else yet discovered. The comparative scarcity of gold prevents its value being completely demoralized by great discoveries, and even if such were made, it is doubtful whether the cost of production would be very much lower than at present. Of course, if some chemical process of making artificial gold could be discovered which would produce tons of gold out of some inferior substance it would completely destroy the value of the invention by depreciating the value of gold through its superabundance; but it is a striking fact that though nothing in the

world's history has led to greater effort from the earliest times than just this search for the philosopher's stone, not the slightest success has rewarded all these efforts. The world is still dependent for its gold supplies upon the hard won product of the miners in countries which are all distant from civilization and mostly very inhospitable, and the cost of getting it out is high in human life and sacrifice, as well as in mere labour and machinery. The cost of production of gold is therefore likely to remain fairly high; and by one of the peculiar compensations of economics the very fact of an excessive supply of gold serves to some extent to increase the cost of production of further gold, and so tends to check the increase of the supply. To explain this fully involves anticipating the argument of the next chapter, so that it must suffice at the present stage to say that the general effect of an increased supply of gold is to raise the prices of all kinds of commodities throughout the world; this inevitably affects the prices of machinery and human labour and all the other essentials which go to make up the cost of production of more gold and makes it less profitable to produce gold.[1] Thus the increased supply of gold tends to check itself; but this influence is not normally of any great importance, because it only affects the supply of gold and that very slightly. The other influences which affect the value of gold are of much greater weight than its cost of production.

Cost of production of gold.

It is again a matter of great historical and social interest to trace the gradual development of the modern form of coined money which is so generally adopted throughout the world, for there is really astonishingly little difference between the chief types of coins in use in all the different countries of the world. Most of them are round and flat, covered with designs or lettering, and with milled edges, except in the case of coins of inferior metal. What is the explanation of the universal adoption of one common form?

Evolution of coinage.

At first the precious metals were used in the form of ingots or small pieces of the metal, which had to be assayed and weighed in order to ascertain their value, a very cumbersome

[1] See Chapter XVI.

process. Then the practice grew, probably among merchants travelling about the then known world from fair to fair, of making their ingots of a fixed standard of fineness, and putting private marks upon them. Those who knew the merchant's mark and had confidence in him, only required to weigh the ingot; they could take its standard for granted. It is interesting to note that in many cases these primitive coins bore a distinct resemblance to certain articles or commodities which had formerly been in customary use as means of exchange. Thus we find traces of small images of oxen in gold apparently in use as means of exchange in Egypt, and in China there were knife coins, which recalled the previous use of knives as the medium of exchange. It is hardly possible to draw any hard-and-fast line between these primitive ancestors of the idea of coinage and the first of what would be called coins in the modern sense of the word, for the process was not one of invention so much as of evolution. The small bean-shaped ingots, bearing one or more punch marks in the side, which were in use among the Lydian kings as early as 700 B.C. and probably also in China about the same time, are just the last stage before the emergence of the real coin. The first coins in the modern sense of the word were probably the early Greek coins such as those used by the Greek merchants in Naukratis in Egypt in the seventh century B.C. These were round and flat, and bore representations or symbols of the gods in high relief upon both sides. The later Greek coins in Egypt, especially those which bore the head of Alexander the Great, though these were not issued till after his death, were of extraordinary beauty, and the whole coinage of the Greek and Roman periods in Egypt provides an epitome of the history of the various rulers of the country in those days, Greek and Roman. Gradually they were working up to the modern form of the coin, and indeed the only thing they did not use in their coinage, which may fairly be claimed as a modern invention, was the milled edge. Their coins had a bevelled edge which served the same purpose; it enabled any one handling

Marked ingots.

Early Coins

the coin to see at a glance whether it had been much worn, or had been clipped or interfered with in any way. For that is the whole secret of the modern coin; its object is to make it impossible to subtract anything from the metal content of the coin without the fact being immediately patent That is why the coin is covered with designs over almost the entire surface of both sides, and the edge milled; the least attempt to scrape or rub off any of the metal must interfere with the design or the milling and be shown up at once.

Object of a Coin.

The final stage in the history of coinage is its adoption by the government as its exclusive business, for coinage has from very early times been regarded as the privilege of the government. Thus the government steps in and takes over the making of the coins, marks them with its own mark, generally the portrait or superscription of the sovereign, and fixes the weight and standard of fineness of the gold contained in the coin, at the same time fixing the value of the coin accordingly, and making it legal tender, that is to say, making its acceptance compulsory.

A government monopoly.

Hence Jevons's definition of a coin is *An ingot of which the weight and fineness are guaranteed by the government, and certified by the integrity of designs impressed upon the surface of the metal.* Its universal acceptability is now based upon the order of the government, not upon the mere consent of the people to accept it, though that was originally based upon the intrinsic value of the coin. But the government has merely set its seal upon the convention already established by custom, and it remains to be seen later on whether the sanction of the government has in any way altered the real value or authority of the coin.

CHAPTER V

THE QUANTITY THEORY OF MONEY

The value of money is its purchasing power.—Quantity theory of money.—Variations of its purchasing power or general level of prices.—Index Numbers.—The meaning of Money.—Metallic money with full intrinsic value, Token money, Paper money, Bankers' money, and the Credit system.

BEFORE going on to deal more fully with the qualities and requirements of metallic coinage, and how it fulfils the functions of money, it is necessary to consider certain general questions affecting the position of money as the result of these different functions, especially the second, the common measure or common denominator of values. If, as already explained in previous chapters, all goods are, under a 'money economy' as it is called, exchanged not directly for each other but in the first place for money, it is natural to expect that some relation will be set up between the total amount of goods in existence at any given time which must be exchanged for money, and the total amount of that money which is available at the time to carry out the necessary exchanges. If there is a certain quantity of goods which must be sold for money, and there is only a certain amount of money available to buy them with, then obviously the price of the goods, that is to say the amount of money obtainable for each commodity, will depend on the relation between the amount of money and the quantity of commodities. If there is plenty of money and not very many of the goods, each commodity will exchange for a large quantity of money, in other words it will fetch a high price; but if there is little money and a great many goods the price of the goods

Money and prices.

will be very low. This is no new theory, but simply another application of the ordinary theory of value, namely, that the value of anything depends on the quantity of other things one can get in exchange for it, which depends as a rule on the relative quantity of the two commodities awaiting exchange. Obviously the same rule ought to apply to the case of exchange between commodities in general and the one commodity for which they are all exchanged, namely money. The value of money then, like that of everything else, should depend on the amount of it, or on supply and demand.

Theory of value.

In the first place, however, it is necessary to make clear what is meant by the value of money. The value of any other commodity is expressed by its price, which is its exchange value in terms of money. That of course is not its real value, but merely a method of expressing its value in terms easily understood and comparable with those of other commodities. But obviously the value of money cannot be so expressed. One cannot express the exchange value of anything in terms of itself. The price of money—its exchange value expressed in terms of money—is an absurdity, which conveys nothing at all. To find out the value of money one must therefore do as in the case of other commodities, go behind the price which is merely the expression of their value, to the real value behind that price. The real value of any commodity is the quantity of other goods for which it can be exchanged. So it is with money: the value of money is the quantity of other commodities for which it can be exchanged, but as all other commodities can be exchanged for money, it is more convenient to say that the value of money is its purchasing power. Now the purchasing power of money obviously depends upon the general level of prices; if prices of all commodities are high it means that a certain amount of money will not go so far in the market as it would if prices were lower. What then is it that regulates the general level of prices, and so controls the purchasing power of money?

Value of money.

As already stated, the value of money is like everything else

in that it depends on the supply and demand. The supply of money consists in the first place of the quantity of metallic coinage which is in circulation as the medium of exchange. It will be seen shortly that that is by no means a complete definition of the money supply, but it may serve the purpose in the meantime. On the other hand, the demand for money is only measurable by the number and value of the exchanges which have to be made of goods for their prices. Obviously this depends primarily on the quantity of the goods concerned, and so it may be generally stated in the meantime that the demand for money depends on the quantity of commodities produced which require to be exchanged for money. Putting these two together we arrive at the definite statement of what is known as the Quantity Theory of Money that *the general level of prices depends on the amount of money in effective use; it varies with the relation or proportion between the total amount of money (of every kind) and the total amount of goods and services which must be exchanged for that money.*

Quantity Theory of Money.

Notice next that theoretically it does not make any difference to any one whether the general level of prices is high or low. Money is only a means to an end, the exchange of goods for each other, and theoretically it does not matter how much of the money is used in the double exchange; what really matters is the amount of each commodity exchanged, that is to say, the relative value of the two commodities compared with each other, regardless of the standard of comparison used. Thus if it is necessary to know which of two men is the heavier, it does not matter whether their weights are measured in terms of pounds or kilograms. The unit of weight used will not affect the relative weights of the two men. In the same way it may be said that the general level of prices is of no importance to any one, because it makes no difference in the real values of commodities. A general rise or fall in prices theoretically makes no difference.

It may be well to point out here a very common confusion of terms. It is customary to speak of a general rise in values,

Prices *v.* Values.

when people say that the value of everything is rising. But a rise in the value of everything is a contradiction in terms, because value is only relative, it means that one thing is worth so much more or less of another. If then the value of one thing rises it must mean that the value of something else in respect of that first commodity has fallen. Both cannot rise at the same time. The confusion arises from the fact that the *prices* of two things may both rise; but that does not affect their values in relation to each other, which remain the same. If the one was worth two of the other before, and the prices of both are doubled, the one will still be worth two of the other. What is really meant by those who speak of a general rise in values is only a general rise in prices, which is not the same thing at all. A general rise in prices means that the value of everything *except one* has risen. That one is gold or money. It means that the value of gold, which is its purchasing power, has fallen, while the value of all other commodities in terms of gold, which is their price, has risen. A general rise in prices means that the amount of gold for which other commodities can be exchanged has risen. One gets fewer commodities now for the same amount of gold: in other words, the value of gold has fallen.

Theoretically therefore the value of gold makes no difference to any one, because it does not matter to the world whether the general level of prices is high or low; but what does matter is the process of rising or falling of the general level of prices, that is to say, the change from one general level of prices to another. Theoretically again even this should not matter if all prices rose or fell simultaneously and proportionately all round, because no one would be any the worse or the better. But that is just what they never do. Owing to various causes, which may be summed up in the term economic friction, there are always some people who suffer in a period of transition because they are less able to defend their economic position. It takes time to make changes, existing contracts must be carried out till they expire, customary prices and rates of

wages are very slow to change, even when it is clear that other things are changing, and the result is that there are always certain classes who tend either to gain or lose by a change in the general level of prices. For example, such a change affects the relative positions of debtor and creditor, because it means a change in the value of money during the period which elapses between the granting of the loan and its repayment. If a manufacturer borrows £1,000 to put into his business to be repaid ten years later, the only thing he can do with the money is to buy with it something which he requires for his business, say raw materials, and these are in due course manufactured and sold as finished goods, for which he receives a certain price. At the end of the ten years all prices have risen, including those of the manufacturer's commodities. As the time for repayment approaches he must sell £1,000 worth of his goods to pay his debt, but owing to the rise of prices he will not require to sell so many goods now as he would have sold for £1,000 ten years ago. Fewer goods will therefore pay his debt now than he was able to make out of the original sum borrowed. He has gained by the rise of prices, because the value of the money repaid is lower than the value borrowed, though the sum is the same. The value of money has fallen. When prices fall the position, of course, is just reversed. Thus rising prices are good for debtors, and bad for creditors, and *vice versa*. In the same way the change in the purchasing power of money obviously affects all people with fixed incomes, or those whose rate of remuneration is fixed by custom and is slow to change. Thus the wages of the workers and the salaries of the middle and professional classes are very slow to move in times of changing values, and these classes gain greatly by falling general prices and lose by rising prices. Their real income moves in proportion to the rise or fall of prices in general, but in the opposite direction. This, for example, was very seriously felt by all classes owing to the rapid rise of prices during and after the War. In England in March, 1920, a sovereign would only buy as much as could have been

Effects of changing prices.

Debtors and creditors.

Fixed incomes.

bought for about 6*s.* 2*d.* in July, 1914, the wholesale Index Number being 325 against 100 at the former date (see Table IV).

What matters, then, is not the actual position of prices, but the movement up or down of the general level of prices, and in modern times great attention has been paid to evolving methods of calculating the rise or fall in the general level of prices. For obviously it is not easy to say how the general level of prices is moving when many items are going up, but some are steady, or perhaps even going down. The method now in use is known as that of Index Numbers. A large number of commodities in general use being selected, the price of a certain quantity of a particular quality of each commodity is ascertained. Later on, say at intervals of a month or a year, the price of the same quantity of the same quality of each of the commodities is again taken, and the new figure in each case is compared with that formerly recorded. The difference is calculated as a percentage, and the total of these percentages indicates the movement of the general level of prices. There are of course many different methods of calculating Index Numbers, and many intricate points of detail to be considered,—for these, reference must be made to a special text-book,[1]—but the general method is the same and the results are always very similar. There are three main Index Numbers much used in England, namely Sauerbeck's, published in the *Statist*; that of the *Economist*, published monthly; and the Government Index Number, which is prepared by the Board of Trade. It is interesting to note the general effect indicated by them all, as shown by Table III in the Appendix. Since 1873, for example, they provide illustrations of both a great fall and a great rise in the general level of prices. From 1873 onwards prices fell very rapidly, and on the whole steadily, till about 1896, when a change began which had become very marked even before the War. Thus the Board of Trade Index Number which was 151·9 in 1873 fell to 88·2 in 1896, and then rose again, till in 1913 (the last complete year before the war) it was 116·5. After 1914 the rise of prices

Index Numbers.

History of prices.

[1] e g. Layton's *Introduction to the Study of Prices*, Appendix A.

was very much greater, but for reasons which form a very special case of the Quantity Theory and will be more fully discussed in a later chapter.

Of the two evils of falling and rising prices the former used to be considered the worse, because a general fall of prices causes great depression of trade, and introduces an undesirable element of uncertainty into the calculations of the manufacturer. On the other hand, a rise of prices while it encourages trade is apt to lead to over-activity, inflation of prices, and speculation which generally ends in a collapse and a financial crisis. Further, the effect of a rise of prices upon the wage-earning classes and generally upon those whose economic position is weak, may be disastrous by cutting down their standard of living. Thus the years before the War were marked by a wave of industrial unrest due to the fall of real wages through rising prices, while during the War and especially in the post-war boom the evils of rising prices were very sharply impressed on every country.

Falling and rising prices

What is wanted above all things is neither rising nor falling prices, but steadiness of the general level of prices, that is to say stability of the value of money, and that is just where the world's monetary system fell short of perfection even before the War. Herein lies the answer to the question propounded in the first chapter as the main thesis of this book; the system of money prices does, in times of transition from high to low prices or *vice versa*, produce an actual distortion of values through inequality of the rate of movement of prices of different commodities. If one class of prices (and it must be remembered that prices include wages or incomes) is rising rapidly, while another remains steady or rises slowly, then the relative value of these commodities or services is being altered by the changes of our monetary system. The quantity theory of money is therefore the essence of the whole question round which this book revolves, viz. the mechanism of exchange and its effect upon values. It becomes necessary then to inquire more fully into the quantity theory and the line of this further inquiry

Distortion of values.

may be indicated as follows: According to the theory the general level of prices depends on the quantity of 'money' in circulation. But there are many different kinds of money in use in the world, and metallic money, especially gold, is only a very small proportion of the total. It must not be assumed therefore that the quantity of *metallic coinage* in circulation, still less the quantity of one particular coinage, say gold, has any direct and *proportionate* effect on prices. In the first place we have no definite knowledge of the amount of gold coinage in existence in the world. All we can do is to take the totals of certain known stores of gold e.g. in certain banks and State treasuries, and estimate the rest. Again our information as to the world's annual supply of gold is fairly accurate, but we have no very definite information as to how much of that is used for coinage purposes and how much for other uses, such as gold watches and ornaments; that side of the demand for gold can only be estimated.

Quantity of 'money'.

But even if we had exact information as to the quantity of all the different metallic coinages in circulation in the world we should still be very far from being able to apply the quantity theory with any approach to definiteness, because there are so many other things to be taken into account. Suppose for example that in one place or country, owing to the development of the conveniences of exchange, the concentration of markets, and the habits of the people, the turnover of trade is very much quicker than in another district, so that the same piece of money performs many acts of exchange in the course of a day passing rapidly from hand to hand. Obviously from the point of view of the quantity theory that will have just the same effect as if there were many pieces of money each of which merely passed from one hand to another and remained in the possession of its second owner all day. This then points to the question of 'rapidity of circulation', which is a factor of great importance in the effective amount of money. Again, there are many different kinds of money, all of which require to be taken into account in discussing the quantity of money. First of all there is the

Rapidity of circulation.

standard coinage of the country, usually gold nowadays in most countries, which possesses full intrinsic value, that is to say it would be worth as much at a goldsmith's shop as a piece of bullion as it would be in any other shop in exchange for goods. But there are also many other kinds of money which are called generically 'token money' which possess much less intrinsic value than their face value, such as silver, nickel (in every country except England), and copper. These as most people know are not worth, as metal, nearly their full legal value as coins, yet they pass current every day at their full face value without question. In other words, it has gradually been realized that full intrinsic value is not essential to the utility of a coin as a means of exchange, if certain other requirements are complied with, and it will be necessary to consider carefully what these requirements are and how far token money can thus take the place of its more intrinsically valuable companions. Still more startling when the truth is realized is the fact that in modern civilized communities certain slips of paper which are called paper 'money', though they possess no intrinsic value whatever, do as a matter of fact pass current from hand to hand in exchange for valuable goods. They are currency in fact, or money of a sort, and the question of how they perform this apparent miracle and the conditions of their issue, especially as to their amount, must be carefully studied, for obviously if money can be made out of paper to an unlimited extent it is waste of time and trouble to use gold as money, and the amount of gold brought to light in the world every year does not matter at all. Further, bankers and other financial men have gradually brought into use certain ingenious methods of doing money's work without the use of any actual money at all, e.g. by the use of cheques, bank drafts, bills of exchange, and so on, which are all included in the general term 'bankers' money', and these carry us into the mysterious realm of 'credit' which in the modern financial organization of the world means paying our debts by a system of set-off or contra account, without using any currency.

Token money.

Paper money.

But from the point of view of the quantity theory of money

all these different kinds of money or expedients for doing without money must be taken into account as money of one sort or another, and the question comes to be whether, in view of this enormous mass of 'money' other than gold, it really matters much what quantity of *gold* money is in existence at all. What are all these different kinds of 'money'; how do they come to fulfil the requirements of money as the means of exchange, and what is their relation to real money, that is to say, to the full intrinsic value money which in most countries nowadays is gold only?

The following is suggested as a classification of 'Money' for future use throughout the text:

Classification of Money.

I. Currency.
Gold standard money possessing full intrinsic value.
Token money (silver,[1] nickel or copper) possessing only partial intrinsic value.
Paper money / Bank Notes } possessing no intrinsic value at all.

II. Credit Instruments, which are really means of doing money's work without the use of any money at all in the sense of currency.
Cheques, Bank drafts, Letters of Credit, Bills of Exchange, Promissory Notes, Deposit Receipts, and all other forms of 'Bankers' money' or Credit Papers.

Currency *v.* Credit.

To make the distinction between Currency and Credit Instruments as separate kinds of money, instead of merely regarding the credit system as a means of increasing the rapidity of circulation of money, is of practical value, because it is in accordance with the actual facts of the modern monetary system; and its more general observance might have avoided much of the confusion that has arisen in post-war years in discussions of the quantity of money and its effect on prices. It must be remembered that the Quantity Theory of Money is an equation which may be stated thus:—

$$\text{The general level of prices} = \frac{\text{The Quantity of Money}}{\text{The volume of exchanges of goods and services which must be effected by Money.}}$$

[1] Silver may be 'standard money'.

Both these factors in the equation, the quantity of money and the volume of money's work to be done, are very difficult of ascertainment. The latter depends not only on the quantity of goods produced in the world but also on the number of times these goods must change hands in their progress from the first producer of the raw material to the final consumer, and the volume of services rendered in the conversion of the raw materials into the finished articles as well as in the various stages of transport and merchandising through which the goods pass in the process of manufacture and sale. Money's work.

But the quantity of 'money' is equally difficult to measure, especially when we consider that the great bulk of money's work to-day is done not by gold standard money, but by symbols of various kinds from a shilling (which is intrinsically worth only about 2*d.*) down to a £1 note, which has no intrinsic value at all, while the largest volume of all is done by credit instruments which are pure symbols.

Now if the Quantity Theory of Money means anything at all *in terms of gold* it is essential to arrive at some means of measuring the relation (if any) between the volume of all these symbols and the quantity of gold produced, or the quantity in use either as coinage or as the backing of our currency and credit systems. In the case of currency that relation is easily ascertainable. The volume of token money is strictly controlled by governments, and it is always convertible into legal tender currency. The volume of notes again is in all countries controlled nowadays by the government, and always with some relation to a known backing of gold. The whole volume of currency is therefore known, and has a more or less fixed relation to gold. Quantity of money

But what of credit instruments? Is their volume related to or controlled by gold, and how? Does the production of gold control the volume of credit facilities, which is nowadays the major factor in the quantity of 'money'? An answer to this question is essential to our continued faith in the Quantity Theory of Money. That theory at first meant that the quantity of *gold* controlled the general level of prices. But nowadays

gold plays hardly any direct part in the volume of money. It has gone almost entirely out of use as currency. Its use as the backing of paper currency is fixed and limited. But its importance as the foundation of the international credit system is still very great. Payment in gold of international debts and balances is still frequent, and every nation thinks it desirable to hold a reserve of gold to meet the possible need for such payments. There is therefore some relation between the amount of these gold reserves and the volume of credit facilities available in the country for its own domestic trade, which may affect its internal price level. In effect therefore the amount of the world's gold reserves affects the supply of credit instruments and therefore controls the larger and more fluctuating part of the world's supply of money. But the nature of this control of the supply of 'credit' by gold is very complicated and uncertain. The relation between the world's production of gold and the total supply of 'money' is therefore highly complex, but that relation is of fundamental importance to the general level of prices both in the world as a whole and in any particular country. The problem of the Quantity Theory of Money to-day therefore is the problem of the relation between gold and credit.

Gold and credit.

The writer's insistence on the distinction between Currency and Credit is therefore founded on the fact that the total amount of currency is small and is completely controlled by gold, while the volume of Credit instruments is enormous and its relation to gold is much more complex and uncertain. The plan of this book is therefore to deal first with currency and its control, and then to go on to the far more difficult question of the control of the volume of credit. The question throughout is whether the quantity of money (including currency and credit instruments) is still measurable in terms of gold.

CHAPTER VI

THE QUALITIES OF GOOD COINAGE

Intrinsic value and legal tender value.—Right, weak, and strong money.—Free mint and mint price.—Gratuitous coinage.—Brassage and seigniorage.—Gresham's Law.—Token money.

It has been seen in Chapter IV that the adoption of money as the universal means of exchange is the result of custom; it requires the gradual development of a general agreement to accept the coins in payment of debts. Then the government steps in, guarantees the weight and standard of the metal contained in the coins, and compels the public to accept them in payment of debt at a certain value, that is to say, it makes the coins legal tender. This raises a new difficulty. The coin has now two values, (1) its intrinsic value as a piece of bullion, which depends on the market value of the bullion, and (2) its legal tender value, which is fixed by the government.

Legal tender.

These two must always be the same, because if the bullion value is greater than the legal tender value, that is to say, if the coin is strong, it will be melted down or sold by weight as bullion, and the coinage will disappear. If, on the other hand, the coin is weak, that is to say, if its bullion value is less than its legal tender value, then the government is defrauding its subjects by trying to make them accept the coin at a value greater than its real value. The terms 'strong' and 'weak' are preferable to those formerly used, 'heavy' and 'light', because it may happen that the heavier of two coins is actually the weaker on account of the greater proportion of alloy which it contains. The government then must see to it that the coins are kept 'right', that is to say, that their bullion values are always equal to their legal tender values, no more and no less. But it is very difficult to do this. For while the weight

Strong and weak money

of a new coinage may be carefully calculated at the time of issue, so that it may be exactly right, yet the bullion value of the metal it contains may change, because the bullion is a commodity which has its market price. This price depends on other considerations besides the demand for coinage, for example, on its use in trade or the arts. Thus the government must either be constantly re-coining and altering the weight of the coinage to suit the changing value of the bullion, which is not practicable; or else some means must be discovered of preventing the fluctuations of the market value of the bullion. This is done by what is called the open or free mint. The government fixes a certain price which it is willing to pay for gold of a certain standard, that is to say, it undertakes to coin any quantity of bullion that the public may bring to the mint into coins at a certain fixed number for a specified weight of gold. For example, until 1925 the English mint would coin any number of ounces (troy) of gold of twenty-two carats standard, that is to say eleven-twelfths fine, into sovereigns at the rate of 1869 sovereigns for 480 ounces of gold. In other words, the mint price of English standard gold was £3 17*s.* 10½*d.* per ounce (troy).

Free mint.

The price of gold.

It is interesting to notice how this peculiar figure was adopted as the basis of the world's price of gold, for such it has become. The explanation goes back to the very beginnings of the modern history of coinage in the seventeenth century in England. At that time a great change was coming over the opinions of business men and foreign merchants as to the policy to be adopted in regard to the precious metals. In the days before the discovery of America by Columbus the precious metals were becoming increasingly scarce throughout Europe. The supplies had originally come from the East in the times of the Greek and Roman conquests, and these had been gradually depleted by wear and loss until in the period between say the thirteenth and fifteenth centuries every nation in Europe was struggling to obtain and retain for itself a sufficient supply of the coveted bullion. The result was the existence in every

Its history.

country of a mass of legislation prohibiting under the most stringent penalties the export of any of the precious metals; but the frequency of these enactments in itself shows how inefficient they were to prevent the trade. The discovery of the New World, however, with its enormous supplies of silver and gold changed the whole situation, and gradually men's views on the proper method of regulating the movement of bullion between different countries began also to change. When the East India Company received its Charter on 31st December, 1599, a clause was inserted conferring upon the Company the right to export bullion, and this became one of the chief charges made against the Company in later controversies.

The Mercantilists.

Early in the seventeenth century a strong school arose of men who came to be known as the Mercantilists and who advocated an entirely new view of trade, namely, that the only way to protect the nation's supplies of bullion was to regulate trade in such a way that there would always be a favourable balance of trade, which to them meant an excess of exports. This was looked upon as desirable because it meant that other countries would require to pay for the excess in gold or silver. Thus the Mercantilists, whose views to this day colour the terminology of the foreign exchanges, were in reality not reactionists but advanced reformers who stood for the economic principles of free trade rather than the traditional policy of protection which came later on to be associated with their name. One effect of their arguments was seen in 1663 when England, first of all the world, passed an Act allowing within certain easy limits the free movement of bullion out of the country, and to this, as will be seen later on, was largely due the early supremacy of England in the world's financial affairs. This Act was immediately followed by an entire reconstruction of England's own coinage, which was then in a very bad state. At that time the standard coinage of England, like that of every other country in Europe, was silver; a pound Troy of standard silver contained 11 oz. 2 dwts. of pure silver and 18 dwts. of alloy and was coined into 62 shillings,

The 1663 Act.

The silver standard.

or in other words the price of English standard silver was 5*s.* 2*d.* per ounce or 62 shillings per pound troy, which contains only twelve ounces. Under an Act of 1663[1] gold coins were introduced which were officially known as 'Unites' or 'broad' pieces, but soon came to be popularly known as Guineas, because they were made from gold brought from the territory of the Guinea Company in West Africa. Forty-four and a half of these new pieces, which were declared to be worth twenty shillings each, were to be made out of a pound troy or twelve ounces of standard or 'Crown' gold, which was to contain twenty-two carats of gold to two of alloy, that is to say it was the modern standard of eleven-twelfths fine. Accord-

The Guinea.

ing to this the standard gold would be worth $\frac{£44\ 10s.}{12} =$ £3 14*s.* 2*d.* per oz. This fixed price, however, turned out to be much less than the real bullion value of the new coins in comparison with the silver coins, which to make matters worse were very much clipped and worn, and the new coins quickly showed a tendency to disappear from circulation, being melted down or sold for export at their bullion value. To meet this difficulty the price of the guinea was gradually raised until it finally touched 30 shillings.

Locke and Newton.

In 1696, England, under the advice of the philosophers, John Locke and Isaac Newton, entered upon a great re-coinage scheme which for a time righted matters again, and the price of the guinea fell to 21*s.* 6*d.*, at which it was officially fixed, thus marking the first step on the part of England (though it was probably unintentional) towards establishing a fixed ratio between the values of gold and silver bullion. But still the price was too high, and in 1717, Sir Isaac Newton being then Master of the Mint, the guinea was reduced to its well-known value of twenty-one shillings, at which it remained as long as it continued to be a part of the English coinage. Incidentally this fixed the modern price of English gold, because if twelve ounces of standard gold were still coined into

[1] See Dana Horton, *The Silver Pound*, p. 229.

44½ of these coins, which were now officially declared to be worth £1 1*s.* each, then obviously one ounce was worth a twelfth part of 44½ guineas, namely £3 17*s.* 10½*d.* The modern English sovereign, it may be mentioned in passing, was not introduced till 1816, when the guinea disappeared.

Free *v.* gratuitous mint.

There was then a free mint in England for gold coinage from 1666,[1] but a free mint does not necessarily mean that the government does the work of coinage without any charge. This is called gratuitous coinage, and England was the only country that did so. Most countries charge the cost of coinage, called brassage, and sometimes an extra profit called seigniorage. The latter, however, is very often used to include both the actual cost of coinage and any extra profit that may be made.

Brassage and seigniorage.

The result of the English system of gratuitous coinage is that the English sovereign was the only coin in the world which was absolutely right. A very little consideration will serve to show how the free mint kept the coinage right. It is obvious that if the government is prepared to buy any quantity of gold at the price of £3 17*s.* 10½*d.* per ounce, no one will sell gold for less than that price. On the other hand, if any outside merchant were to offer more than the mint price he would have such a quantity offered him, sovereigns being melted down and sold to him at a profit, that he would soon cut down his price again. Besides, why should any one offer more than £3 17*s.* 10½*d.* for gold when he can get it at that price by simply melting down new sovereigns? Thus the mint price of gold, which was the same, considering the differences of standard, in all countries, practically fixed the value of gold bullion all over the world, so that the price never varied more than a small fraction per ounce.

Effect of free mint.

Incidentally it must be explained that as a matter of fact the actual price of standard gold in the London Bullion Market fluctuated round £3 17*s.* 9*d.*, not £3 17*s.* 10½*d.* as already stated. The reason for this is as follows: As a matter of fact it was not the custom in England for any one

The Bank price.

[1] Ibid., p. 230.

to take his gold to the Mint itself and have it coined on his own account. Though any one was entitled to do that, in practice it was found more convenient that the Bank of England, which is in reality though not in name the Government Bank, should act as agents for the Mint in receiving bullion for coinage. Any one who had bullion for sale, therefore, instead of taking it to the Mint and leaving it to be coined at their convenience, which would mean a considerable delay, took it to the Bank instead and received the corresponding amount of sovereigns at once, or at least as soon as the gold had been weighed and assayed to prove its standard. This was not only a convenience to the owners of the bullion, but it also saved them the delay of coinage, and time means money, because the value of the gold would be just so much uninvested capital while it lay at the Mint waiting to be coined. Though this sounds a very small matter yet it is really quite an important consideration, and the owners of bullion were quite willing to pay for it. The Bank therefore by arrangement paid only £3 17*s.* 9*d.* per ounce or 1½*d.* per ounce less than the statutory price, and this formed at once the remuneration of the Bank for its trouble in the matter and some recompense to the Government as owners of the Mint for their loss of interest on capital. Thus as a matter of fact the Bank became in a sense an agency of the Mint and the bulk of the bullion lay in the Bank safes uncoined until coinage was required, when it was taken out and forwarded to the Mint.

The Bank and the Mint.

So far then for the gold coinage of England, but the matter becomes much more complicated when it is remembered that every country requires more than one coinage; for example, they must have silver and copper coins as well as gold. Now to fix a mint price for silver is essentially a different operation from that of fixing a mint price for gold, which only means fixing arbitrarily the weight of the standard coin, or the number of coins to be made out of a certain weight of standard bullion. As already pointed out, it was mainly the result of an accident that the present price of gold was fixed, or in

Other coinages.

other words that 46·725 sovereigns are made out of a pound troy of standard gold. Had we to begin over again with a new coinage it is probable that an even number, say fifty, would be selected, which would mean that the *price* of gold would be raised to £4 3*s.* 4*d.* per oz., but it would not make the slightest difference in the *value* of gold, that is to say its purchasing power. For it cannot be too often repeated that the mint price of gold is not its real value, but merely its price or exchange value in terms of itself, which of course is not an exchange value at all. The real value of gold is its purchasing power, its value in exchange against all other commodities, and that varies frequently, quite regardless of the price of gold which, being purely arbitrary, remains fixed. It is just the same as if for some reason it were decided that in future there should be only ten inches in a foot instead of twelve; this change of the standard of measurement by increasing the size of an inch would not make the slightest difference in the length of anything, but merely in the terms used to express that measurement. The mint price of gold therefore is merely the result of an arbitrary decision which means nothing and has no effect whatever upon its value.

Value of gold and silver.

The mint price of silver, on the contrary, is a real value, its value in exchange against gold, and through gold against all other commodities. But this exchange value of silver is already fixed by the market according to the forces of supply and demand. To fix an arbitrary mint price for silver is therefore impossible; it must be in accordance with the actual market value. This could be done well enough; but the difficulty is to maintain the price, once fixed, in accordance with the market value, because that market value fluctuates frequently and considerably, and, unlike those of the value of gold, the fluctuations in the value of silver are clearly seen, because they are shown by its price in terms of gold. The price of silver is a real price, its price in terms of another commodity. Thus the fact that the price of gold does not vary, disguises the fact that its value varies, because the

Mint price for silver.

Fluctuation of silver.

variation is shown in an inverse way by the variation of prices of other commodities. When the value of silver varies, the variation is shown at once by its price in terms of gold, that is to say by the amount of gold which must be paid for an ounce of silver. This has varied for example from $62\frac{1}{16}d.$ per ounce in 1859 down to as low as $21\frac{11}{16}d.$ per ounce in 1903; in February 1920 it rose to $89\frac{1}{2}d.$ per ounce, and in February 1931 it was down again to $12d.$ (see Table II). These fluctuations in the value of silver are even larger and more frequent than those of gold because, in the first place, the supplies of silver are much larger and more variable than those of gold, and, second, because the uses of silver in trade and for industrial purposes form a much larger proportion of the total requirements than in the case of gold. A very large part of the total annual production of gold, say one-half to two-thirds, is bought up by governments for use as coinage or gold reserves; but the proportion in the case of silver is very much less. In the case of copper and nickel a mint price is for similar reasons altogether impossible. The price of these metals is fixed entirely by their value for industrial purposes, and the demand for coinage purposes is negligible.

This, however, leads to a new difficulty. If silver coins are to be legal tender, then they must come under the same rule as gold; their value must be kept right. If not, a still worse complication is introduced: if the silver is allowed to depreciate or become weak, it will cause the gold coinage to disappear out of circulation, and the same would happen in the reverse way if the silver were to become strong, the gold coinage would be relatively weak and the silver being appreciated would disappear. This is called Gresham's Law, viz.: that *of two coinages both circulating freely as legal tender in any country, the weaker always tends to drive out the stronger*, or to put it more crudely, that bad money drives out good.

Gresham's Law.

This is at first sight a very hard saying, but a little consideration will show that it is only natural. The chief purpose for which coins are employed is the payment of debt. If

both coinages are invested by law with the power of fulfilling that function, and that is what is meant by saying that both are legal tender, then naturally people will choose the worse of the two for that purpose, in other words, they will give away the inferior and keep the better coin. For the other is better in this respect, that while the two are by law equally good for paying debts, there is another market in which they are not equally good, namely the bullion market or the goldsmith's shop. There the value of the gold is slightly better than that of the silver; in technical terms there is a premium on gold. Obviously then the thing to do is to use the gold coins as bullion and keep the silver for use in those other cases where it is just as good as the gold. The mystery therefore disappears when it is remembered that the disappearance of gold from circulation only means that people are keeping the good coinage and giving away the bad. It is only natural to keep the best. Every one therefore uses the depreciated or weak money for paying debts, and keeps the good money for other purposes where its superior value is realized. Explanation.

A few illustrations of the circumstances under which Gresham's Law may come into force will make the matter clearer. A very common case is where an old or worn coinage is in circulation and the government decides to replace it by a fresh issue of new coins. Although the new coins are no better than the old as regards purchasing power, yet instinctively every one who receives the new coins tries to keep them. Suppose for example a man takes out a handful of coins to pay an account, he will inevitably and almost without realizing what he is doing, pick out the old worn coins and leave the bright new coins—he prefers to keep them. The result when such a new issue takes place is at first sight paradoxical. Immediately the new issue is made it disappears, but the old worn coins are more in evidence than before, and unless the government calls in the old coinage as fast as it issues the new, the old coins would remain in circulation alone for a long time. This points to Old *v.* new coins.

one essential condition of the operation of Gresham's Law; there must be enough of the weaker coinage to supply the currency requirements of the country or the good coinage will not disappear. A certain amount of coinage is required to carry on the daily business of the market, and if there is not enough of one coinage to do that work another will be employed to make it up. Thus as a rule it is only when there is a free mint for the depreciated coinage that Gresham's Law operates strongly, because then the mere fact of the depreciation tends to increase the supply of the weak coinage.

Depreciated silver.

As long as the mint is open it pays to coin the depreciated bullion into coins. This points to the second illustration of Gresham's Law where a depreciated coinage of say silver is in circulation as legal tender along with gold. Here the very fact of the depreciation and the free mint causes further depreciation, because with a free mint it pays to take silver to the mint, have it minted into coins and use these coins in the market to exchange into goods and then into gold which will finally be turned into more silver bullion at its depreciated market value and again coined into legal tender coins at its full face value. Thus the depreciation is cumulative.

Gold in Egypt.

A very peculiar illustration of the operation of Gresham's Law was seen in Egypt after the reconstruction of the coinage system in 1885. Under the old system which was preserved with only slight alterations there were in addition to the nominal standard unit of the coinage, the Egyptian pound, three foreign gold coins which circulated freely in the country as legal tender at certain fixed tariff rates, namely the Turkish pound, the French Napoleon, and the English sovereign. But when the tariff rates of these coins were fixed in the time of Mohammed Aly, the government, probably not understanding the theory of coinage, fixed the tariff value of them all too low, and they graded the tariff in a peculiar way so that the Turkish coin was the most undertariffed of the three, the French next, and the English least of all. Mark the effect of this peculiar discrimination. For many years it did not matter

much because there was no material quantity of gold of any kind in the country, and whatever did come in was eagerly sought after. But after 1885, owing to a variety of circumstances, a large quantity of gold began to flow into the country, and immediately Gresham's Law came into play, but in a peculiar way. To begin with, there never had been any quantity of the Egyptian pound issued, nor was there now, so that the comparison lay between the three foreign coins. Of these, all were strong, as compared with the nominal standard coin of the country, the Egyptian pound, but the English was least strong, the French next, and the Turkish most of all. The result was that the English was weak as compared with the French and that as compared with the Turkish. In effect then the English sovereign was a weak coin as against two strong and it promptly drove the others out of circulation. If a parcel of French gold coins came into the country it immediately disappeared either back to France again or down to the Goldsmiths' bazaar, where it fetched its full bullion value or at least something nearer it than the fixed tariff or face value, which was all that could be got for it in ordinary shopping. This case again illustrates the necessity for an ample supply of the weaker money to displace the stronger and so do all the work.

The English sovereign.

The most common case in which Gresham's Law can be seen to operate strongly is perhaps that of depreciated paper money circulating as legal tender alongside of metallic money especially gold. As will be seen later on, the War has provided a number of illustrations of this problem which has for so long been one to which most European nations at least were complete strangers.

Paper and gold.

It remains to consider one more point in the working of Gresham's Law, namely, where does the good money go? In the first place it simply remains in possession of whoever is lucky enough to possess it, and rich enough to be able to keep it, that is to say it is saved up or hoarded. If a man wishes to lay up a store of money he will naturally choose the newest

How the good money goes.

Hoarding.

and best coins he can find. Egypt frequently offered a striking illustration of this habit, for when hard times came on and the fellaheen were forced to go to their hoards, it was remarkable how many gold coins turned up in circulation of old dates but in very good preservation. But in countries where people put their money in the bank instead of hiding it in a hole in the ground, the thing works out in a different way. Gold finds its way to the bank, and when the banks require to send money abroad, as they do frequently in payment of a temporary indebtedness of their customers to others in foreign countries, they naturally send the gold, because if they sent silver they would only receive credit for its bullion value, and its face value at home is more than that. Thus silver is kept for use at home and the gold is used to pay foreign debts, and so the good money goes abroad.

Export.

Again, it pays to sell the good money as bullion, and this transaction can be combined with the former in a most ingenious way. As long as there is a free mint for silver in one country the bullion value of silver in that country cannot depreciate to any material extent, and the local value of silver bullion is artificially maintained there. But there is nothing of this sort abroad, with the result that silver is much cheaper there than it is in the country where it can be freely coined into legal tender money. What merchants do, therefore, is to turn all their silver into gold at home at the locally inflated value of the former, send the gold abroad and buy silver bullion with it at its true value, then have this silver coined at the home mint into silver coins at a considerable profit and change these again into gold in the course of trade. The effect is that rapidly all the gold disappears and there is nothing left in the country but silver.

Effect of free silver.

But it may be asked, why does this never occur in those countries such as England which do as a matter of fact use silver coinage as part of their currency. The answer is very simple. In such countries there is no free mint for silver. The government retains the coinage of silver entirely in its

The alternative system.

own hands, and no one else can issue silver currency nor get silver minted into coins by the government. The government thus makes a considerable revenue out of the seigniorage on its silver coinage but not without incurring a serious responsibility: it must see that it does not issue too much silver or the silver would at once begin to fall in value or, as it is called, to depreciate. To preserve the right balance between excess and defect in this way is no easy matter, for either extreme is almost equally disastrous. An insufficient supply of silver coinage causes great inconvenience and loss to every one who wants change for gold. Naturally the government would not have too little intentionally, because to do so is simply throwing away the opportunity of making the seigniorage out of a further issue. But the consequences of over-issue are so serious that the government must be constantly on its guard against it, and must be ready at any moment to withdraw the surplus if signs of over-issue appear. Yet with all the care possible, mistakes or miscalculations of this kind will inevitably occur even without a free mint for silver, and the risk of over-issue with a free mint would be so serious that the government must take other steps to guard against it. The great danger is that if silver were legal tender with a free mint any depreciation of its market value would tend to drive the gold out of circulation and in a short time out of the country. To guard against this the obvious remedy is that silver must not be legal tender, and that its issue must be retained in the hands of the government; and this, as a matter of fact, is the policy adopted by most Western countries. The silver coinage, and of course the same applies to the nickel and copper coinages, is only token money as it is called, its bullion value is less than its face value and it has only a very limited legal tender, which is from the point of view of economics no legal tender at all. In England, for example, payment in silver can only be legally enforced to the extent of £2, and copper to the extent of one shilling. It follows from the character of token money that the mint is closed to the coinage of silver.

No free mint for silver.

Token money

This seems quite an easy way of solving the difficulty, but unfortunately it is not so easy as it seems, and in fact it is the cause of one of the greatest economic controversies that has ever raged throughout the world, namely that between the rival systems known as Monometallism and Bimetallism, which will be explained in the next chapter.

CHAPTER VII

BIMETALLISM

The meaning of the question and its importance.—Insufficiency of gold alone for the world's currency requirements.—Instability of the value of gold.—Difficulties of national bimetallism.—The Latin Union and its history.—The position of India and America.—Possibilities of International Bimetallism.

It is difficult now to realize that the bimetallic controversy once occupied the foremost place among economic controversies throughout the world, so completely has the question apparently fallen asleep in these days. Yet the question still has its interest and its importance not merely as a part of the modern history of currency questions, but because it is almost certain to be revived again some day if the conditions of the world's supply of the precious metals and their use as currency return to anything like their former position.

On the face of it the question does not seem of any great practical importance. Why should the whole civilized world have been divided into two bitterly hostile camps, over the apparently unimportant question of whether silver coinage should be legal tender or merely token money? But though that is all that the controversy amounted to on the surface, its real meaning is something deeper and of much greater practical importance. It involves the fundamental principles of currency and is based on the Quantity Theory of Money and the whole question of the world's currency requirements and how these are to be met. The pivot of the controversy is whether gold alone should be legal tender, or whether both gold and silver should be made equally available for the payment of debt without limit. If the double standard be adopted it follows

The controversy.

that some fixed ratio must be set up and maintained between the value of the two metals as bullion, this ratio of value corresponding with the relative weight of the standard coins of the two metals and the market value of gold and silver. For it is obvious that if twenty shillings are to be really worth a sovereign, then the weight of gold and silver in the two coins respectively must be so adjusted that the value of the silver bullion in twenty shillings will be worth in the market exactly the same amount as the value of the gold bullion in one sovereign. To secure this permanent rightness of both coins there is only one possible method. The weight and value of the two coins must be fixed upon some assumed ratio of value between the bullion of the two metals, and effective steps must be taken to enforce this ratio permanently upon the actual market values of the two metals. As we have seen, the only practical method of doing so is to establish and maintain a free mint for the coinage of both metals into the standard money at the fixed ratio. Thus the famous Classical Ratio of $15\frac{1}{2}$ to 1, which was finally adopted by France in 1803 and maintained by the Latin Union till 1873, meant that the weight of pure silver contained in 20 silver francs or four five-franc pieces was exactly the same as that of the pure gold contained in 310 francs gold or $15\frac{1}{2}$ Napoleons of twenty francs each, for the standard in France is the same for gold and silver—$\frac{9}{10}$ths fine. For seventy years the countries of the Latin Union maintained this ratio against the gradual adoption of monometallism by the rest of Europe; and it was their acknowledged defeat in 1873, when they were finally forced to give up the struggle and close their mints to the free coinage of silver by the public, that produced the conditions which led to the controversy. The maintenance of a free mint for silver is the crux of the whole bimetallist position.

Double standard.

The opposite view is that gold coins alone should be legal tender, silver being merely token money like nickel or copper, and that the coining of the silver should be retained entirely in the hands of the government. This is called Monometallism

Monometallism.

or the Single Standard and is the system adopted by England, Germany, Japan, &c., and in effect now also by France and the Latin Union and by India. To understand the importance of the question it is necessary to study the history of the currency conditions which gave rise to it, and to see how the various countries adopted the alternative systems between which the controversy arose.

It has been explained in the previous chapter how England was the first country in the world to allow the free export of the precious metals in 1663, and how the subsequent history of the guinea led England almost unintentionally to fix a tariff or ratio between gold and silver when in 1717 the value of the guinea was fixed at 21*s.*, at which rate it was made legal tender. This was equivalent to a ratio of about $15\frac{1}{4}$ to 1. From this point England gradually and almost unconsciously drifted into the adoption of gold as its chief currency in place of silver. The first definite step was taken in 1774 when it was enacted, owing to the very bad condition of the silver currency at the time, that silver coinage should only be compulsorily acceptable by tale or count up to a limit of £25, this being the first limitation ever placed upon the full legal tender value of silver coins. In 1798, during the Napoleonic Wars which had rendered necessary the suspension of gold payments by the Bank of England, the free coinage of silver at the English mints was suspended. Incidentally the result was that the silver coinage rapidly sank into a very bad state and became so deficient in amount that all sorts of token money were issued by banks and even private individuals, and large quantities of French silver coin were actually brought into the country to supply the deficiency, a very strange expedient considering that it was with France that England was then at war. It was probably the very bad state of the silver coinage and the appreciation of gold, due to this and the suspension of payments, which led men gradually to think of gold as the better coinage. At the same time the increasing wealth of England due to the development of her young

History in England.

industries was making it necessary to handle a great deal more money in the course of business, and the inconvenience of silver with its low value and heavy weight was being increasingly felt. At any rate the fact is that when, after the war was over, the question of the reform of the currency came up in 1816, it was almost unanimously agreed that gold was the better currency for England in the future, and the Act of that year adopted this view. Under it the gold sovereign became the standard unit of the English coinage; silver was reduced permanently to the subsidiary position of token coinage, its legal tender being limited to £2, and the Mint was not reopened for its coinage. At the same time the bullion value of the silver coins was slightly reduced, for the Act provided that in future sixty-six shillings should be coined out of a pound of silver instead of the old rate of sixty-two. Thus England definitely and finally adopted monometallism.

Reform of 1816.

The adoption of the Classical Ratio of $15\frac{1}{2}$ to 1 by France is usually given as having occurred in 1803, but as a matter of fact the measure of that year was only the ratification of a previous decision made in 1785 on the advice of Calonne, Comptroller-General of the Finances. From 1803 onwards the history of bimetallism lies mainly with France and her continental neighbours. After the early part of the nineteenth century, especially from 1820 onwards, gold was mainly appreciated, that is to say its bullion value was really higher than the fixed ratio of the French mints. The inevitable effect was that there was a very considerable coinage of silver at the French mints and a good deal of gold was exported, but its disappearance was comparatively little felt, as the large silver five-franc coins served the purpose fairly well.

Bimetallism in France.

The great discoveries of gold in California and Australia in 1848–49 changed the whole situation. The world's output of gold increased enormously,[1] but the real meaning and effect of the increased supply were not realized for a considerable time even by experts. In France the gold Napoleons were

New gold supplies.

[1] See Table I.

hailed with delight as the visible sign of the new Golden Age, and the Great Exhibition at the Crystal Palace in London was regarded as the celebration of the dawn of an unprecedented era of peace and prosperity throughout the earth. Gold was everywhere, to an extent which had certainly never been known before in modern history, and it was not for some time that suspicion was aroused as to the true meaning of this abundance of gold. What first made people realize it was the gradual dawning upon the people in France that their silver was disappearing. Then at last economists and financiers woke up to the real meaning of things. Gold was depreciating and was driving out silver under Gresham's Law. But it was not until 1865 that the continental countries fully realized not only what had happened but what was to be done to meet this unprecedented situation. In the meantime the Latin Union had been established by the formal decision of France, Italy, Switzerland, and Belgium in 1865 to arrange their currency systems definitely on the basis of a standard coin of equal value in every country, which would therefore circulate freely between the different countries. The franc became the model of all their coins, though Italy preferred naturally to retain its old name 'lira' for the new coin, and of course each nation retained its own designs and inscriptions on its own coins. Greece also joined the Union in 1868.

Gold depreciates.

The Latin Union.

The problem which faced the Latin Union was one of great difficulty. Being entirely committed to their policy of bimetallism they could not entertain the idea of abandoning legal tender and a free mint for silver, yet they could not possibly go on supplying coined silver for all the world to use as silver bullion, as India, for example, was doing then, at their expense. An ingenious compromise was conceived—it was first adopted independently by Switzerland in 1860—that they should reduce all their silver coins to mere token money, except the five-franc piece, and of course close the mint to these degraded coins. The effect was that the drain of the five-franc pieces abroad continued till the supply was exhausted, but the smaller coins

1865.

remained in the country and served every purpose of a silver coinage quite well; in other words, they provided the necessary change which is the chief function of silver currency nowadays, large amounts being generally paid in gold.

The problem reversed.

Almost before this remedy was put in force, however, the whole conditions of the problem began to change again in the reverse direction. New discoveries of silver in America in the early 'sixties resulted in an increased output of silver,[1] which rapidly reduced the relative value of silver to a point below the ratio. Now silver was depreciated relatively to gold, and the action of Gresham's Law was reversed. The gold began to disappear, and Europe was flooded with silver. This was even more serious than the first difficulty. France could do without five-franc pieces but she could not do without gold, for in those days the modern use of paper money or bank-notes for the payment of large sums had not been fully developed. Things went on in this way for some time till the action of Germany after the Franco-German War precipitated the crisis. Germany had long been watching England's industrial and financial supremacy, and, rightly or wrongly, had come to the conclusion that her position was partly due to her adoption of gold coinage; and Germany had evidently made up her mind

Germany's action.

to follow that example at the first opportunity. The indemnity of £200,000,000 which Germany extorted from France proved the opportunity. Germany stipulated for its payment in gold, and forthwith proceeded to throw upon the market huge quantities of her heavy silver 'thalers', which were of about the same size and value as the five-franc pieces.

The result ought to have been a foregone conclusion. The addition of this enormous weight of silver to the world's available supplies, already so much inflated by the new stocks from America, and the withdrawal of Germany from the market as a consumer of large quantities of silver for currency, produced an absolute slump in the value of silver, and prices began to fall in a most alarming way.

[1] See Table I.

The Latin Union were in despair. No sooner had they managed to circumvent one difficulty than they were forced to face round to the opposite extreme and devise some other new expedient. The double experience convinced them that it was absolutely impossible to maintain the double standard and their fixed ratio against such a combination of forces; but their difficulty was to discover a remedy which would meet the situation without formally abandoning their bimetallic policy, for that had become a matter of national pride, and they were now especially reluctant to abandon it, because to do so would practically mean following the example of Germany. What they did finally decide upon was another ingenious expedient. They refused to abandon the five-franc piece, that being the only silver coin which retained its legal tender, but they closed the mint to its coinage. Thus in effect they ceased to be really bimetallic at all, because they have only one silver coin which is legal tender, and the mint is closed to its coinage by the public. Since then the system of the Latin Union has come to be known as the Limping Standard because it is neither the double nor the single, but something half-way between. In effect it is practically monometallism, but in theory the currency is bimetallic because both gold and silver are legal tender.

Closing the mints to silver.

But the action of the Latin Union was the last straw which broke the price of silver, and from 1873 onwards its fall, as will be seen from Table II in the Appendix, was greatly accelerated. It was not for some time, however, that the world began to realize that the currency question was more than merely a question for the producers of silver who were suffering by its fall. The price of silver was obviously falling to unheard-of levels, but so was the price of everything else, and it was not for some time that it began to be realized even by economists that there was a connexion between the two facts. The Quantity Theory of Money is of course as old as the Greeks, but it was entirely new to the man in the street, and for many years it was received with nothing but ridicule by business men of every country, especially in England, where

Too little money.

the great financiers of the London Money Market simply refused to listen to it as a practical question. Gradually, however, conviction grew in thoughtful quarters, and the evidence became more and more convincing. The world's production of wealth of all kinds was increasing with unprecedented rapidity, and more and more money was required to carry on the world's business of exchange. But the world's production of gold had been definitely checked (see Table I), and silver was no longer available for the larger part of the world's monetary requirements, because in nearly all European countries it had been in effect demonetized. The result was that there was not enough money in the world to do the increased amount of money's work required, and the effect was inevitable; what money there was had to be spread out thinner and made to go further. In other words, prices fell because money was scarce and less of it had to serve. Goods had increased faster than money, and the quantity of money obtainable in exchange for a certain quantity of goods was reduced. Gold had appreciated again, and the general level of prices was falling. It will be seen from the Index Numbers in Table III in the Appendix how very far prices did fall from 1873 to 1896.

Fall of prices.

In the meantime, however, the problem was becoming specially pressing in India, which was directly affected by the fall in the value of silver, as a country possessing an entirely silver currency was bound to be. The value of the rupee at the original price of silver, 62*d.* per ounce, was two shillings; but its exchange value outside of India was being steadily dragged downwards by the fall in the world's market value of silver. The inertia due to India's enormous population, with its huge silver demand both for coinage and industrial purpose, and the existence of a free mint for silver, combined to maintain silver artificially at a higher price in India itself. But the effect of the fall of the external value of the rupee upon India's foreign trade and her position in relation to other countries, especially England, was disastrous. All her revenues were

The problem in India.

received in India in silver, but when her debts had to be paid abroad the silver fetched only its market value, which by 1893 had fallen to about 35*d.*, and this meant that the value of the rupee for foreign exchange purposes was only about 1*s.* 2*d.* The effect upon the financial position of the Indian Government especially as regards its foreign remittances was intolerable, for the loss on the exchange must in the long run fall upon the Indian tax-payer, who had to make up the annual deficits by taxation. Further, the position of the exchanges had a very serious effect upon the position of India as an importing country, though it is only fair to recall that the corresponding effect on the export side was entirely in India's favour. For the depreciation of the rupee meant that every importer had to pay more for his goods than their face value in rupees, while every exporter received a bonus on his trade, because he produced his goods in India for rupees and sold them in London for gold, which when brought back to India exchanged for much more than its face value in rupees. But what did the greatest harm to India's foreign trade was the constant risk and uncertainty introduced by the fluctuations of the exchange, dependent upon the varying value of silver. There is nothing so bad for trade as such unsteadiness of prices, for merchants cannot afford to take risks unless they see their way to make a sufficient profit on the whole to cover their losses, and a little over to compensate them for the risk, and the public must in the long run pay higher prices to cover these risks.

Fall of the Exchanges.

The position was rapidly becoming intolerable, and finally, in 1892, the government appointed a Committee to inquire into the whole position. The remedy suggested by the Committee's Report in 1893 was a heroic but most controversial measure. The only way to stop the fluctuation of the exchange value of the rupee was to regulate the supplies of coined rupees, but they could not do that with a free mint at which any merchant in the bazaar could demand to have unlimited quantities of silver coined at the face value. They therefore decided to recommend the closing of the mints to free coinage, an apparently simple and

Closing of the mints.

harmless measure, which, however, involved the most serious consequences. For the fact of the existence of the open mint in India had always helped to maintain not only the world's price of silver but especially the actual price of silver in the Indian bazaars, and in India silver in the form of ornaments was practically the only available investment for spare capital. But the closing of the mints meant an immediate fall in the Indian price of silver to something more like the world's price, and, further, a severe fall of the world's price owing to the withdrawal of India's enormous demand for silver both for coinage and for use in industry.

Immediate consequences.

The result was that the government found themselves in a dilemma between two classes. If they let things alone the whole country through its government and its merchant system would be ruined. If they closed the mints, the country would be saved at the expense of the holders of silver whose store of invested capital would be reduced in value by at least one-third. Faced with the choice between two alternatives, which inevitably meant serious loss to one class or another, they finally decided that those who would lose by the fall of silver were less to be considered, or were better able to bear the loss, than the others who would benefit by the closing of the mints. The measure was bitterly criticized at the time and for many years afterwards; but the opposition had completely died down before the War. It was very clearly brought out by the Indian Currency Commission of 1913–14 that whatever may have been the depth and extent of the feeling against the closing of the mints in 1893, the measure had in effect been justified by subsequent events, and hardly any one suggested its repeal. After 1893, then, the rupee was artificially maintained at its new value of 1*s.* 4*d.*, or fifteen to the £, which is equivalent to a silver value of about 42*d.* per ounce.[1]

Subsequent history.

The effect of the closing of the Indian mints upon the price of silver was, as had been anticipated, to produce a further fall, much worse than anything that had gone before.[2] To

[1] See Chapter XVI.

[2] See Table II.

this, however, another cause contributed. In America, which is a great silver-using as well as silver-producing country, the silver question had also given rise to great controversy. Before 1873 the general use of paper money in the United States had practically displaced silver as the actual means of currency in many parts of the country; but the steady reduction in the demand for silver for coinage purposes throughout the world had greatly alarmed the silver producers of the West, and in 1878 they succeeded in getting through a measure known as the Bland Act, which was intended to counteract the effect of falling demand. This Act compelled the United States Treasury to purchase two to four million dollars worth of silver every month and coin it into silver dollars, which were to be legal tender; but as no one wanted these dollars in actual circulation, it was agreed that they should remain in the Treasury while their place was taken in actual use by silver certificates or paper dollars, which were, of course, immediately convertible into silver currency, if any one wanted that. To this day, in the Eastern States at least, no one ever does, and it is only as one goes west or south-west that silver dollars come into actual use at all. But this measure naturally failed to stem the tide which was overwhelming the value of silver, and in 1890 it was replaced by a further proposal known as the Sherman Act, which raised the monthly purchases to $4\frac{1}{2}$ million ounces. At that time the price was about 47*d.* per ounce, so that the value of the proposed purchases was just about the maximum of the Bland Act, while the Treasury had hardly ever exceeded the minimum. But still it was all in vain, and, as already stated, the price continued to fall so rapidly and so far that in 1893, the same year as the Indian mints were closed, America had to abandon her attempt to hold up the price of silver unaided, and the Sherman Act was repealed. As will be seen from Table II, the price fell still further after 1893, and in 1902 touched $21\frac{11}{16}$*d.* per ounce.

U.S.A. Legislation.

Repeal.

Thus, as the end of the nineteenth century approached, the Bimetallic controversy seemed to be solving itself by the general

failure of its advocates to maintain their position against the overwhelming weight of those nations which had elected to follow the example of England. The Latin Union, India, and America had been practically forced to give up their attempts to maintain the standard of silver, and it seemed as if the world were drifting rapidly towards universal monometallism. But there were several reasons why this prospect could not be regarded with equanimity. Chief of these, though entirely discredited by the commercial community, was the quantity theory of money and the steady fall of the general level of prices, for which there seemed to be no prospect of a remedy. But there were other arguments which appealed more convincingly to the ordinary business man. In the first place, the silver-producing countries of the world were greatly alarmed at the fall in the price of silver, as was evidenced by the desperate attempts made in America to prevent it, and it was in America that the agitation in favour of the double standard was strongest and lasted longest. Presidential elections were fought over the issue, and no stone was left unturned to force the question upon the further consideration of Europe. The countries of the Latin Union were only too willing to join the struggle, for they were still in a very difficult position. They could not formally abandon their theoretical bimetallism because, to take France as an example, the Bank of France still held large reserves of five-franc pieces, which stood in their books at their full face value, and the bank could not face the writing down of that value which would have been inevitable if these coins lost their legal tender value. Again, as long as there remained in the East such countries as China which still retained their silver standard—Japan abandoned it and adopted gold in 1897—the business of foreign trade between Europe with its gold standard and these silver-using countries was still subject to all the difficulties of the old régime.

Drifting towards mono-metallism.

Silver producers' objection.

Position of the Latin Union.

Silver-using countries.

The result was continuous efforts on the part of the bimetallists to bring the question to the front, and repeated Conferences were held at which the question was threshed out

again and again. But England, with her enormous financial preponderance, continually blocked the way, and finally with the end of the century the question seemed to fall out of practical politics. It was some time, however, before the real reason of this became evident. Once again circumstances were changing. The development of the South African gold fields, followed by the discovery of the Klondike fields in America in 1896, had begun to change the whole situation with regard to the world's gold supply, which was now increasing again by leaps and bounds. The result was at one stroke to destroy the primary argument of the Bimetallists, while by a strange paradox it proved once and for all the soundness of their theory. From about 1896 prices under the influence of the increased gold supply began to rise again, and before the new century was many years old the world was actually beginning to wonder whether a rise in prices might not perhaps prove as bad as the long-continued fall which had lasted for nearly twenty-five years.

England's attitude.

More gold.

For the time being then the new conditions took all the point out of the main argument in favour of bimetallism, and indeed there was some reason to feel thankful for its failure, for as the gold supply increased and prices rose, people could hardly help asking, 'What would the rise of prices have been if silver had been restored to its position as part of the world's currency supply?' The joint supply of gold and silver might well have been overwhelming. As a matter of fact the difficulty during pre-war years had almost been to get rid of the increased gold supply, and to prevent a depreciation of gold which would show itself in a serious rise of prices. That danger was to a large extent avoided by the fact that all the principal nations of the world, inspired to some extent by the traditional policy of the years when gold was scarce, rushed to take the opportunity of building up great reserves of gold, and the enormous supply was taken up very easily. India too began to absorb gold in very large quantities, and any danger of an over supply of gold was at least postponed.

Absorption of gold.

But the lesson of the Bimetallic controversy must not be forgotten. The fact which caused the suspension of the struggle supplied the final proof of the Quantity Theory of Money, for the argument that the fall of prices from 1873 to 1896 was due to lack of currency was proved by the fact that as soon as the gold supply increased prices began to rise again. The moral of this is obvious. It is not good for trade that prices should be at the mercy of the gold supply like this. Falling prices are bad and so are rising prices, and though the danger of an insufficient supply of gold has been forgotten for the time being, it must be remembered that at any time in the future the conditions might once more be reversed and a new era of gold scarcity come upon the world again. In fact it lies in the nature of things that such a return swing of the pendulum is almost inevitable, for as the gold supply increases and prices rise the effect is to encourage the development of industries and the production of all kinds of goods throughout the world leading to a further demand for gold to carry on the work of exchange. Rising prices mean more goods, and more money is required to handle them, and if this is not forthcoming the rise of prices will be checked. At the same time the rise of prices affects the cost of production of gold by raising wages and increasing the prices of all the machinery, &c., required by the miners.[1] Thus it becomes a race between the gold production of the world and the demand for gold, and it is almost impossible to avoid the conclusion that if ever we return to the general use of gold as currency, some day the world will be short of gold again with all the consequent evils of falling prices once more. The Bimetallic controversy would then be revived, and in any case the experience of the past has shown the great disadvantage of a money medium which is liable to such fluctuations. The second argument of the Bimetallists is therefore still worth recalling that the fluctuating character of our coinage supply could be greatly minimized if it were not dependent upon one metal alone. If both gold and silver were available as currency as and when required, the value of money could be made much more stable, because in the first place the total quantity of

Fluctuating prices.

Future prospects.

Stability of double standard.

[1] See Chapter XVI.

money available would be much larger, and the supply would be much less liable to variation, because anything that might affect the production of the one metal would not be likely to affect the other in the same way at the same time. Thus the Boer War provided a striking illustration of the danger to the world through a temporary stoppage of a large part of the world's supply, which caused a distinct set-back in the rise of prices.[1] At such a time under a bimetallic régime the supplies of silver could be augmented to take the place of the failure of the gold supply. This argument also tells in another way from the side of demand. While many countries are mainly dependent on gold there are others which use mostly silver, and others still, like Egypt and India, which to a certain extent could use either gold or silver. Under these conditions if both gold and silver were legal tender, the variations of demand would probably not be concurrent but rather counteracting. If, for example, there was an extra demand for gold in England or America, Egypt and India could use more silver. If again there were an excessive demand for silver in China these countries could use more gold, and so on. Thus there would be a compensatory action in demand as well as in supply, which would greatly help to reduce the fluctuations of the value of money.

Compensatory action.

These arguments are undeniably sound in theory, but the history of the Latin Union shows the practical impossibility of any one nation attempting to maintain a double standard against the fluctuations of the relative values of gold and silver, which are inevitable so long as there is a free market anywhere for these metals. The universal though tacit agreement among all the commercial nations of the world to adopt the same mint price for gold has resulted in fixing the price of gold all over the world; but as long as certain nations refuse to establish a similar mint price for silver it is quite impossible for any other nation or combination of nations to do it for themselves, because as soon as the market ratio ceased to be the same as

[1] See Table III.

their fixed ratio the effect of Gresham's Law would be to draw away the appreciated metal to the free market outside the agreement. Single or national bimetallism is therefore impossible; no one nation nor even combination of nations is strong enough to enforce its ratio upon the rest of the world, because no such combination could possibly undertake to buy up at its own mint price all the world's supplies of the metal which happened for the time being to be depreciated in the world's markets. In other words, it is the outside market for the precious metals that a bimetallic nation has to fight. Whenever the ratio changes, all their good money goes abroad and the country is flooded with the depreciated metal, through their free mint.

Single bimetallism impossible.

But it does not follow from this that bimetallism is entirely impossible. There is one possibility which would alter the whole situation. Suppose it were possible to get all the important commercial nations of the world by an international agreement to adopt the same fixed ratio between gold and silver, and to establish a free mint for both at that ratio. The first difficulty would then disappear. There would be no foreign market to draw away all their supplies of the appreciated metal and flood them with the depreciated. The mint prices of both silver and gold being the same practically everywhere, there would be no inducement for either metal to move from one country to another. It is, of course, by no means a foregone conclusion that this would completely solve the difficulty, because even if all the chief nations of the world agreed to fix their prices for gold and silver, in order to make these prices effectual they must be prepared to buy or sell unlimited quantities of the precious metals, or whichever of them may for the time being be below or above par. But how could either of them be below or above par? Only in one way. It must be remembered that the effective demand of the nations for gold and silver is limited by the quantities they require for coinage. These quantities are, of course, very large, but they are not unlimited and, especially in the case of silver, they are probably only a comparatively small part of the world's total

International agreement.

production. They are therefore only one factor in the demand for the precious metals, though a very important one, and the question is whether they are a sufficiently large factor to control the price against the weight of all the other demands for the precious metals for industrial uses. In the case of gold they have done so, but with silver it would be more difficult, because the proportion of the world's total production of silver used for coinage is less than in the case of gold.[1] The difficulty is that it is impossible to fix the price of any commodity by legislation, against economic tendencies. But if in the case of a particular commodity it were possible to control either the supply or the demand by legislation, then such control might be effectual by influencing these economic tendencies. It would hardly be practicable for even a combination of all the nations to control the supply of gold and silver; but, as has been indicated, they might exercise a very strong influence over the demand, and so in that way might be able to establish a fairly effectual control over the world's price of silver as well as gold, in other words to maintain a fixed ratio between the two. It was admitted by many on both sides during the bi-metallic controversy that the existence of the Latin Union had at least done a great deal to minimize the fluctuations of the value of silver during the period of its existence, and it is fairly probable that an agreement among all the chief nations would be almost completely effective. But can such an agreement ever be attained? It proved impossible before the end of the nineteenth century, but the world has changed since then, and many things have been done which would have been regarded as utterly impossible before 1914. It must be kept in view that the world has learned the lesson of bimetallism as much by its failure as by its partial success under the Latin Union, and if circumstances were to change again in the direction of a money shortage there would be no need to quarrel as before over the reasons of it and the possible cures. The Quantity Theory of Money is now understood and almost generally accepted, and the only question would be how

Its limitations

and possibilities.

Difficulty of attainment.

[1] Since the War, this is very doubtful.

best to deal with the new circumstances. The world is now pretty well convinced of the unsatisfactory character of a means of exchange which fluctuates so seriously in value as gold has done.

A still better way.

But the probability is that if the nations were sufficiently sensible and sufficiently of one mind to tackle such a reform, they would prefer to go to the root of the matter and adopt an even bolder policy than that of controlling the demand for gold and silver. For there is a better way than even international bimetallism. What is wanted is some effective control of the amount of money in circulation, so as to keep it in constant proportion to the varying needs of the world's business for the means of exchange. But the discussion of the functions of money and how the precious metals fulfil these functions has suggested a further possible development which must now be more clearly indicated. It has been seen that the use of money as a means of exchange began with the adoption of something intrinsically valuable as the means of exchange, because if it were to lose its value as a means it would still retain its own value as an end in itself. The history of currency has been the gradual recognition of the fact that money is only a means to an end, that its value depends primarily upon universal acceptability, and that that acceptability may be based upon convention or consent apart altogether from intrinsic value. This has been shown by the fact, not yet fully explained, that token money, that is to say

A logical development.

silver coins whose intrinsic value is much less than their legal or face value, do as a matter of fact and under certain conditions fulfil the functions of money perfectly well. Herein lies a suggestion of great possibilities. If money which possesses only partial intrinsic value can serve all the purposes of money with full intrinsic value, why should the process not be carried a little further by lowering that partial intrinsic value until it disappears altogether? If full intrinsic value is not essential to universal acceptability, why should any intrinsic value at all be necessary? If money is only a means of exchange, a promise to pay goods when required, as it were,

the promise itself being the thing accepted for its own sake, and not for the sake of any inherent value in the thing which represents the promise, why should we not be content to accept some other form of representation which would make no pretence to any intrinsic value. In other words, it has now to be shown that the gradual adoption of token money is the first step in a process of evolution which will carry us altogether away from the idea of intrinsic value in money, and the only logical conclusion of this development is paper money.

International paper money.

This startling suggestion will be more fully worked out in the next chapter, but in the meantime its bearing upon the possibilities of international bimetallism must be pointed out. Instead of attempting to regulate the world's supply of the raw materials of metallic currency, why not go straight to the root of the matter by introducing international paper money, the amount of which could be automatically controlled at no cost at all, by an international agreement? This points to the theoretical ideal currency, a paper currency regulated by international agreement to the exact amount required by the varying needs of the world's business, so that prices need never vary at all. An international committee watching the index numbers compiled in every country would quickly recognize any tendency to a rise or fall in the general level of prices throughout the world, due to the excess or insufficiency of the world's currency medium, and would be able to check the excess or supply the deficiency by a further issue or a calling in of some of the international paper currency. It would certainly be the ideal currency for the world, and though not at all likely to be realized in practice for perhaps centuries to come, it is worth considering as a theoretical possibility. In the meantime, therefore, it carries on the argument a stage further. From token money to paper money is the next step in the evolution of the mechanism of exchange.

CHAPTER VIII

PAPER MONEY

Different kinds of paper money.—Differences between paper and metallic money.—Limits of issue of paper money.—Signs of over issue.—War Paper Currencies.

It has been shown at the end of Chapter V that the correct application of the Quantity Theory of Money requires a detailed consideration of all the different kinds of 'money', in the widest sense of the term, which under modern conditions are employed to do the work of exchange. Again, at the end of the last chapter it was pointed out that the progress of the argument from one kind of money to another was a logical development or evolution, from money with full intrinsic value, through that which has only partial intrinsic value, namely token money, to that which has no intrinsic value at all, namely paper money. This development is perfectly logical, yet when the idea is baldly put forward that a scrap of paper may serve the purpose of money just as well as a piece of shining and much-coveted gold, it is at first startling. But the puzzle disappears when it is remembered that what men want money for under modern conditions is not to hang on their watch chains or round the necks of their womenfolk as ornaments (though such uses had much to do with the original choice of the precious metals as the best money material) but only to pay their debts with, and to exchange for commodities. A coin is simply an order on every producer to hand to the bearer a certain quantity of goods, and that order can be conveyed quite as well by a written paper, if there is the same sanction or authority behind the written paper, namely common consent, upon which in the long run even the

Logical evolution.

Money a mere order.

gold or silver coin depends for its value. It is because every one is willing to accept gold and silver that every one else is willing to take them in payment. The same unanimous agreement could invest anything else, even paper, with the same power. This will be clearer if a distinction is made between three kinds of paper money.

Representative paper.

(1) Representative or convertible paper money merely represents an equal sum in coin deposited somewhere, say in a bank or the Treasury of a State, like the silver dollar certificates of the United States. Bank-notes under modern legislation partake largely of this representative character, because in most countries provision is made for the compulsory deposit of at least a portion of their value in actual coin 'earmarked' for the redemption or conversion of the notes if and when required by the holder. It is easy to understand this form of paper money. It is more convenient to handle in bulk than the coins, especially silver coins, and it is quite certain to be worth its value in coin at any time, because it is convertible at will.

Fiduciary.

(2) Fiduciary paper money is merely a promise to pay, and obviously its value depends on the confidence of the public in the ability of the promissor to pay. If he is known to be a reliable man, there is no reason why his written promise should not pass current and be as good as gold. If, as was strongly illustrated during the War, the promissor is a government in whose good faith and solvency the people have boundless confidence, the validity of the notes may be unquestioned. In Germany, for example, the strong faith of the people in their government made it possible to issue enormous quantities of paper money. Again, bank-notes, so far as they are not representative, are fiduciary paper money, and the history of the Bank of England notes shows how strong and deeply rooted is the faith of the public in these notes.

Conventional.

(3) Conventional or inconvertible paper money represents nothing, and makes no immediate or definite promise of any-

thing. The term paper money in the full sense of the word should almost be confined to this kind. It is usually issued by a government which has no coin, and is in need of money to pay its debts or supply its requirements. It may be marked £5 or $5 like a promissory note, but every one knows that the government has no intention of paying the money at any particular date, and probably has no immediate prospect of having money to pay it with. It is in this form that paper money is hardest to understand, yet experience, confirmed by the history of the currency expedients adopted during the War, has shown that, under certain conditions, it is quite possible for such paper money to pass current, and to do the full work of metallic money. If these pieces of paper are invested by law and common consent—both being absolutely necessary, if anything common consent is the more necessary of the two—with the power of paying debts and exchanging for commodities, there is no reason, under certain limitations, why they should not circulate as freely as gold or silver. But there are certain differences between paper money and metallic money which must be carefully noted because they indicate the dangers of paper money, and also the conditions which must be observed if it is to serve its full purpose.

Its possibilities.

Its value is precarious.

In the first place, the value of paper money is more precarious than that of metallic money because its value was given to it by the government and might be taken away in the same way, when it would become worthless. Of course, the repudiation of its paper currency is a flagrant breach of common honesty of which no government would willingly be guilty, because, apart from the dishonesty of it, the effect upon the government's future credit would be disastrous; but experience had shown, even before the War, that a state might be driven to this extreme course by force of circumstances or by political conditions, such as a revolution, and this experience was repeated with dramatic intensity in many countries during and after the War. Repudiated paper money loses its value completely by

the stroke of the pen. Gold coins, on the contrary, even if they cease to be legal tender, have still their value as bullion.

Restricted.

Again, the value of paper money is more restricted because it depends on the law, and the paper money only passes current where that law holds good—that is, within the territory of the government which issued it. Thus in France during the War the Chambers of Commerce of many of the larger towns were authorized to issue local paper currencies which were only good within the locality, so that passing through France one received franc notes in change at Lyons which could not be cashed in Paris. The same applies to the paper money of any country outside of its own territory. It is of no value unless some one can be found who has means of returning the money to its own country, such as Cooks' or an international banker. Indeed, during the War the advantage of paper currency in this way was remarkably shown. The English Treasury notes not only passed current throughout many foreign countries, but were at one time actually valued at a premium compared with the metallic coinage. Thus in France, in May 1916, the rate of exchange obtainable for English gold was only 26 francs while 28 was willingly given for Treasury notes. This, however, was due to special circumstances. Owing to the prohibition of the export of gold from France it was impossible to send even English gold out of the country, while the Treasury notes could be sent under cover of a letter by post. These, however, are exceptional cases which do not alter the general rule that the value of paper money is not effective outside of its own territory. But the value of gold coin depends not on the will of the government which issues it, but upon its own bullion value, which is the same all the world over. Thus metallic money, especially gold, is essentially the universal and international money.

Treasury notes an exception.

Unstable.

Finally, the value of paper money is more variable than that of metallic money, because its value depends on the amount issued, and that depends entirely on the will of the issuing government. It is the easiest thing in the world to issue more

paper money at a time of financial crisis, and most governments who once begin the issue of inconvertible paper money find it very hard to resist the temptation; but, as will be seen shortly, any increase beyond the proper limits of safe issue means inevitable depreciation. Germany, for example, very quickly found after the War, as Russia had done at an earlier stage, that the value of her paper currency rapidly deteriorated owing to the enormous issues.

The ideal currency.

It is fascinating, however, to consider how all these considerations regarding paper money might be modified by an international agreement among all the chief commercial nations of the world to create one kind of international paper money and make it legal tender in all the countries subscribing to the agreement. The most careful precautions would, of course, have to be adopted to prevent over-issue; the issue would require to be in the hands of an International Committee absolutely independent of any one of the governments constituting it, and this Committee would control the amount issued by each country according to some predetermined scale, probably on the basis of population, allowing each country to issue so much per head of its population, as the Latin Union did with the issue of token silver under its Conventions, or, still better, adopting the method of control indicated in the previous chapter, namely, regulating the total amount of the issue by the movement of the world's index numbers.

International paper money.

If such an ideal system were ever to become possible, paper money might almost entirely supersede metallic money in actual circulation. It is probable that a reserve of metallic currency behind the paper would be regarded as necessary for a long time at least, though even that would, of course, be theoretically unnecessary. The possibility of such an international currency, costing the world practically nothing and capable of the most perfect regulation, is the economic ideal; but it is far from being practically possible in the meantime.

All this goes to show that as a matter of fact paper money

does often circulate freely and is as good as gold, but it does not explain why it should do so. Again, reference has been made to certain limits that must be observed in issuing paper money. What are these limits? The answers to these two questions are closely connected, and they were first indicated by a very apt illustration put forward by Adam Smith. He pointed out that in one sense the whole amount of the precious metals used as coinage is unproductive capital; it does nothing but pass from hand to hand and is never put to any useful purpose whatever. In the same way the land occupied by roads in a country like his own native land of Scotland, which possesses an excellent system of local roads everywhere, is really unoccupied from an agricultural point of view, and entirely unfruitful. If by the invention of some other means of locomotion, such as flying, men could somehow do without roads entirely, all this good land would be free for cultivation, and the world would make a net gain to the extent of the crops produced by that land. In the same way, if men could invent some other way, such as paper money, of doing money's work without the use of the precious metals, all the valuable metal now employed in this unproductive service would be set free for other uses. Instead of keeping our coins in our pockets or safes we would hang them on our watch-chains or beat them into gold rings and watches, and the world would be just so much the richer, for the world's money work would be done just as well as before by the paper money. This illustration brings out very clearly how it is that paper money can actually increase the wealth of the country, and the fact was brought home by the War. At a certain stage in the War the government found that they required gold for export to America in payment for munitions and other supplies. Now England has always been, owing to her conservatism, very largely a gold-using country, with the result that there were believed to be many millions of sovereigns in circulation—gold unprofitably employed. The Chancellor of the Exchequer appealed to the public to give up this habit of using gold

Theory of paper money.

It replaces gold.

War paper

and use notes instead, and out of a sense of patriotism they very largely complied, with the result that for the time being gold practically disappeared from circulation in England, and the Chancellor of the Exchequer had over a hundred millions of gold handed to him for the use of the government free of charge. The people of England were no worse off; they had just the same amount of money in their pockets as before; and once they got used to it they found that the paper money served the purpose quite as well. The country's gain was therefore secured at no loss to any one. The figures of the British Treasury Note issue are given in Table V in the Appendix.

Limits of issue.

This explanation also indicates the answer to the second question, namely, to what extent can paper money safely be issued? Just in as far as it sets bullion free for other productive purposes, that is to say, to the extent of the metallic coinage already in circulation which it displaces. There are two points to be noted in this connection. On the one hand, before the war it would not have been thought possible to drain the country entirely of its gold; a reasonable margin must be left in circulation because, if for no other reason, people who were going abroad must carry a little gold in their pockets, and there were always some old-fashioned people who would insist on having gold if they could get it at all. It was largely a question of the habits of the people, but no one would ever have ventured to prophesy that England would so quickly and almost completely give up the gold habit as it did.

On the other hand, it must be remembered that the amount of gold actually in circulation at the time of such a change does not necessarily represent the maximum amount of currency which was really desirable for the monetary business of the country. If money is scarce in the country at the time, an issue of paper money in excess of the amount of gold called in might be actually beneficial; and on this point a great deal depends on the conditions under which the change is made. At a time of crisis, which would generally be the reason for such a change, there may be, as will be explained in a later

Possible margin.

chapter, a much greater need than usual for actual currency in ordinary business, because owing to the failure or restriction of ordinary credit facilities, more cash is required to carry on the ordinary turnover of business. This was true to a very large extent in England at the time of the financial crisis due to the approach of the War when for the first week the need of currency was very severe until the new Treasury notes could be printed and issued.

Such, then, are the national or social advantages which accrue to a country that adopts paper money. Look now at the much narrower case of the advantages to a government of issuing paper money to its own people, that is to say, the selfish advantage to the government at the expense of its people. These are much more obvious, because a forced issue of inconvertible paper money provides an impecunious government with an immediate means of paying its debts to its own subjects at practically no expense at all. It really amounts to borrowing capital without paying interest, and with no immediate intention of repaying the capital. Thus it has been said that the issue of inconvertible paper currency is equivalent to a forced loan to the government, and the truth of this must have been very forcibly brought home to the German people even during the War by the enormous issues of paper money of all kinds with which the government paid them for goods commandeered for war purposes.

Government issues.

But, as might be expected, this delightfully easy way of paying one's debts has its difficulties and is liable to very dangerous abuses, which were so strikingly illustrated in history that in pre-war times it had come to be almost accepted as an axiom that no respectable government would ever fall so low as to issue paper money—an axiom which went the way of many others under the stress of war conditions. The War taught the governments of Europe what was well enough known as a matter of theory before, that the evils of paper money lie entirely in its abuse. It is all a question of amount; so long as the limit of safety, the amount of currency actually

Dangers of excess.

required in circulation by the business needs of the country, is carefully observed, there is little to fear, but anything beyond that is absolutely fatal. This is a point which must be specially emphasized because it was the subject of much misunderstanding everywhere during the War. People talked as if the validity of paper money depended on the good credit of the government, and it was thought that as long as the security was good no harm could come, regardless of how much was issued. Certainly this popular idea must have had much to do with the confidence with which the German people accepted issue after issue of paper money during the War; they believed that the government would pay it all back some day out of the indemnity to be wrung from their defeated enemies. But it cannot be too strongly emphasized that this point of view is entirely wrong. The only thing that matters to the value of a paper currency is the amount issued. If that is not too much, it will pass current perfectly well, though the credit of the government be hopelessly bad; while, on the other hand, if the issue is in excess of the real requirements of the country it will depreciate absolutely beyond all prevention, no matter how high the credit of the government stands. The history of the French Assignats during the Revolution ought to have taught the world that lesson for all time. These were based on the finest security possible, for they were really mortgages over the whole State domain, which in effect meant all France. But they were over-issued to an appalling extent, and no power on earth could prevent their fall, which was tragic in its extremity, for at the last an assignat professing to be worth 100 francs or £4 passed current for less than threepence. Even that record was completely eclipsed by post-war history, for the Russian and German currencies became practically valueless.

Government credit.

The Assignats.

Nothing can prevent a similar fate befalling any paper currency under similar conditions. No amount of security or good credit on the part of the government can save it from depreciation if over-issue is allowed. There is only one absolutely valid security for a paper currency, namely convertibility, because that automatically prevents depreciation *by preventing*

Convertibility.

over-issue; before actual depreciation could show itself the banks would return some of the surplus paper money to the government for conversion into gold, and the excess would at once disappear. But if people are sensible and have acquired the habit of paper money, they will not want gold under normal conditions. It was because the British Treasury notes were convertible, though few people knew it and no one had any desire to convert them, that they remained absolutely right throughout the War, while the German paper money, which was inconvertible, had to pay the penalty of its excess even before the War was over, and afterwards in fullest measure.

Signs of over-issue.

Fortunately, however, for the peace of mind of any government that really means to act honestly in regard to its paper money, there are certain signs which make it possible to tell when the limit of safe issue has been overstepped; and these must now be examined. The first is the emergence of a premium on gold, which shows itself in the unwillingness of people to part with gold as compared with paper, and the anxiety to secure gold of those who must have it, such as the banks for export purposes. This results in their offering a premium for gold, and of course charging the same to their customers who find it necessary to have gold. Whenever there is too much paper money it begins to fall in value, and the first to realize it are those who have to send money abroad, because gold only can be sent abroad, even when the paper is all right at home. As long as the gold and the paper are of equal value at home, no one cares which he pays or receives, but the moment people begin to feel a reluctance to accept paper or part with gold the trouble has begun, and the preference for gold very quickly shows itself in a premium at the banks, for they must have gold for their export business.

Gold premium.

The effect of the premium on gold, however, does not show itself at once to the man in the street, because he does not particularly want gold; paper serves the purpose for all his business perfectly well. But foreign merchants begin to find it affecting them in another way, which is called a rise of the rate

Rising rate of exchange.

of exchange. The meaning of this will be fully explained in a later chapter, but at present it may be briefly indicated in this way, that merchants who have foreign debts to pay do not normally send gold, even when gold is actually the currency of the country, they buy instead foreign bills payable in the country where their creditor is waiting for payment and post these bills to their creditors. Now, a bill payable in London is payable in gold, so that if one has such a bill for sale it is just the same as if one had a bag of gold for exchange. And if paper is less valuable than gold in any country, the owner of a London bill will expect to receive more paper for the bill than the face value of it, just as he would for gold. Thus the foreign rates of exchange rise against the country where paper is depreciating, just as the foreign exchanges went against Germany during the War in all neutral countries. Too much must not be made of this argument, however, because the exchanges for entirely other reasons have at times gone against all the belligerent countries during and still more since the War. The reasons for this will be dealt with at length later on; but in the meantime the fact that Germany's exchanges fell so much more heavily than the English may be taken as indicating the depreciation of Germany's paper money even during the War. That depreciation would certainly have been much more evident had it not been for the fact that the blockade had very drastically reduced her foreign trade so that the depreciation was concealed. Its full extent was not seen till peace brought the resumption of foreign trade relations between Germany and the rest of the world.

Disappearance of gold.

The next sign of the depreciation of paper money, or in all probability synchronizing with those already mentioned, is the disappearance of gold, which is the natural result of Gresham's Law. The gold is hoarded or sent abroad to pay foreign debts while the paper money is everywhere at home.

All these indications, however, are comparatively unimportant, and indeed are largely unknown, to the ordinary person at home who, having no foreign connections, is not interested

in the foreign exchanges, and who is quite content to receive payment in paper so long as the paper is apparently good for his ordinary purchases. To these people, however, who represent the bulk of the population, the effect of the depreciation of the paper money is soon brought home in another way, by the rise of prices. At first when merchants and shopkeepers begin to feel that the paper money is no longer worth what it once was, the tendency one would think would be to cause disputes over the amount to be paid for things. In practice, however, this seldom happens, because instinctively the sellers of goods, realizing that they are having to pay more for their imports, because these must be paid in gold which costs more than paper, raise the prices of these goods to recoup themselves, and this becomes infectious. The effect is that instead of prices remaining the same, while the value of the paper money is 'cried down' as it were, the easier but equally effective method is adopted, prices are raised, and the real value of the paper money, which is its purchasing power, falls just the same. And this, if there is still any gold left in the country, produces a very peculiar phenomenon, namely the duplication of prices. Prices have risen everywhere, but if you have gold to offer you will find that shopkeepers are still willing to sell at something like the old prices. This is generally regarded as the last and fatal sign of depreciation of paper money, but a word of warning is again required here as the result of the experience of the War. It is not safe to assume, as so many people did in England, that a rise of prices is necessarily due to the excess of paper money. The case of England during the War was an illustration of this. After the War, for reasons which will be discussed later, prices rose more than ever, but there was no depreciation of the paper money as compared with gold; that was impossible with the Bank of England under obligation to change the Treasury notes into gold or their own notes at any time. On the other hand, the much higher rise of prices in Germany during the War was almost certainly due to the depreciation of their paper currency.

Rise of prices.

Duplication.

The remedy. It only remains to point out the remedy for over-issue. It is very simple, but usually quite impossible, namely to stop the issue of paper money and at once begin to withdraw the outstanding paper, by accepting it in payment of debts due to the government such as taxes, while paying debts due by the government in gold. Unfortunately, however, that is just the one thing the government in such a case can never do. It only issued the paper money because it had no gold, or not enough, and to go on paying its debts while receiving payment of none—for that is the effect of the cancellation of the paper money received—is impossible. Yet that is the only alternative to complete repudiation, or permanent writing down of the nominal value of the currency, which has been the solution forced upon many of the belligerents with regard to their war and post-war paper currencies.

All this shows that paper money if properly guarded may be of great advantage to a nation, especially in times of crisis, but that its use is open to many dangers. In modern times, however, another system has been evolved which is not open to the same objections, though it has its own drawbacks. This is what is known as the credit system, on which the whole financial organization of the modern commercial world is based.

CHAPTER IX

THE CREDIT SYSTEM

A system of deferred payment and of doing money's work without the use of currency.—The functions of a bank.—The Clearing House.—Deposits and discounts.—Bank notes contrasted with (*a*) bills of exchange and (*b*) inconvertible paper money.—Assets and liabilities of a bank.—Reserves.

THE growth of the modern credit system, which includes the whole financial system of London and, indeed, of the entire commercial world, is a striking illustration of the way in which the thing described by a word may come to mean so much more than the name itself covers or originally implied. Thus credit simply means trust or confidence, and the original meaning of the credit system was that sellers of goods in place of demanding immediate payment were prepared to give the buyer time to pay. In other words, it was merely a system of deferred payment, and in that sense the word is still used by retail shopkeepers. But as the result of a gradual evolution the system has come to mean a great deal more than that. In many cases the debtor before the time of payment fell due was able to reverse the position by becoming creditor in his turn, selling goods to his original creditor, and so reversing the transaction or extinguishing his debt by contra account. This has in course of time developed into a system of avoiding the necessity of cash payment altogether, by squaring indebtedness of all kinds by contra accounts. This method has been extended to include not merely debts due by one person to another in the same town or country at different times, but also debts due by persons in one country to those in another, and out of this has grown the most wonderful and complicated

Time to pay.

Contra accounts.

organization the world has ever seen, through which an enormous amount of money's work is done without any currency passing at all, by the use of cheques, bills, bank drafts, and so on. Yet the whole organization still in a way merits its original title of the credit system, because the foundation of it all is that people trust each other in accepting these substitutes for money. In fact, the whole financial system of the world is built upon the idea of prompt payment of all obligations. Every one trusts every one else, because every one else trusts him, and as long as the system goes on properly in its circle it works very well indeed, and produces the most extraordinary efficiency. The pivot upon which the whole machine turns is mutual confidence, and by it the world's money work is carried on with the maximum rapidity and at the minimum cost. The system may be described as being centred in the modern bank, and the first step is to find out what are the functions and duties of a bank, and how it facilitates the working of the credit machine.

Deferred barter.

The simplest theoretical case of credit is where a seller of goods instead of receiving payment in cash accepts the buyer's promise to pay at some future date. Before that promise becomes redeemable the position of parties is reversed by the purchaser becoming the seller and *vice versa*, and the debt is wiped off by a contra account. This, then, is practically a system of deferred barter—barter of present against future goods. But it would be very difficult always to find two people thus mutually related as debtor and creditor at the same time, and to the same extent. By extending the system, however, so as to include an indefinite number of individuals it may be made highly efficient, just as in the case of barter it was exceedingly difficult to carry on the system until it was extended to include more than two individuals. Thus A buys goods from B and gives a promissory note in payment. B buys goods from C and pays for them with A's promissory note. C in turn buys goods from A and gives him back his own promissory note in payment. The circle may include

any number of intermediate buyers and sellers until the original debt is at last cancelled.

A further development followed naturally. Instead of being all debtors and creditors of each other, the idea was invented of having one common debtor and creditor, who would balance all the debits and credits of each trader, and pay or receive the balance due to or by each. This is the business of a bank. A buys goods from B, but instead of giving him a promissory note he gives him a cheque or order on his bank. But the banker has nothing to pay this cheque with until A sells goods to C, and lodges the cheque received from him with the bank. The banker then pays B out of C's account, or following the original illustration, C sells goods to B and receives his cheque, which squares the accounts of all the parties by cross-entries in the banker's books. This, then, is the first function of a banker, to balance the debits and credits of his various customers, keeping for each of them what is called a current account into which all the cheques paid in to his credit are entered, and out of which all his own cheques presented to the bank by the payees are paid. It is a convenience to a merchant to have his books kept for him, as it were, by the bank in this way, and it saves the danger and inconvenience of handling so much currency as would be necessary to carry out all these separate transactions in cash. When the bank extends its business to many different towns throughout the country the advantage of this form of payment by cheque becomes still more obvious. A merchant in London can pay his debts all over Great Britain by simply sending cheques to all his creditors. These will be paid in by the receivers to their own banks wherever they carry on business, and will gradually find their way back to the drawer's bank in London, where they will be duly paid out of his account.

The bank.

Current accounts.

But again a further development of the system becomes possible and indeed necessary. As the banking system develops, many different banks grow up in different towns or even in the same town. Every one does not deal with the same

bank. Every bank's customers deal with every other bank's customers, and as the number of individual transactions by cheque increases it becomes necessary for the bankers to provide some one to do for them what they do for their own customers, some one who will keep accounts between them, and balance the debits and credits of the various banks and receive or pay the balances due to or by each bank. This is what is known as the Bankers' Clearing House. In London every bank of importance is a member of the Clearing House, and country bankers are represented there by London agents. Every morning the representatives of all the Clearing Banks, as they are called, meet in the Clearing House, each bringing in the huge bundles of cheques which have been received by his bank's customers from the customers of all the other banks. An account is made up for each bank showing (*a*) on the credit side all the cheques received by the bank from its own customers drawn in their favour upon other banks; (*b*) on the debit side all the cheques drawn upon it by its own customers in favour of their creditors but which have been paid into other banks. When these debits and credits have been totalled up, the Clearing House presents to the representative of each bank a slip showing the amount credited to it for the day, the amount debited, and the balance due to or by it. If the balance is due to the bank, the Clearing House will draw a cheque on the Bank of England in favour of the bank for the amount of the balance. If, on the contrary, the balance is against the bank, they will draw a similar cheque for the amount on the Bank of England in favour of the Clearing House, for every Clearing Bank keeps an account with the Bank of England for this purpose. Thus at the close of the day the Clearing House balance at the Bank of England will be exactly as it was in the morning, for it must have received cheques of exactly the same amount as it gave out.

Clearing House.

To such an extent has this system of cheques and bank accounts been developed in England that in the year 1929 the total turnover of the London Clearing House[1] for the year was

[1] See Table VI *a*.

£44,896,677,000. More than 1,300,000 cheques have passed through the Clearing House in one day, while the highest amount paid in one day was £282,157,000 on June 30, 1930. And the whole of this enormous volume of money's work is done without the passing of a single sovereign or bank note. It will be seen, then, that the volume of business which can be carried through under such a system is colossal. It would be utterly impossible to carry on such a turnover on any other system which involved paying in cash. There is not enough currency in the country to do the work of paying such huge sums in a day; all the gold in circulation in England before the War was only about £123 millions[1] and the note circulation barely £30 millions. Even if the money were there to be paid it would take an army of men to pay it in the time; but a cheque for a million pounds can be drawn and passed through just as easily as one for five pounds. The banking system has therefore created a new way of doing business, and the cheque system has been one of the most important factors in the development of our modern commercial world.

Enormous turnover.

It may be noted here that the work of the London Clearing House is divided into three sections. The Town Clearing covers all banks in the Central London or City area around the Bank of England and therefore includes the head offices of all the Clearing Banks except the National Bank, which is an Irish bank with its head office in Dublin, and Williams Deacon's Bank which has its head office in Manchester. The Metropolitan Clearing embraces all banks and branches outside the Town Clearing but within an area roughly corresponding with the London Postal district, i.e. within a radius of about four miles. The Country Clearing deals only with cheques on those branches of the Clearing Banks outside the Town and Metropolitan areas and with the cheques of other banks throughout England and Wales who are correspondents of the London Clearing Banks.

Various Clearings.

In addition to the London Clearing House there are now eleven Provincial Clearing Houses in Birmingham, Bristol, Hull, Leeds, Leicester, Liverpool, Manchester, Newcastle-on-

[1] See *Cunliffe Committee Report* [Cd. 9182, 1918], p. 5.

Tyne, Nottingham, and Sheffield, the figures of which are not included in the returns of the London Clearing House.

The separate statistics of the three sections of the London Clearing House and also of the Provincial Clearing Houses are given in Table VI *b*.

The list of the London Clearing Banks (in addition of course to the Bank of England) was as follows in 1933: Barclays Bank Ltd., Coutts & Co., Glyn, Mills & Co., Lloyds Bank Ltd., Martins Bank Ltd., Midland Bank Ltd., National Bank Ltd., National Provincial Bank Ltd., Westminster Bank Ltd., Williams Deacon's Bank Ltd.

The banks, however, have developed other functions as well as this of squaring accounts between their customers. One of the striking features of modern industry is the greatly increased use of borrowed capital, and the banker is a dealer in capital.

Dealers in capital.

A manufacturer sells goods to a wholesale dealer, who after some time re-sells them to a retail dealer, who, in turn, after further delay, sells them to the public, who use them, but perhaps do not pay for them immediately. Thus there is a long interval of time between the first sale of the goods and the final payment of the price by the consumer. In the meantime the manufacturer requires capital to keep himself going, to pay wages and the price of his raw materials, &c. He must take payment from the wholesale dealer by bill at, perhaps, three months' date; but he cannot afford to wait three months for payment. He must therefore sell this promise to pay for ready money, and he does so by discounting the bill with the bank. This is one of the ways in which the banks provide the borrowed capital upon which industry works, and the magnitude of this financing business may be inferred from the figures of the total deposits of the British banks given in Table VIII.

The next question is, Where does the bank get this money? First of all, it has its own capital, but that is comparatively a very small amount. The main sources from which the bank draws its funds are deposits and current accounts. These consist of money left with the bank by people who cannot utilize it

The supply.

themselves, either because for the moment they do not require it owing to the fluctuating requirements of their business, or because they have made more than they can use profitably in their own business, and it lies in the bank till they can find a suitable investment elsewhere. Again, it may be that the nature of their business does not provide a suitable opening for the employment of capital, as in the case of professional men; while others have so little that it is not worth while investing it separately; or from their position they have no means of knowing about investments, and they are afraid to take risks. All these people are willing to give their money temporarily to the bank, if the bank will keep it safe for them and give them a very little interest, or even none at all. They can withdraw their money at any time when they want it. This money the banks get cheap and sell dear. They lend it out to manufacturers, merchants, &c., at a rate of discount much higher than the rate of interest payable to the depositors. The bank takes all the risks and keeps the difference between the rates as its profit or payment for work done and risks taken.[1] This, then, is the second function of the banker; he is a dealer in credit; he buys and sells capital, just as other traders do other commodities, and the effect of the very high development of this system is that in England capital need never lie idle, while on the other hand no genuine venture need ever remain untried or be lost through want of capital.

Deposits and discounts.

There are, of course, many different systems of deposits, e.g. fixed-term deposits, deposits subject to a certain notice of withdrawal, or others, again, which may be withdrawn at any time without notice. The latter are practically current accounts, which may be drawn upon by cheque as required, or added to from time to time. In Scotland the more usual form is the Deposit Receipt which can only be handled in one sum. Current accounts may be with or without interest; if notice of withdrawal is required they are really deposits. The rate of interest payable by the banks on deposits usually varies according to the

Terms of deposits.

[1] See Table XV.

length of term of the deposit or the length of notice of withdrawal to which the bank is entitled.

Rates of interest.

In the period of cheap money from about 1895 onwards the practice of paying interest on current accounts had died out and rates of interest on deposits were very low. Before the War, however, they were rising again, but the payment of interest on current accounts had never been revived. During the War and in the years immediately afterwards, rates of interest rose very high and with the Bank Rate frequently at 5 per cent. or more the rate of interest on deposits also rose, for there was a general custom prevailing that the normal rate of interest on deposits should be about $1\frac{1}{2}$ to 2 per cent. less than Bank Rate. In England, however, there was no uniform rate (as in Scotland) for deposit interest. All the banks charged more or less the same rates, but these varied with different classes of customers, and in fact the rate payable was very often a matter of negotiation between the customer and the bank. In this period the payment of interest on some current accounts was also revived and in England it was difficult to distinguish between a personal current account with interest and a deposit account.

With the new period of cheap money in 1930–1 and especially in 1932–3 the rate of interest on deposits again fell till it became almost nominal, but this brought out another distinction in banking practice, namely, that between the 'country' deposit rate and other rates. For deposits by private clients in the provinces the banks had a fixed rate of $2\frac{1}{2}$ per cent. which never varied, but when deposit interest sank to only a half per cent. in 1933 this rate became impossible.

Bank loans.

Again, there are many different forms under which the banks lend money, e.g. overdrafts, secured or otherwise, cash credits, discounts on bills, and advances on security of negotiable documents, such as bills of lading, stock exchange securities, or any other form of valuable property.

Before he can lend money on discount, however, the banker must first get deposits, and the accumulation of deposits is slow, because it requires confidence on the part of the public

in the bank, and that only grows with time. It would be very convenient if the bankers could somehow lend money first and borrow it afterwards. They could then increase their operations immensely, and this is practically what the early bankers did. They issued bank notes, which were really promissory notes by a banker. The banker exchanged the merchant's promissory note for his own; but the banker's note was better known and more likely to be accepted by the public. This is primarily how bank notes get into circulation.

Bank notes *v.* bills.

But of what use is this to the merchant? He has only exchanged one promissory note for another. There are certain differences, however, between bank notes and bills of exchange which make them better for the merchant, because they are more like money. In the first place, bank notes bear no interest. At first sight this would seem rather a disadvantage than otherwise, but in one sense it is not. The value of a bill of exchange varies from day to day according to the date when it is payable, because up till the due date it is subject to deduction of discount, whereas after the due date has passed, interest accrues on the principal sum. The value of a bank note, on the other hand, never varies; it is worth exactly its face value at any time, never more and never less. From the point of view of currency, that is to say its capacity for passing quickly from hand to hand, this is an advantage, because the receiver does not require to consider or calculate its present value. A bank note is therefore much more like a coin than a bill of exchange.

No discount.

Again, a bank note is transferable to bearer without any formality of endorsation, and 'without recourse', that is to say without any liability remaining on the parties through whose hands it has passed. To deal with this point fully would require a whole treatise on the law of bills of exchange, but it must suffice here to explain the salient principles of that law. The theory of a bill of exchange is that it is a 'document of title' to money. The object of the legal system of documents of title is to enable the owner of goods or valuables to transfer

No recourse.

his rights in them by a written act, or by mere transfer of the document which represents the goods. Thus, for example, when goods are placed on board ship for export the shipmaster or his representative signs a 'bill of lading', which is in effect a certificate that these goods have actually been placed on board, and will therefore be available to their owner when the ship arrives at its destination. But in the meantime the owner of the goods may find it desirable to sell these goods, or to borrow money upon the security of them, and the object of the bill of lading is to provide him with a document of title, the transfer of which will carry all his rights in the goods to another, the new owner's title to the goods being sufficiently proved by his possession of the document of title or bill of lading. This system is a great convenience to the merchant, who is thus enabled to handle the goods, figuratively speaking, though the goods themselves are for the time being out of his or any one else's reach, say at sea, and are therefore dead capital. The same system applies to store warrants and dock warrants, which enable the owner of goods lying in safe storage to sell or deal with them without actually handling the goods at all, or making specific delivery of them to the purchaser. Round this system there has grown up a complicated body of law designed to protect the rights of parties interested in such goods, and the whole principle of the law is to maintain the validity of the document of title.

Documents of title.

In the same way, then, a bill of exchange is a document of title which enables the creditor to handle his money while it still remains in the debtor's hands, and the method of the system is that the possession of the bill *prima facie* proves the right of the holder to the money represented by it. Thus a bill of exchange may be defined as an order addressed by one person, called the drawer, to another, called the acceptor, requiring the latter to pay to a third person, called the payee, the amount stated in the bill on demand or at a fixed or determinable future time. It is therefore in legal terms an assignment by the creditor of his debt to a third party, and the

Bill of exchange.

bill is completed by the debtor's accepting it, as it is called, by writing his signature underneath or across the bill. As a matter of practice, bills instead of being drawn in favour of a third party are frequently drawn as payable to the drawer himself or his order, and the following is the usual form:

£1,000. *London, December* 1, 1916.

Three months after date pay to me or my order the sum of One thousand pounds for value received.

A. B.

To C. D.

Then if the drawer wishes to transfer the amount to a third party, as, for example, when he wishes to discount the bill with a bank, he endorses the bill by writing his name across the back and hands it over to the bank.

The object of the law, as has been said, is to do everything possible to secure to the endorsee of the bill or holder in due course, as the bank is now called, the due payment of the bill when it becomes payable, which by custom in the above case would be March 4, three extra days, known as days of grace, being allowed to the original debtor for payment. To secure this it is provided that in case C. D. does not pay the amount when duly called upon, the holder in due course, the bank in this case, has the right of recourse, as it is called: that is to say, the right to come back on the original drawer and endorser of the bill (or any or all of the endorsers if there are more than one) for payment, leaving him to take the bank's place and recover payment if he can from his original debtor. This liability therefore attaches to every person through whose hands a bill has passed: he remains liable as endorser until the bill is past due. This means a very serious liability to business men who are passing bills through their hands every day, and they have developed a system of noting all these bills in a bill-book with the amounts, the names of the parties, and the due date, so that they may know how they stand.

Holder in due course.

Liability of endorsers

It is obvious that such a system would be utterly impossible with anything which passes so rapidly from hand to hand as

money does. Many people even grudge the trouble of noting the numbers of bank notes for large sums when they pass through their hands, as a protection in case these notes should be lost or stolen from them. It would be quite impossible, therefore, to handle notes at all if every one had to endorse them every time and remain liable on them for some time afterwards. Under these conditions no one would dare to accept a note without the most careful scrutiny to see that it was all right.

The same careful system of handling bills of exchange implies another disadvantage from which bank notes are free. A bill of exchange must be presented exactly on its due date; if not, the holder loses, not his right to claim payment of the money from the original debtor, the drawee or acceptor of the bill, but his ancillary right of recourse against all the intermediate parties to the bill. Such a restriction is absolutely necessary in the interests of these parties, as otherwise they would never be sure that they were free of their liability on a particular bill. That liability therefore ceases when the due date has passed, and a reasonable time beyond it to allow the holder to intimate the dishonour of the bill by non-payment to any of the holders against whom he may wish to have recourse or to 'operate his right of relief', as the legal expression is. This involves a very serious obligation on the part of the holder; if he wishes to protect his full rights under the bill, he must take a careful note of the exact date of the bill and present it for payment without fail on that very day. Such a system would be absolutely impossible with anything that is to pass current as money.

No due date.

Again, to protect the original debtor under the bill against an old bill being produced and presented for payment many years after the due date, when perhaps he has really forgotten whether he paid it or not, or at any rate has lost or destroyed the evidence of payment, the law provides that if a bill is not presented for payment within a certain time (six years under the English law) after its due date, the position of the parties to the bill is changed; not that the original debtor is entirely

relieved from payment, but the onus is now laid upon the creditor to show that the sum due under the bill has never been paid, and that is a thing which is very difficult to prove. Once more it is obvious that such a system would be fatal to the utility of anything that is intended to serve the purpose of money. One of the functions of money, as will be remembered, was to act as a register of debt, a store of value, in other words one of the things that money is used for is to lay it by or keep it. It would never do if when, under the pressure of some need for money, one went to his store, took out a bank note and presented it to the bank for payment, one were met with the answer, 'This note is over-due. We cannot pay it now unless you can prove that it has never been paid before.' That would be utterly impossible for the ordinary holder. No such law then applies to bank notes. They are recoverable by the holder at any time, to-morrow or forty years hence as he likes.

No prescription.

All this explanation is intended to show that while a bank note is legally a form of bill of exchange, for it is in effect a promissory note drawn by a banker, payable on demand, and a promissory note as defined in the Bills of Exchange Act is just a bill of exchange in a slightly different form; yet in order to facilitate the quick passing of bank notes from hand to hand as a ready means of exchange, their position has gradually approximated more and more closely to the position of money itself rather than of a document of title to money. And this similarity to money is strengthened by the fact that bank notes are always made for an even or round sum, such as Five pounds, Fifty pounds, &c., while a bill of exchange, like a cheque, may be for any odd sum of pounds shillings and pence. Bank notes are therefore the nearest approach to actual money that can be imagined; they are in fact practically paper money. So near do they come to being regarded as money that in many cases they have been made legal tender, like the notes of the Bank of England, which indeed used to be the most desirable form of money in England, and in some respects the most convenient

Bank notes legal tender.

form of money anywhere in the world. When notes are issued by a well-known bank which possesses the entire confidence of the people in the country, and as in the case of the Bank of England of business men throughout the world, they are really a very near approach to the ideal form of money.

In fact, so thoroughly accustomed has the commercial world become to the idea of bank notes as the most desirable form of paper money, that it had before the War become almost an economic axiom that bank notes under proper regulation were much better than paper money issued by a government. It was maintained that under modern conditions even when bank notes were made legal tender they were much preferable to a forced or inconvertible paper currency issued by the government, and it is interesting now to consider the arguments which were generally accepted in proof of this preference. For the striking fact is that when the war crisis broke over Europe all the belligerents at once rushed into large issues of government paper money, apparently forgetting or disregarding the old theories altogether. It is only fair to note, however, that the circumstances were entirely abnormal, especially in this respect, that the choice lay not between a forced or inconvertible government paper currency and a convertible bank note but between bank notes and government paper, both more or less inconvertible, for, to take the case of England, it is very doubtful whether the government could have escaped the necessity of suspending the convertibility of the Bank of England notes, during the War. While as a matter of legal right, convertibility into gold both of Bank of England notes and of the Treasury notes was maintained all through the War, the practical value of that right was taken away by the virtual impossibility of exporting gold during the War (see Chap. XVI).

Better than inconvertible paper.

War paper currency.

But it is still necessary to emphasize the very real advantages of a convertible bank note issue as against the alternative of an inconvertible government paper money under normal conditions. The most important of these lies in the argument that the method of issue of bank notes to some

extent provides an automatic regulation of the amount issued, which is in itself a safeguard against the danger of over-issue. Theoretically the banks only issue notes in the ordinary course of business, e.g. to their own customers when they draw on their deposits or current accounts, or to their borrowing clients on the discount of bills or on other securities representing real business transactions or actual assets, and this it is claimed automatically restricts the issue of bank notes to something corresponding to actual business requirements for currency. The issue of paper money, on the other hand, is regulated only by the needs of the issuing government. Both these arguments, however, have been somewhat altered by the evolution of modern conditions. The extraordinary development of the financing facilities of the modern banking world and the growth of methods of doing business which, while following the old forms, really represent different kinds of transactions, such as accommodation bills, finance bills, and the like, have to a large extent destroyed the validity of the first argument. This matter will come up again in dealing with the history of the controversy over the bank note system in England, when this argument was opposed and finally overcome by the contrary doctrine known as the currency principle.

The banking principle.

Again, the second argument with regard to the danger of over-issue by a government has been largely changed by the much higher standard of national honour and financial efficiency and rectitude which was displayed by the governments of the belligerents, or some of them at least, in the issue of paper money during the War; while if others transgressed the limits of safe issue it was admittedly under stress of entirely abnormal conditions. It may therefore prove the beginning of a new attitude towards paper money on the part of even the most reputable governments. After all, if a government can be trusted to behave with common honesty and common sense, it is just as well fitted to be the guardian of a paper issue as the best controlled bank, except perhaps in one respect. The fact of a bank note issue being in the hands

Government over-issue.

of a private institution, which is run for the personal profit of its own shareholders, was really a certain protection against the dangers of over-issue in one way. It must be kept in view that such a bank is a commercial concern conducted on business principles, and in modern business honesty is the best policy. Commercial men have realized that nothing but honesty pays in the long run. If, for example, a bank is tempted by the prospect of an extra profit into issuing too many notes, the responsible officials know perfectly well that they are running a frightful risk, not merely of losing that profit as soon as the public begin to feel the over-issue and bring the notes back for conversion, but also of losing everything else as the result of the inevitable run on the bank which will follow at once upon the suspicion of its inability to pay the notes. Thus, if a bank over-issues, the consequence is ruin to the bank itself in the first place, though the public as holders of the notes may suffer too. The bankers know this, and they are not likely to take the risk even if the law allowed them to do so; it is not worth while for the sake of the small extra profit they might make out of the excess of notes. To an impecunious and not over-scrupulous government, on the other hand, the consequences of over-issue are not so immediately fatal, or the government may not be so quick to recognize the signs of over-issue, because, the notes not being convertible, the government cannot be made to feel the pressure of the demand for their exchange into gold again. Whatever be the cause, the fact remains that the public before the War always had more confidence in the notes of a bank than in paper money issued by the government, and the result was that most governments had entirely given up the issue of paper money, and had handed over the issuing of bank notes to certain banks under strict legislative control. During the War many countries, like ourselves, went over to government issues of paper money but most of them have since reverted to the system of note issues by a Central Bank.

Banks and over-issue.

Changed ideas.

Having now dealt with the three functions of a banker as

an account keeper for its customers, as a dealer in capital, and as the issuer of bank notes, it next becomes necessary to consider the position of the bank with regard to its various customers, debtor and creditor, and to make up its balance sheet of assets and liabilities as follows: Its assets are its own capital, its investments, its advances on discount of bills and other securities, and its cash balance or reserve. Its liabilities, on the other hand, are its deposits and current accounts and its note issue if any. The point to be specially noted in comparing the two sides of this balance sheet is that although the assets may largely exceed the liabilities, the latter are nearly all due on the spot or at very short notice, while most of the assets are only realizable after more or less delay. Its bills discounted, for example, are only due at certain dates, and although they are falling due and being paid every day, it is impossible for the bank to anticipate payment,—unless some other bank will re-discount the bills for it. In case of a run on the bank, therefore, the bank has only one asset to fall back upon immediately, one asset which is perfectly liquid and available on the instant to meet any abnormal claims that may be made upon the bank. For the fact must be clearly realized that the bank bases its whole business on the assumption that normally only a certain proportion of its customers will want their money back at any given time. If they had to keep all their customers' deposits lying waiting, on the off chance that they might be wanted, there would be no possibility of doing business at a profit at all, and the customers would require to pay the banks a heavy premium for keeping their money safe, instead of receiving interest on their deposits. The banks have learned by experience that in normal times they may safely lend out all but a certain proportion of their deposits, but they must keep a certain part always at hand in actual cash or very nearly so, to meet the ordinary requirements of the business, and something over to provide for unusual requirements. In other words, in addition to keeping a certain amount of what they call 'till money', that is to say actual money for

Bank's assets and liabilities.

Liquid assets.

The reserve.

the day's turnover of cash, they must always have at hand a reserve of available funds in case their customers should happen to require more than their usual for a time. This reserve, then, becomes the pivot of the bank's whole business, and it is a very difficult problem to know just how much of a reserve the bank ought to keep, and how to keep it, that is to say, how to maintain it at a safe figure and prevent its being drawn upon too rapidly in times of difficulty. The natural desire of the bank's shareholders is to keep the reserve as low as possible, because money lying unemployed, as the reserve must, is purely unproductive capital. On the other hand, the reserve is the sole security for the ability of the bank to meet all possible claims that may be made upon it *immediately*, and that is the one thing essential to a bank, because the slightest hesitation in paying what is asked for would at once alarm all its depositors and bring them clamouring to the bank for their money, which otherwise they would never have thought of withdrawing. Self-preservation therefore dictates the keeping of an adequate reserve, while the desire to earn dividends points to its reduction as low as is compatible with safety. How then are these conflicting interests balanced?

CHAPTER X

THE ENGLISH BANKING SYSTEM

The Bank of England.—The Other Banks.—Lombard Street.—Where they get their money and what they do with it.—The Bank Charter Act, 1844.—The Issue Department of the Bank of England.—Regulation of bank note issues in other countries.—The Banking Department.—The Weekly Return.—The Reserve.

THE whole banking system of the modern commercial world is so largely dependent on the banking system of London, which in turn is centred in the Bank of England, that it is necessary, in order to understand the banking system of any country, to examine the English system first. The War has proved more conclusively than ever the international character of finance, and the way in which disturbance in any country is bound to react upon the financial world everywhere. The world's financial system is perhaps the most complex and many-sided organization ever seen, and it can only be understood by getting at the core of it first, and working outwards. It is a simple statement of fact that that core lies in the small area of about a square mile which houses the great London Money Market, and it is no exaggeration to describe the building of the Bank of England, the 'Old Lady of Threadneedle Street', which is the centre of that area, as the hub of the universe, for, as the War has shown, finance rules everything.

The hub of the universe.

The financial system of London may be divided into three parts. There is first the Bank of England itself, which is the pivot of the whole system; next, in the inner circle as it were, are all the 'Other Banks', as they are called, of Great Britain, meaning all the Joint Stock Banks and the comparatively few private banks still remaining, which make up the banking

system of Great Britain. For in order to understand the English system it must be realized that in England, to a degree which holds good nowhere else, the financial system is specialized or divided between home and foreign business. Roughly speaking, though this is becoming every year less true,[1] the British banks as such do not touch foreign business. Finally, in the outer circle is a heterogeneous collection of banks and financial institutions of all sorts, generically known as Lombard Street or the Outside Money Market, which can be distinguished from the inner circle by the fact that it does the greater part of the foreign monetary business of London, though this must not be taken to mean that it does not do a very large share of the home business too. It does both and is in a way the connecting link between the two parts of the system. The name is an indication of the history of the system. In the thirteenth century the Lombards, coming in the first place as agents to collect the Pope's taxes, settled down in this part of London and began to carry on their traditional business of money-lending and also foreign exchanges and marine insurance. Thus the quarter which subsequently became the home of the goldsmiths, the first English bankers, acquired its name, which has ever since been synonymous with money. Lombard Street itself is a small street running off among seven others from Bank Corner, the famous centre of London's business quarter, and probably the busiest street-corner in the world. Every one of these streets, for half a mile or so from the Bank itself, is crammed with the offices of financial houses and branches of banks from every country in the world. Every bank of any importance in the world has a branch or an agency, if not its head office, within this small circle, to which as a whole the general title of Lombard Street is applied.

Specialization.

Lombard Street.

The method of the inquiry into this enormous and complicated system is indicated by the line of thought suggested at the close of the previous chapter. The essence of a bank's business is receiving and lending money or dealing in floating

[1] Very markedly so since the War.

capital. The best method of attacking the problem is therefore to follow out these two sides, by putting the inquiry into two questions: 'Where do all these banks get their money?' and 'What do they do with it?' At the same time the vertical division, as it might be called, of the London system into home and foreign business must also be kept in mind. The following is an attempt to apply this double method of division of the system.

Home and foreign business.

I. Where do the Banks get their Money?

A. The Bank of England.

Home sources. In the first place, the Bank of England is in every sense of the term, except the name, the national or government Bank. It holds all the accounts of the various departments of the government; it manages the National Debt; it is the representative of the Mint, and generally speaking it exercises the fullest functions of a state bank. But it is one of the paradoxes of the English system that the Bank of England so far as its constitution and control are concerned is entirely a private institution, theoretically at least. Officially the government has no control over it whatever, not even a representative upon its directorate; but as a matter of fact the final say in all its affairs really lies with the government, while its actual policy is dictated entirely by the public interest, so far as the directors can ascertain it. Though the Bank is a private concern, owned by ordinary shareholders, it has for many years fully realized and acted up to its position as the official head of the English banking community, and the interests of the shareholders have always been regarded as secondary to the public interest. From the present point of view the importance of this privileged position of the Bank is that it holds all the government accounts, which at times amount to enormous sums. These Public Deposits, as they are called, amounted at times during the War to nearly £150,000,000.

Bank of England.

Public Deposits.

Many large business houses, public companies of all kinds, and even private persons also keep accounts with the Bank of

England, and these are classed in the Bank's Weekly Return as Other Deposits.[1] There is, however, a radical difference between the Bank of England and all others, in respect that it pays no interest on private deposits. Its total deposits therefore are not nearly so large as its position otherwise would indicate. The great bulk of the private deposits in England is held by the Other Banks.

Private Deposits.

One of the most important contributions to the deposits of the Bank of England arises from the fact that all the Other Banks make it an invariable custom to keep a considerable balance with the Bank of England as their own reserve. This is in fact the outstanding characteristic of the English system, which is known as the 'one reserve' system. Instead of each bank keeping its own reserve, they all lodge it with the Bank of England, which thus becomes in a very peculiar sense the bankers' bank. This fact again illustrates the solidarity and centralization of the English system. All the banks support the Bank of England by giving it their deposits (without interest be it remembered) in normal times. They thus establish a certain claim on the Bank for special assistance to any bank that may find itself in temporary trouble; and this claim is fully recognized not only by the Bank of England itself, but by all the other banks, for they clearly recognize nowadays that they all stand or fall together. A serious run on one bank necessitating its suspension would almost inevitably, in times of financial nervousness, produce a run on other banks, and the effect of such a panic is peculiarly cumulative. If one bank goes, others are almost certain to follow.

Finally, the relations between Lombard Street and the Bank of England are so close, especially in times of strain, that most of the foreign bankers, bill brokers, and other financial institutions in the Outside Money Market make a practice of keeping a balance in normal times with the Bank of England.

Foreign supplies.

Foreign sources. These are on the whole similar in character to the home sources, the only difference being that their origin

[1] Divided since 1928 into Bankers' and Other Accounts (see Chap. XVI).

is foreign. Thus many foreign governments have at times large sums at their credit with the Bank of England because London is a very important centre—it was until the War almost the only centre—for raising large government loans. Suppose, for example, that the Turkish Government proposes to add to its fleet. Orders are placed with British ship-builders, and in course of time the ships are completed and payment is due. But the Turkish Government can only find the necessary funds by raising a loan, which can best be floated on the English market, with perhaps the assistance of French, or now American, financiers. The money borrowed in England would then be paid into the account of the Turkish Government with the Bank of England, to lie there until drawn upon by cheques in favour of the ship-builders.

Foreign loans.

Many foreigners of all kinds, from crowned heads downwards, also keep accounts with the Bank of England, because until 1931 the Bank of England was just about the safest place in the world in which to keep one's financial sheet-anchor. One could always be sure of getting payment as and when it was wanted in London, in gold if required, which was not always true, especially in times of crisis, in other countries. Only twice in the history of the Bank had this not been literally true, once during the suspension of gold payments due to the Napoleonic Wars, and again during the Great War, and the suspension of free gold exports till 1925.

Foreign Private Deposits.

Many private firms in foreign countries, and especially foreign banks and foreign merchants, also keep accounts with the Bank of England because so much of their financial business finds its way to London for final settlement, and an account there is very convenient, wherever one may want to make payments. If, for example, an Austrian in Vienna wants to make a payment to an Argentine Spaniard in Buenos Ayres, the most desirable form of payment from the creditor's point of view may still be a cheque on London. A London cheque is welcome anywhere, because under normal conditions there are always many who require to remit to London, and who are glad to get such a cheque.

It is difficult, however, to distinguish between this kind of private deposits by foreigners in the Bank of England and those already mentioned as home receipts by the Bank from Lombard Street, for many of these deposits, though actually foreign in their origin, would naturally be paid to the Bank by the representatives in London of the foreign owners.

B. The Other Banks. Roughly speaking, the British Banks as already indicated confine themselves to home business and receive all their funds from private deposits. But as a matter of fact even before the War some of the large London Joint Stock Banks had been doing an increasing share of the foreign business which comes to London, and had received considerable deposits from foreign sources of the kind above described in the case of the Bank of England. Their funds are mainly derived, however, from British private depositors, and the amount of these deposits in all the banks of the United Kingdom (excluding the Bank of England) before the War was nearly £1,100 millions. In 1921 it had risen above £2,500 millions, and in 1932 it was again approaching that figure even without the Irish Free State (see Table VIII).

The Other Banks.

C. Lombard Street, like the Bank of England, also draws its supplies both from home and abroad. The Outside Money Market includes not only the representatives of foreign banks and other financial institutions abroad, but also all kinds of purely British houses, some of which are engaged mainly in foreign business, but many others just as largely in home trade. Discount Houses, both home and foreign, Accepting Houses, primarily foreign, and all sorts of other interests are represented in London, because Lombard Street is the one place in the world which provides the quickest and therefore the most profitable market for money. There you can either borrow or lend money, as your position for the time being requires, on the shortest possible notice, and to almost any amount. Lombard Street is the meeting-place of the world's supply of and demand for floating or loanable capital. Every one who has money to spare, even for the shortest period, can

The Outside Money Market.

send it in to Lombard Street as 'call money', and he will receive a small rate of interest on it even for the few days or weeks that he can allow it to remain. Such money received from large financial institutions of all kinds, insurance and investment, and even commercial and industrial companies as well as the banks proper, is the chief source of Lombard Street's funds; but they also have the control from time to time of large funds belonging to the foreign banks and merchants which many of them represent. Lombard Street therefore is the meeting of the waters in the world's financial affairs.

II. What do they do with the Money?

A. The Bank of England. The drains upon the Bank of England's funds, or the employments found for them, are chiefly for home purposes, though many of them are really the result of foreign requirements. Taking the actual home needs first, the Bank has often to advance money temporarily to the government, when certain expenditure has to be met before the funds to meet it from taxation have yet been fully collected; or again, one department may be heavily out in its expenditure while another has large funds at its disposal. On balance the government was, before the War, not often a borrower.

Government borrowing.

The Bank being, after all, an ordinary private concern, must employ the bulk of its spare funds in the ordinary lending business of a banker, that is to say on the discount of bills, loans on stock exchange securities, and other similar kinds of financial business; but owing to its peculiar position the Bank in normal times does a comparatively small proportion of the total business of this kind done daily in London. The reason is that the Bank, being the Central Reserve Bank of the whole English system, must keep a much larger proportion of its total deposits in reserve than any of the Other Banks, which, as already explained, look to the Bank of England to fulfil this function for the whole system. In normal times, before the War, the Reserve amounted to over fifty per cent.[1] of the whole

The Reserve.

[1] See Table X.

liabilities of the Bank to its depositors both public and private, and the necessity of maintaining this large proportion in Reserve naturally restricted its ordinary lending business. But the peculiarity of the Bank's position is that while in normal times it does only a comparatively small share of the discount business, in times of difficulty the whole strain of the Money Market's requirements is thrown upon it. Apart from such times of crisis the Bank does a considerable business at times with the Lombard Street houses who come to it for funds when their ordinary supplies are temporarily insufficient; and in this way, as will be seen later on, the Bank is able to exercise a very powerful control over the position of the Money Market as a whole.

Discounts.

B. The Other Banks. The employment of their funds is still mainly confined to home business, though this characteristic has changed markedly in recent times. They employ a considerable proportion of their funds, as much as they think safe in view of the nature of their liabilities to their depositors, in lending to merchants, manufacturers, stockbrokers, &c., on discount of bills, on overdrafts or cash credits, and on the security of all kinds of valuable and quickly realizable property, stock exchange securities, &c. But it is generally regarded as unsafe for them to invest in land or immovable property, because at a time of difficulty, such as a financial crisis, or when there is a run on the bank, such securities cannot be realized quickly enough. Of the rest they send a comparatively small portion to the Bank of England as a reserve, and the remainder, or the greater portion of it, is lent to Lombard Street, 'at call,' that is to say as call money, to be used by them in the short loan market already described. There was, however, before the War a tendency for some of the other banks to keep a larger amount of cash and even gold in their own hands as reserve; but as they did not publish any information with regard to these holdings the amount of them was largely speculative.

Home discounts.

Call money.

Until 1921 very little statistical information was available as to the position of the Joint Stock Banks and the uses they made

of their funds. Every bank of course published an annual balance sheet and most of them also a half-yearly balance sheet, but as these were all made as at 31st December or 30th June, which are abnormal periods in financial circles, they did not necessarily represent the average position of the banks throughout the year. In January 1921, however, more or less under compulsion from the Government, the London Clearing Banks began to publish every month a summary of the leading items of their balance sheets based on the average of one day in each week of the month. The details given in these monthly returns since 1931 will be found in Table IX *c*.

Banking statistics.

In 1931, however, the Committee on Finance and Industry, known as the Macmillan Committee, compiled a table of monthly returns of the London Clearing Banks which gave a great deal more information. Deposits were divided into Current Accounts and Deposit Accounts; the item of 'Cash in Hand and at the Bank of England' was split up into its two constituents, 'Money at call and Short Notice' was divided into Money at Call, Money at Short Notice to the Money Market and to the Stock Exchange; Discounts were divided into Treasury Bills and Commercial Bills; and they carried all these details back to 1919, which is important because it covers the period of post-war inflation and the beginning of deflation. As these details are of great interest they are summarized in Table IX *b*, but owing to considerations of space it is only possible to give the quarterly averages throughout the whole period of 12¼ years. Table IX *a* gives the half-yearly particulars from 1913 to 1920.

Clearing Banks.

It should be noted from a comparison of the figures of total deposits during the first quarter of 1931 for which sections *b* and *c* of Table IX overlap, that the basis of the two sets of returns is not exactly the same. This is due to the fact that the figures in the Macmillan Committee Report include only part of the business of the National Bank, namely, that done by their branches in England.

It will also be noticed from a comparison of the 1919 and

1920 quarterly figures in Section (*b*) with the half-yearly figures in Section (*a*) that there is a marked difference between the half-yearly figures and the average throughout the year. This is in accordance with the known fact that the banks naturally made their position look as strong as possible in the half-yearly balance sheets. When the monthly returns were established it was thought that this feature of 'window-dressing' would be greatly minimized, if not entirely eliminated, but the Joint Stock Banks adopted a practice which went far to defeat this object, for they arranged among themselves that they would not make up their weekly returns on the same day of the week, the 'Big Five' especially doing it on different days. The result was that each bank, on its making-up day, by calling in a considerable amount of its Call Money from Lombard Street made its cash position look much better than it would otherwise have done. Each day in turn therefore one bank would be calling in, and next day releasing their Call Money, while another bank called in. The result was that the total 'Cash in Hand and at the Bank of England' of all the Clearing Banks was made to look considerably larger than the actual facts, and the Macmillan Committee called attention to this in their report and estimated that the difference amounted to a floating fund of at least £20 millions.[1] The extent of this difference, however, was not brought out until in 1928 the new form of the Bank of England Return began to separate their Other Deposits into 'Bankers' and 'Other Accounts' and it was then found that the total bankers' deposits at the Bank of England, which included all the banks, was consistently *less* than the amount of balances at the Bank of England returned by the Clearing Banks alone. This can be tested by comparing Table IX *b* with Table X which gives an Analysis of the Bank of England's Weekly Return.

Window-dressing

Cash balances.

C. Lombard Street. The Outside Money Market will lend money to any one who has good security to offer, and on almost any kind of security. Their main business is the discount of bills both home and foreign, but they also lend money

[1] *Macmillan Committee Report*, p. 157.

for all sorts of purposes and for any time from the shortest periods, even overnight or for the week-end, upwards. The rate of interest they receive on such short loans is comparatively low as a rule[1]; but the rate they pay for the call money is lower still. They work on small margins of profit, and their whole business is to keep their money constantly employed. This business is world-wide in character and distribution. The business of discounting foreign bills, which is still largely and was formerly entirely in their hands, requires some further explanation on account of the part it plays in other matters to be dealt with later on. Suppose that a merchant in Buenos Ayres wishes to buy lace goods from a Nottingham manufacturer. Some method of payment must be arranged, because the Nottingham man knows nothing of the foreigner, and can hardly be expected to give credit to a total stranger. The apparently simple way is for the Argentine to send the money with the order, but he is probably not able to pay in advance; besides, he may not care to trust the manufacturer. What he does, therefore, is to offer payment by bill of exchange, say at three months' date, against receipt of the bill of lading for the goods. This, however, would not satisfy the exporter; he must have some sort of guarantee that the buyer is good for the money, and that the bill will be met when due, and so the custom has grown up in London of certain large firms who have connections abroad lending their names to such bills as guarantors by accepting the bill in place of the foreign buyer. This they do for a commission paid them by him, and because they know, or are informed by their house in Buenos Ayres, that he is good for the money. These 'Accepting Houses' then, as they came to be called, have become middlemen of a sort between the manufacturer and his foreign customer. When the goods are ready for shipment the manufacturer sends the bill of lading for the goods to the forwarding house in London along with the bill of exchange for their value. The latter is presented to the Accepting House for their signature, upon

Short-loan market.

Accepting Houses.

[1] See Table XV (1).

which the bill of lading for the goods is handed over. Then the bill of exchange can be discounted either with an ordinary bank or with one of the large Discount Houses, as they are called, in Lombard Street, which lends the money willingly on the double security of the Accepting House and the manufacturer himself, who as drawer of the bill is of course ultimately liable. Thus the business of foreign discounts in London has gradually become specialized or divided between these two classes of firms, the Accepting Houses and the Discount Houses, and the two together represent a very large and very important part of the business done in Lombard Street.

Foreign discounts.

In the diagram on page 124 an attempt is made to represent, something after the fashion of a wheel and its spokes, the ramifications and interrelations of this complicated system. The principal point to be noted in the description of the system is how the whole organization is centred in the Bank of England. The Bank, in addition to its own ordinary current accounts and deposits, holds the reserve of all the Other Banks; it holds also the government funds and often balances belonging to foreign banks and foreign governments also. It is no exaggeration therefore to say that the insolvency of the Bank of England would involve the bankruptcy of every one in England from the government downwards, and also in all probability the bankruptcy of every state bank and almost every government throughout the world. It is simply impossible to realize what it would mean.[1] Thus the responsibility of the Bank, not only to England, but to the financial world as a whole, is very heavy, and it is all the more paradoxical that, as already pointed out, practically no government control over the Bank should have been found necessary. While this is true, however, it must be very clearly recognized that, as a matter of fact, the actual control over the Bank's affairs is of the most stringent kind possible, because it is exercised by the public opinion of the whole Money Market,

Position of the Bank.

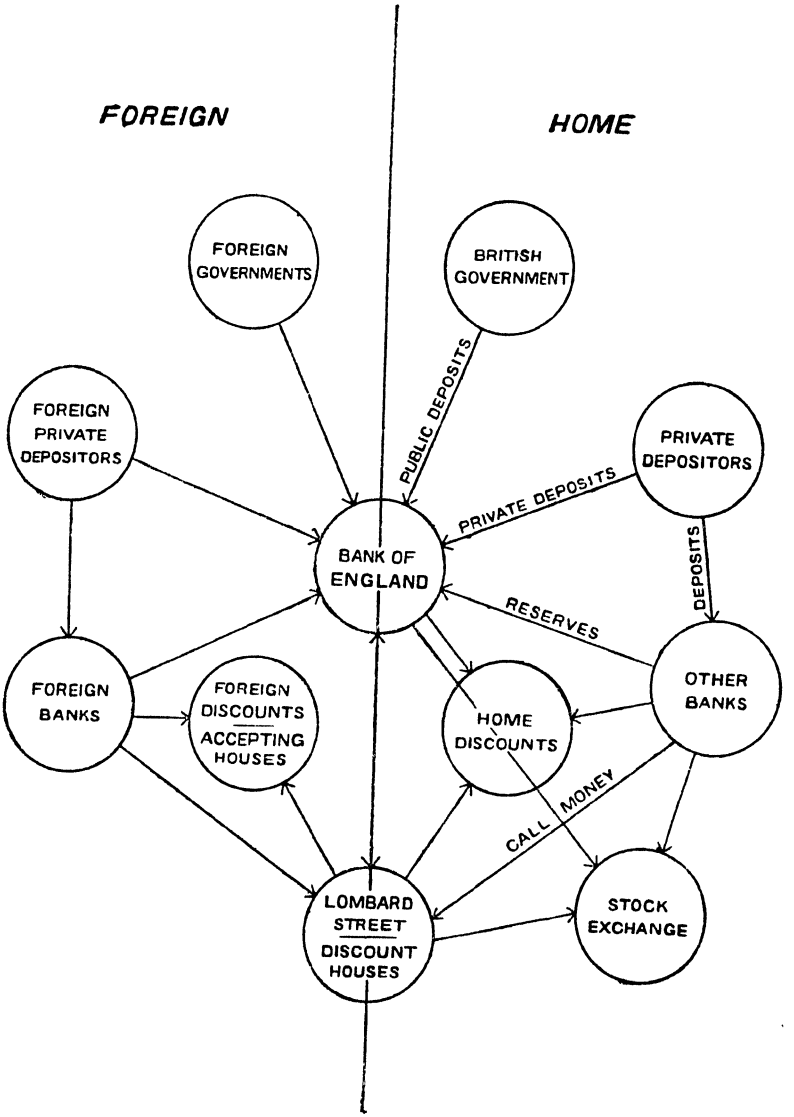
[1] But see Chap. XVII as to the effect of England's going off the gold standard in September, 1931.

which would certainly be enforced if necessary by the government. But it has never been necessary for the government to interfere or to overrule the directors. On the contrary, the Directors of the Bank of England have at all times of crisis been the chief advisers of the government, and during the war crisis of August 1914 their action was an example to the whole banking world. This idea of the position occupied by the Bank of England and its responsibilities is more than anything due to the work of one man, Walter Bagehot (1826–77), who in his book called *Lombard Street*, originally published in 1873, was practically the first to set forth the real constitution of the London Money Market and the true place of the Bank of England in it. When his work was first published he was describing an ideal, but the ideal has every year become more and more actual; and now there is no financial institution of any kind in any country that more thoroughly deserves the public confidence which it unquestionably enjoys than the Bank of England. And this has been achieved with the absolute minimum of government control. The only legislation affecting the Bank of England is the Bank Charter Act of 1844, commonly called Peel's Act, and that only deals in detail with the one question of note issue. How that came to be so involves a brief account of the history of the Bank of England from its foundation.

Bagehot's work.

The Bank of England was founded in 1694, but the development of banking in Europe which led up to its foundation had been going on for several centuries before that date. The earliest banks in Europe were those of the Italian Republics which are said to date back to the twelfth century, though the famous Bank of St. George at Genoa was only definitely established in 1407 and the Banco di Rialto in Venice in 1587. The first bank in Western Europe was the Bank of Amsterdam, founded in 1609, followed by the Bank of Hamburg in 1619, and the Bank of Rotterdam in 1635, and the first bank-note was issued by the Bank of Sweden in 1656, two years after its establishment. In England the banking system only began to

Early history of banks.


FOREIGN
HOME
FOREIGN GOVERNMENTS
BRITISH GOVERNMENT
PUBLIC DEPOSITS
FOREIGN PRIVATE DEPOSITORS
PRIVATE DEPOSITORS
PRIVATE DEPOSITS
BANK OF ENGLAND
DEPOSITS
RESERVES
FOREIGN BANKS
FOREIGN DISCOUNTS — ACCEPTING HOUSES
HOME DISCOUNTS
OTHER BANKS
CALL MONEY
LOMBARD STREET — DISCOUNT HOUSES
STOCK EXCHANGE

develop early in the seventeenth century. Up to 1640 the merchants of London had been in the habit of keeping their uninvested funds in the Tower of London under the care of the government; but in that year Charles I seized a sum of £130,000 lying in the Tower, and thereafter the merchants, not trusting the government, developed the practice of lodging their funds with the goldsmiths. These had already begun to extend their original trade of artificers in the precious metals, by acting as money-changers and also as dealers in capital, lending at interest part of the funds deposited with them. They paid interest on these deposits and issued notes of hand acknowledging them, which were practically deposit receipts. In spite of the usury laws they charged high rates of interest on their loans, and they also made considerable profits by their money-changing transactions. In these days the irregular state of the coinage made banking a highly skilled and remunerative profession, involving careful consideration of the weight, standard, condition, and value of every coin handled; it is said, for example, that when making payments the goldsmiths paid out the most worn or debased coins, keeping the best for use as bullion.

The goldsmiths.

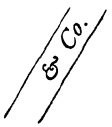
Money-changing.

From 1640 onwards the government from time to time received advances from the goldsmiths acting as bankers; but in 1672 the Exchequer stopped payment, being at that time in debt to the goldsmiths to the extent of £1,300,000, and thus again destroyed all confidence on the part of financial men in the government. Public confidence in the goldsmiths and private banking firms into which they were then developing—some of the private bankers of the present day can trace their origin to the old goldsmiths of those days—had been shaken by frequent failures among them, and from about 1651 tracts had appeared in England advocating the formation of a public chartered bank on the lines of those which were already in existence in other parts of Europe.

In 1694 the government of William III was in urgent need of funds, but owing to their bitter experience with his prede-

Foundation of the Bank.

cessors none of the London merchants would trust the government with a loan. It was then that a Scotchman named William Paterson came forward with the scheme which led to the formation of the Bank of England. He offered to lend the government £1,200,000 on condition that they granted him a Royal Charter for the incorporation of the Bank, with the right to carry on all the business of bankers, including deposits and discounts, and conferred upon the Bank the right to issue notes to the extent of the sum lent to the government. Thus began the modern National Debt of England.

In 1697 a new charter gave the Bank of England the monopoly of joint-stock banking in England, and this was further strengthened by the Act of 1708, which restricted the number of partners in banks of issue to six during the continuance of the Bank of England. In 1751 the Bank took over the management of the National Debt. The granting of this monopoly to the Bank of England is the key-note to the history of the subsequent development of banking in England. From this point onwards the development of the English system may be compared with the entirely different system in its immediate neighbour Scotland, as illustrating two opposite ideas of the kind of body which should be entrusted with the functions of a banker. In England, with the exception of the Bank of England, the banking business was carried on entirely by private banks, that is to say by private firms composed of a number of individual partners under firm-names composed of the names of these partners or some of them, and usually ending with '& COMPANY',—hence the form still in use in crossing cheques 

Public confidence in these banks was largely based on the faith of the public in the integrity and stability of the private individuals composing the firm, and this naturally restricted the operations of the bank to the town or district where the partners were known. As the Bank of

England confined itself entirely to London and had at first no branches throughout the country, it practically meant that all the banking business of the country was localized, each town or district having its own local bankers. In Scotland, however, a different system began to develop at an earlier stage than in England. A number of large joint-stock or incorporated banks were formed, that is to say, joint-stock or shareholding companies incorporated by Royal Charter, such as the Bank of Scotland in 1695, the Royal Bank in 1727, and the British Linen Company in 1746. These large concerns established branches in many of the chief towns of Scotland, and their reputation became firmly established throughout the country. Thus the two systems may be described as a large number of small, local private bankers throughout the country in England, while in Scotland it was a small number of large joint-stock banks with branches covering the whole country.

The Scotch system.

The chief event in the history of the Bank of England before the Act of 1844 was the suspension or restriction of cash payments during the Napoleonic Wars. Till then the use of bank notes in England as common currency had been greatly restricted by the large denomination of the notes issued. At first the lowest amount of any note was £20. In 1759 £15 and £10 notes were authorized, and £5 notes in 1793. With the suspension of cash payments in 1797, however, the need of smaller notes was at once obvious, and £1 notes were immediately issued in considerable quantities. The crisis which was the immediate cause of the suspension soon passed, and the Bank would have been quite willing to resume cash payments; but so little objection was there to the note system that no one asked for its discontinuance, and the suspension was prolonged. At first the issue was comparatively small, only some £10,000,000 in 1797, and it was not till 1809 that there began to be any suspicion of inconvenience attached to the note issue. Then it began to be realized that gold had gone to a premium, the price rising to about £4 12*s.* per ounce in 1810 instead of the official price of £3 14*s.* 2*d.*

Suspension of payment, 1797–1823.

Premium on gold.

Financial people began to talk about the high prices, which were then prevailing,[1] being due to inflation caused by the excessive issues of paper money throughout the country, for although the Bank of England issue was still only about £19,000,000 the private banks throughout the country and in Ireland had increased their issues enormously. A Bullion Committee was appointed in 1810 which marked the beginning of a tremendous controversy, the very meaning of which it is now almost difficult to comprehend. The truth is that the financial world of those days was only feeling its way by experience to a realization of the meaning and principles of money, and it is largely to those discussions that we in modern times owe our very clear-cut ideas as to the principles and functions of money. But from our present point of view the chief importance of this controversy was that out of it grew the alternative principles which formed the basis of the later controversy over the question of the best method of regulating the Bank of England's note issue. The Restriction itself was finally removed in 1819–23, by which time the new currency of 1816 was in full being; but the lessons of the controversy were still to be applied to banking problems. From 1790 to 1820 there had been growing dissatisfaction with the English system owing to the disastrous frequency of failures among the private banks. Between 1810 and 1817 alone, there had been 157 of these, and a considerable agitation was growing in favour of some approximation to the Scotch system of joint-stock banks. In 1823 a pamphlet was published by one Thomas Joplin in which he pointed out a fact which had apparently not been fully realized till then, namely, that the Bank of England's monopoly only prevented the establishment of joint-stock banks *with the right to issue notes*, and that if any one cared to establish a joint-stock company to carry on the other parts of a bank's business there was nothing to hinder him doing so. But, as things were then, the impossibility of obtaining a note issue was quite sufficient to prevent the

Bullion Committee.

Joplin.

[1] See Table III.

establishment of any other joint-stock banks, because in those days the issue of notes was looked upon as the most important and certainly the most profitable part of a bank's business. The fact is that banks as they are now did not exist then. The development of the system of current accounts and payment by cheque was still in its infancy, but no one then could have conceived that banking business would develop on the lines and to the extent which it has since done. Indeed, that development is very largely just the result of the history which is being narrated. No one, however, paid much attention to Joplin's pamphlet at the time, but in 1824–25 there was another series of bank disasters, seventy-six of them failing, and in 1826 a new Act was passed which allowed joint-stock banks to be established with the right of issue, so long as they had no office or branch within sixty-five miles of London, this being the first establishment of the metropolitan area which afterwards became the Bank of England's absolute preserve for note issue purposes. This same Act once more raised the minimum value of bank-notes to £5, and an attempt was made to extend this provision to Scotland, which, however, was successfully resisted, fortunately for Scotland, thanks largely to Sir Walter Scott.

The Metropolitan area

In 1833 when the Bank of England's Charter again came up for renewal, the view which had been advocated by Joplin was specifically adopted in the wording of the new charter, and immediately the development of the great modern joint-stock banks of London began apace. But the unstable character of the provincial joint-stock banks which possessed the right of note issue, still attracted public attention from time to time to the question of the regulation of note issues, and finally the matter came to a head in the great controversy which preceded the passing of Sir Robert Peel's Bank Charter Act of 1844. The principles underlying the arguments of the two sides were known as the Currency and the Banking principle respectively. The former maintained that no security for a bank-note issue could be satisfactory except the retention of actual currency in reserve or 'earmarked', as it is called, for the conversion of the

Regulation of notes.

Banking v. currency principles.

notes when required. The advocates of the banking principle, however, maintained that bankers could be relied upon to restrict the issue within safe limits, because the nature of banking business provided a natural limitation to the issue, notes being issued only on actual commercial transactions representing a bona-fide need for currency. In reply to this it was argued that experience during the suspension of payments had shown that excessive issues were not so checked; during the South American boom in 1809, for example, owing to enormous loans by the banks on discounts, the amount of the issue rose dangerously high. It must be remembered that in those days the Bank did not possess one very powerful weapon which it now uses successfully when necessary, and which will be explained in the next chapter, namely the right of raising the rate of discount, or, in other words, charging more for its loans in order to check an excessive demand. In those days the usury laws were still in existence and the maximum rate of interest chargeable, namely five per cent., was not nearly high enough to check excessive borrowing in times of excited speculation. It is hardly worth while discussing now, however, whether, under the extended use of this means of self-protection, the Bank of England might have developed on better lines. The fact is that the Currency party triumphed, and the Act of 1844 tied up the English bank-note system under such restrictions as completely prevented its further growth, and so resulted in diverting the development of the English banking system along entirely different lines from what might otherwise have been the case.

The 1844 Act.

The leading principles of the 1844 Act seem to have been, first, that the issue of bank-notes should gradually be monopolized in the hands of the Bank of England, and, second, that that issue should be limited to a fixed amount against securities, all the rest being against full gold cover only. To secure the first, it provided that no bank having an office in the metropolitan area of 65 miles round London was to be allowed to issue notes, and that in the provinces of England no new joint-stock bank was to be allowed to begin issuing notes

—Scotland and Ireland were accorded special treatment—while the future issue of those which already had the right of issue was to be limited to the amount of their actual issue at the time of the passing of the Act. In the case of the Bank of England its business was to be divided into two entirely separate departments known as the Issue Department and the Banking Department respectively; the former was to do nothing but issue notes, the latter to carry on the whole banking business of the Bank. The regulation of the Bank's note issue was laid down as follows: The actual issue at the date of the Act was taken as £14,000,000 and this amount they were to be allowed to issue in future against securities, including the amount which the government then owed the Bank, which was about £11,000,000. This sum of fourteen millions was to be known as the Authorized Issue. Beyond this the Bank may issue as many notes as they please, so long as the full value of them in bullion is deposited with the Issue Department. Silver to the extent of one-fourth of the gold was allowed by the original Act; but in modern times the Bank never exercised its right to hold silver. The notes of the Bank of England were legal tender in England only (not Scotland and Ireland) except of course at the Bank itself.

The Issue Department.

Authorized Issue.

With regard to the existing issues of the provincial banks, both private and joint-stock, it was further provided that should any such bank fail or give up business or become amalgamated with another its authorized issue should forthwith cease, and it would be within the right of the Bank of England by Order in Council to have two-thirds of the lapsed issue added to the amount of theirs. As showing how effectual this policy has been in centralizing the note issues of England in the Bank it may be mentioned that in 1844 the provincial issues in England amounted to £8,631,642 issued by 207 private and 72 joint-stock banks; in 1917 they had fallen to £258,870 issued by one private and eight joint-stock banks,[1] and in 1921 the last of these disappeared. By the addition of their share of these

Provincial Issues:

[1] See the *Economist* Banking Number, May 18, 1918.

lapsed issues, the authorized issue of the Bank of England had been raised before the War to £18,450,000, which was over a million less than the full two-thirds of the lapsed issues. It was sometimes thought that the authorities of the Bank of England were keeping this margin as a reserve for use in times of crisis; but it was not so employed in the great war crisis of 1914 and it was not till 1923 that the authorized issue was raised to the limit of £19,750,000.

This stringent regulation of the Bank's note issue was very severely criticized for many years, and there can be no doubt that it was the main cause of the English banking system following the lines of development which it actually chose.

Inelastic system.

The weakness of the system was its absolute inelasticity at times of crisis when more cash is wanted. Notes would serve the purpose, but the Bank cannot issue a single note except against gold, which is quite useless. This absolute restriction of development of the issue of notes has therefore compelled the adoption of an entirely different system, namely the use of cheques instead of notes, and there is much to be said for the argument that that has proved to be in the long run a better system.

It is interesting before leaving this part of the subject to note the various alternative systems of regulation of note issue adopted in other countries. These are three in number, namely:

Other systems.

(1) The principle of the fixed ratio, that the number of notes issued must be covered by gold and securities in certain fixed proportion. This is the German system, for example, the proportion being one-third gold[1] and two-thirds securities, but there a special provision is made that the bank may exceed the fixed proportion on paying to the government a tax of 5 per cent. on any notes in excess. This heavy tax was thought to be sufficient to prevent any danger of over-issue.

(2) The principle of maximum issue. This is the French system, where the total issue was limited before the War to 6,800 million francs, and there is no provision at all as to the amount

[1] Afterwards raised to 40 per cent.

of gold to be held. That is left to the prudence of the bank. But the Bank of France, which issues these notes, is under severe legislative restriction as to its ordinary banking business.

(3) Practically the whole amount of the note issue is covered by the deposit of securities, as in America till 1914.

Weekly Return.

The only provision made by the Act of 1844 with regard to the Banking Department of the Bank of England is that the Bank must publish every Thursday an account, known as the Weekly Return, showing the position on the previous day of the whole accounts of the Bank, including both the Issue Department and the Banking Department. Specimens of this Weekly Return as it was till 1928 will be found in Table VII.

It is very important that this account should be really understood, for its publication every Thursday at noon is awaited with the greatest interest, and the announcement of the Bank Rate which is then made, depending upon the figures of the account, goes far to control the value of money, and the movement of floating capital throughout the world. The pivot of the whole matter is the strength of the Reserve and its proportion to the total amount of the liabilities it might be called upon to meet. It is essential in the first place to be quite clear as to what the Reserve really is, because in the lay mind there is constant confusion as to what the Reserve consists of, and where it is kept. Especially, confusion is very common between the Reserve which is part of the assets of the Banking Department, and the gold held against the notes by the Issue Department. These are two entirely different things, which must on no account be confused with each other, and they appear in different parts of the Weekly Return. The last two items on the credit side of the account of the Banking Department, namely: 'Notes' and 'Gold and Silver Coin', are the Reserve. But the confusion is excusable when it is pointed out that though as a matter of fact the Reserve is mostly in notes, yet when it requires to be drawn upon, the call is generally for gold. The Banking Department, however, for its own convenience and to save the necessity of having a duplicate set of

What is the Reserve?

safes each capable of housing many millions of gold, prefers to let the gold lie in the Issue Department and take out notes instead. If gold is wanted, all they have to do is to send a bundle of notes across to the Issue Department, when they will get the gold at once. This is the explanation of the distinction between Total Issue and Circulation. The latter means the total amount of notes issued by the Issue Department, less the amount held as Reserve by the Banking Department, that is to say it means the amount of notes actually in the hands of the public other than the Bank.

Circulation.

Table X in the Appendix gives an analysis of the main items of the account as these are usually studied by the Money Market, and shows the extraordinary movement of these items since the War. Up till a few months before the War the average proportion of reserve to liabilities had been maintained at a little over 50 per cent. of the total deposits. The next question comes to be 'How did the Bank contrive to maintain the Reserve so steadily at that figure?' In other words, how does the Bank of England manage its Reserve, upon which so much depends?

The Proportion.

As already mentioned, the calls upon the Reserve which the Bank must always be prepared to meet may be divided into two main classes, home and foreign. The home drains, as they are called, are for the ordinary currency requirements of the country, which inevitably fluctuate a good deal from time to time, as for example at the quarter days when large numbers of periodical payments such as rents are due, or at the half-yearly dividend days when many companies pay their shareholders. Again, a time like the August Bank Holiday, when so many people go on holiday, means a heavy withdrawal of cash from the banks to meet expenses, and this involves a considerable outflow of cash from London to the provinces. But the important characteristic of these home drains is that they are regular or periodic; their usual amount, and the time when they are expected, are well known from experience, and can be estimated with a reasonable approach to accuracy. They are therefore easily provided for, and do not cause any trouble; because the

Home drains.

fact must be grasped that the Money Market does not in the least mind even large sums of money being drawn out of the Bank of England's Reserve, as long as it knows where they have gone to and what for, so that it may estimate when they will return.

But with the foreign drains it is often quite different. Some, like the autumnal drain of gold to Egypt and India for the movement of the crops, which had become well known as annual events before the War, were looked forward to and recognized as quite normal. But there is another kind of foreign drain of gold from the Bank which is the constant care of the London Money Market because it is much more difficult to foresee when it is likely to come, or to know where it comes from, how long it will last, or what amount it will rise to, and especially when the money is likely to come back, if at all. These foreign drains are therefore very difficult to provide for, and often cause great disturbance in the Money Market, especially if some unknown drain of this sort happens to coincide with another large drain for other purposes, as the war crisis coincided with Bank Holiday in 1914. It is necessary therefore to find out the cause or origin of these foreign drains, before considering further how they affect the Reserve and how they are to be dealt with; and to do so the inquiry must be diverted to an entirely different branch of the subject, namely, foreign trade and the foreign exchanges.

Foreign drains.

CHAPTER XI

THE RATE OF EXCHANGE

International trade a return to the system of barter.—The law of the balance of trade.—Foreign bills and the Rate of Exchange.—Course of Exchange.—Variation of the Rate of Exchange—Its effects and its limits.—Gold points.—The cause of the foreign drain.

In the inland trade of modern commercial countries the use of metallic coinage in commercial transactions has, as already explained, been reduced to a minimum. In foreign trade this tendency is carried still further. International trade is carried on almost entirely without the passing of money; it is really a return to the system of barter. Every country exports just as much as is required to pay for its imports, and imports just as much as it can buy with its exports.

Inter-national barter.

It is obvious that this must be so; because if any nation were importing persistently more than it exported, and paying for the balance every year in gold, its gold supply would soon be seriously diminished. The result, according to the quantity theory of money, would be a general fall of prices in that country. What would this mean? First of all, every one would be very short of money, owing to the fall in prices and consequent depression of trade, and would be compelled to reduce his purchases, especially of foreign luxuries. Prices being now so cheap at home, it would not pay to import anything that could be bought at home, because the home prices would be cheaper than the foreign. Thus the current of importation would be checked. At the same time the cheap prices at home would tempt foreigners to come and buy, thus giving an impetus to exports. The result would be to redress the balance of trade by reducing imports and increasing

Cash payment impossible.

exports, until the excess of imports, which was the beginning of the trouble, was wiped out. It is therefore impossible for any country to be always importing more than it exports and paying for the excess in gold (except of course a country like South Africa which produces gold), and the same process reversed would apply in the case of a persistent excess of exports. The very fact of an excess either way would tend to check itself. It is like the swing of a pendulum; every swing to one extreme sets in operation forces which tend to bring the pendulum back to the point of equilibrium again. The result is embodied in what is called the law of the balance of trade. *Every importation when it takes the form of a regular current, necessarily provokes and determines a corresponding exportation, and conversely.*

The balance of trade.

It will be apparent, however, that the operation of the theory above stated would be a slow and inconvenient process. It would be some time before the reduced supply of coinage would have its effect on prices, with the resulting compensatory action. Again, the frequent variation of the general level of prices is very bad for trade. In practice, however, the same result is reached by a more delicate and at the same time much more rapid process, known as the variation of the rate of exchange, which, though invisible and automatic, is equally certain under normal conditions.

How it works.

The system of settling accounts between foreign merchants by the exchange of bills is a development of the credit system as seen in the banks. Just as in inland trade all the merchants settle their accounts with the bank instead of with each other direct, so in foreign trade, each merchant, instead of settling with his own creditors in various foreign countries, settles with his creditors' creditors in his own country, thus saving the passing of coin, with all its necessary risks and expense.

Thus supposing that A in London buys £100 worth of cotton from B in Bombay, and grants a bill in payment, while C in Bombay buys £100 worth of goods from D in London,

Foreign bills.

and grants a bill in payment. Suppose that the bills fall due on the same date, say January 31. Before that date A in London must remit to B in Bombay the sum of £100; C in Bombay must remit to D in London the sum of £100. But A meets D and says, 'Instead of sending £100 out to Bombay to pay B, I will give it to you in exchange for the bill payable by C which you hold. Then I shall send this bill to my creditor B, who will collect payment of the amount from your debtor C'. Thus all parties' accounts are squared without any money passing from England to India or the reverse.

In practice a middleman is employed, called the bill broker, who buys bills from all the exporters who have them to sell, and sells them to the importers, who require them to pay for their imports. In all countries except England a large part of this business is done by the banks. The bill broker's price is the rate of exchange, which is simply the price of foreign bills, and his price list is called the course of exchange.[1] For example, the rate of exchange between London and Paris is the price which a merchant in London must pay for a bill payable in Paris, or vice versa. How, then, is this price fixed?

Their price.

First of all, it must be explained how the equilibrium or normal price, as it might be called, of foreign bills between two countries is fixed; then it will be necessary to consider the causes of variation from this equilibrium, or par value.

(1) In trade between countries whose coinage is based on the same unit the exchange is the simplest possible. Between England and her Colonies, for example, where the English sovereign is the universal unit, there is really no par of exchange in the ordinary sense of the word at all, for an English sovereign is exactly the same thing as an Australian sovereign.

Mint par of exchange.

(2) Where two countries use different coinage units, the rate of exchange is based upon the comparative gold values of the coins which form the respective units of their coinage. The rate of exchange between London and Paris, for example,

[1] See Table XI.

that is between the sovereign and the franc, before the War was calculated thus :—

One English sovereign = 7·98805 grammes[1] of gold $\frac{11}{12}$ths fine
∴ „ „ „ = 7·32238 „ „ pure gold.
One Napoleon (20 francs) = 6·45161 „ „ gold $\frac{9}{10}$ths fine
∴ „ „ „ = 5·80645 „ „ pure gold.
∴ One English sovereign = $\frac{7{\cdot}32238 \times 20}{5{\cdot}80645}$ francs = 25·2215 francs.

This is called the mint par of exchange between London and Paris ; one English sovereign was equal to 25·22 francs. But in 1928 France reduced the gold content of the Napoleon to 1·31 grammes of gold (still $\frac{9}{10}$ths fine) or 1·179 grammes of pure gold so that the mint par of exchange then became £1 = 124·2134 francs.

(3) Where the currency of a country actually consists of paper, the mint par of exchange of the nominal gold unit of the currency must be calculated and then converted into terms of paper money by finding out how many units of paper money are equal to one unit of gold. Paper exchanges

(4) Again, with a silver currency and a nominal gold unit, a similar method would be followed. But between a gold standard country and one with a silver standard there is no calculable rate of exchange at all. The rate of exchange in such a case depends mainly on the fluctuations of the market value of silver in terms of gold. or silver.

(5) Lastly, when the bill is not due immediately, but say three months after date, an allowance must be made on the price of that particular bill to cover the interest for the period till its maturity. The long rate of exchange, as this is called, used to be quoted for three months bills, as opposed to the short rate or cheque rate for bills payable immediately. The difference between these two obviously depends on the rate of interest current for the time being in the country where the bill is payable. Short and long rates.

(6) In practice, the probability of the bill being duly paid, in other words, the solvency of the granter, must also be

[1] 123·274 grains (troy) and 1 gramme = 15·4323 grains.

taken into account, but, as the rate of exchange refers only to thoroughly good bills, it is not affected by this consideration.

The cause of variation.

But over and above all these considerations, the principal cause of the variation of the rate of exchange remains to be explained. The rate of exchange means the price of foreign bills, which, like that of any other commodity, depends on the supply and demand. The supply of bills depends on the number of merchants who have sent out goods from the country and have received bills in payment; the demand for bills depends on the number of merchants who have brought goods into the country and must buy bills to meet the price of these imports. In other words, the supply of, and demand for, bills depend on the balance of imports and exports for each country. If a country is importing more than it exports, the rate of exchange rises against that country; if it has been exporting too much, the rate of exchange falls or is in favour of that country.

Supply and demand.

Thus if France had been importing too much from England, the French merchant would require to pay more than 2,522 francs for a bill of £100 payable in London. If on the other hand France had been exporting too much to London, a bill for £100 drawn on London would only realize something less than 2,522 francs when sold in Paris.

Before proceeding to discuss the effects of the variation of the rate of exchange it is necessary to explain more fully some of the methods of the business which are very confusing to the lay mind. We speak, for example, of the rise and fall of the rate of exchange and of the rates being above or below par, but it is not always easy on looking at a list of rates of exchange, to be sure at a glance whether a particular rate is above or below par, or is rising or falling. This is due to a peculiarity

Method of quotation.

in the methods adopted of quoting the rate of exchange. Every such rate can be stated in two different ways, that is to say, it may be expressed either as the amount of *home* currency which must be *given* in exchange for the standard unit of the other country, or as the amount of the *foreign* currency which will be

received in exchange for the standard unit of the first country. Thus the rate of exchange between London and Paris is invariably expressed both in London and Paris as the number of francs given or received for £1 sterling. But it might just as well be expressed as the number of pence equal to one franc, which since 1928 is about twopence at par. Now the movement of the actual figure which is called the rate of exchange depends on which of these two methods is adopted. If the rate is expressed in foreign currency then it means the amount of that currency received in exchange for so much of the home currency, and in that case a rise in the figure means that we receive more of the foreign money for the same quantity of ours, in other words the rate of exchange has become more favourable to us. But as a matter of fact this is called a falling exchange, because it means that we have to give less of our money for so much of the foreign currency. A rising rate of exchange where the rate is quoted in foreign currency means that the actual figure of the quotation is falling, because that indicates that we receive less of the foreign currency for each unit of ours paid. Thus when the London-Paris rate is, say, 120 instead of 124·2, that means that an Englishman remitting to Paris will only receive 12,000 francs in exchange for £100, so that if he wants to remit the full par value of £100, i.e. 12,421 francs, to Paris he will require to pay more than £100 for the bill or draft. This is therefore unfavourable to him as a debtor requiring to remit.

Home or foreign currency.

This confusion in the manner of expressing the rates of exchange can only be avoided by constantly remembering whether the rate is expressed in home or foreign currency. It may be put for convenience in the following way:

Where the currency is	And the quoted figure is	The rate of exchange is really
FOREIGN	FALLING	RISING or UNFAVOURABLE
FOREIGN	RISING	FALLING or FAVOURABLE
HOME	FALLING	FALLING or FAVOURABLE
HOME	RISING	RISING or UNFAVOURABLE

It will be seen that there can never be three F's in the line.

To put it in another way, if the rate is in home currency then

the movement of the exchange is direct, that is to say a rising figure means a rising rate, but if in foreign currency the movement of the rate is inverse, that is to say a falling figure means a rising rate and conversely. Since the War, however, nearly all the rates of exchange are quoted in the foreign currency (see Table XII) so that the confusion is now all the one way; when the quoted rate is falling the rate of exchange is moving against us.

Effect of rising rate.

When the rate of exchange rises against a country in this way, it means that importers must pay a little more for their bills than they expected. This is the same as if they had had to pay a slightly higher price for the goods imported. On the other hand, it means that exporters receive a little more than they expected for their bills, which is the same as if they had received a rather higher price for their goods. In other words an unfavourable rate of exchange is a penalty on imports and a premium on exports. It therefore tends to check the excess of imports and to encourage exports; it automatically tends to restore the balance of trade, the disturbance of which was the primary cause of the rise of the rate of exchange. Thus the variation of the rate of exchange tends to preserve the balance of trade.

But there are limits to the rise or fall of the rate of exchange. The root idea of the buying and selling of bills was to save the risk and expense of sending gold abroad. If, however, the loss incurred owing to the rise of the rate of exchange becomes very great, it will no longer pay to buy bills; it will be cheaper to send the gold after all. The rise and fall of the rate of exchange are therefore limited by the cost of sending gold from the one country to the other. The limits thus fixed are called the gold points. Thus before the War the rate of exchange between London and Paris could not fall below 25·12 nor rise above 25·32, because the cost of sending gold from London to Paris, or vice versa, was only about 10 centimes per £. These, then, were the gold points of the exchange between Paris and London.

The gold points.

The result of a rise in the rate of exchange to the gold points is that merchants, or the banks on their behalf, will remit gold

instead of buying bills. This is what is meant by the expression that the rise of the rate of exchange against a country is unfavourable to that country; if it continues it will result in a drain of gold abroad. This, however, in spite of the word unfavourable, is not necessarily a bad thing for the country; the phrase recalls the idea of the Mercantilists, who thought that an export of bullion was the one thing to be avoided. During the nineteenth century these ideas had come to be looked upon as old fashioned, but to-day by a curious change of psychology (the result of protection) an unfavourable rate of exchange is regarded by many people as desirable because it means a penalty on imports and a premium on exports, and now that England is off the gold standard there need be no fear of a gold drain.

Drain of gold.

We return now to apply this result to the question which we were formerly considering—the maintenance of the Bank of England's Reserve. When the rate of exchange rose against London, it meant that English importers would soon require to send gold abroad. But there was only one store of gold in the country, the Reserve of the Bank of England. This, then, was the cause of the foreign drain on the Bank Reserve. It was due to a call for gold to meet foreign payments, the need for such payments arising from the fact that imports had been in excess of exports; in short, the foreign drain was due to an excess of imports. How then was the Bank to deal with such a drain?

Effect on th Reserve.

Note—The description in the first part of the following chapter of the normal course of a financial crisis in pre-war days should now perhaps be thrown into the past tense, but although many of the conditions have since been modified in ways which will be indicated in later chapters the description is necessary to an understanding of how our modern credit system grew up: and if (or when) we return to the gold standard it may still prove to be of use as a guide to what may be expected to happen again.

CHAPTER XII

A FINANCIAL CRISIS

The Protection of the Reserve.—Raising the Bank Rate.—Its effect on the foreign drain and on the home money market.—Usual course of a crisis.—Suspension of the Bank Act.—The War crisis of 1914.

THE rise of the rate of exchange towards the gold point is a warning to the Bank to expect a drain of gold for foreign payments. How is the Bank to deal with such a foreign drain? There are two sides from which it may approach the question. It may take steps either to prevent gold being drawn out of the Reserve whether for home or abroad, or to induce more gold to come in from abroad.

Home discounts.

The first course seems the simpler. The Bank might stop discounting; it might refuse to lend any more money on home discounts until the foreign drain on the Reserve stops. But this is impossible, because if the Bank of England were to refuse to lend money on its usual class of security, this would immediately be accepted by the market as proof of something seriously wrong, and would lead to the very thing the Bank wishes to avoid, namely, a crisis.

Gold exports.

To refuse gold for export is equally impossible, for London has always been the free gold market of the world; and it is largely to this that it owes its commanding position in the money markets of the world.

Raising the Bank Rate.

But while the Bank cannot refuse to lend, it may take steps to discourage borrowing, either for home discounts or for export, by raising the rate of interest charged on loans. This is what is called raising the Bank Rate. The Bank Rate is the official minimum rate of discount, the lowest rate at which the Bank will lend on any security. But in normal times the Bank is willing to lend to its own regular customers at

the market or 'street' rate, which is generally a little lower than the Bank Rate. It was compelled to do so in order to avoid losing its customers altogether.

At the same time the raising of the Bank Rate serves the second purpose also. By common custom the Other Banks regulate the rate of interest which they pay on deposits more or less closely by the Bank Rate.[1] When the latter rises, the rate of interest on deposits is also increased, and this tempts an inflow of spare money from the country to the banks. This finds its way to London, and tends to make the conditions of the money market easier all round. The Other Banks may increase their reserves at the Bank of England or they will have more money to put out at call in Lombard Street, which means that the latter have less need to go to the Bank. Further, the raising of the rate tempts gold from abroad, because money always tends to go where it can get the best remuneration, and if the rate of interest is higher in London than in other countries, money will tend to flow from them to London. This stops the foreign drain and may even set up a counter inflow of gold into England. Thus by one operation, the raising of the Bank Rate, the Bank secures both its objects: it reduces the borrowing on the one hand and tempts an increased supply of money from abroad on the other; and if a little time could be given for this to work itself out, there need be no alarm, and certainly no crisis. But unfortunately this time cannot always be got, because the raising of the Bank Rate causes serious inconvenience to all kinds of people at home. It means that every one who requires to borrow money not only has to pay a higher rate for it, but has greater difficulty in getting money at all, for all the Other Banks, fearing trouble ahead, begin to strengthen their position by reducing, as far as possible, the amount of money they have out on discount, at the same time as they are offering a higher rate of interest on deposits so as to tempt increased deposits. Those who are supposed to be in difficulties are the first to be cut off, their

Deposit rate.

Mobility of money.

Home difficulties.

[1] See Table XV (1).

loans are called up or they are refused further loans, and this may lead to their bankruptcy. Their fall involves others, and every failure makes matters worse. Business men begin to get nervous, and suspicious of their neighbours; credit, upon which the whole financial edifice is built, is beginning to fail.

Credit falling.

Merchants want payment in cash, instead of giving the usual credit, partly because they themselves are really requiring the money, and partly also because they are doubtful about the position of those with whom they are dealing. Thus the difficulty goes on increasing, until some important house, or perhaps even a bank, fails. Then the uneasiness increases to a panic, and the crisis is in full swing. The failure of one bank makes the public suspicious of the others. A mere rumour may be enough to start a run on any bank, which may bring it down. Thus public confidence is entirely upset; credit has ceased to exist; everybody wants currency now.

Strain on the Bank.

What is the effect on the Bank of England? The Outside Money Market, upon which the ordinary borrowers usually depend, is no longer available. The Other Banks have called in their money from Lombard Street, which has now no money to lend, and can only get it by borrowing from the Bank of England. At the same time, the Other Banks have reduced their lending business to the lowest possible point. Every one is therefore thrown back on the Bank. The whole lending business is now centred in the Bank of England, which is the only place where there is any money. The strain on the Bank is enormous; it has to do all the lending work of the whole market, of which it formerly had only a comparatively small share. At the same time, those who used to supply it with

Position of the Other Banks.

funds are withdrawing them. The Other Banks, for example, are requiring to draw upon their reserves deposited with the Bank of England in order to meet their own liabilities, and may even have to borrow from the Bank to tide them over a difficulty. Thus the strain on the Bank is twofold: its supplies are practically cut off, while the work it has to do has been enormously increased.

And the Bank cannot refuse to lend; to do so would precipitate a crisis. It may raise the rate as high as it likes, but it must go on lending money, even to those who never came to the Bank before, and on securities which it never touched before. It must lend more freely than ever; it must do all the work of the Other Banks and the Outside Market, as well as its own ordinary business, and that at a time when its supplies are less than ever. The Bank's policy.

The Reserve, of course, sinks rapidly, and would soon be wiped out altogether if matters came to a crisis too quickly, that is, before the raising of the Bank Rate had time to produce its proper effect by stopping the foreign drain and setting up a counter influx of gold into the country from abroad. Whether this will happen or not depends mainly on the general condition of the country at the time. If trade is good, and there has not been too much speculation or inflation of prices by credit, then the chances are that the storm will be safely weathered. But if the financial position of the country is bad, if there has been excessive speculation and an undue inflation of credit, if there are many firms which are already in difficulties, then the immediate result of the restriction of the Money Market will be to bring such firms down. Uneasiness spreads rapidly under such conditions, and soon grows to panic. It is all a question of time. If things move slowly the Bank will be able to deal with the difficulty; but if they cannot get time the Reserve will be very quickly exhausted, and—what then? The lower the Reserve falls the more excited the public become, for the Reserve is regarded as the barometer of financial solvency. The Bank, then, must play for time, but on several occasions the game has failed, and the Reserve has been reduced to vanishing point. What is to be done in such a case? The strange thing about these financial crises is that, even at the worst, there has never been any sign of the public losing faith in the notes of the Bank of England. On the contrary, at such times the number of notes in circulation always increases. Every one wants currency, and the notes are as good A crisis

Faith in the notes.

The remedy.

as gold. But when the gold and notes in the Reserve are exhausted the Bank cannot pay out any more. It cannot even issue more notes, because it cannot get any more notes from the Issue Department except in exchange for gold, and it has no gold to give. The Bank, therefore, must simply stop payment. But that is impossible. The whole financial system of the country is centred in the Bank of England, and the stoppage of the Bank as already explained would mean the bankruptcy of the government and of every business man in the country, besides, probably, the bankruptcy of half the other governments of the world. The Bank simply cannot stop payment.

Suspending the Act.

What else can it do then? The crux of the difficulty is that the public want currency, and, failing gold, they are quite willing to take notes. But the Bank Act prevents the Bank issuing more notes. The Bank directors therefore go to the government and explain the position. The government practically gives them permission to disregard the provisions of the Bank Act for the time, to issue more notes against securities, instead of gold, and promises to introduce into Parliament at the earliest possible moment a Bill of Indemnity to save the Bank from the consequences. This is called the Suspension of the Bank Act, and its effect is miraculous. The moment it is announced that the Act is suspended, the crisis collapses, and so quickly that only once, in 1857, has it ever been necessary to issue the extra notes at all. The mere intimation that the Bank Act is suspended is sufficient to calm the fears of the public and stop the crisis.

To sum up, the position of the London Money Market is most peculiar. It is entirely founded on credit and the actual amount of metallic money used to carry on its work is exceedingly small. As long as credit is good the system works very well. But if anything happens to impair credit the whole system is in danger. Rightly or wrongly, the public have got into the habit of regarding the Bank Reserve as the barometer of credit. When, owing to a foreign demand for gold, the Reserve falls slightly, there is no need whatever for any alarm:

The system psychological.

the raising of the Bank Rate would soon put things right again. But if the condition of the market and of industry generally throughout the country is not sound, the market cannot stand the strain of the high Bank Rate, and some people get into difficulties. That kind of thing only needs a beginning; one failure leads to another, suspicion becomes general, and the mischief is done. Credit is gone and people begin to want money, gold or notes, who before were quite content to take cheques or bills or to let their money lie in a bank or in some business. That is the root of the difficulty. It is not that the actual amount of gold in the country has been seriously reduced. The total amount of the foreign drain is a comparative trifle. It is because, owing to the panic, people at home begin to want currency who never wanted it before; it is because the demand for cash has gone up enormously, not because the supply has gone down.

Danger of panic.

If the public could keep cool, there need be very little difficulty, and, as a rule, if such a crisis comes when times are good, they do fairly well. But if it comes on top of dull times, especially during the reaction after a boom or period of inflation, when trade is bad, and every man is already inclined to be suspicious of his neighbour's soundness, then nothing can stop the trouble. The weaker concerns are soon exposed, and their fall may bring down others with them. So the trouble goes on till the whole country is involved.

The only cure.

And for this there is practically no cure. Careful regulation of the Reserve, keeping its amount as high as possible, tends to improve the stability of the system. But the only thing that will really alter the position is the spread of a better understanding of the system among all those who have to do with it. The more enlightened policy adopted by the directors of the Bank since the days of Bagehot has made a great difference, and the public are every year becoming better informed and less likely to cause difficulties by foolish panic. At the same time these periodic crises really serve a useful purpose. They test the soundness of the country's trade, check over-specula-

tion or undue inflation of credit, and weed out the unsound concerns, leaving the country, once the crisis is past, in a sounder and healthier condition.

The 1914 crisis.

It is interesting to compare the course of what may be called a normal crisis in the London Money Market, as above described, with the experience of the extraordinary war crisis which swept over London and all the financial markets of the world in the memorable last week of July, 1914. That crisis was abnormal not only in its extent and seriousness, but also in its causes, and in the measures which had to be adopted everywhere to meet it.

Trouble on the Continent.

On Tuesday, July 28, 1914, Austria declared war on Serbia, and the declaration was followed immediately by a panic on all the Bourses of the Continental countries. This, however, did not at first attract very much attention in England, except in financial circles, because similar panics had taken place on the outbreak of the Balkan Wars of 1912 and 1913, and these had not seriously disturbed the world's markets outside of the Continent. The man in the street had not yet realized the danger of England being dragged into this War, and he did not see why our business world should be seriously affected by what he imagined to be purely a Continental disturbance.

Exchanges closing.

The situation developed very rapidly, however, and on Thursday, July 30, all the Continental Stock Exchanges were closed, except the Parquet or official market in Paris. That day happened also to be Pay Day of the periodical Settlement on the London Stock Exchange, and seven firms of stock brokers in London and two in Glasgow were 'hammered' or declared defaulters. The fact that one of the London defaulters was a firm with very large German and Continental connections was the first indication of the quarter from which trouble was approaching so far as England was concerned. It became known that during the period of this Settlement Germany and other Continental countries had been buying heavily on the London Stock Exchange; and, now that these

transactions had to be settled, difficulty was being found in getting the necessary remittances through to London. This difficulty was becoming general. Accepting houses in Lombard Street were not receiving the usual remittances from their debtors abroad, especially on the Continent, to meet the bills which fall due every day to an enormous total; and they were being put to serious difficulty to meet their own obligations in London. At the same time there was serious trouble on the London Stock Exchange. The heavy sales from the Continent, which had been unloading stocks to an unprecedented extent both on London and New York, these being now the only Stock Exchanges open in the world, had of course caused prices to fall very heavily. The banks, which as a rule finance so large a part of this business, became alarmed, and not only discontinued further loans on stock exchange securities, but also began to call up or reduce existing loans, which they would have had to do in any case owing to the fall in values. One of the penalties of the system of loans on a margin over the current value of securities, as explained in the description of the Stock Exchange, is that on a falling market the effect of forced sales is cumulative. The lower prices go, the more shares are thrown on the market; prices are again forced down by these forced sales, and so on. This was just what happened now. The London Stock Exchange became absolutely demoralized; prices were tumbling down and no one could say what was going to happen. This inevitably reacted very quickly on the London Money Market as a whole. Every one was short of money to meet current obligations, and on going to the bank was met with restricted credit instead of the enlarged facilities required. The Discount Market was almost at a standstill by this time, and the only place where it was possible to get any money was at the Bank of England. When the Directors met as usual on Thursday the position was serious, but apparently they did not wish to precipitate matters by too drastic action, and they only raised the rate from three to four per cent.,

Effect on London.

The Stock Exchange.

The Bank Rate.

a fact which to many people outside London seemed to offer reassurance as to the true state of affairs, though this very quickly proved deceptive. Before the day was out, however, it must have been evident to those who were well informed as to the state of affairs in London that things were much more serious than was indicated by a four per cent. Bank rate. On Friday morning the storm broke. The Settlement on the Paris Stock Exchange was postponed, which was practically equivalent to closing the Bourse, and the London Stock Exchange only opened in the morning to close again at once, a thing which had never happened before in its history. New York did the same as soon as the five hours difference of time had passed; and the crisis was at its full height. Most of the Produce Exchanges throughout the world were compelled to do the same, especially the Cotton Exchanges of New Orleans, New York, Liverpool, Havre, Bremen, Alexandria, and Bombay, and only the Wheat Exchanges, which could not be allowed to close owing to the urgent character of their supply, remained nominally open, though they were utterly disorganized by the breakdown of the financial system. The Directors of the Bank of England met again on Friday, a most unusual proceeding which has only happened once before in living memory, and raised the Bank Rate at one jump from four to eight per cent. The Discount Market was by this time practically non-existent; but the Bank of England followed its traditional policy and was still lending freely, though of course at very high rates. The foreign exchanges, which had been the beginning of the whole trouble, were in a state of the wildest confusion. To make matters worse, the difficulty had arisen at a time of the year when all the world normally owes London a great deal; in America, for example, the great wheat and cotton crops were just beginning to move, and it is with the proceeds of these crops that countries like America meet their obligations to London. It so happened that America was also specially indebted to London at that particular time, because America,

The crisis—Friday.

Discount Market.

like the Continent, had been buying securities in London, and had now to meet these payments. As a last straw it happened that certain heavy American obligations of a semi-public character were maturing at the time, particularly a large amount due by the City of New York in repayment of an issue of bonds, many of these being held in London. Thus America, like the Continent, was requiring to remit unusually large amounts to London, and the rush to obtain remittances on London became unprecedented. The foreign exchanges had already begun to establish records by the Thursday. After that all quotations became absolutely nominal.[1] Exchange was practically unobtainable, and the most extraordinary offers, such as 6½ dollars per £ instead of the normal 4·86, were said to have been made without avail. One ship was dispatched with gold for London, but being a German ship she had to make for a neutral port on the declaration of War.

Foreign exchanges.

The sudden rise in the Bank Rate was the first intimation to the general public of the serious character of the crisis, but before this became generally known they were beginning to feel the difficulty in another and very peculiar way. The August Bank Holiday was approaching—it fell on Monday, August 3, and as usual most people in London were going on holiday on the Thursday or Friday before it. When they went to the bank to draw money for their expenses they were taken aback to find that the banks would only pay in Bank of England notes, which are of course legal tender in England. Now, for ordinary holiday expenses a five-pound note, which, it will be remembered, has been since 1826 the lowest denomination of bank note available in England, is far too large; and the holiday-makers wanted change, that is to say, gold. But some of the Joint Stock Banks, apparently desiring to conserve their balances of gold, demurred about giving gold, referring some customers to the Bank of England for change; and on the Friday the unprecedented sight was seen of long queues of people waiting at the Bank to get change for their

Scarcity of change.

[1] See Table XIII.

Queues at the Bank.

notes. Nothing contributed so seriously to the popular idea of the gravity of the crisis. It began to be suspected that for the first time in history the public were becoming uneasy about the Bank's notes. Such a suspicion, had it been well founded, would have been the end of all things; but fortunately it was not so. All that was wanted was change, and the sudden restriction of the gold supply at a holiday season brought to the front, what Scotchmen had long preached, the inconvenience of having nothing in England like the Scotch one-pound note. But the difficulty, though not so tragic as it at first appeared, was serious enough. By the Friday change for a five-pound note was almost unobtainable anywhere; and it was said that in London restaurants people could not get food to eat because they had nothing less than a five-pound note in their possession with which to pay for it.

The Bank Holiday.

But if the Bank Holiday contributed to the difficulties of the position in one way it saved the situation in another. On Saturday morning the City was practically in a state of collapse. The Bank Rate was raised to ten per cent., not so much because that made any great difference to any one, but rather because it is by way of being a tradition that the Bank Rate should go to ten per cent. in a serious crisis and especially before the Bank Act is suspended; and so far that was the only course that any one could conceive as the way out of the difficulty. The Discount Market was at a standstill, partly, at least, owing to the action of the Other Banks in refusing loans and calling up their money, though, as will be seen shortly, there was a deeper cause than that also at work. But the Bank of England was still lending freely, though at maximum rates of discount; the Reserve was sinking, and it seemed to be only a question of time when it would be exhausted, if things went on as they were doing. In any case, Saturday being a short day, followed by the Sunday and then the Bank Holiday on Monday, gave the financial world and the government time to turn round, measure the situation, and decide what was to be done to cope with it.

The first business was to be clear as to the cause of the crisis, and there was fortunately no difficulty in putting one's finger on a single fact which was at least the immediate cause of the trouble. In one way the crisis was like others that had happened before: it was due to the complete collapse of the world's credit system, which indeed is just what a crisis means, in one form or another, in every case. The credit system, as has been pointed out, is a highly nervous organization, its action or failure being due very largely to psychological causes, and, whatever may be the immediate cause of any crisis, its development generally follows the same lines; the failure of credit produces similar results whatever may have been the cause of the breakdown. But the interesting point in this case was the cause of the first breakdown, and it was in this respect that the crisis of 1914 was markedly abnormal, and indeed unique. The beginning of the trouble usually is difficulty in London owing to a withdrawal of gold on foreign account, but in this case it was the reverse; it was the action of the Continental banks in refusing to part with their gold for remittances to London which paralysed the foreign exchanges and made it impossible for Continental debtors to remit to London. The moment that happened all the rest followed inevitably. The object of the foregoing account of the World's Money Market system has been to make clear its extraordinarily complex character, to show how every section of it is closely inter-related with every other, and how every one depends on every one else for the due fulfilment of current obligations. A can only pay B if C pays A punctually, and so on. Now the first effect of the inability of the Continental debtors to pay their bills in London was that the Accepting Houses, who had guaranteed these bills to the Discount Houses, were faced with immediate bankruptcy, because, as their remittances had not come to hand, they could not pay their creditors, the Discount Houses. At the same time the failure of remittances from the Continent to members of the London Stock Exchange made the stock brokers unable to fulfil their obligations to their

Immediate cause of the crisis.

Action of Continental banks.

Effect on Lombard Street.

On the Stock Exchange.

fellow members in connection with the purchase of shares, and sent them post haste to the banks and large Discount Houses to borrow money on these shares to carry them over, if they could not sell them. Again, the Continental debtors, in their honest desire to pay their debts to London, turned to the only other alternative—they tried to sell shares in London; but the pressure of these sales at once began to depress values on the London Stock Exchange and produced further difficulties. As soon as prices began to fall seriously the Other Banks necessarily began to call in their loans and sell out their 'cover'. At the same time they found it necessary to reduce their loans on securities; and it is reported that many of them even withdrew loans which they had arranged to give for the Settlement. For the banks were suddenly finding themselves very badly pinched at another point. Their bills discounted were not being met when due, owing to the failure of the Accepting Houses to meet them, which in turn was due to the failure of their remittances from abroad. Thus the banks were compelled to reduce their new loans on discounts, because their daily supply of money was not coming in as usual. But worst of all for the banks was the fact that owing to the disorganization of the Discount Market they were unable to get in their Call Money from Lombard Street, and in this way their most liquid asset was suddenly frozen and not available. It was a very serious predicament indeed in which the banks found themselves, and any criticism that may be made of their action in the crisis must be tempered by due recognition of the fact that their position was really almost desperate. For they had to face the risk, indeed it was almost a certainty, of a run on them by their depositors, which would have been inevitable by the beginning of the week, not so much because their customers had lost faith in the banks, but simply that their current requirements for cash, swollen by the sudden collapse of credit, would very quickly exhaust the available resources of the banks, reduced as these now were.

On the banks.

Fear of a run.

It was therefore a very difficult situation all round which had

to be faced, and the government found it impossible to devise and carry out the measures necessary to meet it even in the time made available by the Bank Holiday. Their first step, therefore, was to declare a prolongation of the holiday for other three days, which in effect was equal to a complete moratorium for that period, for during Bank Holidays no bill can be presented for payment, nor can any steps be taken to enforce payment of practically any obligation whatever.

Extended Bank Holiday.

The first task which lay before the government and its advisers was to relieve the Accepting Houses from their impending bankruptcy. This was done by a partial moratorium issued on Sunday, August 2. But this was only passing the burden on to another branch of the Market, namely the Discount Houses, and anything that would relieve them could only be at the expense of the Market generally, especially the banks. The position of the latter was so precarious that practically nothing but the right to refuse payment to their own creditors would meet the difficulty; but that, of course, was again only shifting the burden on to the shoulders of the general public. Thus there was nothing for it but to proclaim a general moratorium, and this was done on Monday, August 3.

Relief to Accepting Houses.

General moratorium.

The next step was to meet the sudden need for actual currency, especially small change. There was no time to discuss the best way to do this: it was simply a question of finding some method which could be adopted quickly enough to meet the emergency. Even the provision of the necessary stock of the right kind of paper was a difficulty, and finally the machinery used for printing Bank of England notes was turned on to a stock of the paper usually employed for postage stamps, and an emergency currency of £1 and 10*s.* government legal tender notes was ready for issue when business was resumed on the Friday after the prolonged Bank Holiday. This new stock of 'money' enabled the government to solve two difficulties at once. It met the public need of change; and it enabled the government to lend large sums of money to the banks to meet any possible rush that might take place on them when they

Paper currency.

reopened. But no such rush took place; everything passed off quite quietly and the first stage of the crisis was over. The Bank Act was not officially suspended in the ordinary sense of the word, but a clause was inserted in the Currency and Bank Notes Act which practically gave the Treasury power to suspend the Act themselves at any future time if necessary, thus avoiding the necessity for an Act of Indemnity on each occasion.

The Bank Act.

But these measures marked only the first stage of what was required to deal with the crisis. They were simply emergency measures to stop the panic: they did nothing to remove the root causes of the crisis, which, as a matter of fact, had not yet reached its full development. For the outstanding fact which must be emphasized at this stage was that up till Saturday, August 1, when the first stage of the crisis was at its height, the War had in a sense not begun at all. No two of the Great Powers of Europe had actually declared war upon each other till Russia and Germany led off on that date; and at that time it was still by no means certain that England would be involved in the War at all. On the contrary, there was a very strong party in England which would have resisted England's participation in the War to the utmost, had it not been for Germany's invasion of Belgium, and that did not become a public certainty till the Monday. Thus the crisis was essentially a pre-war crisis up to this stage; and the point to be emphasized is that it would have happened just the same even if England had never come into the War at all. England was involved in the crisis not because she was to be one of the belligerents, but because London is the centre of the world's financial system.

A pre-war crisis.

But before these first measures were in force England did find herself inevitably involved in the War, and the second stage of the crisis had begun. The effects of the declaration of war upon the industries of England were bound to be very serious. In the first place the government practically commandeered the whole railway system of the country for mobilisation purposes, and for a few days it was almost impossible to

Declaration of war.

move goods of any kind, except military, from one part of the country to another. At the same time shipping, upon which England's industries so largely depend, was practically at a standstill. This again was due to causes of a semi-financial character. The ordinary marine insurance policy held by shipowners and merchants to cover the risk of loss of their ships and goods at sea, does not cover war risks, which are specially excepted by the terms of the policies. When, on the first rumours of war, owners rushed to cover their property against the extra risk, the facilities available for insurance even in London, which is the centre of the world's marine insurance business, were very rapidly exhausted, and even before the declaration of war by England, marine insurance against war risks was practically unobtainable. When war was actually declared the situation became simply a deadlock. No one knew how things were going to turn out, what naval strength in fighting ships or armed merchantmen Germany might have at large, or what success the British navy would have in dealing with them or in bottling them up. For a shipowner to send a valuable ship and cargo to sea uninsured against war risks under such circumstances would have been courting disaster, and most of the owners, except in the case of the regular lines, postponed their sailings till events would develop. Ships at sea made for the nearest port, and those in port remained in safety awaiting developments. Thus even if it had been possible for manufacturers and exporters to get their goods to a shipping port, there was no possibility of getting them away, and this of itself would very quickly have brought trade almost to a standstill.

Marine insurance.

Effect on shipping.

Perhaps the most regrettable feature of these early days of the War was the food panic, for it can hardly be described in milder terms, which swept over the country, and which, though it was very quickly checked, had one most interesting result. It has been pointed out in Chapter III that the result of the development of highly organized modern markets is to produce a remarkable uniformity of prices throughout the area of the market. But under the strain of war conditions this system,

Food panic.

so far as retail prices were concerned, broke down completely for a time. Prices were all at sixes and sevens; shopkeepers did not know what to charge for their goods, because they did not know what it would cost them to replace their stocks when these were exhausted, and in many cases they found it impossible to replace them at all for the time being. Purchasers were at the mercy of the shopkeepers, some of whom simply charged whatever prices they thought they could obtain. It was a complete reversal of the ordinary conditions of the determination of market price in England, under which as a rule the prices of most commodities are fixed by cost of production. The system in normal times works by competition through the common knowledge on the part of every one, both purchasers and shopkeepers, of what every one else is charging. But under the rapid changes from day to day, and even hour to hour, which were now taking place, it was hardly possible for the shopkeepers even to know what their immediate neighbours were charging. Left pretty much to himself, each man charged what he thought fit; and the result was that the uniformity of prices which was always regarded as characteristic of Western methods almost disappeared. Prices were mainly influenced by demand rather than supply, and the shopkeeper regulated his charges more by what he thought his customers would pay than by the price he himself had paid for the goods. It was a striking revelation of the extent to which the fixing of prices in normal times had become simply a matter of custom.

Effect on industry.

The effect on the position of the large manufacturing industries of England was much more serious. At first no one knew what to do, and most people took the precaution to restrict their commitments as much as possible by cancelling delivery orders for goods, wherever it was open to them to do so, and placing no new orders. The manufacturers in many cases did not object to cancellation, because they did not know what to do for raw materials, which were undeliverable even if it had been possible to buy them. Many of the cotton manufacturers, for example, could only get delivery of their raw cotton by

sending motor wagons to the docks or stores for it, over long distances in many cases. But the trouble was not so much the impossibility of getting goods as the difficulty of knowing what price it would be safe to pay for them. Prices of course fell very rapidly at first, except in the case of those goods directly required for war purposes, such as woollen materials, leather, &c. In the cotton trade, for example, the position was very serious. Every one expected that the trade would have a very bad time, unemployment was at first very serious, and the price of the raw material fell so alarmingly that no one could tell where it would stop.

Lack of finance.

To add to all these difficulties the manufacturers found business almost paralysed by the difficulty of getting their usual financing facilities. The banks were still in a serious difficulty, for though the moratorium had stopped the panic, it had not touched the root of the matter, which was that so much of the money usually available for carrying on the financing of the country's trade was locked up in the Discount Houses on the foreign bills which could not be realized. The same cause affected foreign trade in another way, because, owing to the breakdown of the Accepting House system, no new foreign bills could be negotiated, and foreign trade was for a time almost impossible. The result of all these adverse conditions was very soon shown in the published statistics which reflect the condition of trade. Unemployment statistics rose very fast in practically all but war trades, and the Board of Trade figures of exports and imports began to fall off ominously.[1]

Unemployment and trade.

To meet these difficulties the government very quickly devised a number of expedients which, whatever may be the final verdict of history as to their theoretical soundness, at least reflect credit upon the originators for their boldness and promptitude. The key-note of the whole was State intervention; and in one thing after another the State shouldered responsibilities which had become too great for private enterprise. The first of these to be announced was the undertaking

[1] See Table XVII.

State insurance.

of marine insurance against war risks by the State. The government undertook to cover any venture to the extent of eighty per cent. of its value, at rates which though high enough —they began at five guineas per cent.—were eagerly accepted by shipowners. These rates must have proved very profitable to the government too in the long run, for the losses at first were exceedingly small; and the government were able to lower the rates gradually till, on December 31, 1914, they were reduced to one guinea per cent.[1]

The next problem was how to relieve the Money Market and the banking system of the country from the incubus of the foreign bills. Again the government came to the rescue with the heroic proposal that they, through the Bank of England, would take over the whole of these acceptances from the Discount Houses without recourse; that is to say, that they would take the risk of these bills being ultimately paid by the principal debtors, who were in most cases the Accepting Houses. This the government did by authorizing the Bank of England to rediscount the bills at a rate of two per cent. above the Bank Rate, which immediately after the first rush of the crisis was over had been reduced again to five per cent. Of the seven per cent. the government were to take 2½ per cent. as their insurance premium for bearing the risk, while the Bank received the remaining 4½ per cent. as interest, which, considering that they had the government's indemnity against loss, was quite sufficient. It was estimated at the time that the responsibility which the government were thus shouldering might run to as much as £350,000,000, and as a matter of fact it is now known that bills to the value of more than a third of that sum were actually brought to the Bank; but the final result of the transaction was to justify the government's action, for it is estimated that the great majority of the bills were duly met at maturity. In this the government gave some further assistance by lending funds to the acceptors who could not recover from the ultimate debtors in enemy countries owing to the War.

Relieving the Discount Market.

[1] Raised again after February, 1917.

By this measure the government at once set free a large amount of the funds locked up, and these should have enabled the Discount Market and the banks to resume business; but it is doubtful how far the desire of the government to rehabilitate the financing system of the business world was given effect to in the subsequent action of the banks throughout the country. At any rate, the worst of the difficulties were tided over, and business of some sort became possible again, though it was very far from justifying the popular cry of 'Business as usual'. The moratorium was nominally continued till October 4, but few of the banks and not many business men ever took full advantage of it.

Reopening the Exchanges.

Other measures were quickly elaborated to deal with different sections of the business world. Thus the Stock Exchanges were finally reopened, under strict government control at first, however, in the way of minimum prices fixed by the government, and with government assistance to the stock brokers who found themselves saddled with heavy unpaid liabilities from Continental debtors. At the same time the government introduced a new control over the exploitation of the capital resources of the country in war time, by prohibiting the flotation of any new company or loan without the approval of the Treasury. Similar measures to those required in the case of the Stock Exchange were gradually extended to other produce markets, such as the Cotton Exchange in Liverpool, brokers being offered financial assistance by the government to enable them to meet their obligations. But the extent to which all these facilities were made use of by the various sections concerned was surprisingly small.

Gold reserves abroad.

One of the difficulties which had to be faced at an early stage was the collapse of the American Exchanges, which are so closely related to the cotton and wheat industries. An ingenious expedient was adopted to meet the difficulty of getting gold from America to London, by transferring it to Ottawa in Canada, where, being in British territory, it was by a legal fiction accepted as being lodged in the Bank of England,

thus enabling its original owners in America to draw on London against it. A similar arrangement was subsequently made for Australia and South Africa.

This then brings the history of the great crisis down to a point at which we must leave it for the time to follow another line of argument, which again will bring us in touch with the further effects of the War. The crisis began with the breakdown of the foreign exchanges, owing to the refusal of the Continental banks to part with their gold, and that at a time when the Continent, like other parts of the world, happened to be peculiarly heavily indebted to London, so that the effect of the refusal was particularly severe. It has been pointed out in the chapter on the foreign exchanges that the final resort of an indebted country when the exchanges go against it, owing to a temporary excess of indebtedness, is to redress the balance by an export of gold. It may be doubted whether in this case the balance was not far too heavy to be wiped out in that way; but in any case the determination of the Continental banks not to give gold for export brought matters to a head at once. The action of these banks was quite consistent with their policy, which had been well known to the financial world for many years, of laying up a large reserve of gold against this very contingency of war. Germany, for example, was believed to have collected a large store of gold in the fortress of Spandau to be used in case of war; and it is not surprising that, when war actually came, the first step of the Reichsbank should have been to close down their gold supplies and absolutely prohibit any drain upon them. Whether such action was well advised or not, will hardly be doubtful to English ideas. It certainly produced the very effect which every one should have striven to prevent, namely the precipitation of an extreme crisis, which might have been alleviated, if not prevented, had other nations followed the traditional policy of England in giving gold freely, though at a high price, in times of incipient crisis. It is doubtful, however, whether abstract discussion of what might have happened under

Continental gold policy.

other circumstances, is of much value. In the meantime it remains to consider the further effects of the War in its progress upon the world's financial system; and in order to do that it is necessary to go on to another aspect of the question which, as already explained, lies at the root of the whole matter of the foreign exchanges, namely the balance of trade. For the foreign exchanges are only the means of adjusting a small excess of trade one way or the other, and so maintaining the normal balance of each country's trade. But the War completely upset that balance, not only in the case of all the belligerent countries, but also of practically every neutral country in the world. The financial problems of the War are bound up with that question, and the theory of the balance of trade must therefore be examined in further detail before returning to deal fully with these secondary effects of the War.

Balance of trade.

CHAPTER XIII

THE TEST OF THE QUANTITY THEORY

Was it true before the War?—The facts of the gold supply and prices.—How does it work?—Money of all kinds and credit.—The gold control of credit.—The War experience.—Why prices rose.—Paper money.—Credit inflation.

IT is time now to return to the question with which we began, and to which we have been seeking an answer all through the argument, viz.: Is the Quantity Theory of Money true? Does the general level of prices depend on the amount of money in circulation, and particularly does it depend to any extent on the total gold supply or on the amount of gold in use as money? It will be useful first to review the apparent facts of the position, and see whether they bear out the theory sufficiently to make out a *prima facie* case. The main facts will be found in Tables I and III in the Appendix. The former gives such information as is available as to the world's gold supply and the accumulating stock of gold since 1493; the latter gives the Index Numbers since 1782. To bring these together, the two sets of figures should be plotted down on a diagram side by side, and on doing this it will be seen that there certainly does seem to be a considerable degree of correlation or causal connection between the two in modern times. Thus there was a marked rise of prices in the early 'fifties, when the increased gold supply from California and Australia began to make itself felt in the world. The great fall of prices from 1873 onwards has already been explained as due in large measure to the fact that the joint supply of gold and silver money, which had before then been available as legal tender throughout the world, was suddenly reduced by the demonetization of silver. The world's demand

A *prima facie* case.

History since 1860.

for standard coinage was thus thrown upon gold alone, and the gold supply being insufficient to meet the whole demand for money, especially as those demands were so largely increased by the enormous expansion of trade and industry of all kinds and in every part of the world which marked that period, the money supply became quite insufficient for the amount of money's work to be done, and the result is shown by the severe fall of prices from 1873 to 1896. After 1873.

The turn of the tide in 1896 and the marked rise of prices from then till the first half of 1913 coincided with the increased gold supply from South Africa, the Klondike, &c. The short-lived fall of prices in 1901–3 again coincided with the temporary cessation of the South African gold supply during the Boer War. Since 1896.

Finally it may be asked whether the downward tendency of prices shown by the Index Numbers from about January 1913 was not the result of the check on the increased output of gold which began in 1910. Was this the beginning of another downward swing of prices to prove again the substantial truth of the Quantity Theory as it was before the War?

These facts then are sufficient to show at least a very remarkable coincidence between the world's gold supply and the general level of prices, which would probably be regarded as quite convincing were it not for the difficulty of accepting the supposed supremacy of gold, in face of the fact which has been brought out in the preceding chapters that gold itself, and indeed currency of any kind, plays such an exceedingly small part in the enormous volume of the world's monetary transactions. It is difficult to believe that the exceedingly small proportion of gold could have such a controlling effect as the theory would seem to require. Of all the money's work of this country, for example, the enormous proportion which was done even before the War without any gold at all, that is to say the amount of payments made by cheque, &c., where no money passes, has been shown by the figures of the annual turnover of the Clearing House—£16,000,000,000 worth of Doing without gold.

money's work done in 1913 without the passing of a single sovereign, and our whole supply of gold coinage in the country probably did not much exceed one hundredth part of that total. Even if we add the pre-war amount of our token money and bank-note issues to this money total, the aggregate was still very small in comparison with the amount of 'money' of another kind represented by the deposits in the banks of the country which then amounted to over £1,100,000,000.

The answer to this objection, however, lies in the immediately preceding chapters on the Money Market and the nature of a financial crisis. The argument of these chapters has been directed throughout to showing the remarkably centralized character of the world's Money Market—how the London Money Market, which is in a very real sense the centre of the world's financial system, is in its turn centred in the Bank of England, whose whole system is centred in the control and management of the Reserve. The Reserve, as has been shown, is the financial barometer of the London Money Market, and, through the movement of the Bank Rate, its rising and falling controlled to a remarkable extent the value of money, not merely in London but also in all the other money markets of the world, and in this way it controlled the movements of gold throughout the world. The eyes of the financial world were therefore always centred upon the Bank of England Reserve. Now, of what did that Reserve consist? It was gold; and although the total amount of it was so small, yet its importance was infinitely more than proportionate because it was the only free gold supply in the world, and as a matter of fact the great bulk of the world's gold supplies passed through it.

The gold Reserve.

It may therefore fairly be argued that this small central reservoir of gold was really in a quite extraordinary degree the controlling factor in the world's gold supply, and therefore in the world's supply of credit, which in every country was based more or less directly on some form of gold reserve. It may seem incredible that such a small amount of actual metal should exert such a controlling influence upon the whole system

The bottle-neck of credit.

of credit, but the fact is that it did exercise an altogether disproportionate influence because of the way in which the system was pivoted upon the Gold Reserve. This gold reserve was, as it were, the bottle-neck through which the whole volume of credit must pass. One could easily imagine a totally different system under which the expansion and contraction of credit would be manipulated or controlled in some entirely different way,—we had some experience of such a system during the War,—but in the meantime the fact remains that that was how our credit system was controlled before the War; and that fact alone is enough to explain the indirect effect of the gold supply upon the whole credit system, and therefore upon the general level of prices. It may therefore safely be laid down that as far as the normal conditions of the financial world before the War were concerned, the Quantity Theory of Money had been proved substantially true.

But while the essential truth of the theory may now be taken as established, it would be a mistake to imagine that it can be applied in any definite or precise way to any particular set of circumstances so as to enable us to dogmatize quantitatively as to the expected results of any particular change in the gold supply. The whole discussion of the system has been directed to show that the influences which modify the effect of a certain change in the gold supply upon the general level of prices are so extraordinarily complex that such attempts are bound to be almost worthless. There are so many factors in the problem, so many disturbing causes which may throw the effects almost completely out of gear with the theory, that any attempt to prophesy, for example, what the effect of a particular rate of increase of the gold supply will be upon prices is almost bound to fail; even if they happen to hit the mark, they have no right to claim anything more than a lucky guess. For in the first place it is impossible to be accurate as to the world's effective supply of gold, even assuming the available statistics of the annual output to be correct, because the first question is how far the working of the theory depends on the amount of gold bullion produced

Quantitative application impossible.

or the amount turned into coinage. As a matter of fact, the Reserve contains both gold bullion and gold coins of all kinds, and it is by no means to be taken for granted either that it is only the proportion of the world's annual crop of gold which is turned into coinage that matters, or on the other hand that the whole gold supply counts, irrespective of how much of it is used for purposes other than coinage. Second, as the world's supply of gold is a stock, not a crop, it is difficult to estimate the effect of a change in the annual supply upon the total amount of gold in use in the world as currency.

Difficulties of measurement.

Token money.

Again, it is difficult to say how far the amount of token money in circulation might modify the effective amount of gold in the country. If, for example, the people of the country took it into their heads for a time to use silver more largely than they had done for money payments, it would release a considerable quantity of gold for other purposes. The same applies to the use of notes. A marked increase in the use of small notes instead of gold would have the same effect as an increase of the supply of gold. Thus in Scotland before the War, a peculiar change had been coming over the practice of the cashiers in large factories as to the way in which they paid their men's wages. In the old days each man's pay was put into an envelope, and generally consisted of a pound note and the odd shillings and coppers. But in recent years the custom had grown of putting the pay into small tins set in a frame, and it was found much more convenient to put in a sovereign than a pound note. Such a trifling change in the habits of a class which handles a large sum of money every week might mean a considerable change in the effective demand for gold for ordinary currency purposes.

Notes.

Credit.

Further, it is impossible to be accurate as to the extent of the superstructure of credit which is at any particular moment standing upon the foundation of gold. The only figure we can take is the amount of the Bank Deposits and perhaps the Clearing House turnover, but these, as will be seen shortly, are by no means an accurate quantitative index of the state of credit.

Finally, it is impossible to measure with any approach to accuracy the extent of the demand for money, that is to say, the amount of money's work to be done in the country at any particular time. It depends not merely upon the amount of goods of all kinds produced and services rendered in the country, but also upon the number of exchanges which must be made of these goods in the course of their passage from the producer to the ultimate consumer, and both of these are almost impossible of measurement. Money's work.

To attempt, therefore, as has been done by certain writers, to state the Quantity Theory of Money in the form of a definite equation, and then to fill in actual statistical measurements for the various factors of the equation, seems to be straining the theory far beyond its capacity for practical application. It can never give more than an approximation to the probable effect of a certain increase of the gold supply upon prices. Like all economic laws, it is only a statement of a tendency, and almost incapable of quantitative measurement.

It must next be asked whether the experience of the War has had any effect upon the theory either in the direction of confirming it or otherwise. Certainly the facts are sufficiently striking, and at first sight they seem entirely incapable of any explanation which would be in the least consistent with the theory. As will be seen from Table IV in the Appendix, from 1914 to 1918 the general level of prices rose beyond all experience in modern times, while the gold output was actually less than it was before the War. So extraordinary was the rise during the War that the index number in 1918 was higher than it had ever been since the earliest records (1782), even during the Napoleonic Wars (see Table III). War prices.

Further, as will be described in a later chapter, after the War there came in 1919–20 a still greater rise of prices which completely eclipsed the experience of the war years, and was followed by the most catastrophic fall of prices ever recorded, all without any material change in the gold supply. Obviously

therefore there must have been other causes at work during these periods, but as the conditions prevailing during the War were so radically different from those of the early years of peace it is desirable to treat them separately, and this chapter will be confined to the War period.

Obvious causes.

It is of course obvious that there is no need to go to any theory of money supply for an explanation of the greater part of the rise during the War. Direct causes are staring one in the face, such as the increased cost of all raw materials, due partly to the high rates of freight which became universal owing to the scarcity of tonnage, and this extended not merely to freight by sea, but also to the cost of carriage by land. Again, owing to the risk of submarines, the cost of marine insurance was very substantially increased, while the risk of air raids in certain districts must have done something in the same way for fire insurance on land. But the chief item of increased cost in most cases was the labour cost. Wages of all kinds rose materially, which, of course, affected the prices of the goods in which labour forms a large proportion of the cost of production. Again, interest on capital was steadily rising, owing to the enormous demand for capital for War Loan purposes, and this was reflected in the higher rate of interest which all kinds of industrial concerns had to pay for any new capital raised, while the financing facilities granted by the banks to business of all kinds inevitably rose in cost in the same way. This increased cost of capital had its effect on the cost of all machinery, which had also to bear heavier interest charges than formerly. Further, there is very little doubt that in many cases the price of particular articles rose abnormally simply because the supply was short. Actual scarcity may not have been responsible for the rise of prices as a whole, but there were bound to be cases under the conditions of a war of such magnitude, with all its interference with normal supplies, where, for a time at least, the supply of a particular commodity practically ran out, and the fortunate producer or dealer who happened to possess a good stock could charge whatever price he liked, or at least the

Rising costs.

highest price he thought his customers would pay. And though these cases were probably less common than was popularly believed, yet it is certain that they contributed in no small degree to the aggregate rise.

Passing from these comparatively obvious causes of the rise of prices, there were many theories afloat as to other causes, all of which come within the scope of the quantity theory. For example, it was freely alleged that the rise was due to the increased issue of paper money, and to an excessive inflation of credit by government financing of the War in the shape of War Loans, Treasury and Exchequer bills, &c.

Paper money.

The first of these theories may be comparatively easily disposed of. In the first place, Table V in the Appendix shows that the total issue of paper money was barely £300,000,000 up till the end of 1918, and against this must be set the pre-war gold currency of the country. To some extent also the Currency Notes took the place of silver currency and even of bank notes in circulation. It must be remembered, too, that quite a considerable number of the Treasury notes went abroad; apart from their use in the War areas they were found in every port from Gibraltar eastwards, and probably wherever else the sovereign used to circulate; and, as a matter of fact, they were actually surcharged and used as local currency in Egypt for a time, during a severe scarcity of the local coinage.

But even the total amount would probably not have been enough under war conditions to produce any excess, for two reasons. In the first place, the circumstances of the War were in every way abnormal; and it is probable that one effect of the changes was to make people use currency in one form or another a great deal more than they did formerly. For example, the needs of the army involved the circulation of a very large amount of actual money in the country. Again, wages were higher, separation allowances were being paid to soldiers' and sailors' dependents to the extent of £80,000,000 per annum, it was said; there was far more money being earned and spent by the working classes, many of whom found themselves with

Increased currency requirements.

more money in their hands than they had ever known before. But the working classes do not keep banking accounts; their monetary transactions are all done in hard cash, and in this way a much larger amount of currency was required in the country than was formerly the case. Finally, it seems hard to believe that there could have been any marked rise of prices due to the excessive issue of paper money (which is equivalent to the depreciation of the paper money) without there having been some disposition on the part of the public to prefer gold to paper, and any signs of such a tendency were entirely wanting, either at home or abroad. The paper money maintained its value absolutely, and that is not to be wondered at in view of the essential fact that the Treasury notes were in the last resort convertible into gold at the Bank of England, though sensible and patriotic people never showed the least desire to convert them, but gave up the gold habit completely.

No desire for gold.

The idea that the rise in prices was directly due to excessive issues of paper money may therefore be regarded as 'not proven'. It is not so easy, however, to deal with the other theory that the rise was largely due to the inflation of credit by methods which were in some way connected with government finance. Here again the facts tend to give some support to the argument, for, as will be seen from Table VIII (1) in the Appendix, the total amount of deposits in the British Banks increased from £1,104,000,000 in 1913 to £2,161,000,000 in 1918. This of itself does not necessarily prove an increase of credit facilities which would amount to inflation, but there are several ways in which it is said that such an inflation may have taken place. In the first place, when the government stepped in to remove the block which had stopped the working of the financial system, by taking out of the market the whole of the acceptances which had not been paid owing to the War, and subsequently by enabling the responsible parties to find the money to clear off these liabilities, they could not, of course, make any distinction between those which would have been duly paid by the debtors at maturity and those which would

Credit inflation.

not in ordinary course have been paid off, because they are what is known as finance bills, that is to say bills which go on being renewed from time to time as they fall due, representing a permanent loan of capital by the holder of the bill to the other party or parties. Thus there is no doubt that a considerable part of the business of certain foreign banks was financed by such bills more or less permanently, and when these bills were paid up with government assistance in 1914–15, it actually gave the money market more money to work with than it had before, at least so ran the theory on this point.

Finance bills.

Again, there is another way in which government finance may have contributed to an excessive creation of extra credit. The huge War Loans floated during the War and the issue of Treasury Bills, Exchequer bonds, &c., certainly meant the creation of a large amount of first-class securities upon which money could be borrowed with great facility. It was argued that when a man who had taken up such securities (that is to say who had lent money to the government which the government of course spent on War purposes) found it necessary later on to raise money himself, temporarily perhaps, for his own business purposes, he had nothing to do but take a bundle of War Loan certificates out of his safe and pledge them to his banker, when he would immediately receive credit for their amount or a substantial part thereof. Thus the creation of these securities, it was said, added to the loanable credit of the country, at least to the extent to which such a method of employing them was adopted. That, however, it is impossible to measure. It was probably comparatively small in this country, though in Germany such financial expedients were very largely resorted to by the government themselves in their efforts to finance the War.

Loans on War Stocks.

But the question of credit inflation goes much deeper than this, and as it gave rise during the War and afterwards to many rather wild theories, it is necessary to discuss the question more fully. The most specious of these theories was connected with the system which was described as the pyramiding of

deposits by the Banks. It will be remembered that the chief business of bankers is to receive money from one class of customers on deposit and to lend it out to others as discounts and advances. Now when a bank makes an advance to a customer, the form of the transaction is not that the bank hands over to the customer a bag of gold for the amount of the advance, but that the bank opens an account or places a sum to the credit of the customer against which he can draw, and this account has the same effect as the lodging of a deposit by that customer. When he proceeds to draw cheques on this deposit these are paid in by the receivers to their bank accounts and create further new deposits there. These other banks having now increased deposits must proceed to employ the funds, which they do by making advances to their borrowing customers, who again repeat the process, and so the total amount of deposits goes on increasing apparently *ad infinitum*. But many of those who put forward this theory forgot one essential factor in the system, namely, that the banks must keep a certain proportion of all their deposits in cash or at the Bank of England, or in some other immediately available form equivalent to cash. This percentage may be taken as normally about 15 per cent., or say one-seventh of the whole. Thus if the banker receives a new deposit of £70,000 he can only lend at the outside £60,000 in new advances, retaining the balance in cash, and so on. The result is that the utmost limit of this system of pyramiding deposits is about seven times the amount of cash which the banker has available.

Pyramiding of deposits.

Again, as each borrowing customer draws against the deposit which represents his advance, that deposit is gradually reduced, so that the new deposits appearing in other banks are set off by the reduction of the first deposit. Further, if the receiver of any of these cheques draws out currency instead of lodging them with his bank on deposit, the pyramiding process is so far reduced.

Finally, an increase of the total pyramid of credit can only take place if there is an increase of the total amount of cash,

i.e. if 'new money' as it might be called becomes available. This is of course assuming that the banks did not content themselves with a smaller percentage of cash against their deposits, but reference to the statistics at once shows that they did not do so. On the contrary, throughout the whole period of the War and especially during the first two years the banks' cash resources increased far more than in proportion to the increase of the deposits. To some extent this was at the expense of their Call Money for which Lombard Street had then little use, but the fact remains that the other banks' cash resources increased abnormally during the War. From what sources then could such new money come? The most obvious of course is the import of gold, but during the War that was less than normal and most of it went to the Bank of England. It was argued, however, that there is another form of cash which to the banker is as good as gold, namely cash at the Bank of England, and the argument was that during the War the working of the process of government loans created a largely increased amount of cash at the Bank of England at the credit of the banks which enabled them to enlarge the pyramid of credit, and this argument is the crux of the whole problem.

Cash reserve

The root of the matter is that war creates an enormous demand by the state for goods and services of all kinds, and these must be obtained and paid for in some way. State services in times of peace are provided for by the state taking from the resources of the individual, mainly in the form of taxation, a certain portion of his purchasing power and using it for the state's own purposes; but this does not involve any increase of purchasing power, because what the state gains the individual loses. But the abnormal scale of war expenditure always makes it difficult for the state to finance its war budgets in this way. The burden is so heavy that it is not possible to meet it all by immediate taxation (even if it were fair to throw the whole burden upon one generation), and it has always been recognized as inevitable that a considerable part of the cost of war must be met by borrowing rather than by taxation. Even

War and taxation

then, however, it should be possible to arrange borrowing in such a way that the purchasing power which is transferred by a loan to the state would be taken out of the pockets of the lenders, whose own purchasing power would thus be correspondingly reduced. If this could be done there need be no inflation.

Owing, however, to the unprecedented scale of the Great War, it was obvious from the first that the proportion between taxation and loans was bound to be very different from previous cases. Indeed, so enormous was the scale of expenditure that at first it appeared almost impossible to raise the amount at all by any ordinary methods of borrowing. At the same time the state of affairs in the banking world during the early months of the War provided the opportunity of adopting other measures. When the first strain of the crisis was over it became evident that the normal civilian business of the country had been seriously checked, with the result that the amount of their deposits which the banks were able to employ in their ordinary business of discounts, &c., was far below the usual proportion. When, therefore, early in 1915 the first great government loan of £350,000,000 was floated, it seemed natural and quite unobjectionable that the banks should utilize part of their surplus assets in taking up the loan themselves pretty heavily. It has even been said that they were officially desired to do so.

Early war loans.

But this method of financing the War had effects which were not realized at the time. When the government takes money from the individual, either by taxation or as a loan, the amount is in effect transferred from his deposit with a bank to the credit of the government at the Bank of England. They then draw cheques in favour of their suppliers, who in course of time pay these in to their credit with their own banks. Thus the circle is complete, and the total amount of the other banks' deposits is not increased. But if the government borrows direct from the banks instead of from the public, the government account at the Bank of England is increased and there is no corresponding reduction of private deposits with the other

banks. If then the government proceeds to pay out this money as before to its creditors by cheques on the Bank of England, these come back to the banks as deposits and are paid in by them to the Bank of England, thus increasing the amount of the other banks' balances at the Bank of England which is the equivalent of cash, and this enables them to increase their advances to their customers to the extent of seven times the increase of their cash. Of course, if any of the banks drew out currency from the Bank of England against their balance this would correspondingly reduce their power to multiply that cash balance in the form of advances and ultimately deposits. Bank loans.

There is, however, one seeming flaw in this argument. How did the Other Banks make the loan to the government without reducing their cash at the Bank of England to the full extent of their loan? It is true that they did so reduce their cash to some extent, but an examination of the statistics shows that the reduction was a great deal less than the amount of the loans. Again, they might have done it by selling other investments, but in that case the purchasers of these securities would have reduced their deposits.

The question remains, however, how such a series of transactions would affect the government accounts at the Bank of England and the position of the Bank itself. A new loan means an increase of the public deposits at the Bank of England without a corresponding reduction of the other deposits, for the assumption of the whole argument was that the banks made the loan to the government without drawing to the full extent on their cash at the Bank of England. The result would be an increase of the total deposits at the Bank of England without any increase of the Reserve, which would mean a reduction of the 'proportion', i.e. the percentage which the Reserve bears to the total deposits. If any of the cheques issued by the government against these deposits were drawn by the receivers in currency this would still further reduce the Reserve, and in fact the only way by which such cash drawings Effect on Bank of England.

could be made would be by the creation of further currency notes. Now after the first year of the War there was a steadily increasing demand for currency notes, because the increased production of goods, especially munitions, meant an enormous increase of the nation's wages bill which is mostly paid in currency. Week after week the banks in the large industrial towns were requiring more currency notes, many of which remained in circulation instead of coming back to the banks a few days after they were paid out. The method by which the government were able to go on issuing these notes is important. They did not resort to the usual practice of simply printing notes and issuing them direct to their creditors in payment of services of all kinds. What they did was in effect to borrow money as required from the Bank of England, or in various forms from the public and the other banks, and pay their debts like any one else by cheques on the Bank of England. In as far as payment of these cheques was required in currency notes the Bank had to get currency notes from the Treasury, who issued them to the Bank against securities, these securities being mostly government bonds. Thus by a roundabout process the government secured pretty much the same result. They paid for munitions, &c., out of the proceeds of loans, and the Treasury supplied the necessary currency notes also against government loans.

Method of issue.

But what was the effect of the currency notes on the position of the Bank of England? Their deposits, both Public and Private, were piling up, but without any increase of their cash, i. e. the Reserve, so that the Proportion came steadily down; but nobody worried about it, because in the first place they knew the government would have to protect the Bank, and in the second place the reduction of the Reserve did not foreshadow the usual possibility of being unable to get gold or bank notes, which was the great danger in a pre-war crisis. That could not happen now because the government could always issue more currency notes to meet any demand for cash.

Notes in a crisis.

It is impossible within the limits of a text-book to go into any detailed examination of the facts and to follow out the working of the system above described throughout the War period. The necessary statistics are, however, given in Table IX, and the writer must confine himself to stating his tentative conclusion that the true test or index of credit inflation during the War is to be found not in the increase of the deposits of the other banks but in the reduction of the Bank of England's Proportion, and Table X shows how very far that reduction was carried. It is also interesting to note that the particular method of government borrowing from the banks was dropped quite early in the War, and that from 1917 onwards the bulk of the financing of the War was done by borrowing from the public either on short terms, such as treasury bills, war bonds, or war savings certificates, or by permanent war loans. Yet the inflation continued throughout the War, and long after the particular methods to which the blame was first attached had been abandoned.

Direct borrowing.

Another favourite scapegoat of the critics of the government's financial methods was what are known as the 'Ways and Means Advances'. These were confined in pre-war days to temporary advances by the Bank of England to the government to tide them over periods when expenditure had to be met before the revenue to cover it had been received. Throughout the War, however, these advances became chronic and of enormous amounts, and it was argued that this was the most obnoxious form that government borrowings could take, because every payment of this sort went to increase some bank's balance at the Bank of England and so form the basis for a further creation of credit. But after the War was over the government for the first time began to publish statistics of the Ways and Means Advances, differentiating between those which really meant actual advances by the Bank of England to the government, and others which merely meant that one department of the government was borrowing a balance lying with the Bank of England at the credit of another government

Ways and Means.

department. Incidentally it leaked out that one of the items of these Ways and Means Advances was the Investment Reserve Account of the Currency Note Department. Unfortunately the differentiation of the statistics was not carried back through the War years, so that it is impossible to estimate the extent of the true Ways and Means Advances during the War, but the result is to throw some doubt on the theory that they were the main cause of credit inflation.

It is, then, impossible to say to what extent the actual increase of bank deposits was in excess of the requirements of the country, for here again it must be remembered that the other side of the account is almost incapable of statistical measurement, viz. the total volume of the country's industry and production during the War. Before the War it used to be estimated that the national income of Great Britain was not less than £2,250,000,000 per annum. Owing to the War many of our industries suffered a material reduction in their turnover, but against this must be set the output of the greatest of all our industries during the War, the making of munitions. The output of that industry will never be known, but it was certainly enormous, and it is more than likely that if the total were added to the output of all our other industries, it would be found that the aggregate national income during the War was increased probably to at least £3,000,000,000 even at pre-war prices. When the rise of prices is taken into account the total value would probably exceed £5,000,000,000. In view of such a possible increase of money's work to be done, there must have been a much larger need for credit and financial facilities of all kinds; and it is by no means certain that the increase of the deposits represents anything more than what would be required for this purpose. It is of course obvious that this is partly an argument in a circle, but it may be none the less true. Whatever started the rise of prices, one result would inevitably be an increased need for credit to finance them, and currency to pay for them.

Credit requirements.

It is therefore impossible to tell how far the rise of prices

during the War was due to what may be called natural causes, and how far to inflation or monetary causes. There seems to be no doubt that it was partly due to the latter, but it is not possible to tell how far. But after all, to say that the rise of prices during the War was due to inflation is merely putting in another form what is obviously the true cause of the rise of prices during the War. That can be much more clearly explained by the use of Marshall's idea of the National Dividend, by which he figuratively expressed the fact that the total amount produced in the world constitutes not only the supply of all kinds of goods for consumption, but also the demand for these same goods, for production is at once the sole source of the right to consume and also the measure of that right,—and it must be remembered that 'goods' include services. Now during the War the country was producing goods or services of one kind or another, to an extent absolutely unprecedented in the world's history. Every one was busy either in war service abroad or in the production of war goods or services at home, and all these services had to be paid for.

Real cause of inflation.

In normal times when a man receives his wages for his week's production the first thing he does is to go out and spend most of it on the products of other people. During the War the producers were earning more than they had ever earned in history, and naturally they expected to spend the money. But when they went out to do so they found the shops very bare of goods, and (even apart from the rationing of most necessaries) they could hardly find anything to spend their money on. Naturally they bought anything they could get, and were not very careful as to how much they paid for it. The meaning of this extraordinary state of affairs was not at first realized. The world had produced goods and services to a volume entirely unprecedented. The government had to pay for all these goods and services, and had to find the money, in other words, to create the purchasing power, with which to do so. But when all these wage earners went to spend their money the goods were not there, for the obvious reason that a

large proportion of the goods and services produced had been destroyed. The result was that the purchasing power in existence was represented by the quantity of goods and services produced, but the civilian goods upon which alone this purchasing power could be spent represented only say half of the goods produced. It was as if Marshall's ring of producers sitting round the great heap which represented the National Dividend, the product of their labours, found when at the close of the period they went forward to take the equivalent of their share out of the heap, that half of the heap had sunk through a hole in the ground and disappeared. The result would be that each of them would receive in exchange for the money equivalent of his production only half as much as he had produced.

Destruction and the National Dividend.

Is all this, which is the inevitable result of the destructiveness of war, to be labelled as merely the result of inflation? It is of course inflation in a sense, because the government had to create the purchasing power to pay for the products they required; but inflation ought to mean the creation of purchasing power in excess of what is necessary to do the money's work of the country. The government did not create any more purchasing power than was necessary to pay for the goods and services produced; but owing to the abnormal lack of equivalence between the goods produced and the goods available for consumption, the amount of purchasing power necessary to pay for the production of the goods was far in excess of the value of the goods available for consumption, and the inevitable result was a rise of prices. The fact is that such a rise of prices is inseparable from war; and to argue whether that rise was due to inflation, and whether inflation took the form of excessive paper money or excessive credit, is really beside the question. The rise of prices was due to the War, and no system of currency or credit could have prevented it. If it were conceivable that the Bank of England had possessed a secret and inexhaustible gold mine in the courtyard of their premises, and had been able to produce sovereigns for the

War and prices.

government to the full extent of their requirements, the resultant rise of prices would have been practically the same.

The question in the meantime, however, is whether the War experience in any way altered our views as to the Quantity Theory of Money, and the answer to that question seems clear. The War proved the theory up to the hilt, if 'money' be taken, as it must be, in the widest sense of all, including credit. It is perfectly obvious that the increased quantity of 'money' during the War was not gold, and it is doubtful whether even the comparatively large quantity of currency notes put into circulation was (except indirectly) the cause of the rise of prices; it is just as likely to have been the result. The real culprit was the credit system.

Effect on Quantity Theory.

The Quantity Theory of Money, therefore, stood not merely unshaken by the War, but more firmly established than ever, with this difference; that 'money' means money of all kinds, including credit, not merely gold. During the War, the link between gold and the total amount of credit was hopelessly broken; the gold bottle-neck of credit was smashed. But the question did not end with the close of the War. After the War there came a greater rise of prices than ever, and then a tremendous fall which, however, was broken into two stages, the Deflation Slump of 1920–2 and then the great depression from 1929 onwards. We must therefore suspend judgement on the Quantity Theory till we find how it came through these further experiences which will be dealt with in later chapters.

CHAPTER XIV

THE BALANCE OF TRADE

The law of the balance of trade.—Customs returns of imports and exports.—Invisible exports and imports.—International trade of Great Britain.—Effect of the War upon the world's trade.

ACCORDING to the law of the balance of trade, as explained in Chapter XI on the rate of exchange, the exports and imports of every country must balance each other. Every country exports just as much as it requires to pay for its imports, and imports just as much as it can buy with its exports.

Apparent discrepancy.

But on examining the actual customs returns of exports and imports of any country, they do not seem to bear out this law at all. On the contrary the customs returns of England, for example, given in Table XVI in the Appendix, show that before the War she imported annually nearly £150,000,000 more than she exported, while those of the United States showed that they exported about £100,000,000 more than they imported. What is the reason of this apparent discrepancy? It is quite evident that such enormous balances could never be paid in gold, in the first place because the total supply of gold in the United Kingdom would be little more than enough to pay for a single year's excess of imports; while on the other hand, America would, in the course of a few years, have attracted to herself half the gold in the world. There are, of course, countries like South Africa which produce gold as one of their commodities for export, and in such a case we find a steady outflow of gold, which is their means of paying for their imports. Again, it is true that in every country there are occasional exports or imports of bullion which help to redress a temporary excess of imports or exports of other commodities.

Gold-producing countries.

Egypt, for example, had before the War a periodical inflow of gold in the autumn, and outflow in the spring, which corresponded to the seasonal swing of her trade, from a great excess of exports (chiefly of cotton) in the autumn, to the opposite excess of imports of manufactured goods in spring. England, on the other hand, had a continual but fluctuating movement of exports and imports of bullion, because England was the world's free gold market. A large part of the world's annual production of gold found its way to England for sale and distribution to the other financial centres which required it, or could afford to buy it. Seasonal movements.

All this, however, does not alter the fact that the great bulk of the trade between nations is barter and not cash sales, and that the apparent normal excess of imports in some cases, and exports in others, is squared by some other items of indebtedness between nations which, though they do not appear in the customs statistics as goods, are nevertheless effective payment for goods, and therefore render payment in gold of the apparent balance unnecessary. We have next to consider, therefore, the nature of these invisible imports and exports, as Sir Robert Giffen first called them, to find out their character and probable amount, and why they do not appear in the customs statistics. In the meantime, however, they may be defined as follows: *An invisible export is something that enables a country to import goods without paying for them directly by the export of other goods*, and conversely, *an invisible import is something which makes it necessary for a country to export goods without receiving payment directly in other goods.* The true balance.

First, then, it is necessary to consider how the customs statistics of exports and imports are made up. Every ship that enters or clears from a British Customs Port (and no ship may enter or leave the country by any other than a customs port) must make a declaration of the quantity, value, origin, and destination of the cargo, and that whether duty is payable upon the cargo or not. As our import duties were before the War confined to a comparatively small number of articles, these Customs statistics.

declarations frequently involve no payment, but the returns made are the basis of all our foreign trade statistics. This is, of course, the only possible method of checking the movement of foreign trade, but it obviously fails to catch and record the passing of certain kinds of goods, which will affect the balance of indebtedness between nations. Thus, for example, it does not touch the ordinary passenger's luggage, nor the money in his pocket. Still less does it take account of the letter of credit in his pocket-book, the proceeds of which will provide the expenses of his stay in the country. Again, it does not touch the ordinary letter mails of the Post Office, and if any one cares to risk sending small articles of value by letter post (against the regulations) they will escape the customs net. The Parcel Post, however, passes through the Customs House, which takes toll of its contents.

Leakages.

But all these omissions are trifling compared with certain other items which from their very nature must escape the customs system, because it is based on the passage of corporeal goods through a given point. These items are services rendered by the members of one nation to those of another, and which have no corporeal existence, or which may be rendered entirely outside of the customs area of any country, namely on the high seas. The greatest and most obvious of these is the service of carriage or transport. Transport of goods from one country where they are produced in such abundance that they cannot be consumed, to another in which they cannot be produced but can very readily be consumed, is an essential part of the process of production of a valuable commodity, and as such must be paid for; the goods at the end of the voyage are actually worth more than they were at the beginning. These services then, which result in an increase of value, must be paid for out of that increased value, and their value will be payable to the owner of the ship which renders them, in whatever country he may have made his head-quarters.

International services.

Shipping.

Now England owned before the War about one-third of the world's mercantile marine, and her share of the world's shipping

trade is larger even than is represented by the proportion between British and foreign ships entering her own ports. For many of her ships are doing the world's work of carrying, not merely from British to foreign ports, but between other ports abroad. A tramp steamer, for example, leaving a British port with an outward cargo, may carry many foreign-owned cargoes from one country to another, before she finally picks up a cargo which brings her home again to a British port; or even on the homeward run her cargo may be for Antwerp or Hamburg, from which port she will return 'light' to a home port, to load outwards again. Or having delivered her outward cargo in New York or Baltimore, she may be chartered by American owners to carry cargoes back and forward between say New York and the West Indies, and may run up and down in that trade for years, till it is time for her to seek a homeward cargo again, tnat she may undergo her survey or periodical overhaul. Many British lines, such as the British India Steam Navigation Company, maintain a whole fleet of coasting steamers plying to and fro between foreign ports, and some of these steamers have never seen a British port since they first left one on their maiden voyage.

England's share.

All this means money due to the British shipowner for freights, and the payment must find its way in some form to London or Liverpool, where the owner's office is. In the old days, the owner's freight was often paid in a share of the cargo, and the legal right of retention or lien over the cargo, which the owner and master still enjoy for their freight and disbursements, is founded on the fact that they are entitled to payment *out of the value of the goods* for the share in that value which they have created by their services. It is, in fact, out of the price realized for the cargo that the freight is ultimately paid; and the effect is that the full value of the goods as they appear in our customs returns of imports is only partially covered by the export value of the goods which are sent abroad in return. Thus, to take an imaginary transaction, on a double voyage between Manchester and Alexandria goods worth £1,000

shipped from Manchester, would appear in the Egyptian customs returns as worth £1,100 (the extra £100 being added for freight, &c.). In payment for these goods, the Alexandria merchant will ship a load of cotton worth in Alexandria £1,100, knowing that on arrival at Liverpool it will realize £1,200, and thus provide funds not only to pay the Manchester warehouseman the amount of his bill for the original consignment, but also to pay the Liverpool shipowner the freight of £200 on the double voyage. Thus, England has exported goods valued at £1,000 and received in exchange goods valued at £1,200, leaving an apparent excess of imports of £200.

The world's balance of trade.

This difference between export values and import values is the explanation of the puzzling fact that the world's total figures of exports are apparently less than the world's total imports. This is, of course, obviously impossible. As a matter of fact, many a cargo that leaves port never reaches its destination, and the toll of the sea must be paid in both gold and goods, as well as human life. The explanation of the apparent mystery is, of course, quite simple when the fact of the added value due to the service of transport is taken into account. Apart from the probability of inaccuracy in the returns made to the customs authorities, which would naturally tend to an under-valuation of imports, because customs duties are as a rule heavier on these than on exports, the discrepancy is due to the difference between what are called F.O.B. and C.I.F. values. The declaration of value made by the exporter when the goods are put on board is naturally based on the value at that point, that is to say the original price of the goods plus the cost of carriage to the ship's side and of placing them on board, and this is known as the value 'Free on Board'. But the value declared by the importers when the goods arrive at their destination is the value at that point, namely the original cost of the goods when they were placed on board, plus freight, insurance, and any other charges incurred on the voyage, i.e. 'Cost, Insurance, and Freight'.

Customs valuations

The amount of these freight services in the course of the

world's trade of a year is very large, and various calculations have been made as to Great Britain's share in it. Sir Robert Giffen in 1882 estimated it at not less than £60,000,000, and in 1898 at £90,000,000, while another calculation on quite different lines put forward by the Board of Trade in 1903 made it £89,500,000. Before the War it was probably £100,000,000.

Reference has been made to the charges incurred for insurance of goods at sea. This recalls another class of similar payments for services rendered in connection with foreign trade. In addition to freight and insurance, goods have to be financed, sold, and paid for, and the modern complexity of this work has called into existence a whole class of traders or agents of various kinds, who look after these parts of the work for the foreign owner, and are remunerated by various forms of commission. Thus, in addition to commission agents so called, who buy and sell goods on commission, there are, in London especially, great numbers of financial and commercial men whose whole business is the handling of foreign trade in one way or another. Thus, for example, the payment for exports and imports is usually made by a foreign bill of exchange, which passes through the hands of several bankers or bill brokers, for acceptance, discount, or collection. All of these different agencies, which our elaborate financial system has called into being, are remunerated by a small fractional commission or profit on the transaction. Again, London does a very large Stock Exchange business, especially in international securities (which are themselves, at times, an important factor in the balancing of international indebtedness), and in the flotation of loans, government or private, for foreign countries as well as the British Colonies, and all this involves the payment to London stockbrokers and financial houses of commissions, which aggregate a very large amount in the course of a year.

Commissions.

With regard to marine insurance, a very considerable share of the whole world's business, including insurance both of hulls and cargoes, is done in, or through, London; for though a ship may be 'underwritten', as it is called, in Hamburg or Trieste,

Marine insurance.

or in New York, the risk is in most cases at least partially transferred by reinsurance to a London underwriter, and this means a premium payable by Germany, Austria, or America to London. Again, the ordinary fire insurance business of all the world tends to gravitate to London, where most of the large companies have their head offices, with the result that London generally holds the largest interest in any loss, either marine or fire, that may take place in any part of the world.

Fire insurance.

All these items are in themselves comparatively small, but so enormous and widespread are the financial interests of London, which has been called the Clearing House of the world, that the total amount payable in a year is very large indeed, and under this heading it was estimated that London earned probably at least £20,000,000 per annum before the War.

In connection with the shipping industry there is another item which, though comparatively less important, does at times involve a considerable claim by Great Britain against foreign countries, namely the sale of British ships at sea to foreign owners. Not only does Great Britain build new ships for all the world, but British shipowners frequently sell their older vessels to foreign owners, building new ships to take their places. In every port of the world one can recognize ships flying a foreign flag, which from their build were obviously once British. Old liners, which owing to the increasing demands of the travelling public are no longer up to modern requirements, are sold to foreigners, who convert them into tramps or cargo steamers, in which capacity they are still good for many years' service. If such a sale takes place while the ship is in a British port, the transfer is duly recorded in the British shipping register, and when the ship leaves this country for her new service, the consideration is recorded in the customs returns. But if a ship has left a British port, flying the British flag, and is sold to foreign owners while on the high seas or in a foreign port, there is no such record of the sale; and as such transfers are at times very numerous, the effect is to create a considerable indebtedness by foreign countries to

Sale of ships.

Great Britain. It is, however, impossible to place any reliable estimate on the amount of this claim, which, of course, varies greatly from time to time.

Again, another item which may seem trifling but yet is of considerable importance to certain countries, is the amount expended by tourists, either in the country by foreigners, or by that country's subjects in foreign countries. Under this heading, for example, countries like Egypt, Italy, and Switzerland are creditors of all the world to a considerable extent, while the United States at the other extreme is heavily debtor. In our own case, the claim probably balances itself, as we usually have a sufficient number of visitors from foreign countries to set against what we owe to others for the entertainment of our travellers. Boarding expenses.

The method by which this indebtedness is created and discharged is interesting. The ordinary tourist does not carry with him a bag of gold sufficient to pay the expenses of his trip. He leaves home with only a small amount of cash in his pocket for the expenses of his journey, having paid to Cook's or a shipping company, or a foreign railway agency here, the bulk of his travelling expenses, including even hotel coupons. For his personal expenses while abroad he carries a sheaf of circular letters or letters of credit, or a banker's draft, addressed to some bank in the country of his destination. In exchange for these railway or steamer tickets and hotel coupons, he receives board and lodging and transportation, while his letters of credit provide the cash with which he pays for all the services of various kinds rendered to him during his visit, including the price of the curios or trinkets which he buys and brings home, but which incidentally, being as a rule of small bulk, pass through the customs as part of his personal baggage, and are not thought worthy of record by the customs authorities, except in the United States. But for all these services rendered to the strangers within her gates, Egypt must be paid or credited. The letters of credit, for example, which the tourist has cashed in Cairo are returned to London, where they are How repaid.

placed to the credit, say, of the National Bank of Egypt at its London office, and are available to meet the bills payable for the English manufactured goods which Egypt imports. The result is that a country like the United States must export goods to meet this claim for the entertainment of her subjects abroad. In Egypt, it was estimated that this item amounted to at least £1,000,000 per annum, a considerable item to a country whose annual imports averaged about £30,000,000. In Italy and Switzerland the figures were put as high as £14,000,000 and £5,000,000 respectively, while the annual debit of the United States under this head was estimated at no less than £20,000,000 before the War.

International borrowing.

But probably the largest single item of invisible international indebtedness is due to the flotation and repayment of foreign debts, both interest and capital. On this point the world may be roughly divided into two great classes, debtor countries and creditor countries, namely those which from the point of view of industrial progress are young and requiring capital for their development, and those older-established industrial countries like England which provide the means for that development, and the necessary capital to finance it. Thus, for example, India, Egypt (which from this point of view is the youngest of countries), Australia and New Zealand, the United States, and the Argentine Republic have at various periods, say since the middle of the nineteenth century, received from England large sums of capital for railway development, harbour construction, irrigation works, and all kinds of productive expenditure, as well as for public works of a less directly productive character, such as public buildings or armaments; and the amount of these advances is now represented by national or private debts of all kinds, such as government stocks and bonds, railway and land companies' shares, and all the other forms of public and private indebtedness. The method and the effect of the creation of these huge items in the balance sheet of nations are of a double character. When in the first place a loan is raised in London, say for the construction of an Argentine

Double effect.

railway, the amount of the loan is not exported in boxes of gold to the borrowing country. As a matter of fact the bulk of the money never leaves England, but is simply placed to the credit of the foreign government or company in the books of the Bank of England, from which it is almost immediately paid out again in the form of cheques to the engineers or bridge builders who have already supplied the goods for which the loan was intended to pay. Thus the loan is given in the form of goods which appear in the customs returns of the exports of the lending country, and go to swell the statistics of exports for that year, without any corresponding entry of imports in payment therefor. There is, therefore, for the time being an apparent excess of exports by the lending country, and a corresponding excess of imports by the borrowing country. But in subsequent years interest will require to be paid on the loan, and at some future date it must be repaid either in a lump sum or by instalments spread over a period of years, and this repayment, whether of interest or capital, can only be made in the form of goods. In the case of productive expenditure—such, for example, as that of the construction of the Assuan Dam in Egypt—the source of payment is obviously the additional cotton crop due to the increased water supply, so that the loan pays for itself in exports of cotton. Thus the effect upon the borrowing country's balance of trade is to create in the year that the loan is raised, an apparent excess of imports which is balanced by the invisible export of the debt in the form of the loan certificates. But in future years the borrowing country's exports must be in excess of its imports, to an amount sufficient to meet the interest charges on the debt, which thus becomes an invisible import (of interest coupons) to that amount. Again, when the loan comes to be repaid, this also will tend to swell the exports of the debtor country for that year.

A new loan.

Debt charges.

Repayment.

The general effect is that, if we find the customs returns of any country showing an apparent excess of exports, we are fairly safe in believing that that country is a debtor country.

Effect on balance of trade.

And if, as frequently happens, we find a country which we know to be largely in debt actually reducing its normal excess of exports, and even running up for the time an excess of imports, it simply means that that country, instead of living within its income as it were, and duly paying its debt charges, is actually incurring further debt every year. Thus, in Egypt, for example, where the normal figures of the customs returns should show an excess of exports of at least £5,000,000 per annum, such an excess was actually maintained from the early 'eighties till about 1900. Then the normal excess of exports began to diminish rapidly, until in 1904 and 1906 there was actually a balance the other way. From 1900 to 1906 the imports of goods rose from £14,000,000 to £24,000,000, while during the same period the net imports of gold rose from £1,500,000 to £7,000,000. The meaning of this was that owing to the enormous prosperity of the country, due to the high price and the increasing crops of cotton, the people of Egypt found themselves in a position to borrow freely, England, France, Belgium and Germany competing eagerly for the privilege of lending the money. The result was, in the first place, a tremendous acceleration of the agricultural development of the country, which was all to the good; but unfortunately this led to an inflation of values of every kind, especially in land, and a fictitious prosperity which very soon showed itself in lavish expenditure on all kinds of European luxuries, such as motor-cars and champagne. The result was the crisis of 1907, due to the sudden withdrawal of this excessive credit, and an abrupt and painful return through the crisis to a more normal state of affairs. But it took Egypt many years to wipe out the increased burden of additional debt so unnecessarily taken upon her shoulders in these years of exaggerated prosperity.

The case of Egypt.

In this matter of international indebtedness, England of course occupied before the War a unique position. Her industrial development being more than half a century in advance of all the world, enabled her to become the world's creditor, while at the same time it provided the inducement to every

other country to borrow from her. Her manufactures quickly found their way to all the ends of the earth, while her colonizing instincts made her quick to realize the possibilities of development of the new countries which her new inventions in the means of transport and communications were bringing within easy reach of the Old World. British emigrants began to spread over every habitable quarter of the globe, and wherever they went, they saw opportunities for development which only required capital to convert them into wealth, and England found the capital. Thus British capital led the way in the development of the resources of every part of the new worlds, east. west and south, from Canada to the Argentine, throughout Africa, and in India, Australasia, China, and Japan, with the result that there is not now a country in the world in which British interests are not engaged. In the latter half of the nineteenth century other European countries began to follow suit, and the scramble for colonies was nothing more than the visible effect of their desire to share in the development of the unexploited resources of the world. England's investments.

The result was that England became the creditor of all the world to the extent of some thousands of millions sterling,[1] and was continually receiving payment of interest and repayments of principal under old loans and still making new loans all the time. It was estimated by Giffen in 1898 that under this head England was then receiving about £90,000,000 per annum and before the War the total was probably over £120,000,000. Her dividends.

It remains now to sum up the result of all these various elements which go to make up the balance sheet of Great Britain's various accounts. Indeed, the idea of a balance sheet is perhaps the best way to bring out the whole situation, for it gets rid at once of the confusion of mind due to the apparent distinction between visible and invisible imports or exports. Visible and invisible imports alike go to the debit side of the account, while the exports visible and invisible

[1] The total was estimated by Sir George Paish, in a paper read before the Royal Statistical Society in 1910, at £3,180,000,000.

The balance sheet.

appear together on the credit side, and the result, based on the figures of 1912–13, is something like the following:

Dr.	*£ Millions.*	*Cr.*	*£ Millions.*
Total imports . say	750	Exports, home produce . say	500
Tourists abroad . . .	10	Re-exports, foreign & colonial	110
New loans abroad . .	200	Freight	100
		Interest on loans abroad . .	120
		Repayment of loans	100
		Commissions	20
		Tourists	10
	£960		£960

It will be seen that the final result of all these items of our foreign trade is to bring out the fact that instead of England importing more than she exports, which has frequently been misrepresented as showing that we are living on our capital, England has all along been living so far within her income that she has a steady annual balance which enables her to continue making new loans out of her annual surplus.

Not living on capital.

One more point remains to be explained before leaving this subject. While the total exports and imports of each country must on the whole balanee each other from year to year, it does not at all follow that the exports and imports passing between any particular pair of countries will balance each other, even taking into account the invisible exports and imports. Thus, taking again the case of our own trade with Egypt, the excess of imports which we take from her in the form of our share of her cotton crop is much greater than the amount necessary to pay our share of her annual debt charges, both public and private. The truth is that trade between nations is not conducted in pairs, but that the circle of exchange is world-wide. England may export manufactured articles to a country from which she imports relatively little, but she takes payment of that excess from another country which owes her nothing, but which is debtor to England's debtor. The transaction is like the theoretical form of the bill of exchange, A being a creditor of B, instructs him to pay the money to C, who is A's creditor.

Triangular trade.

No one debtor has paid his own creditor, but all the creditors are paid, and, as has been seen in previous chapters, the analogy of the bill of exchange is not merely a simile, but is the actual form by which the transaction is carried out.

It may seem rather surprising that during recent years it should have taken so much argument to carry conviction to some minds of the truth of this law of the Balance of Trade. There is perhaps an explanation of this difficulty in the fact that the word 'balance' itself contains a double meaning, which is exceedingly confusing. In popular use, the word means either of two things which are the direct negatives of each other. To say that an account balances, means that both sides are equal in amount; but if one side is greater than the other we speak of the balance, meaning the excess, being on that side. When therefore we speak of a balance of imports, we mean something entirely different from the balance of trade. The 'balance' of trade means that there can be no 'balance' of exports or imports, because these two must 'balance' each other. To avoid this play upon words, it is better not to use the phrase 'balance of exports or imports' at all, but to speak only of an excess of imports or exports, reserving the word 'balance' for use in its true meaning of equilibrium or equality of exports and imports. This distinction in the use of the terms is not merely a question of literary criticism, but represents the historical development of the theory of international trade, from the time of the Mercantilists who first used the phrase 'a favourable balance of trade' as meaning an excess of exports. Their theory has been abandoned, and it would have saved a great deal of confusion of thought if we could have abandoned their terms entirely and spoken only of the equilibrium of foreign trade, and the excess of exports or imports.

Balance or excess.

It remains now to consider the effect of the War upon the balance of England's trade. It has been seen that its first effect was to dislocate our foreign trade very seriously for the

War and the balance of trade.

time being, but gradually, as the emergency measures came into force, things began to readjust themselves, and business was resumed under difficulties. Shipping began to move again fairly freely as the risk of capture was seen to be comparatively small, and the first sign of the recovery of trade was the free movement of the great crops of raw materials such as wheat and cotton from America to this country; which incidentally soon served to remedy the confusion into which the American exchanges had fallen at first, and to enable America to pay its debts to this country. Gradually things settled down again and most of our industries resumed something like their normal appearance. Some did so more quickly than others because any shortage of normal demand for their products was more than made up by the increasing pressure of demand for war goods of all kinds. Thus the woollen industry had been very busy from the first in turning out uniforms of all kinds in enormous quantities. The boot and shoe and other leather trades were in the same position, and soon another enormous new industry began to develop in the wholesale conversion of all kinds of engineering works to the production of the fabulous quantities of munitions which were to be the chief characteristic of this war. The effect of all these tendencies may be traced, with certain qualifications next to be noticed, in the Monthly Returns of Imports and Exports which will be found in Table XVII in the Appendix. The general effect of these may be briefly stated here as follows: At first all categories of our trade, both imports and exports, and of every class of goods, showed very serious reductions, but within a very few months a new tendency began to show itself. Our imports, especially of food supplies and certain raw materials, stopped falling, and soon began to show actual increases upon the pre-War figures. Exports were much slower, but in course of time they also began to improve, and finally by the month of May, 1916,[1] the total exports were also

First effects.

[1] But this did not last. See Table XVII.

above pre-war figures. The general movement of our trade can best be shown by a diagram, which can very easily be constructed from the monthly figures of exports and imports given in Table XVII. The figures.

In studying these figures, however, several points require to be kept in view, for the figures must be handled with great caution to avoid the most deceptive conclusions. In the first place it must be noted that the figures available for the country's trade as a whole are only value statistics, because it is impossible to give figures which would show the volume of trade as a whole. That can only be done accurately for individual commodities. The effect of this may, however, be indicated, though it is impossible to calculate it exactly. The rise of prices of most staple commodities must be taken into account, and its effect estimated as far as possible. It means that the enormous figures to which our imports attained during the War must be so heavily discounted that as a matter of fact the total volume of our import trade in 1918 was actually much less than it was before the War. Our exports, on the other hand, which only for a few months showed figures comparable with the pre-war levels, must have been very far below the corresponding quantities before the War. Table XVIII contains some very interesting statistics, largely estimates of course, based upon shipping figures, which fully confirm these tendencies. Values only. War supplies.

This again, however, is only half the truth. The figures of exports and imports do not represent anything like the whole of the commodities which were coming into or going out of the country during the War, because they do not include the whole of those imports and exports which are government property, and which then formed so large a proportion of our foreign trade.

The relative effect of this omission upon our imports and exports is all the more difficult to estimate because we do not even know exactly what was and what was not included in the published figures.[1] Thus government stores, that is to say,

[1] The practice with regard to publication was changed in July, 1917.

war supplies of all kinds, which left this country for our forces at the front, were certainly not included, and probably munitions of many kinds brought to this country also did not appear. But raw materials which were to be turned into war materials in this country did appear in the statistics. On the other hand it is not easy to ascertain how far the enormous military supplies which we sent to our Allies everywhere were declared, so that it is impossible to know how far our true balance of total exports and imports may be from the proportion indicated by the published returns. It is almost certain, however, that the export figures suffered more largely from this cause than the imports, so that on the whole this factor would tend to counterbalance, perhaps to a considerable extent, the increasing excess of imports which our trade statistics showed.[1]

Imports worse.

Exports better.

The only possible way of estimating the effect of these invisible exports and imports of a new kind was to make a guess based upon the total war expenditure. In doing so, however, it must be remembered that the value of our exports of war materials to our own troops abroad could not be included as exports in the sense of placing them to the credit of our balance of trade, because these were payable out of our own pockets, and constituted no claim by us upon any foreign country for subsequent repayment. There is, however, one way in which we may estimate the extent to which we piled up claims against our Colonies and our Allies. During the War we lent to our own Colonies and our Allies at the rate of over £500,000,000 per annum, and it is probable that a very large proportion of this went out in the form of war supplies, such as uniforms, boots, engineering materials, and war munitions of all kinds. We were, of course, receiving very large quantities of munitions and raw materials of all kinds from neutrals, and from America, but the probability is that the most of these were included in the published returns, while the others were not.

How much.

Again, to make the figures even as complete as they could

[1] See Table XVII.

be, another item must be taken into account, namely the movements of bullion. On this point it must be recalled that during the War much of the gold which really belonged to England was never actually brought into the country at all, but was lying at the credit of the Bank of England in Ottawa, Cape Town, and Sydney. The possible effect of this upon the figures may be inferred from one fact alone, that during the War we imported almost no gold at all from the Transvaal, the output of which was going on nearly as before, and certainly was not going anywhere else.[1]

Bullion movements.

Taking all these cautions and reservations into account, what do the figures indicate as regards the balance of our trade during the War? Simply this, that our foreign trade underwent an entirely new orientation, just as the main object and character of our home industries had undergone a complete change. It is certain that our home production of wealth, including munitions of all kinds, increased very materially during the War. That is obvious from the fact that there was hardly a man, woman, or machine idle in the country, that unemployment in the old sense of the word disappeared, that many people, especially women, were working who never worked before, and that most people were working overtime to an extent absolutely unprecedented. In the same way probably our total foreign trade, if only the true figures were known, had also increased very largely if war materials are included. But its direction was changed. Just as in our home trade a large proportion of our productive capacity was being devoted to the wasteful production of war materials, so our foreign trade was completely turned into new channels. We were importing largely from countries to which we used to export, and vice versa. To take one case as an example, our trade relations with America were completely changed. The enormous quantity of munitions and raw materials which we were taking from her was no longer balanced by the large quantities of our own manufactured goods which we used to send to her.

A new orientation.

[1] From 1916 the figures of gold movements were not published.

America as creditor.

We were running into debt to America very seriously, or rather America was rapidly repaying to us the old debts which we had accumulated against her for many years, in the form of money and goods lent for the development of the country. We could not for the time being pay her in goods as we went along, and by one of the paradoxes of the War we could no longer pay her for this excess in gold, not merely because we had not enough gold to do it, but because she did not want so much gold. We were paying America by selling back to her the securities of all kinds which our people held in American concerns: hence the Treasury scheme for the mobilization of American securities in this country with a view to their being sold to America or used as securities for loans raised there to pay for our supplies. The same principle was applied to other countries, and the total amount involved was more than £600,000,000.[1] To this fell to be added our share of the loans by America to the Allies since she came into the War.

Our position after the War.

But while we were thus in a sense running into debt, or at least living on our capital, in our relations with these countries, we were on the other side running up new claims against most of our Allies and the Dominions, the total amount of which as at April 26, 1919, was £1,739,000,000. When the War was over our balance of trade was probably not much worse than it was before, but we had very largely changed our debtors.

Other neutrals.

The position of other neutrals as the result of the War was similar to that of America.

Our Allies.

As to the effect upon our Allies, the result of this movement was of course to leave them largely in debt to us, and to other neutral countries for these war supplies. We shall see in a later chapter what happened to all these War debts when peace came.

Effect on invisible exports.

Again, it is interesting to note the effect of the War upon our invisible exports and imports. The amount of these was always largely guesswork, and more so now than ever, but some indications may be obtained from various facts. In the first place as to freight: a very large proportion of our

[1] Report of the American Dollar Securities Committee (212) 1919.

mercantile marine was commandeered for transport purposes, and its services were therefore no longer an invisible export, except in so far as they were carrying war materials, &c., to our Allies. But for the remainder, though the quantity of tonnage was seriously reduced by submarine losses,[1] the freights earned were very much above pre-war levels, if we may judge from the high dividends paid by shipping companies of all kinds. As for the other usual items, tourists' expenses may be treated as non-existent during the War, but they swelled very rapidly again as soon as it was over, and the battlefields of Europe became the happy hunting-ground of the American tourist. Shipping.

Reference has already been made to the extra cost of insurance of all kinds, especially war risks both on land and sea, and as before a very large part of that business was done in London. Our banking and other commissions too were probably not materially reduced on the whole, though a great deal of business must have gone to America. But what we lost in one way we probably more than made up for by our share of the business which formerly went to Germany and Austria. Much of their trade came into our hands, and the profits followed the trade. Commissions.

The only item that was seriously affected was probably, as has been seen, the lending of new capital to the world. We certainly had to restrict our new loans to foreign countries almost to vanishing point, and that not only had a serious effect on our balance of trade during the War, but will have a permanent effect on our balance afterwards; but it must be remembered that these two effects are counteracting. If we are not lending so much new capital in the meantime, we are not requiring to export so much against the new loans, so that that alone would set off some reduction in the normal quantity of our exports. Capital.

Finally, it follows that all this interference with the normal pre-war course of our trade and the settling down of our trade into new channels affected the foreign exchanges very materially.

[1] See Table XVIII for Import Tonnage.

Foreign exchanges.

The American exchanges soon recovered from the pre-war crisis, and rapidly turned the other way against us, as the current of exports began to flow. And that is typical of the position of all the exchanges during the War. All our exchanges with neutrals were against us, because we were receiving more goods from them than we could export to them at the time. On the other hand, all the exchanges between us and our Allies were heavily in our favour, because they were receiving far more from us than they could send us.

The position of the other belligerent countries as regards their exchanges was practically the same. All the exchanges went against Germany and Austria, and to a much greater extent than in our case. But the reasons for that included one which fortunately we did not require to reckon upon, viz. the depreciation of their paper money. Some idea of the extent and character of these movements of the foreign exchanges may be gathered from the figures given in Tables XII to XV in the Appendix.

In pre-war days there were two lists of foreign exchange rates published regularly. The London Course of Exchange (Table XI) was made up twice a week on Tuesdays and Thursdays; it contained the rates of exchange current in London at the bi-weekly meeting of the bill brokers in the Royal Exchange. There was also a daily list of the rates current in foreign countries on London. During the War, however, and afterwards, so much of the foreign exchange business in London was carried on from the brokers' own offices by cable and telephone every day and all day, that gradually the bi-weekly meetings on change became of less importance, and finally, early in 1921 they were dropped altogether. The last official publication of the London Course of Exchange was on January 20, 1921, and the rates of that date have been added to Table XI. Thereafter the two tables of London and foreign rates became merged into one, so that Table XII is now the London rates as well as the foreign rates.

Table XIII has been retained as of historical interest; it

shows the extreme fluctuations of the principal rates, especially that on New York, in the early months of the War.

Table XIV gives a quarterly record throughout the War of the New York Exchange on eight of the principal European countries—Germany and Austria of course disappearing in 1917 when America came into the War. From this table it will be seen how successfully the pegging of the sterling exchange was done, while the French rate was also fairly uniform. Italy showed much greater fluctuations and a heavier fall, but Russia showed the heaviest fall of any during the War. For a time after the Revolution the exchanges were stabilized, but this gave way again in 1920. Germany and Austria also of course had their worst difficulties to face after the War. Holland and Switzerland are typical of the favoured position of neutral countries during the War, their exchanges being above par most of the time.

CHAPTER XV

THE THEORY OF INTERNATIONAL TRADE

The advantages of foreign trade.—The theory of comparative cost.—Free trade *v.* protection.—A question of policy not principle.—Protective *v.* revenue duties.

Object of international trade.

IT has been shown that the value of the exports and imports of each country must on the whole balance each other, unless a country is debtor or creditor of other countries, either for capital borrowed in the past or for services rendered from year to year. It may then be asked, what is the good of foreign trade if both parties give and receive exactly the same value? What is the gain to either?

In this respect foreign trade is the same as trade between individuals. What is the good of any exchange if each party to the exchange receives only an article of the same value as he gives? The answer is that, while the exchange value or price is the same, the subjective value of the articles exchanged is different to the two parties.[1] So in foreign trade, while the money value of exports and imports to each country is the same, that does not represent the whole advantages of the exchange. The theory of foreign trade is very like the theory of the division of labour. Each nation should produce those things which it can produce to the greatest advantage, just as in division of labour between individuals each individual should be put to the work he can do best. The causes of these differential advantages between nations vary greatly, but in most cases they can be expressed in some form of the idea of cost of production. Owing to the differences of climate, geology, or industrial

Gain of subjective utility.

[1] See *Science of Prices*, p. 26.

history, one country can produce certain things more cheaply than another, or which the other cannot produce at all. Thus a nation whose soil and climate are adapted to growing cotton should, under this theory, devote itself mainly to growing cotton, exchanging it with some nation whose command of other raw materials, such as coal and iron, renders it especially suitable for manufacturing. In this way every nation gets the benefit of the special products or facilities for production of every other nation, and the total world's production is the greatest possible. It is to the advantage of all the world, for example, that Egypt should grow fine cotton, while Lancashire with its humid climate should be devoted to fine spinning. Not only will this pay the world at large best, but it will also be the most profitable course for each of the countries concerned, and if the trade between nations were left entirely free from artificial restrictions, the effect of competition would be to produce this ideal distribution of productive capacity.

Differential costs of production.

This theory sometimes produces the puzzling anomaly that it may actually pay a country to import something from abroad which it could really produce more cheaply at home. For example, it pays England, the finest dairy country in the world, to import dairy produce from Denmark, paying for it with coal and manufactured goods. The explanation is that the imports are paid for with something else, in the production of which the first country has a still greater advantage; as in the above illustration, Denmark can produce butter, &c., nearly as well as England, but Denmark has no coal at all. England has a greater advantage in the production of coal than she has in dairy produce. It pays her therefore to devote herself to that branch in which she has the *greatest* advantage. In the same way, it might pay an individual to buy from others something which he could make better or more cheaply himself, if by doing so he could devote himself to some other branch of production in which he has special advantages.

An anomaly.

The theory of international trade is therefore that each country should produce, not merely what it can produce more

Theory of comparative cost.

cheaply at home than it can buy from abroad, but what it can produce to the greatest advantage. This is known as the theory of comparative cost. What must be considered in each case is not the cost of producing the commodity in one country as compared with the cost of importing it from abroad, but rather the comparative cost of producing each commodity in the two countries. Thus if in one country X a commodity A costs five units of labour and capital to produce, and another commodity B costs ten similar units, while in another country Y the production of A costs only three units of labour, &c., against nine for B, then Y should devote itself entirely to producing A and leave B to be produced in X (although Y can actually produce B more cheaply than X can), because the comparative cost of A to B in Y is 1 : 3 against 1 : 2 in X. Thus 100 units of A produced in Y and 100 units of B produced in X will cost altogether 1,300. By any other distribution the cost would be increased.

Popular ideas.

It follows from this that certain commonly accepted views of the advantages of foreign trade require revision. If the man in the street were asked whether the advantage of our foreign trade lies in the imports or the exports, he would probably say the latter. Our imports, except the raw materials of our industries, are, from this point of view, regarded as at best a necessary evil. We must also, of course, import exotics, that is to say, those foreign commodities which owing to climatic and other conditions cannot be produced in this country, such as cotton or tea; and it hardly affects the question whether these things are raw materials for our industries or conventional necessaries for our food supply. But when it comes to foreign articles of luxury, such as champagne, for example, the advantage is regarded as doubtful, and when we reach the final case of foreign wheat, which we obviously could grow ourselves, the import is looked upon as an unquestionable evil. From this point of view, then, the desirable part of our foreign trade is our exports. That we should supply all the world with manufactured articles, the products

of our great industries, seems to be regarded as the chief object of our existence, and the best test of the prosperity of these industries. Yet that all our exports are not regarded as equally desirable is apparent when we come to discuss the export of raw materials, such as coal.

Exports *v.* imports.

What is the underlying idea of this attitude? Apparently it is that exports should be encouraged because they provide an outlet for the products of our home industries, but that nothing should be exported which might be used at home for these industries. Imports, on the other hand, are harmless only when they provide materials for our industries, and are most objectionable when they consist of commodities such as wheat, which might be grown at home. When imports consist of manufactured articles directly competing with the products of our own home industries, no condemnation, it seems, can be too strong.

All this points to an apparent misconception of the object of our home industries, namely that these industries exist primarily for the purpose of manufacturing goods for export, that the business of this country in the world is to manufacture goods for all the rest of the world, that any other nation which, inspired with a similar idea, tries to cut us out in what are fondly regarded as *our* foreign markets, is in some way meddling with that part of the world's business which belongs by right to us, and that any nation that tries to send manufactured goods into our country has not merely committed the folly of sending coals to Newcastle, but is actually guilty, as it were, of some sort of trespass.

Home and foreign trade.

The root of the fallacy lies in the idea that the main object of our industries is to make goods for export, that we live by foreign trade, and that our foreign trade is more important than our production for home consumption. It is the idea of the manufacturer converted into a national policy. The manufacturer makes his living by making goods which he almost never uses himself, and selling them to somebody else. But that is not the true model for a nation's policy. A nation

is not a factory turning out goods for sale to other nations. Still less is it a merchant or shopkeeper buying and selling other nations' goods, and making a profit on the turnover. Its position should rather be like that of the old yeoman farmer, whose land produced most things that he required to feed and clothe himself and his dependents, leaving a surplus to exchange for such luxuries as he could not produce himself. The prime object, then, of a nation's industry is to feed, clothe, and house her own population, who are the chief producers of all her manufactures, and are entitled to consume the major part of them. But as the manufactures are partly dependent on the use of foreign raw materials, these also must be paid for by a share of the finished commodities; and if, as in these days, when we lay the whole world under contribution for the satisfaction of our high and complex standard of living, our workers want tea, coffee, cocoa, tobacco, spices, and a thousand other things that we cannot grow ourselves, it is only right that we should pay the producers of these foreign commodities with part of our manufactured goods.

The nation's position.

The nation's exports, therefore, are only its surplus, which it exchanges for those foreign products which it cannot produce itself. Wherein then lies the advantage of this exchange? Clearly, if one must choose between the exports and imports, the advantage lies in the imports. We give of our abundance of cheaply manufactured goods in exchange for other commodities which, because we cannot produce them at all, or so easily as the foreigner, we value more highly than the things we produce ourselves so easily. The gain to us is in getting something which is worth more to us than what we give in exchange for it; in other words, the gain lies in the imports rather than the exports.

Function of imports

This, of course, must not be taken as in any way detracting from the real advantage and value of our export trade. If, for example, the turnover of the cotton trade is enormously increased by our exports of cotton goods, the effect will be, owing to the well-known economies of large production, that

and exports.

the cost per pound of yarn or yard of cloth produced in this country will be so much the less, and our own home consumers will benefit by this reduced cost of production. Here, too, lies some consolation for the much-regretted imports of wheat, &c., which might be grown at home. These imports must be paid for in goods, and the effect is not only that the textile operatives have good wages to spend, and cheap bread for themselves and their families, but also that the farmer himself, who is suffering by the low price of his wheat, finds the price of everything else he buys more or less reduced in consequence.

Relative importance of foreign trade.

It is perhaps not surprising that those whose business makes them familiar with any branch of our foreign trade should be inclined to exaggerate its importance, and this tendency was accentuated by the fact that until a few years ago no figures of the extent of our total home production were available to enable us to form a true estimate of the relative importance of foreign trade and home consumption. As far back as 1877 Sir Robert Giffen estimated the income or profit derived from our export trade as not more than one-eighth of our total income; but it was not till the Census of Production of 1907 that it became possible to form anything but the vaguest statistical ideas on the subject. Now, however, it is known that the total net output of all our home industries, including agriculture and fisheries, in that year was not less than £1,456,000,000, while the total value of our exports of home produce in that year was only £426,000,000, and of our net imports £554,000,000.

National trade policies.

But while this theory of comparative cost is the basis of the economic theory of international trade, it is unfortunately not the principle which actually rules the trade policy of the nations, and the reason is obvious. The theory of international trade is an ideal theory of what things would be like if the world were ruled by one all-wise body which had no other interests in view but those of the world as a whole. But that is not the way the world is ruled, and we never had more

cause to realize it than to-day. For many reasons, geographical, ethnographical, and historical, the world is divided up into a number of separate nations, whose trade policy is ruled by no consideration of cosmic ideals, but by frankly selfish national aims. Differences of language and race, of climate and natural conditions, and national and racial antipathies due to historical antagonism, have made it useless to hope for any conscious approximation to the ideal principles of international trade. Never has a prophecy been more promptly and completely falsified than was that of the Free Trade leaders in England in 1846, that within five years after the triumph of the Corn Law agitation in England every other civilized country in the world would be following our example. It is well, here, however, to enter a caution against the idea that England adopted the policy of Free Trade because it was the international ideal. The truth is, and our reputation for honesty has suffered seriously in the minds of our continental neighbours because so many of us apparently did not see it, that we adopted that policy because, under the particular circumstances at that time, it was the policy which was likely to suit our own interests best. We failed to realize then, and to a considerable extent since, that because that policy suited our conditions, it did not necessarily suit those of other nations, nor indeed would it necessarily suit ourselves best if conditions should change. But the rise of the German school of national economists very quickly brought out the difference between their position and ours, which was indeed the difference between our position and that of most of the other nations of the world. We know now, however, that fiscal policy is not a matter of international theory or general principle, but a matter of national policy or expediency. The question of Free Trade or Protection, therefore, is no longer a question of principle but of policy. Of the principle there can really be no question. World-wide free trade, which by the force of competition would compel every nation to devote itself to the production of those commodities in which it had the greatest advantage,

England's position.

Policy not principle.

would certainly be the world ideal; but what each nation has to consider is not the principles that would best suit an ideal world, but the actual measures which are likely to prove of greatest advantage to its own peculiar national interests. Most countries have therefore adopted a certain degree of Protection, i.e. they have thought it advisable to interfere more or less with the natural flow of industry, so as to attract or divert it into what were thought to be the most desirable channels. The ideal.

It would, however, be going to the other extreme to imagine that the theory of international trade has been entirely disregarded, or that the distribution of the world's productive capacity has been on the whole arranged in despite of it. On the contrary, the great bulk of the world's industry is, as a matter of fact, carried on in the countries best suited for it. Lancashire does not grow cotton, nor Egypt spin her own crop to any great extent. What has happened has rather been that many nations have endeavoured to modify the conditions existing in their own country at particular stages of its development, so as to overcome temporary obstacles to the development of certain industries, which they regarded as necessary or desirable for the full development of the facilities which they believed their country to possess. It is true that these restrictions, begun as temporary measures, have in most cases been very difficult, and in many cases impossible, to get rid of; but this does not alter the fact that on the whole the world's trade is following the line of least resistance, that is to say, the line of the international theory of comparative cost, and that the cases in which one nation is persistently carrying on an industry at a loss are comparatively few.[1] The actual.

One more caution as to a popular misconception regarding international trade relations may be of advantage. People sometimes talk as if international trade meant trade between nations, and, especially in discussions about fiscal questions, phrases are used about the fiscal policy of particular nations, e.g. 'What Germany has done for her foreign trade', as if the

[1] With the excessive growth of economic nationalism since the War it would be very difficult to maintain this view now.

The world's traders.

trade between nations were conducted or mainly controlled by their governments. This is of course seldom true. International trade is conducted almost entirely by the individual traders of the different nations, and their prime (one might almost say exclusive) motive is to make money for themselves. The government may lay down certain conditions as to trade, it may impose duties or confer bounties upon certain commodities when imported or exported, or provide certain facilities for, or place certain obstacles in the way of certain trades; but only in very few cases does it actually take a hand in these trades itself. The world's traders are private individuals, firms or corporations working for their own profit.

It remains to be noted that the mere fact of the existence of import duties does not necessarily mean protection, because such duties may not be protective at all, but merely for revenue purposes. To make this clear, the distinction between revenue and protective duties must be kept in view.

Customs v. Revenue duties.

Duties charged upon goods may be of two kinds—(1) Customs duties charged on the import of goods into this country, and (2) Excise duties levied upon goods made in the country. When the same rate of duty is charged upon goods imported into the country and also upon similar goods made or grown in the country, it is merely a revenue duty. But if customs dues are levied on goods imported, while no excise duty is charged on similar goods produced in the country, the result is clearly to protect the home industry. A protective duty may thus be described as *a customs duty not balanced by a corresponding excise duty*. The import duties in England before the war were therefore not protective, because all the goods upon which the customs duties were charged were not grown or manufactured in the country at all. Import duties were only charged upon 'exotics'—that is to say, upon goods which cannot be produced in the country, such as tea, tobacco, &c. The only other heavy import duty in England, that on spirits and wines, was balanced by an excise duty on all spirits made in the country, so that it had no protective effect.

CHAPTER XVI

THE POST-WAR PERIOD, 1918–28

Progress of prices.—Post-Armistice slump.—Post-war boom.—Deflation.—Cunliffe Committee.—Currency Notes.—Bank Notes.—The Gold Standard.—Cost of production of gold.—Silver.—Foreign Exchanges.—Purchasing power parity theory.—Balance of trade and indebtedness.—Reparations and inter-allied debts.—Currency Note Issue.—The Young Plan and the Bank for International Settlements.

In previous chapters it has been shown that most of the economic problems which arose during the War were very intimately connected, either as cause or effect, with the rise of prices, which was, on the whole, the most obvious and striking manifestation to the ordinary man of the terrible times through which the country was passing. In dealing with the post-war period, therefore, it will be convenient to follow a similar course, and to take the movement of prices as the thread upon which to string a discussion of the problems which arose in the post-war period. As a matter of fact the rise of prices itself was the most conspicuous and surprising event of that period. Every one expected that as soon as the War was over things would quickly begin to get back to normal, and the first sign of that would be a fall of prices. As a matter of fact such a fall had actually begun in August 1918, though it is probable that this was only seasonal, and that, had the War continued throughout the winter, it would have been followed by a further rise. After the Armistice, however, the fall continued till March 1919 (taking the *Economist* Wholesale Index Numbers); but from April there began a new rise which lasted for twelve months and carried the general level of prices up to a point far above even the War record. Thus in August 1918 the Index Number stood at 244 per cent. of July 1914. In March 1919 it had fallen to 222 per cent., but in March 1920 it

Post war prices.

rose to 325 per cent. Then began a fall which only amounted to five points in the next two months, but, rapidly accelerating in June, carried the figure down to 166 per cent. in February 1922, or little over 50 per cent. of the highest figure, and brought prices back again to almost the same level as in June and July 1916.

The effects of this terrific upheaval were, of course, very serious, and discussion as to its causes became keener and more bitter as the rise progressed. Indeed it was actually during this post-war period that many of the theories of inflation which have already been discussed in Chapter XIII were elaborated. On the other hand the experience of the post-war period threw a good deal of light on the causes of inflation during the War, because after the War the conditions were of course completely changed in many respects, and it became possible to draw more definite conclusions as to what had been the causes of inflation during the War.

Following the same line of argument as in Chapter XIII, we may take first the theory that the issue of currency notes was the cause of inflation. The history of the movement of prices and the issue of currency notes after the Armistice is given in Tables IV and V and Diagram A, and goes far to confirm the suggestion already put forward that the issue of currency notes was the effect rather than the cause of the rise of prices, because the movement of the currency note issue followed rather than preceded the movement of the rise of prices. Thus in the winter of 1918–19 the issue continued to increase all through the post-Armistice slump, but began to fall soon after the new rise of prices began. This fall was continued (except for the usual peak at the end of the year) till April 1920, when a new rise began just about the very time that wholesale prices began to fall again. The actual highest record was £368,231,000 on December 22, 1920, or nine months after the highest point of wholesale prices and two months after retail prices had passed the highest point.

Currency notes.

Passing on to the theory that the inflation was due to

government methods of finance, and particularly to Ways and Means Advances, it became possible after the War to get the actual facts on this point, and these are given in Table IX and Diagram A. From this it will be seen (1) that the deposits of the Clearing banks, as shown by the half-yearly balance-sheets, continued to rise till December 1920. From January 1921 the banks began to publish monthly returns which the Macmillan Committee carried back to January 1919, and it becomes possible (subject to certain statistical reservations) to get a much better view of the fluctuations of the position of the banks throughout these years. The monthly figures for 1919–22 show that the increase of Deposits was practically continuous till December 1920; actually the highest point of all was in December 1921. (2) The Ways and Means Advances (excluding those from other departments) dwindled almost to nothing in the autumn of 1919, and never rose again to any figure worth considering. (3) The Bank of England's 'Proportion' continued to fall till December 1920, when it was a little below eight per cent.!

Credit inflation.

Comparing these dates with the course of prices during the post-war boom, two important facts emerge: (*a*) that the 'inflation' of the bank deposits and the reduction of the Bank of England's Proportion continued for a long time *after* the break in prices; (*b*) that the high figures of Ways and Means Advances were passing into history before the final rise of prices had well begun. Neither of these, therefore, seems to show any evidence of having been the *cause* of the post-war rise of prices.

But, before coming to any conclusion as to the causes of the post-war inflation, it is necessary to consider what happened during the subsequent period of deflation. The history of how this was brought about will no doubt produce much controversy in years to come, but certain facts should be set down now while memory is still fresh. By the close of 1919 every one was crying out against the rise of prices, and the popular slogan was that 'prices must come down'. In the course of

Deflation.

less than twelve months every one had forgotten the danger of falling prices, which had been very clearly demonstrated during the few months of the post-Armistice slump and the extraordinary period of stagnation in many of our industries which it produced. At that time every one was either fearing or hoping for falling prices, with the result that nobody would place orders, and the consequent depression of trade was just about the worst thing that could have happened. What the world most needed at that time was to go ahead at full speed in the production of all the ordinary commodities which had been elbowed aside by military necessities during the War. There were, of course, plenty of difficulties in the way of such a resumption of pre-war production, but the slump in prices discouraged all attempts to overcome these difficulties, and the American cotton crop may be taken as the best illustration of the result. In 1919 the acreage was reduced in consequence of the fall of prices, and the crop, as it happened, was practically a failure owing to bad weather, with the result that, when the boom came during 1919 and the world rushed to make up the arrears of consumption, the supply of the raw material was not available.

What made the outcry against rising prices so strong was partly the conviction that it was due to preventable causes. Inflation had now become a catchword, and the air was full of theories as to its cause and cure. These seemed to centre mainly round the Floating Debt, particularly Treasury Bills and the Ways and Means Advances, and the popular cry was that the cure lay somehow between the government and the banks.

Cunliffe Committee

The origin of many of these theories may perhaps be traced to the first report of the Cunliffe Committee on Currency and Foreign Exchanges after the War, published in August 1918, which was the first official expression of the theory of inflation by pyramiding of the bank deposits. When the inflation reached its height in the boom of 1919 the policy of 'Dear Money' as the only lever to produce deflation found voice in

many quarters, and the first attempt to give effect to it was the raising of the Bank Rate from five to six per cent. on November 12, 1919. This, however, did not seem to have the desired effect, and in February 1920 the demand for a further increase in the Bank Rate became insistent. In the meantime the government finances had been taken in hand, and the great Victory Loan of June 1919 was the beginning of the reduction of the Floating Debt, particularly the Ways and Means Advances from the Bank of England, which fell to quite negligible figures immediately afterwards, though Treasury Bills soon mounted up again and continued to do so till June 1921 (see Diagram A).

Dear money policy.

Looking back now over the events of the deflation period, it almost seems as if the deflationists had been waiting till the Victory Loan was out of the way, but that the time was not considered ripe for taking definite steps until the United States also had put their financial house in order. This they did by issuing a large Consolidating Loan in February 1920, and that seems to have been the signal for the announcement of a similar deflation policy in America. Nothing was actually done in England, however, until April. On April 14, 1920, the *Times* published excerpts from a memorandum by Mr. Basil P. Blackett, of the Treasury, in which he set forth the theory of deflation and Dear Money, and this is so important that the following paragraph may be quoted:

'To effect deflation now that the War is over, the government must find means for persuading the public to hand over some of its present greatly enlarged purchasing power (as expressed in terms of money) to be used by the government in repaying the floating debt (and especially Ways and Means Advances), the great part of which represents the credits created by the government during the war and still unrepaid. By securing control of the purchasing power of the public and using the money to wipe out past creations of credit, the government (1) reduces the spending power of the public and so tends to check consumption and reduce prices (and also to increase exports); (2) reduces the amount of accommodation the banks

can give to customers, and also the amount of accommodation the customers want; (3) as the result of reduced money spending by the people and reduced lending by the banks, less currency is needed, and the government is enabled to reduce the outstanding amount of currency notes.'

It seems a little more than a coincidence that it was on that very day that the government took action. The excuse given was that an issue of Treasury Bills had not been adequately taken up and it became necessary to raise the Treasury Bill Rate to $6\frac{1}{2}$ per cent. This inevitably meant that the Bank Rate must also be raised, as it was to 7 per cent. on the following day, and this proved to be the turning-point of the whole position. It is remarkable that the policy which had apparently proved ineffective in November should have been completely successful in April, and one interesting theory is that in the meantime the government had adopted the principle of restricting the issue of currency notes as described on page 225. It is doubtful, however, whether that could have much effect, because if the banks had at any time been in need of currency in excess of the limit they could have forced the hands of the government by allowing Treasury Bills to run off, thus adding to their cash at the Bank of England, and then drawing on the Bank for currency notes or bank notes, which the latter could not refuse.

Bank Rate raised.

It is now generally admitted that no one in authority, either in financial circles or at the Treasury, anticipated the full extent of the effect of this Dear Money policy. The first results were merely the normal reaction of the financial world to the raising of the Bank Rate. The banks throughout the country at once began to 'strengthen their position' in the usual way, by making borrowing more difficult and endeavouring to call in their loans; but the effect of this procedure was far beyond expectation. This was probably due to the extraordinarily high level to which the boom had been carried, but that was merely the natural result of the abnormal conditions of the time. It must be remembered that for five years the world had been doing without all sorts of ordinary supplies,

including food and clothing, while a tremendous amount of reconstruction work was crying out to be done, especially in the devastated regions, as well as the arrears of normal structural work, particularly housing. When the War was over and the blockade withdrawn it was natural that all the world should rush to make up the deficiency of their supplies of every kind of commodity; and every country that could produce the required goods was inundated with orders far beyond their capacity to supply. The result was the inevitable rise of prices, which meant that everybody was making money, and credit was easy, as it always is under such circumstances. At the same time, however, cautious people in the world of finance were becoming uneasy, in view of the movement of the foreign exchanges, especially against the belligerent countries, who were now at last able to buy goods from abroad, but were not yet able to pay for these goods with their own production; and this was to some extent restraining the eagerness of the manufacturers to sell.

The effect.

When, therefore, the banks began to issue orders to their customers to reduce their overdrafts, which were enormous, the only way the latter could do so was to stop buying any more goods, and even refuse to take deliveries under existing contracts, in the hope that sales to the public would bring in the necessary cash. But it was here that the vision of the deflationists had failed to foresee one natural effect. Everybody was talking about prices coming down, and the consumers seemed suddenly to jump to the conclusion that if prices *were* coming down at last they had better suspend purchases and wait till they did. The result was to produce a sudden stalemate—nobody would buy anything. Retail shops found their trade suddenly at a standstill, and could neither reduce their stocks nor pay for the goods recently ordered, which were still coming in. The effect was to produce the most drastic strangulation of demand that has ever been seen. The consumers would not buy, the retailers could not pay their accounts, the wholesale houses could sell nothing, and of

course could not pay the manufacturers. The effect was to produce in a few weeks the most extraordinary position of frozen credit, which was the very opposite of what the banks wanted. No one could pay anybody anything, and the state of affairs all round rapidly became not only alarming but actually desperate.

Recovery.

The period of stagnation and slow but painful recovery which followed will not be forgotten by those who lived through it. It is enough to say here that it probably convinced most people that falling prices are after all the worse of the two evils. It is now generally admitted that the process of deflation, inevitably painful, was pushed much too fast and too far, and perhaps also that its application was too long delayed. In the meantime, however, our concern with the question is how far it throws light on the causes of inflation, and the writer's conclusions may be stated, again tentatively, as follows: The causes of the post-war inflation were entirely different from those which caused the rise of prices during the War. They were, briefly, that the world had not yet had time to get back to anything like pre-war production of ordinary commodities when the flood of accumulated arrears of demand was let loose upon it. The result was a period of virtually famine scarcity which could only lead to a rise of prices. Increase of credit facilities under such conditions was practically inevitable; the banks could not be expected to display such superhuman wisdom and courage as to refuse credit to customers who were making money hand over fist. It is interesting, however, to note that in the half-yearly balance sheets at June and December 1920 the cash percentage of the Clearing Banks fell for the first time from the very high level it had maintained throughout the War to something like normal pre-war figures, but never lower. It cannot, therefore, be maintained that the inflation was due to excessive credit facilities granted by the banks.

Causes of post-war inflation.

Reconstruction.

To return to the history of post-war financial reconstruction, reference has already been made to the Cunliffe Committee's

first report of August 1918,[1] in which they discussed the future of the currency note issue and recommended that, with a view to their gradual reduction during the reconstruction period, the actual maximum of the fiduciary circulation in any year should become the legal maximum for the following year. In their final report, published in December 1919, they reaffirmed this proposal, and the government immediately announced their intention to adopt it. There were one or two periods of difficulty during 1920, in one of which the government resorted to the rather doubtful expedient of omitting from the total some seven millions of notes of the early issues which had been 'called in but not yet cancelled', for the obvious reason that they were still in the hands of the public, but apart from this the fiduciary issue, i.e. the amount uncovered by gold or bank notes, was kept below the maximum by the addition of further bank notes to the currency note reserve. In April 1921 a sum of three million pounds in silver coin was added to the currency note reserve, and this was gradually increased until it reached seven millions. During 1921 and 1922 the issue was substantially reduced, and after 1923 it maintained a fairly level figure about £290,000,000. More than once expectations were aroused that the government would deal with the whole question of the currency note issue, probably incorporating it in some way with the existing Bank of England note issue, but nothing was done in this direction till 1928. The reason probably was that any such step must be preceded by a decision on the question of the return to the gold standard.[2]

Currency notes.

A word must be said as to the history of the Bank of England note issue, especially during the post-war period. From Table X it will be seen that the issue only increased very slowly during the early years of the War, but from 1917 the circulation began to increase more rapidly till, by the end of 1918, it was more than double the pre-war figures. After

[1] First Interim Report of the Committee on Currency and Foreign Exchanges after the War 1918, Cd. 9182.

[2] See Report of the Committee on the Currency and Bank of England note issues 5 February 1926, Cmd. 2393.

the War the rise became still more marked, especially in 1920, when the government practically compelled the other banks to hand over to the Bank of England the bulk of the gold which they had been holding before and during the War, which was said to amount to about forty million pounds. From August 1919 the government began to add Bank of England notes to the coin and bullion held against the currency note issue, so that in any calculation of the total note currency of the country this amount must be deducted to prevent duplication. In 1925 this amount was increased by returning to the Bank the whole of the gold held in the currency note reserve (but not the silver), replacing it entirely by notes, and it is interesting to show here the effect on the total issues of Bank of England and currency notes as regards the real amount of gold (and silver) cover held against them in all.

Total note issues.

TOTAL BANK OF ENGLAND AND CURRENCY NOTE ISSUES, as at *August 5, 1925*.

Bank of England Notes:			
Total Issue	£182,404,875		
Less held in Banking Department	36,085,250		
Circulation		£146,319,625	
Gold held against total issue			£162,654,875
Less Notes in Banking Department			36,085,250
Net Gold Cover			126,569,625
Currency Notes:			
Total Issue	£305,484,000		
Less Bank Notes	56,250,000		
		£249,234,000	
Silver held against Currency Notes			£7,000,000
Total Circulation and Cover		£395,553,625	£133,569,625

The Total Cover is therefore 33·8 per cent. of the Total Circulation.

The chief result of the increased issue of Bank of England notes was the rise of the percentage of gold held against the notes. The 'authorized issue' of notes against securities being still fixed under the 1844 Act (though raised to 19¾ million pounds, as already explained in Chapter VIII), every additional note issued meant so much more gold, so that with a total issue which amounted on 5 August 1925 to £182,404,875 the gold cover was no less than 89 per cent. This, of course, would have been preposterous were it not for the parallel issue of currency notes which was secured only by bank notes and a little silver. The real position of the two issues should therefore be combined as shown in the table above.

From this table it appears that the percentage of bullion held against the total net circulation was just about the same as in pre-war days, when the circulation was about thirty million pounds and the gold cover (excluding that of the notes in the Banking Department) about ten millions or 33 per cent. net cover for the actual circulation.

The gold standard.

Every one, from the Cunliffe Committee downwards, was agreed that the resumption of an effective gold standard was the one thing to aim for at the earliest possible moment after the War. But, before discussing the steps which were taken with that end in view, it must first be made quite clear exactly what happened to the gold standard during the War. As a matter of fact, there was never throughout the whole period of the War any suspension of gold payments. Bank of England notes continued to be payable in gold as before, and the currency notes were also specifically convertible into gold throughout the whole period of their existence. As no one seemed to be aware of the fact, and most people refused to believe it, it may be well to quote here the actual words of the Currency and Bank Notes Act, August 6, 1914, Section I (3): 'The holder of a currency note shall be entitled to obtain on demand, during office hours at the Bank of England, payment for the note at its face value in *gold* coin which is for the time being legal tender in the United Kingdom.'

Gold exports.

The method by which the government secured in effect a complete embargo on the use of gold was very ingenious. The only real use of gold is to export it, and what they did was simply to refuse to include shipments of gold under the government's emergency scheme for war insurance of cargoes. As the risk of loss was substantial, this practically involved the prohibition of export and was completely effective. For the rest the prohibition of the melting down of gold coinage was sufficient in most cases to prevent any attempt to realize the enhanced bullion value of the sovereign, and gold virtually disappeared from circulation.

World's gold supply.

In the meantime the position with regard to the world's gold supply during the War had provided the most vivid illustration in history of the effect of a rise of prices upon the cost of production, and therefore upon the output of gold. As will be seen from the revised statistics in Table I, even before the War the world's production of gold had been distinctly checked, but as the War went on and prices rose, the effect upon the gold production became more serious. This reduction was due mainly to the high cost of production both in labour and materials of all kinds, and the shortage of labour and explosives resulting from the War. In 1918 some of the mines had already closed down; in practically all cases the output had been reduced, and it was stated that if conditions did not improve other mines would have to be closed, while the output from low-grade ores would be still further reduced. In September 1918 the question was remitted to a special committee, whose Report[1] definitely negatived the suggestion of a subsidy to assist the producers to maintain their production.

With the coming of the Armistice the question of course dropped out of sight, but early in 1919 an entirely new situation developed. As the result of the reopening of the world's trade the foreign exchanges began to show the effect of the

[1] Report of the Committee on the Gold Production of the British Empire, November 29, 1918.

huge demand for goods, especially by the countries which had been blockaded during the War. Our own rates of exchange had been protected or 'pegged', as it was called, by the system under which the American Dollar Securities Committee used these securities in foreign countries to purchase exchange at a fixed price. This was essential as a war measure, because the government themselves were the greatest purchasers abroad and would have suffered most by the rise of the exchange. But when the War was over the government could not be expected to maintain that system for the benefit of private traders, and in March 1919 the exchanges were 'unpegged'. But the immediate effect would have been an outflow of gold, and to prevent this it became necessary to control the export of gold. This was done by an Order in Council in April 1919, which forbade the export of gold except under licence from the Treasury. Thus it was not actually till after the War was over that there was technically any suspension of the gold standard.

American exchanges.

The system of export licences merely gave the Treasury and the Bank of England control over gold movements which would have been inevitable in any case. The gold-producing countries naturally wanted to send their gold where it would command the best price. If they sent it to England it was only worth £3 17*s.* 10½*d.* per oz. If they sent it to New York its value was the actual rate of exchange, and as the New York rate soon began to soar above par (the actual quoted rate being in dollars, was, of course, falling) the South African producers would simply have been compelled to find some means of shipping the gold direct to New York. Accepting the inevitable, therefore, the Treasury, practically as a matter of course, granted licences for re-export from England, so that the gold followed the normal course of trade and merely passed through London. The result was, of course, that gold flowed freely to the United States and to such an extent that it very soon began to cause considerable embarrassment to the authorities there. In April 1922 it was estimated[1] that the gold held in the

Gold export licences.

[1] Commerce and Finance, New York, 26 April 1922.

United States Central Banks amounted to 3,657 million dollars, or nearly 45 per cent. of the total holdings of the world's banks, so far as known.

From the summer of 1919 the state of the foreign exchanges became the main problem in financial circles, but before going on to deal with that, the history of the price of silver must be considered. Nothing has been said in previous chapters about the movements of silver prices during the War because, remarkable as these movements were, they were completely eclipsed by what happened after the War. It will be more convenient therefore to deal with the whole question here.

Silver

The disappearance of gold from circulation at the very outset of the War naturally produced an increased demand for silver currency which it was quite impossible to meet, and for a time postal orders had to be used. The appearance of the currency notes soon removed this difficulty, but during the early years of the War practically every country indulged in enormous issues of silver, partly because of the increase of actual currency requirements, but also no doubt in certain countries because of hoarding of silver, gold being no longer obtainable for that purpose. The rise of prices, however, and consequent increased cost of production, affected the world's supply of silver even more quickly than that of gold, the deficiency being principally in Mexico, owing to the politically disturbed state of the country, and from about the end of 1915 the price of silver began to rise rapidly. By September 1917 it had reached 55*d.*, which was near enough to the standard price of 62*d.* to make it necessary for the governments chiefly concerned to take action in the matter. The U.S.A., being among the largest producers of silver, were the first to do so, and in September 1917 they prohibited the export of silver except under licence. They held enormous stocks of silver dollars coined before 1893 under the Bland and Sherman Acts, and under the Pittman Act of April 23, 1918, they agreed to sell to the Allied Governments up to 350 millions of these dollars at a price of 101½ cents per oz.

during the war.

of fine silver. This was fully taken advantage of, most of the silver going to India, and in this way the price of silver was effectively controlled at about $1 per oz. throughout the War. At the same time France was able to fall back on her stocks of 5-franc pieces coined before 1873, and by these means the situation was saved during the War.

After the War and the unpegging of the American exchange in April 1919 the American control of the price of silver also lapsed in the following month, and, as the supply of silver comes largely from America, its price immediately began to soar with the American exchange, till in February 1920 it touched the record price of 89½*d.* per oz. This of course brought to a head the trouble which had been brewing in India throughout the War with regard to their currency and exchange system, which was based on the valuation of the rupee at 1*s.* 4*d.*, equivalent to a silver price of about 43*d.* per oz. From August 1917 the rate of exchange had been gradually raised to 1*s.* 6*d.*, at which it remained till May 1919, when it began to rise again with the removal of control and the rise of silver. In that month the Government of India appointed another Committee whose Report, dated December 22, 1919. is an invaluable compendium of information on the silver position. Their remedy was to raise the rupee to its old value of 2*s.*, but before this could be put into effect the market value had already gone above that figure, and in February 1920 it actually went to 2*s.* 9½*d.*

Post war movements.

At the same time the rise in the price of silver was having a serious effect on our own position with regard to silver coinage, and in March 1920 the government, panic-stricken at the cost of maintaining the silver currency, which, even at its pre-war standard of 37/40ths fine, was now worth far more than its face value, adopted the extreme measure of cutting the standard to 50 per cent. By the time the Act was passed, however (March 31, 1920), the danger was past. The abnormal price of silver produced its natural remedy. Continental countries began to sell their silver currency and silver plate

Silver coinage.

at its bullion value, with the result, of course, that their silver currency disappeared, but that was easily replaced by the floods of paper money which were already beginning to pour from the printing presses. At the same time the world's silver output, especially from Mexico, began to recover as the result of the high price, while silver-using countries such as China reduced their consumption, with the result that by June 1920 the price had fallen to 44*d.* and the repurchase clause of the Pittman Act in America came into force. It appeared, however, that this clause only applied to 'domestic' silver, so that for a time there was the curious phenomenon of two silver prices in the United States. By the end of 1920 the reaction of the deflation slump in Europe was having its effect on the trade position in India. Her favourable balance of trade, due to the enormous prices of her chief exports, cotton, jute, tea, &c., was rapidly disappearing, with the inevitable effect on her demand for silver, and the rupee exchange fell again to 2*s.* At that point the government would willingly have enforced their new price of the rupee at 2*s.*, but once more economic conditions were too much for them, and the market value of silver, which early in 1921 had fallen to $31\frac{7}{8}$*d.*, inevitably carried the rupee down with it to less than the old value of 1*s.* 4*d.* This produced additional trouble in India's foreign trade, for many Indian importers now fell back on the government proposal that the rupee was to be worth 2*s.*, and demanded that that rate should be made effective in payment of their foreign debts. From 1921 silver fluctuated from about 30 to 36*d.* carrying the rupee up and down with it. Latterly, still another government Committee was appointed which in August 1926 reported in favour of the adoption of a new ratio of 1*s.* 6*d.* and recommended certain other important alterations in the Indian currency and banking system.[1]

Effect in India.

By the autumn of 1919 the position with regard to the foreign exchanges was becoming so serious as to overshadow every other question. The sterling exchange in New York

[1] Report of Royal Commission on Indian Currency and Finance, C. 2687.

fell almost steadily till in February 1920 it touched $3.18. In that month the Council of the League of Nations, meeting in London, decided 'to convene an International Conference with a view to studying the financial crisis, and to look for the means of remedying it and of mitigating the dangerous consequences arising from it', and the Conference ultimately met in Brussels on September 24, 1920. In the meantime the dollar exchange, after recovering to some extent throughout the summer, relapsed again in the autumn, though not quite to the lowest point of February.

Brussels Conference.

At the Brussels Conference a great deal was heard of a supposed new theory of the foreign exchanges associated with the name of Professor Gustav Cassel, and which came to be popularly known as the 'Purchasing Power Parity' theory. Though new to the man in the street it was, however, in no sense a new theory, but it attracted so much attention and proved for some time afterwards so important a factor in the view taken by many financial authorities, that it is necessary to treat it rather fully. In effect it was not a theory of the foreign exchanges in the ordinary sense of the word. The rate of exchange in pre-war days meant the relative value of the standard gold coinages of any two countries, and it was based on the relative weight of pure gold contained in the two coins. This was the Mint par of exchange, and round that point the actual rate of exchange fluctuated within the limits of the gold points fixed by the cost of sending gold from one country to the other. During the War and afterwards, however, the actual currency of most countries had become entirely divorced from gold, and the essence of the P. P. P. theory was simply that when there is no rate of exchange in this sense, because neither currency possesses any intrinsic value at all, the only possible substitute for a rate of exchange is to compare the purchasing power of the two currencies each in its own country, and the actual rate of exchange should theoretically approximate to this purchasing power 'parity'; or, to put it in another way, the relative value

Cassel's theory.

of two paper currencies. both possessing no intrinsic value at all, can only be estimated by comparing their relative purchasing power through some method of index numbers.

Reduced to such a simple form the theory is of course axiomatic and really meant nothing at all, but it led to a good deal of misunderstanding in popular acceptance which in the writer's view was largely due to the misuse of the word 'parity'. The man in the street naturally thought that purchasing power '*parity*' meant something the same as the old idea of Mint *par* of exchange, namely, a basic point, fixed according to some definite fact, round which the actual rate of exchange should vary. But the purchasing power parity was not a par at all in that sense; it was merely a relation or proportion between two movable facts represented by the index numbers of each country, both of which were constantly changing, without any basic point or necessary relation between the two. The popular misunderstanding of the theory may perhaps be illustrated by the common idea that in order to get the sterling exchange back to par ($4.86) what was needed was to get the general level of prices in this country down to the same level as in America. That, however, was entirely wrong, because the relative purchasing power of a sovereign in England and $4.86 in New York was never anything like the same before the War when the exchange was at par. The correct application of the theory should have been that if prices in London had returned to exactly the same percentage *above 1914 prices* as that shown by corresponding index numbers in New York, then the conditions would be ripe for a return to the pre-war par of $4.86.

Purchasing power parity.

It was obvious, however, that even in this corrected form the theory would not hold good if local conditions in either country, apart from monetary conditions, produced changes in the price of a sufficient number of articles to affect the general index number. In America, for example, the higher level of prices than in England before the War was generally attributed in large measure to the Tariff policy, and the intro-

duction of the new Fordney tariff in 1922 would presumably have the effect of raising prices again. Further, in considering the movement of prices in each country it was necessary to differentiate between those commodities which were mainly produced and consumed at home, and others which were the subject-matter of foreign trade and were therefore more liable to be affected by world conditions. Again, there was the question of the reliability of the index numbers as a true indication of the general level of prices. Thus, Professor Cassel himself pointed out that if one particular index number were taken for American prices, the actual movement of the exchange corresponded fairly well with the theory, but that if another series of index numbers was taken the correspondence was much less obvious. Finally, the theory takes no account of one very important factor in the balance of indebtedness between different countries which very seriously affects the rate of exchange, namely, the movement of credit between the two countries, and the willingness of one to lend to the other. During the whole of the post-war period this was a most important factor in the sterling exchange, for the U.S. were lending large sums to most European countries, not only in the form of more or less permanent loans, but also in the more fluid form of money in the money market sense, sent to London for employment.

Difficulties.

In view of all these disturbing conditions it is not surprising that an attempt to prove the truth of the P. P. P. theory by working out the course of prices and of the exchanges, say between London and New York, did not establish a very close relation between the actual and theoretical rates of exchange. Thus, taking the whole period from March 1919 till we returned to the gold standard in 1925, there were considerable periods when the theoretical and the actual exchanges were moving more or less in the same direction, but in many cases there was a wide gap between them.

The facts.

The movements of our Balance of Trade during the convulsion of 1919–21 reflected the abnormal conditions of the

Balance of trade.

times. Exports were the first to recover, the rise being very rapid from January 1919. Increased imports soon followed, however, but the apparent excess of imports fell to very small figures, especially during the early months of deflation, for imports were the first to be hit in January 1920, while the peak of the exports was not reached till July. The fall of both during the deflation period was catastrophic, but particularly the exports, which in June 1921 were down almost to the average of 1918. That, however, was the lowest point, and from the autumn of 1921 the exports were remarkably steady at a level well above pre-war figures. As imports showed a more marked recovery the apparent excess of imports was again rising in 1924 and 1925. (See Table XVII.)

All these are of course value figures, and it is very interesting to compare them with the estimates of volume of exports and imports given in Table XVIII. If the value figures are plotted against the volume, it will be found that the volume of imports was fairly well maintained during the War, but fell considerably short of pre-war figures during the post-war boom. During the deflation period, however, it never fell so low as it had been during the War, and by 1924 it had recovered to a little above the post-war figures. The volume of exports showed larger fluctuations, the fall during the War being a little more marked than that of the imports, and, rather strangely, the recovery came in 1919 instead of 1920. After 1921 the volume of exports recovered much more rapidly than either the imports or the export values and substantially exceeded pre-war figures in 1923, but the two subsequent years again showed a considerable drop.

Invisible exports and imports.

The effect of the post-war conditions on our Invisible Exports and Imports is exceedingly difficult to estimate, but since the War the Board of Trade have periodically undertaken the task of estimating our real Balance of Indebtedness, with results which are embodied so far as possible in the following table which is revised and continued in Table XIX in the Appendix.

BALANCE OF TRADE. Visible and Invisible

(From the *Board of Trade Journal*, 27th Jan. 1927—millions of £'s)

	1907	1910	1913	1920	1922	1923	1924	1925	1926
Excess of 'Visible' Imports . .	142	159	158	343	171	195	324	384	477
Nett National Shipping Income[1] .	85	90	94	340	110	133	140	124	120
Nett Income from Overseas Investments[2] . .	160	187	210	200	175	175	192	239	270
Commissions .	25	25	25	40	30	30	60	60	60
Other Services .	10	10	10	15	10	10	15	15	15
Total 'Invisible' Exports . .	280	312	339	595	325	348	410	438	465
Nett Balance due to U.K. . .	138	153	181	252	154	153	86	54	12
New Overseas Issues . . .	91	207	198	60	135	136	134	88	112

They did not attempt to cover the War period, but the comparison between pre-war and post-war is very interesting. 1920, of course, showed record figures in many respects but subsequent years showed a decreasing net balance of indebtedness to the United Kingdom which reached its lowest point in 1926. Nevertheless, our new loans overseas maintained a respectable figure throughout the deflation period.

The problem of the exchanges would have been difficult enough if it had depended only on the balance of trade in actual commodities and services between the various countries, but to this were quickly added two additional factors closely connected with each other, namely, Reparations and Inter-

[1] Including disbursements of foreign ships in British ports.

[2] Less excess of government payments abroad.

Allied Debts on the one hand, and the inability of most of the belligerents to balance their budgets in the early years after the War, with the consequent necessity of further issues of paper money. It is impossible within the limits of a text-book to give even a summary of the long and complicated negotiations which proved necessary before a commencement could be made with the clearing up of the debt position, but the case of Germany may be taken as an illustration of some of the effects of the attempt to enforce payment of reparations. The popular outcry in every country that 'Germany must pay', was almost irresistible, but it was equally obvious that under post-war conditions Germany not only could not begin to pay reparations for some time after the War, but could not even pay her way through the period of reconstruction without financial assistance from her late enemies. But human nature was too strong for the economists, and under the Treaty of Peace it was provided that Germany must forthwith begin making payment of reparations, while it also became clear that no financial assistance could be expected at that stage either from America or England. The result was a foregone conclusion. In her crippled condition after the War, and especially with the loss of Alsace-Lorraine, Germany could not even make ends meet on her internal budget, let alone pay reparations, except by the fatal expedient of further issues of paper money. It took nearly five years to work out that experience to its logical conclusion, but in January 1924 the mark stood at 21 billions to the pound sterling, at which point even nominal quotations ceased to be worth recording. Thus the old classic case of the French assignats, and even the fate of the Russian and Austrian war currencies, which had hitherto been the awful examples of currency depreciation, were completely eclipsed by the case of Germany, which must surely remain the record for the future, for depreciation could go no farther. After many futile attempts, the Dawes Agreement was at last brought about with American assistance in the autumn of 1924, and Germany was placed

Reparations.

German currency.

in a position to begin the slow and painful process of recuperation.

In the meantime England alone of the European belligerents had been able to face that process on her own resources. The very first post-war Budget made heavy provision for the extinction of debt, and in the seven post-war years England paid off nearly 700 million pounds. As already mentioned, the Victory Loan of July 1919 was the beginning of the conversion of the Floating Debt, and by the end of 1922 the Treasury Bills outstanding had been reduced to about 500 millions. The agreement concluded with the U.S. in February 1923 will go down to history more as evidence of England's determination to honour her obligations than of the financial wisdom of the creditors who exacted full payment from England of the loans made by America to the other Allies on England's joint responsibility. England, of course, fully realized the value of such a demonstration in the maintenance of her future credit, but the settlement with America was also an essential preliminary to the rectification of the sterling exchange and the resumption of the gold standard, upon which the efforts of the financial authorities were next centred.

England's debts.

In the early months of 1923 the American Exchange had made a marked recovery, having almost touched $4.70, but the end of the year saw another relapse in spite of the raising of the Bank Rate to 4 per cent. in July. Opinion still clung to the view that the only hope of success lay in the nearer approach of the level of prices in England to that in America, either by lowering the former or raising the latter, as was hoped might be the effect of the great influx of gold to the U.S. In fact the chief importance of the P. P. P. theory lay in the extent to which it was used as an argument by the supporters of the Dear Money policy for bringing down prices in England. In this form it proved a very ready weapon to those whose policy throughout the post-war period was that the credit system in this country must be regulated with a view to the state of the foreign exchanges rather than to the effects of the

Dollar exchange.

policy on trade conditions at home. This naturally led to the development of an opposite school who maintained that the recovery of industry in this country was being sacrificed to the exigencies of foreign financial policy and that the restriction of credit was depressing industry by keeping prices down. In March 1925 the Bank Rate was raised to 5 per cent. By that time the exchange had recovered to $4.76 and the authorities apparently came to the conclusion that the time was ripe for taking the final step and formally returning to the gold standard.

Return to gold standard.

The methods by which this was effected were as follows:— In his Budget speech on April 28, 1925, the Chancellor of the Exchequer announced that the prohibition of the export of gold would not be renewed after December 31, 1925, to which date it had originally been limited. At the same time the Bank of England was given a general licence to deliver gold for export against any form of legal tender as from the date of the Budget speech. By the Gold Standard Act, 1925 (passed on May 13), it was provided that the Bank of England should no longer be bound to pay its notes in legal tender coin, but that the notes themselves should still be legal tender as formerly. At the same time the obligation to pay currency notes in gold coin was also repealed, while by another clause the provision of the Coinage Act, 1870, authorizing any person to have gold bullion coined at the Mint was confined to the Bank of England alone. In place of these three provisions for the convertibility of bank notes, currency notes, and bullion into gold coin the Act provided that the Bank of England must sell gold bullion to any person in exchange for legal tender in bars of 400 oz. *fine* gold at the price of £3 17*s.* 10½*d.* per oz., of *standard* gold, i. e. 11/12ths fine, which is approximately £4 5*s.* 0*d.* per oz. fine.

The object of these provisions was presumably to prevent any attempt by the public to revert to the use of gold coins in actual circulation. Though constituting a fundamental revolution in our whole system of note issue the public accepted

them without a murmur, and the whole business of the return to the gold standard passed off without any difficulty, and without any sign of a serious gold drain. As a precaution, however, arrangements were made for substantial credits in New York in case there should have been any indication of such a drain, but these were never required.

Canada was already substantially on the gold standard, South Africa announced her intention of taking the same step on July 1; Australia and New Zealand made the change on the same day as England, while Holland and the Dutch East Indies also acted simultaneously with us. Austria, Czechoslovakia, Germany, Russia, Sweden, and Hungary had already, between 1922 and 1924, been restored to a position of either *de facto* or complete stabilization.

There remained three important countries in Europe which had not yet returned to the gold standard, namely France, Belgium, and Italy. Belgium was the first to act in October 1926 by introducing a new unit called the Belga of which 35 were equal to one pound sterling. The franc, however, was still retained for internal use as 5 francs to one Belga, so that in effect the new rate was 175 francs to a pound, against the pre-war inter-European rate of 25·22. Italy followed in December 1927 but they retained the old lire at the new rate of 92·46 to the pound. France was the last to stabilize in June 1928 with a new rate of 124·2 francs to the pound, roughly half way between Belgium and Italy. As a matter of fact France had already been *de facto* stabilized for about two years, for after the crisis of July 1926 when the franc touched 250 to the pound, the prompt action of the Poincaré Government quickly brought the exchange back to about 125, and the only question after that was whether it would be allowed to appreciate still further or whether, as was finally decided, France would take full advantage of the devaluation to that level. It only remains to add that Poland, Denmark, Norway, and Greece also returned to the gold standard in 1927 and 1928. The result of all this was that the only countries which had returned to the gold standard at

pre-war rates were England, Germany, Holland, Norway, Sweden, and Denmark. Switzerland of course never really went off the gold standard, while Spain in 1933 was still off gold.[1]

Looking back now over this whole period of post-war stabilization it is necessary to consider in the light of subsequent events whether the levels chosen for stabilization were justified. The outstanding examples of course are ourselves and France. Did England make a mistake in going back to the gold standard in 1925 at the pre-war rate, and did France on the other hand devaluate too much when she stabilized at 124·21 in 1928? The only means of getting an approximate answer is by examining the facts in view of the purchasing power parity theory, and these will be found in a monthly record of relative prices in the U.K. and U.S.A. and the rate of exchange from the beginning of 1920. One interesting fact emerges from this. During the winter of 1922–3 our prices were actually back to par with U.S. prices, but presumably it was out of the question then for us to return to the gold standard because nothing had been done to settle the question of reparations. The German mark was just at the beginning of its ultimate debacle and practically nothing had been done in any country (except Austria and Russia) towards stabilization. When we did actually return to the gold standard in April 1925 our price level was still above that of the U.S. but from June onwards this was corrected.

As to France there was very little doubt at the time that the stabilization rate could have been made a good deal higher than it was; in fact during the latter period of *de facto* stabilization the chief difficulty of the authorities was to prevent the franc appreciating. The course of events after 1928 seems to show clearly that France gained very substantially by the low rate, especially compared with the high sterling rate. There is very little doubt that the position thus created had a good deal to

[1] See table of the Stabilization of Foreign Currencies in *The Economist*, July 14, 1928, p. 59.

do with England's difficulties which resulted in her being driven off the gold standard in September 1931.

The passing of the Currency and Bank Notes Act, 1928, and the issue by the Bank of England of the new £1 and 10*s.* notes on November 22, 1928, marked the penultimate stage in post-war financial reconstruction. The Act was in the form of an amendment of the previous acts controlling the Bank of England, both before and after 1844. It authorized the Bank to issue bank notes for £1 and 10*s.*, and its most important provisions dealt with the limitation of issue and the security to be held against the notes.

The Fiduciary Note Issue, i.e. the amount of notes which the Bank may issue in excess of the amount of gold coin and gold bullion for the time being in the Issue Department, is limited to £260 millions, and this includes the old 'Authorized Issue' under the 1844 Act, which, as already described, had been raised to £19¾ millions, in 1923. The whole of this £260 millions is to be covered by securities, but these may include silver coin to an amount not exceeding £5½ millions. This was approximately the amount of silver held in the Currency Note Reserve at the date of the transfer; and this provision takes the place of that in the 1844 Act under which one-fourth of the gold, or one-fifth of the total bullion reserve, could be held in silver.

In thus abandoning the old provision of the 1844 Act which allowed the use of silver as a substantial part of the bullion reserve, the authorities in the writer's opinion missed a great opportunity. It appears from the Bank of England's new Statistical Summary[1] that of the total note issue, which in 1932 averaged £359,495,000, as much as £263,607,000 or nearly 75 per cent. was in £1 and 10*s.* notes which are payable singly in silver, for the only provision in the new Act for the convertibility of these notes is that they are to be legal tender, and silver is legal tender up to £2. Apart from the right to convert a block of £17,000 of these notes into bar gold (which of course was suspended

[1] See Table V *b*.

when England went off the gold standard in September 1931) any possible desire of the public to convert these notes could only be met by paying them in silver. It would seem obvious therefore that the proper form of reserve to meet such a development would be silver coinage. It ought now to be realized that the true function of a bullion reserve against bank notes is simply to make conversion absolutely certain if it should be wanted. Under our system the fact that the Banking Department of the Bank of England held practically all its Reserve in the form of bank notes confused the issue, because obviously as long as we were on the gold standard the chief use of the Reserve was to meet the possibility of a foreign drain and that could only be met in gold. The notes held by the Banking Department must therefore be completely covered by gold. But so far as the notes actually in possession of the public are concerned silver fulfills all the requirements of a bullion reserve.

The fact that under the 1928 Act the Bank voluntarily gave away its right to hold part of the note cover in silver was of course in line with the policy which they had adopted for so many years of refusing to regard silver as bullion at all, and by so doing they debarred themselves from changing that policy in later years when the right to hold silver would have proved very useful. The decision may perhaps be regarded as to some extent the result of the action of the Government in 1920 in reducing the silver content of the currency to only 50 per cent. Such a debasement of the silver currency naturally intensified the tendency of banking authorities to refuse to regard silver currency as bullion.

With regard to the elasticity of the Fiduciary Note Issue the provisions of the Act are, first, that the amount may be *reduced* at any time by the Treasury on the request of the Bank 'for such period as may be determined by the Treasury after consultation with the Bank' and 'by such amount as may be so determined'. Thus the whole question of reduction of the notes is left to the Bank and the Treasury without any control by Parliament or otherwise.

As to any possible *increase* of the Fiduciary Issue the procedure is that if the Bank represents to the Treasury that it is expedient to increase the issue to some specified amount, the Treasury may authorize the Bank to do so for such period not exceeding six months as the Treasury think proper. Such authority may be renewed or varied from time to time in the same way, but not for more than two years in all, unless Parliament otherwise determines. In the meantime any Treasury Minute authorizing an increase must be laid forthwith before both Houses of Parliament.

At the same time the opportunity has been taken to amend certain provisions of the previous Bank legislation on points of detail as follows:

(1) The new notes may be issued at any place out of London without being made payable at that place, but wherever issued they are payable only at the head office of the Bank.

(2) The new notes are legal tender in Scotland and Northern Ireland as well as in England.

(3) The curious provision of the Bank Act, 1833, under which Bank of England notes were legal tender 'for all sums *above* £5', but not actually for £5, has been amended, and bank notes are now legal tender for the payment of any amount. This of course does not make a £5 note legal tender for a debt of less than £5, i.e. it does not confer on the debtor the right to demand change. Such a right of course has never existed.

(4) The Gold Standard Act, 1925, § 1 (i) relieved the Bank of England of its obligation to pay any of its notes in legal coin, which of course, meant gold. The new Act provides that, as long as this section remains in force, the new notes are to be legal tender by the Bank including the payment of their own bank notes. Apparently, therefore, the Bank of England, on being asked for payment of any of its larger notes can do so in the new £1 or 10*s*. notes, and the only legal tender coin which the holder can demand for these notes is silver. This is of course only the logical consequence of the 1925 Act, which

abolished the convertibility of bank notes into gold, below the limit of 400 oz. fine gold or approximately £1,700.

Holders of bank notes of the larger denominations are also entitled to demand the new notes in change.

(5) The new notes are to be valid payment of wages, thus repealing the former provision of the Truck Act, 1831, to the contrary.

The following is the first issue of the Bank Return in its new form, giving effect to the necessary changes:

Weekly Return of the Bank of England for week ended 28th November, 1928.

ISSUE DEPARTMENT

Notes issued:	£		£
In circulation	367,001,148	Government debt	11,015,100
In banking debt.	52,087,797	Other government securities	233,568,550
		Other securities	10,176,193
		Silver coin	5,240,157
		Amount of fiduciary issue	260,000,000
		Gold coin and bullion	159,088,945
	419,088,945		419,088,945

BANKING DEPARTMENT

	£		£
Proprietor's capital	14,553,000	Government securities	52,180,327
Rest	3,254,001	Other securities	
Public deposits	21,452,051	Discounts & advances £13,586,293	
Other deposits:		Securities £20,214,855	
Bankers £62,379,409			33,801,148
Other accounts £37,185,203			
	99,564,612	Notes	52,087,797
7 day &c., bills	2,649	Gold & silver coin	757,041
	138,826,313		138,826,313

It will be noticed that in addition to the changes affecting the Issue Department the opportunity has been taken to make some changes in the Banking Department also. On comparing the new form with that given in Table VII in the Appendix, it will be seen that the 'Other Deposits' have been split into 'Bankers' and 'Other Accounts', while the 'Other Securities' have also been divided into 'Discounts and Advances' and 'Securities'.

The figure of £260 millions for the Fiduciary Issue was just a little less than the maximum for the year 1928 under the Cunliffe Committee's rule. On August 3, 1927, the Currency Note Issue was £300,885,000 less £56,250,000 gold and notes, making the Fiduciary Issue £244,635,000 which therefore became the maximum for 1928. Adding to this the Authorized Issue of £19,750,000 the total was £264,385,000.

It will be convenient to refer here to the experience of the years immediately following the passing of this Act in order to see how the new elasticity of the Fiduciary Issue has worked out in practice. The first point to be noted is that the fixing of the Fiduciary Issue at £260 millions which as it turned out was rather a high figure, produced perhaps accidentally a result which the public have never realized. During the next three years both the Total Note Issue and the actual Circulation on the whole declined. Now the true test of the strength of the note cover is the percentage of gold held by the Bank against the notes actually in the hands of the public, for the notes held by the Banking Department ought really to be regarded as covered by 100 per cent. gold and should be deducted both from the total note issue and from the total gold held against the notes. On that basis the true percentage of what may be called the Note Gold to the actual Circulation can be followed week by week and it works out in a very interesting way; the smaller the Circulation the smaller the percentage of Note Gold. This is best explained by an actual illustration of two contrasted dates as shown on the following page:—

	Dec. 26, 1928	*Feb. 17, 1932*
Total Issue	£413,784	£395,766
In Banking Dept.	25 541	50,884
Circulation	388.243	344,882
Total Gold	£153.784	£120,766[1]
In Banking Dept.	25,541	50,884
Note Gold	128,243	69.882
Per cent. on Circulation	33·0	20·3

A column has been added to Table X giving this percentage of the Note Gold to Circulation throughout the period since 1928 and the result is very striking. It appears that we are now working our note circulation on a much smaller percentage of gold cover than ever before, and incidentally very much smaller than any other country in the world, for many countries have by statute provided a figure of 40 per cent. as the necessary minimum of gold cover for their note issue.

The curious fact is that the public has never realized this tendency, which means that our people have accidentally been educated into adopting a policy of gradual reduction of gold cover; this is the very best thing that we could do, and has set an example which the whole world would do well to follow. Thus England has (perhaps unintentionally) led the way in what is one of the most important reforms of monetary practice that has developed since the War. Now that the use of gold for internal currency has practically been abolished in every country there is no longer any need to hold any substantial proportion of gold cover against internal currency. It is time now that the world faced the question, What is the purpose of a bullion reserve against a note issue? The only purpose it ever served was to ensure that if for any reason the public took it into their heads to distrust the note issue they could convert it into bullion. But the only reason why such distrust should ever arise was the danger of over-issue, because it was only an over-issue that could cause the value of the currency to decline as against

[1] Fiduciary Issue £275,000.

ullion, or in other words could send gold to a premium. All the ullion reserve that was ever necessary therefore was just enough o run off by conversion any accidental over issue, which it must e remembered could result from a sudden restriction of currency equirements, as well as from an actual increase of the issue.

But in modern times the whole situation has been changed y two facts, first that the note issue is now everywhere under trict government control, and if the Government can be rusted not to indulge in deliberate over issue there is no need or any large bullion reserve. Second, now that the public ave no right to convert their notes into gold but merely into ubsidiary coinage, the only reserve necessary is a reserve in hat subsidiary coinage and a great deal less than 40 per cent. vould be ample. Even the 20 per cent. which we still hold in old is higher than necessary and most of it could be held in ilver. If that seems shocking to English bankers who were rought up to believe that public confidence in the Bank of England note was due to the fact that it was merely the symbol f five golden sovereigns lying in the Bank of England to the rder of the holder of the note, they may be reminded that the Scotch £1 note has only been payable in silver since it was ntroduced, and it has circulated as freely and commanded quite s much confidence in Scotland as any note in the world.

But there remains the larger question of the effects of the ew elasticity of the note issue. Perhaps the best way to follow his is by referring to Diagram B on which the Bank Rate and he Proportion of the Bank's Reserve to its liabilities are shown. In the old days whenever the Proportion fell too low the Bank Rate was raised, but it will be seen that since 1928 the Proportion has fluctuated very violently and only in two periods has the Bank Rate been raised, namely, before the Wall Street crash and again in the crisis of 1931, while on many occasions the Proportion has been allowed to fall very low without any raising of the Bank Rate. Since September 1931 of course the position has been changed by the fact that, as we were off the gold standard, a gold drain against the wishes of the authorities was

impossible. But even before that it is evident that the authorities of the Bank had learned to take a much calmer view of such drains. This may of course have been due to the fact that the Reserve is now normally much larger than it was in the old days; but there is little doubt that it was also partly due to the fact of the power to expand the Fiduciary Issue.

Finally, it may be noted here that that power only had to be exercised once from 1928 to 1933, and that under circumstances of the most extraordinary character in September 1931 when England was driven off the gold standard.

The last stage of post-war reconstruction came in June 1929 with the revision of German Reparations under the Young Plan. This finally wiped out the astronomical figure of 132 milliards of Reichsmarks (£6,600 millions) which was fixed in 1921 as the total of Germany's obligation, limited the annuities payable to approximately 60 years, and reduced the amounts to figures which the experts believed could in fact be both paid and transferred by Germany, and which would finally approximate to the amounts payable by Germany's creditors to America.

But perhaps the most important part of the new plan was the establishment of the Bank for International Settlements which took the place of all the complicated arrangements under the Dawes Plan for the transfer of Germany's payments in marks into the foreign currencies necessary to pay her various creditors. Each annuity was to be paid by Germany to the B I.S., but instead of these shares being paid over forthwith to the creditors they were to lie in the B.I.S. till they became payable in turn to the United States. Thus all the cross payments between Germany, the Allies, and America were to be settled by the B.I S. after the manner of a Clearing House.

But the framers of the constitution of the B.I S. envisaged the development of much wider uses for the new International Clearing House. It was provided that any of the constituent Central Banks could deposit gold with the B.I.S. and use these deposits when required to meet foreign payments of any kind. The idea was gradually to dispense with international gold

movements; each country would keep an account with the B.I.S. and international payments would be made by a transfer from one account to another without any gold passing at all. The possibilities of such a scheme were immense but its development would obviously require time, if for one reason only because it required legislation in every country to empower the Central Bank to accept gold or funds lying to its credit in the B.I.S. as part of its Gold Reserve as if it were gold in its own safes.

The location of the B.I.S. was naturally a question of much heart burning, the problem of what would happen to the gold reserves in case of war being of course insoluble, but Basle in Switzerland was finally accepted as a compromise.

CHAPTER XVII

THE AFTERMATH OF THE WAR, 1929-31

The American Boom and Crash.—Fall of prices.—German difficulties.—England driven off the Gold Standard.—Causes of the fall of prices, alleged shortage of gold, credit facilities, currency.—Loss of confidence.

THE previous chapter brought the history of the post-war period down to the re-settlement of the Reparations question by the Young Plan in 1929 and the establishment of the Bank for International Settlements. It was hoped that this was to be the final stage of post-war reconstruction, but as a matter of fact it proved to be only the beginning of a period in which many things that had been done since the Armistice had to be undone again.

Looking back it is possible now to trace the beginning of the trouble to the New York Stock Exchange boom which reached its peak in 1928–9. After the world Deflation slump of 1921 the United States had made a very quick recovery. As the result of the War they were now a creditor country to a very large extent. Internally the country was very prosperous, and they were also establishing their hold on many markets outside of America. The Fordney Tariff of 1923 had raised still higher the tariff wall which protected their home markets, and as this largely prevented the payment of the world's debts to America in goods and services they had received enormous sums in gold, which made their gold reserves the largest of any country in the world. They of course realized that this huge gold holding was undesirable, apart altogether from the sheer physical cost of housing it, but as all their efforts to reduce it produced only a trifling effect their main anxiety was to prevent it resulting in an inflation of credit and rising prices, a policy to be stigmatized later on as that of 'sterilizing' the gold. They

did succeed to a considerable extent in preventing a rise of commodity prices, but it was not recognized till afterwards that their policy had entirely failed to prevent a rise of prices in another direction, namely on the Stock Exchange. Until 1928 the boom was kept within fairly reasonable dimensions, but in that year it began to be realized that it was going too far and all the efforts of the banking authorities in America to check it were unavailing. One result was that short loan money for employment on the Stock Exchange began to command very high rates, which not only attracted money from other uses in America to the Stock Exchange but very soon began to draw funds from abroad. This made it no longer profitable for America to go on lending money abroad, as they had been doing to a very large extent since the Armistice, and particularly it stopped America's loans to Germany.

The effect on the London money market was very serious. During 1928 the Bank of England had been able greatly to increase their gold holding, but in the last quarter of the year this became subject to a heavy foreign drain which necessitated the raising of the bank rate from $4\frac{1}{2}$ to $5\frac{1}{2}$ per cent. in February, 1929. But during the summer the flow of gold to America began again, and on October 2 the rate had to be raised further to $6\frac{1}{2}$ per cent. In the meantime the Hatry smash in September had given London a severe shock. The Wall Street boom had gone so far that almost any check on it was bound to produce the inevitable burst, but it matters little now what actually brought about the crash. The fact is that it came to a head about October 25, 1929, when the world entered on a period of falling prices which in its duration, if not in its rapidity, proved to be even greater than the Deflation slump of 1921. Stock Exchange prices of course led the way, but commodities followed, some much more quickly than others.

As time went on it became clear that this new fall of prices was something worse than the mere cyclical movement of prices through a fall to a natural recovery. In normal circumstances such a fall of prices would soon have produced an increase of

consumption which would again balance supply and demand. But by the early summer of 1931 it became obvious that in this case there was some deep-seated cause at work which was preventing the swing of the pendulum, and developments on the Continent soon began to indicate the centre of the trouble. Germany was particularly hard hit by the fall of prices because ever since the Dawes Plan of 1924 she had been struggling to pay Reparations and could only do so by developing her exports and creating a favourable balance. Until the Young Plan of 1929 it had been impossible for her to do so to any material extent and she was meeting her debt payments largely by fresh borrowing. With the fall of world prices during 1930 it became increasingly difficult for her to pay anything, and when the loans from America stopped it was obvious to those who were in touch with Germany that a complete breakdown could only be a matter of time. Germany of course did everything possible to maintain her balance by the most drastic economies and by emergency decrees restricting foreign trade, but all these measures proved entirely ineffectual and in May 1931 the situation was rapidly approaching a crisis.

In that month the Credit Anstalt, which is virtually the Austrian National Bank, had to suspend payment and the Bank of England immediately came to the rescue with a loan of £4 millions sterling. France would naturally have shared in this loan but at that time Germany and Austria had just sprung upon the world the proposed Customs Union between them, which the French authorities regarded with suspicion as a first step towards a political union. They therefore wished to make the abandonment of this scheme a condition of their sharing in the loan, and the Bank of England was left to take it up alone.

All this, however, was merely the signal to Germany's creditors to expect similar trouble there. This led to heavy withdrawals of foreign funds and early in June it was obvious that Germany was on the verge of bankruptcy. Fortunately, the Secretary of the U.S. Treasury, Mr. Andrew Mellon, was in Europe at the time and quickly realized the gravity of the

situation. After consultations in London and Berlin he got into direct communication with President Hoover on the then new Transatlantic telephone and made it clear to him that unless something was done immediately Germany's bankruptcy would involve the loss of all the loans by America to Germany still outstanding. The result was that on Saturday, June 20, 1931, there being no time to go through the usual process of diplomatic consultation with all the countries concerned, Hoover on his own authority announced a moratorium of one year for all the war debts due to America. This was received everywhere with acclamation and was quickly followed by a joint loan of $100 millions by America, England, France, and the B.I.S., to Germany. England and every other country except France immediately fell in with the Moratorium scheme, but France of course had most to lose by the cessation of all payments, because she was receiving a substantial net balance, and she therefore made certain difficulties about accepting the scheme. The consequent delay went far to destroy the psychological effect, and by the time France did finally agree (on conditions) it began to be doubted whether Germany was saved after all. Withdrawals of foreign funds continued and in July the failure of the North German Wool Company brought down the Darmstadter Bank and others were certain to be involved. The restrictions on foreign exchange, for example, made it impossible for the Deutsche Orient Bank, whose business was largely in Egypt and Turkey, to obtain funds from Germany and they also had to suspend payment. A Conference of representatives of the Powers most involved met hurriedly in London on July 21, but they were only able to suggest stopgap measures.

In the meantime, however, the trouble was rapidly extending and by the middle of July it began to be whispered about the world that even England was in danger, for it became known that English bankers had been making very large loans to Germany, which were now completely frozen, and it was reported that some of the larger Accepting Houses in London were seriously involved. On July 15 the Report of the Macmillan

Committee was published and showed that for some time back London had been receiving very large sums from various countries (especially France) on short loan terms, much of which had been lent largely to Germany either on longer terms or in short loans which had now become frozen. As the result of this London was owing a net balance of about £250 millions to foreign countries, and although the figures showed that the amount had actually been a good deal larger during 1930 the publication of this balance still due came as a surprise to our foreign creditors, and gave a severe shock to our credit abroad. The result was heavy withdrawals of gold from London, especially to France. This drew attention to the fact that in the flight from the franc, before France stabilized in 1928, many Frenchmen had placed large funds abroad for safety, and since 1928 circumstances had not been favourable for the repatriation of all this money, with the result that very large sums were still lying in London and New York.

The Bank Rate had fallen rapidly after the Wall Street crash from $6\frac{1}{2}$ to 3 per cent. in May 1930 and to $2\frac{1}{2}$ per cent. in May 1931 in the hope of countering the fall of prices by creating easy money conditions, but on July 23 it was raised again to $3\frac{1}{2}$ per cent. in the endeavour to meet the new drain of gold, and a week later it was raised again to $4\frac{1}{2}$ per cent. but without avail; in these two weeks the Bank lost over £30 millions of gold. On August 1 it was announced that the Bank had arranged a credit of £50 millions with France and America and at the same time the Fiduciary Issue was raised to £275 millions, though this was merely a precautionary measure to provide for the usual increase of circulation for the Bank Holiday. The effect, however, was probably to add to the feeling of uncertainty abroad and the withdrawals of gold continued.

On top of all this by an unfortunate concatenation of circumstances came the publication of two further government reports which it is now realized did incalculable harm. In March 1931 the Labour Government had appointed a Committee on National Expenditure known as the May Committee

and their report appeared on July 31. It painted a very gloomy picture of prospective budget deficits and stressed the need for drastic economies especially in the Unemployment Fund. This was quickly followed by an Interim Report of the Unemployment Committee which pointed out that the Unemployment Fund had drifted into a hopelessly unsound position. Ever since 1921 the unemployment position had been very serious and the fund had only been kept going by heavy annual borrowing; and as there was no hope of an early return of prosperity which would once more place the fund in a solvent position this accumulation of deficits could not go on. The annual deficit must therefore be faced out of the year's revenue, which of course only made the Budget position worse than ever.

It is clear now that if the authorities had wished deliberately to engineer the downfall of England's credit they could not have adopted any more certain method. Whether they realized that or not there can be no doubt that the politicians entirely failed to realize the gravity of the position; on the contrary they thought they saw in all these reports a chance to snatch a party advantage. Ever since the War the agitation for Protection had been growing in volume, but since the beginning of the depression it had become increasingly strong, and its chief protagonists now saw their chance to replace the Labour Government with a protectionist government and at the same time cut down expenditure on the social services. The result was that on these various reports they started a cry of economy (especially in the direction of cutting the unemployment allowances) and protection, and it seemed as if everything played into their hands. On August 24 *The Times* announced that the £50 millions credit from France and America was exhausted. The same day saw the announcement of the creation of the National Government, a coalition between the Conservatives and parts of the Liberal and Labour parties, including the Prime Minister. Further credits had to be raised but this time it was decided that it must be on the responsibility of the Government, not of the Bank of England as in the former case,

and a new credit of £80 millions was arranged by the Treasury from France and the U.S.A.

The next move was the introduction on September 10 of the Supplementary Budget in which the Chancellor of the Exchequer made great play with the danger of inflation and the terrors of England going off the gold standard, using the parallel of Germany to enforce the necessity of drastic economies, which included a 10 per cent. cut in the salaries of all the various services for which the Government are more or less responsible, including the teachers. The country accepted this as the only way to meet the painful necessity of balancing the Budget; but no sooner was this done than a new cry arose that it was not sufficient to balance the Budget; we must also restore the balance of trade. It was pointed out that the excess of visible imports, which had always been heavy, was no longer being balanced by the invisible exports, namely payments from our debtors and investments abroad, because world depression had made the foreigners unable to pay; and this argument was made the ground for a renewal of the cry for protection and a demand for a general election. The last incident in the whole business was perhaps the most regrettable of all. The introduction of wage cuts had of course caused a great deal of soreness, but on September 15 a small dispute on board one of the Fleet at Invergordon resulted in a refusal of duty which was immediately magnified into a mutiny in the Fleet. This created a tremendous impression abroad and was probably the last nail in the coffin of England's credit.

The last stage of the debacle may be very briefly described. Gold withdrawals continued, especially to Holland, where it appeared our authorities had not thought it necessary to peg the exchange as they had done in Paris and New York. In four days, September 16–19, the Bank of England lost £43 millions of gold, and it was estimated afterwards that the total withdrawals of gold from the Bank during the whole period of the crisis had amounted to £200 millions.

The crisis came to a head on September 19 with the first

Saturday opening of the Stock Exchange. Heavy sales from Amsterdam and from Wall Street caused a severe slump in quotations and in New York after our close things went still worse. It was known in inner circles at least that the second credit of £80 millions from France and America was exhausted, but it was only known to the authorities that an application for further credits had been practically refused. By this time the gold in the Bank of England was reduced to £130 millions, which happened to be exactly the amount of the two credits from France and America. That may have been merely a coincidence, but the fact remains that over the week-end the Cabinet decided to suspend the gold standard and the announcement appeared in the press on Monday, September 21. The necessary legislation was rushed through Parliament that day, the Bank Rate was raised to 6 per cent., and the Stock Exchange closed.

Before going on to deal with the effects of England's departure from the gold standard it is necessary to describe more fully the real causes which underlay the events that actually led up to it. The immediate cause was the loss of confidence in the Bank of England on the part of our foreign creditors because it was realized that our foreign debtors were no longer in a position to pay us; for while the unsatisfactory position of our internal budget no doubt contributed to the loss of confidence the major cause was the unfavourable balance of trade. That was due in the first place to the fact that our exports were falling off, which was attributed (largely on our own statements) to high costs of production and particularly wages, but the real cause of the disequilibrium was the failure of our invisible exports, especially the inability of our foreign debtors to make their usual payments of interest and the reduction of our income from services rendered abroad, especially shipping. But all these were directly due to the world economic depression resulting from the steady fall of prices; the real objective of the inquiry therefore is the causes of the fall of prices.

The first essential is to get this stage of the post-war fall of prices into its proper perspective with the previous stages. Diagram A which faces page 218 gives the history of prices during the War and the Deflation slump, continued to the end of 1922 in order to cover the lowest point of wholesale prices, which was actually in September of that year. Diagram B takes up the story from 1922 and continues the history of prices to date. The first thing to be noted is the marked absence of continuity in the fall. From the low point of 1922 there was on the whole a rise to January 1925 followed by a steady fall to a new low point in May 1926, then a six months' rise and another fall to April 1927. Then came a period of fully two years of comparatively steady prices till October 1929 when the great slump began; and the striking point is that in October 1929 the Board of Trade's Index Number of wholesale prices was 136·1 per cent. on 1913 against 154·3 in September 1922, a fall of only 18·2 points or less than 12 per cent. in seven years.

It may pertinently be asked what caused that long period of comparatively steady prices. Why did the slump of 1920–2 not continue until prices were back to pre-war level? The natural expectation at the time was that it would do so, but as time went on and the fall seemed to be definitely checked the general opinion swung round to the view that the new level of about one-third higher than pre-war had come to stay. Yet no one seemed to be able to explain why prices should remain above the pre-war level; on the contrary it was evident before 1929 that world supplies of all commodities had completely recovered from the War shortage and in many cases were much larger than they had ever been. In iron and steel for example, and all the industries depending on them, War equipment had been converted to civilian purposes, and the world's potential output was greatly increased. At the same time rationalization had resulted in cheaper production, if not always larger. In agriculture the advance of science and mechanization had done a great deal to increase the product and lower the cost. Even

in cotton, where neither science nor mechanization could do much, the world's supplies in 1926, thanks to a huge American crop, established a new world's record, and in that case prices did fall for a time to pre-war levels, but the immediate result was an enormous increase of consumption, especially in America. It was this fact that suggested to the writer an explanation of the period of steady prices up to 1929. The boom in the United States was the expression of a great wave of apparent prosperity involving enormous consumption. Many people were uneasy even at the time that this prosperity was fictitious, that consumption was being swollen by the instalment system, and that exports, especially to European markets, were being forced by loans; but there is no doubt that the subsequent collapse of consumption began in America, though it spread very quickly to the whole world.

A very popular argument at first was that the fall of prices was due to the very causes above mentioned, namely the enormous increase of production in many lines and the accumulation of huge stocks. But in one instance at least—cotton—this was definitely not the case; on the contrary, the bumper crop of 1926 had been entirely assimilated during the next two seasons, and in July 1929 the World's Carryover was reduced almost to normal pre-war figures. But after the crash the consumption, especially in America, fell off very rapidly, and every year afterwards saw a steady increase of the Carryover. What happened in the case of cotton was that reduced consumption, especially in America, caused stocks to accumulate. An examination of the varying degrees of the fall in prices of different commodities brought out the fact that the commodities which had fallen most rapidly were those in which America accounted for a large proportion of the world's total consumption, and this suggested that the fall of prices was primarily due to the American crash. As the result of the loss of Stock Exchange values, and in America all classes were involved in speculation, every one felt very hard up and reduced their consumption not only of luxuries, but also of

comparative necessaries. The resulting fall in wholesale prices owing to the restriction of demand soon spread throughout the world and produced a cumulative effect in reduced purchasing power everywhere, which again reacted on world prices. Thus the major cause of the fall of prices from 1929 onwards was the sudden restriction of demand beginning in America, in marked contrast to the previous period of artificial prosperity there.

But even if it be argued that the fall of prices after October 1929 was merely the natural but long delayed completion of the post-war slump, the question still arises why it lasted so long. The 1920 slump touched bottom in 1922 even in England, and much earlier in America. If there is anything in the idea of the trade cycle a slump ought to bring the natural recovery in its train, because the fall of prices promotes increased consumption and sets things moving upwards again. Why has that recovery been so long delayed in this case?

To take a number of smaller causes first, one reason was that the fall in wholesale prices was not sufficiently reflected in declining retail prices which would have tempted increased consumption. Just as during the War retail prices lagged behind wholesale on the upward sweep, so the fall of retail prices lagged behind the downward movement from 1920 onwards. The recovery of wholesale prices in 1924 was not paralleled by any similar movement in retail prices, so that the two came pretty close together again, but from 1924 till 1929 retail prices remained even steadier than wholesale prices, so that at the end of 1929 the gap between the two was substantial, and it has continued to widen practically ever since. This comparison of course must not be pressed too far. In the first place the commodities included in the two index numbers are not the same, and particularly the index of wholesale prices is dominated by raw materials. Again the retail index number, which is really an index of the cost of living of the working classes, contains items, such as rent, which are not in the wholesale index number at all. But the main reason for the

divergence is just the fact that one is wholesale and the other retail. Wholesale prices, especially of raw materials, are largely world prices, more or less subject to free competition. Retail prices on the other hand contain a very large element of wage costs both in production and distribution, and as wages had admittedly fallen slowly after the War these costs remained comparatively high and prevented the price of the finished goods from falling as rapidly as the raw material.

But there is a further factor which must be mentioned; owing on the one hand to the development of rationalization, which in most cases meant monopoly through a combine and price fixing, and on the other to increasing tariffs, retail prices had been prevented from falling as fast as they might have done in view of the reduced costs of raw materials. The fact is that the war-time psychology both of the manufacturers and the middlemen persisted too long. They had got into the habit of being able to charge high prices and they were loath to cut them down again; it was easier to do a restricted trade at high prices than a larger trade at cut prices. It was not only private traders who were resisting the downward movement of prices; all kinds of sheltered trades were following the same policy. The railway companies resisted every proposal to return to the pre-war standard passenger rate of a penny a mile, though latterly they were compelled to give all kinds of concessions in special daily rates, excursion tickets, and the like, when road competition began to make them feel the pressure of declining traffic. Shipping companies too through the various conferences or price-fixing arrangements kept their first-class passage rates far above pre-war levels, though they had to introduce other rates, e.g. the Cabin tariff ships and Tourist third traffic which soon took the bulk of the trade. The Government also adopted the same policy, for even in 1933 they had not returned to the pre-War penny postage, although it was admitted that the Post Office was making a profit more than sufficient to cover the difference. Thus instead of meeting hard times by cutting prices, the tendency of the producers

everywhere seemed to be to try to keep up prices artificially against the depression, e.g. the Brazilian Government's valorization scheme for coffee and the attempts of the Federal Farm Board in the United States and the Egyptian Government to maintain the prices of their crops. The only alternative seemed to be schemes to maintain prices by restricting production by agreement among the world's producers, and such schemes were attempted with varying success in Tin, Rubber, Copper, Tea, &c. Finally the growing tide of nationalism was interfering on every hand with free competition, e.g. by countries restricting passenger movement to their own ports and their own ships (and these generally had to be subsidized) and by piling up higher and higher tariffs on imports in the interest of national industries.

Unfortunately, however, instead of the Governments and the experts of the world devoting their attention to the remedies for these causes of the trouble, their attention was distracted by other theories as to the causes of the fall of prices, particularly monetary causes. In *The Fall of Prices*, which was written in the autumn of 1930, the writer discussed these theories so far as they had developed up till that date, but many things have happened since then which, though they do not affect the general conclusions, have made the position clearer. The foundation of the whole argument was that the world's gold supplies were not increasing fast enough to maintain the general level of world prices, in accordance with the Quantity Theory of Money, and that the existing supplies had become very badly distributed owing to the concentration of huge gold holdings in France and America where, especially in the latter case, they had been sterilized, so as to prevent their having the natural effect in a rise of prices. The argument was that this shortage of gold was merely continuing and intensifying the deflation policy which it was said had been applied to bring England back to the gold standard in 1925.

The first essential is to get a clear view of the facts on this question. Table I in the Appendix gives the history of the

world's production of gold, while Table XX shows the gold reserves to the central banks of the world since 1920 with the 1913 figures for comparison. A comparison of these two tables at once brings out one important point. The increase of gold reserves, which may be called the World's Visible gold supply, since 1913 is apparently almost equal to the total gold production of the world during that period, for between 1913 and 1932 the world's total estimated gold production was £1,576 millions, equivalent to about $7,500 millions at par, while from 1913 to 1932 the gold reserves of the central banks increased by about $7,000 millions. This is, on the face of it, extremely improbable, for we know that a large percentage of the world's annual gold production goes into industrial uses and into hoarding; before the War this used to be estimated at about one-third of the total. But an examination of Table XX immediately suggests one obvious explanation. In England alone the gold reserves in 1913 were only $170 millions; in 1920 they had apparently increased to $763 millions, and that figure has been roughly maintained ever since. But it is well known that that apparent change is entirely fictitious, the explanation being that during the War practically all the gold in currency in the country (which was estimated by the Cunliffe Committee at about £123 millions) had been drawn into the Bank of England. There is no doubt that a similar change has taken place in many other countries (e.g. Australia), for the whole tendency has been to concentrate each country's gold holdings as far as possible in the central bank, and this policy has been very effective. There are other interesting changes shown in Table XX, e.g. the enormous increase between 1913 and 1920 in the gold reserves of certain countries which were either actually neutral during the War, like Spain, Holland, and Switzerland, or were in a position to benefit by the War in the same way as neutrals, as in the case of the Argentine and Japan.

But from the present point of view the chief interest of Table XX is in the later years. The United States almost doubled their gold holding from 1913 to 1920, but the increase

continued steadily till 1924, and after a slight reduction to 1929 it piled up again, till at the end of 1932 they held about one-third of the world's total. But even more striking is the case of France whose gold reserves remained roughly at pre-war level till 1926 and then began to rise rapidly, till at the end of 1932 they had not much less than America, so that at that date France and America between them held about 61 per cent. of the world's total. But the curious fact is that while America and France were piling up these enormous totals the rest of the world had not begun to suffer any diminution till 1929, and since then their net loss has been a great deal less than the gain in the U.S.A. and France.

Since 1928, however, there have been striking changes in the details of some of these other countries. Germany, the Argentine, Japan, and Australia have lost heavily, while Brazil's gold reserves have been wiped out altogether; but Russia, Belgium, Switzerland, and Holland have made very heavy increases. Russia is of course entirely exceptional; she has merely been getting back a little of what she lost during and after the War, and is still far below pre-war figures. But the movement in the case of Belgium, Holland, and Switzerland is the result of England's going off the gold standard in 1931 and will be dealt with later. In the meantime the point is that the world's gold reserves as a whole have been increasing substantially all the time, and even omitting the U.S.A. and France there is no evidence at all from the figures that the rest of the world has suffered any material diminution of gold reserves. The truth is that since the War the world as a whole has been to some extent following England's policy of concentrating its gold supplies in the central banks, which of course is the proper place for them, because the right use of gold is not in circulation, but to serve as the foundation for the pyramid of credit which is the world's real supply of money.

That therefore raises the second form of the theory, that there was too little 'money' in the world in the sense that supplies of credit had been restricted in accordance with some

policy of deflation, and that this was the cause of the fall of prices. It is of course impossible to deal statistically with the facts for the whole world on this question, but some light may be thrown on the general question from the experience of this country. With our highly centralized banking system it is easy to get statistics of the volume of credit, because the volume of bank deposits, taken in conjunction with the Clearing House turnover, gives a good index of the supply of credit.

The facts for the U.K. will be found in Table IX which gives the monthly returns of the London Clearing Banks back to 1919, and the results from 1922 are shown in Diagram B. The evidence of this diagram as regards the volume of deposits is unmistakable. The low point following the Deflation slump was in March 1923, but from then till the end of 1925, allowing for seasonal fluctuations, the line was practically steady. In the first half of 1926 the usual seasonal dip was slightly exaggerated, but from then onwards till the beginning of 1929 there was a steady rise. The usual peak at the end of 1929 was definitely below normal and the spring dip in 1930 was very marked, but at the end of that year another new record was established. In 1931 as the result of the summer crisis there was a heavy drop in deposits practically straight through to February 1932, but then there began the most extraordinary increase of deposits that we have ever seen, and at the end of 1932 the total had climbed to a figure which put all previous records, even during the post-war inflation period, completely in the shade.

In order to show whether there was any relation between these movements of the deposits and the policy of dear or cheap money a line showing the bank rate has been added to Diagram B. In 1922 the bank rate fell to 3 per cent. and during that year the deposits were falling. In 1925, when the bank rate was raised for a time to 5 per cent. to facilitate our return to the gold standard, the only visible effect on the deposits was the flattening of the June and December peaks. In 1929, with the bank rate at 5 per cent. during most of the

year and for a short period at 6½ per cent. round the time of the Wall Street crash, again the only effect was a flattening of the June and December peaks. But in 1930, with the bank rate down to 3 per cent. again, deposits resumed their normal course till the crisis of 1931; but after that was over the bank rate was steadily reduced to 2 per cent., and the deposits as already stated soared to new records.

This extraordinary movement in 1932 has perhaps done more than anything else to prove the entire lack of connexion between cheap money and an increase of the deposits on the one hand and prices on the other. The line of the Board of Trade Index Number of Wholesale Prices is shown on Diagram B and it is quite obvious that there is no correlation between the wholesale prices and the volume of deposits. Apart from the short-lived rise in prices which followed England's departure from the gold standard in September 1931, wholesale prices have been falling steadily since October 1929. At the end of 1932 they were practically back to pre-war level and deposits were higher than they have ever been in history!

But it is possible to get from the banking statistics even more definite proof of this contention by examining the way in which the banks distribute their deposits among their various borrowing clients, as described in Chapter X; and in order to bring out the extraordinary development during 1932 these figures are shown in Diagram C. The main feature of this diagram is the change in the relative position of the three main avenues of employment for the bank's money, namely, Loans and Advances, Discounts, and Investments, and it will be seen at a glance that during the latter part of 1931, and still more markedly during 1932, the normal position has been completely reversed. The amount of Loans and Advances has fallen to an unprecedentedly low figure, while those of Discounts and Investments have risen almost exactly in proportion. The explanation is obvious. The banks prefer to use their money in Loans and Advances because they get a

better rate of interest on these, but since 1929 they have found it increasingly difficult to do so, because owing to the depression traders of all kinds have not been able to find profitable use for borrowed money. The fact is that cheap money is only one factor in good trade; the other is confidence, which in the long run rests on the hope of rising prices and potential profits; and, as will be seen later, the complete absence of that confidence has been the outstanding feature of the later stages of the depression.

But before going on to deal with that we must look at the Clearing House figures which are also shown quarterly on Diagram B. It will be seen that they correspond much more closely with the movement of wholesale prices. During the period from 1923 till March 1930 they were rising steadily on the whole with only the normal seasonal fluctuations, but from that date a heavy decline began which carried right through 1931 and was only partially recovered in 1932. To get the full effect of the Clearing House statistics, however, it is necessary to differentiate between the separate Clearings, Town, Metropolitan, Country, and Provincial, included in the total as described in Chapter IX, and the details for recent years are given in Table VI *b*. From this it will be seen that the decline of the total is entirely accounted for by the decline in the Town Clearing, which represents the financial transactions of the big City houses, and the volume of which depends largely on the amount of loan and share issues and the like. The Country, Metropolitan, and Provincial Clearings are a much better index of the amount of ordinary commercial and industrial business that is being done throughout the country, and these it will be noticed showed a much smaller decline.

As there are apparently still some people who think that 'money' means currency, and that the complaint of too little money was in some way connected with a restriction of the note circulation (which is of course the greater part of our currency), it is necessary to examine the facts on this point

also. Until recently we had very little information about the volume of the currency except the note circulation, but in 1932 the Bank of England began to publish a statistical estimate of the whole currency of the country, and they have carried these figures back to 1921.[1] It is therefore possible to trace the movement of the total currency throughout the whole of that period, and a line showing these figures has been added to Diagram B. The facts are very clear. The net circulation was falling during 1921 and 1922, but it steadied during 1923 and 1924; since then there has been only a very slight decline to the actual lowest point in February 1930, and from that date it has risen very slightly. It is rather surprising that it should not have fallen farther since 1930, because during that period retail prices have fallen substantially, and one would have expected that to produce a smaller demand for currency. But the main point is that in this history of currency there is absolutely no indication at all of any restriction of money in that sense.

The foregoing discussion ought to have made it clear that there is no ground whatever for the assertion that there has been too little money in any sense of the word, in this country at least. The great change in our system since the War is that we have been learning to do with less gold. As already described in Chapter XVI we have learned, perhaps by accident, that a much smaller percentage of gold cover is ample for our note circulation, and we have also been feeling our way towards a policy of making our gold reserves work more easily, in the sense that we can suffer a considerable loss of gold at times without adopting the stringent measures that were formerly thought necessary to protect it by raising the bank rate and so on. The trouble is that other countries have not been able, or have not seen fit, to follow our example in this matter, and the worst offenders, of course, have been France and America. But it is not so generally recognized that their enormous accumulations of gold have been not so much a matter of policy but

[1] See Table V *b*.

have resulted inevitably from their position as the chief creditor countries of the world. America is normally a creditor country with a substantial balance of visible exports, and to this is now added her enormous debt payments. France was also a creditor of other countries for Reparations, but the main cause of the great flow of gold to France in recent years is to be found elsewhere. Before she stabilized her currency in 1928 France had passed through a very bad time when in 1926 the franc went as low as 250 to the £, and France seemed to be in danger of following Germany's example of inflation. During this period there was naturally a flight from the franc, and large sums of French money were put away abroad, especially in England and America. After 1928 a great deal of this money was repatriated but not by any means all of it. This movement was inevitable because the French owners received a very small return on this money, and the fact that so much of it was still lying abroad in 1931 was due mainly to the fact that the French owners had no profitable employment for it at home.

But it cannot be too strongly emphasized that these enormous accumulations of gold in America and France were a *symptom* of the real trouble rather than the cause. To take the case of America, her debtors could not pay America in goods because of rising tariffs, which were raised still farther by the Hawley-Smoot tariff in 1931. Even before England's abandonment of the gold standard in 1931 started a new wave of trade restrictions mainly based on the chaos of the exchanges, almost every country was piling up higher tariffs and imposing further trade restrictions. Some of these were in self-defence to protect their balance of trade, others were the result of what can only be described as nationalism run mad. The result was that all the debtor countries were finding it more and more difficult to pay their debts in the natural way in goods and services, and the only alternatives were either to pay in gold or to get new loans. Up till 1928 America had been lending freely, but, as already described, that was stopped by the stock exchange boom in 1929.

France, which before the War had become a great lending country, had never resumed her position in that respect since the War. Until the stabilization of the franc in 1928 it was of course impossible for her to do so, but even after that the French people were very unwilling to lend abroad, largely because of their bitter experience with many of their pre-war loans, especially to Russia. But there was a new feature since 1928 in the position of France in that her authorities had developed a policy of making political terms through loans. France seemed to be aiming at a financial hegemony of Europe, and her loans were largely dictated by her political ideas, the mainspring of which was of course her fear of Germany.

But whether or not the fall of prices was in any way due to a reduced supply of gold the fact remains that every one was blaming all the trouble on that, and there was very grave danger in this attitude because there seemed to be no hope of a remedy. The world's production of gold was a physical fact about which it was thought that nothing could be done. In 1929 the Financial Committee of the League of Nations appointed a special delegation on the whole question of the gold supply and its effects, and in an interim report dated September 1930 they gave statistics showing the actual decline of gold production in recent years, along with estimates by some of the best authorities of the probable future production, and all of these indicated the probability of a further decline. As there seemed to be no hope of making France and U.S.A. alter their policy and disgorge their hoards of gold the result was to produce throughout the world a general feeling of despair leading to a gradual loss of confidence in the prospect of recovery. It was felt that world affairs had got into a hopeless tangle with war debts and reparations, disarmament and tariffs; and there seemed to be no way out. The result was a vicious circle of falling prices due to lack of confidence which was carrying the prices of many commodities far below their cost of production, but, in spite of the tempting level of prices and the ample supplies of money, no one had sufficient confi-

dence to go in and buy, because they were afraid that prices would fall lower still, which of course was just what they did. The various schemes for restriction of production either broke down or proved ineffective, and time after time prices seemed to have got the turn at last but once more it proved a false hope. Thus things were allowed to drift from bad to worse, and in the spring of 1931 it was obvious that Europe was on the verge of a break-down. With the falling prices of all her exports Germany obviously could not go on paying Reparations under the Young Plan. The Austrian trouble was merely the match that started the conflagration. Hoover's moratorium might have saved the situation but for France's delaying tactics. but it also failed completely, and the result was that England was driven off the gold standard in September 1931, and thus opened a new chapter.

CHAPTER XVIII

OFF THE GOLD STANDARD, 1931–3

Effects: (*a*) On England, prices and the Rate of Exchange, the Balance of Trade. (*b*) On other countries.—Continent.—Egypt and India.—America, Reflation.—War Debts and Reparations.—Lausanne and after.—December payments, 1932.—U.S. Banking Crisis.—America goes off gold.

THE effects of England going off the gold standard were of course world wide, and in order to obtain a clear view of the whole situation as it has developed since then it is necessary to divide our survey into sections and periods, which may be outlined as follows:

(1) From September 1931 till June 1932 (the date of the Lausanne Conference), distinguishing between the effects (*a*) on England, and (*b*) on other countries. Then will follow (2) the brief recovery after the Lausanne Conference, which proved abortive during the winter of 1932–3, and resulted in America going off the gold standard in March 1933. (3) The World Economic Conference.

The effects on England.

The immediate effect was of course a fall in the rate of exchange but the surprising thing was the extent and rapidity of the fall. In five days the rate dropped to $3.43, whereas when in April 1919 England officially went off the gold standard after the War, it took nine months for the rate of exchange to fall to $3 50. Reverting to the Purchasing Power Parity theory of the exchanges it is clear that this sharp fall was not justified by the relative level of prices in America and the U.K., for as a matter of fact until September 1931 U.K. prices were relatively lower than in America, and the difference against the U.K. did not become material until December. Probably

the explanation of the rapid fall of the exchange will be found in the continued withdrawals of gold, for it must be remembered that the mere fact of England going off the gold standard immediately compelled many countries, which were on the gold exchange standard and had their currency funds in London, to withdraw these at once before matters became worse. This indeed was one of the most regrettable features of our abandonment of the gold standard. These countries had adopted what is after all the best form of backing for their currencies, namely a claim on gold. Instead of keeping the gold themselves they let it lie in a place where it would be most convenient when wanted, and where they thought they were perfectly safe to get it, for the great point of London's position as the only free gold market was that creditors could always rely on getting gold there. That London would default on gold payments had simply never been dreamt of. In fact it meant that the Bank of England had failed—to meet its obligations in gold ; and the resulting shock to all these countries was just the kind of thing that the man in the street in England entirely failed to realize. There had for some time been an agitation in England in favour of going off the gold standard, and the public in England seemed to be completely unaware of the fact that going off the gold standard meant in effect a declaration of bankruptcy.

But the movement of prices ultimately justified the fall in the exchange and carried it still farther. Prices of most commodities rose sharply and in some cases, especially wheat and silver as the result of speculation in New York, the rise was entirely unjustified by the facts and was quickly followed by a relapse. As will be seen from Table IV *b* the Board of Trade Index Number of Wholesale Prices touched its highest point in November. The downward movement, once it got fully under way, was nearly as sharp as the rise, and continued until June or July when many commodities touched new low levels, and some of them the lowest in history. Gold prices, however, gained practically nothing by the rise in September, and were quickly on the downward grade again till they also touched a

new low level in June, while the index number of New York stocks and shares, which in recent years has been a very good index of the general movement of values, also fell steadily throughout the same period.

A remarkable feature of this period, and indeed of the whole period of the depression since 1929, was the stability of our banking system. Never at any time was there any run on the banks as in almost every other country, even France and America, and not a single British bank got into difficulties of any kind. The exception which merely proved the rule was one South American bank in London which had been handling the affairs of the great Chilean Nitrate Combine and had to receive assistance from the Bank of England.

The Bank of England rate remained at 6 per cent. till February 18, 1932, but from then onwards it was steadily reduced till it reached 2 per cent. on July 7. As the result of continued withdrawals the Reserve fell heavily, and with the normal low point at the end of December 1931 it was reduced to 18·41 per cent.

What may be regarded as the first sign of recovery was on October 30, when the Bank of England found itself able to repay £20 millions of the £50 millions loan from France and America. Of this, £15 millions was paid in gold, but on February 1, 1932, the balance of £30 millions was paid without drawing further on our gold stock. As to the Treasury's £80 millions credits it was announced in February that they had the money in hand and a substantial part was paid then, but as part of the credit in France was in the form of twelve months' bonds these could not be paid until the loan matured.

The fact of our being able to make these large payments was partly due to the extraordinary development which began in February 1932 in the recovery from private individuals of large quantities of old gold and sovereigns. In that month it was announced in the House of Commons that there was no official objection to the full exchange price being paid for gold, and as at the rate then current this meant nearly 30*s.*

for a sovereign, there was an immediate rush to realize the premium, which extended to all kinds of old gold and jewellery. Up to 1933 the total amount recovered in this way was estimated at £15 millions in England alone. Very quickly the dealers in India realized the opportunity of a profit to be made in the same way, and from then onwards there was a steady stream of gold from India to London and Paris which resulted up to 1933 in a total export of about £110 millions. At the same time it became evident that the changed conditions were having their effect in a marked increase in the world's production of new gold (see Table I).

The effect of the suspension on the Stock Exchange was not as dramatic as it had been on the foreign exchange markets and on commodity prices. The Stock Exchange reopened on September 23 with a small boom in industrial shares, but restrictions had to be imposed on dealing and these were only partly removed on November 13 and almost completely in February. Restrictions on new issues, however, continued though modified from time to time. In the foreign exchange market the greatest difficulty at first was the entire absence of a forward exchange market owing to the restrictions on exchange dealings, but these were removed in April 1932.

Great hopes had been entertained that the effect of our going off the gold standard would be immediately to remedy the balance of trade and, as will be seen from Table XVII, there was at first some increase of exports. This, however, did not prevent the protectionists from carrying on their campaign. The general election was held in October 1931 and resulted in an overwhelming victory for the National party. On the score of the necessity of preventing forestalling of tariffs the Abnormal Importations Bill in November imposed emergency duties on many articles, and this was followed in February 1932 by a general tariff.

The figures of the balance of trade both visible and invisible are given in Table XIX. The results for 1931 were certainly bad enough. The excess of imports of merchandise over exports

and re-exports was £407 millions, but against this had to be set the net export of bullion and specie of £33 millions, and as the balance of invisible exports had fallen to only £304 millions the result was an estimated net debit balance of £70 millions. To avoid returning to this question again it may be noted here that the 1932 figures showed no improvement in the net result, the excess of imports of merchandise over exports being reduced to £287 millions, but this time there was a net import of bullion and specie of £20 millions making the final excess of all imports over exports £307 millions. The invisible exports, however, showed a further decline to £230 millions with the result that the net balance was an estimated loss of £77 millions.

Effects on other countries.

The first effect, as was to be expected, was that a number of other countries followed our example. Norway, Sweden, and Denmark did so at once and in October they were followed by Rhodesia and Finland, while Canada also placed gold exports under licence, and in December Japan reimposed the embargo on gold exports which had only recently been withdrawn.

The next point was the effect on those countries whose currency was on a sterling basis, particularly India and Egypt, both of which decided to retain their connexion with sterling so that they also were off the gold standard. Australia had of course already been in the same position for some time and it may be noted here that New Zealand followed the example of Australia in 1933.

The most serious effect of course was on those countries which had sterling balances in London. The Bank of France for example had still fully £60 millions in London which meant a loss to them of about one-third, and the Government had to take this over as they had taken all the Bank of France's profits from the foreign exchanges after the stabilization in 1928. Belgium and Holland were in a similar position, though their losses of course were smaller. Private bankers all over the world had balances in England and they simply had to make

the best of their loss. The movement of gold holdings both before England went off the gold standard and afterwards can be traced in Table XX which gives the monthly gold holdings of the central banks throughout the world. England's holding had risen slightly from the lowest point in July to September and there was actually a slight rise again in October, but there was a further heavy fall in November, after which there was very little change till April. Germany also continued to lose gold, but the most striking movement was the heavy flow of gold to Belgium, Holland, and Switzerland, which had begun in July but was greatly accentuated in September and afterwards. This was of course the natural effect of the holders of money seeking safety in any country which was still on the gold standard.

France also continued to accumulate more gold, though the increase at first was relatively not very large. Some of this came from London and a good deal from India but mostly it came from the U.S.A. which lost gold heavily in October. The main feature in France, however, was the very heavy increase of the note issue, largely the result of some bank failures. In Table XXII an attempt has been made to give an idea of the position of the central banks in France, Germany, and the U.S.A. as well as England, and it will be seen from this that during 1931 the note issue in France increased by 20,000 million francs or nearly 40 per cent. At the same time a gold hoarding movement developed in France, any one who could afford it buying a bar of gold, while smaller people bought gold coins and, as few French gold coins were available, there was a marked demand for golden eagles—American $20 pieces.

Early in 1932 it became clear that the position in America was becoming serious. The first effect of England's suspension of the gold standard was a general rush to buy dollars, but before long this gave place to growing uneasiness as to the position in America, largely as the result of another flood of bank failures, the extent of which may best be realized from the following table:

	Number of Banks failed	*Deposits $ millions*
1930 . . .	1,345	865
1931 . . .	2,298	1,692
1932 . . .	1,453	730

The heavy withdrawals of gold, mostly to France, were causing the authorities in America a great deal of uneasiness, but what was worse was the development of a movement in America to hoard currency, even paper dollars, and Table XXII shows the effect in the increase of these issues. The result was that during the winter of 1931–2 the American authorities entered upon a series of measures which were apparently based on the idea that America must put her own house in order, regardless of the rest of the world, by stopping the deflation which was supposed to be the cause of the depression. But as the authorities were apparently very much afraid of the name of inflation the alternative of 'reflation' was quickly coined.

The tale of all these relief measures is long and complicated, but in view of what happened afterwards in America some attempt to outline the chief points in it is essential. As far back as 1927 the American Government had realized that something must be done for the farmers, and the first attempt was the McNary-Haugen Bill; this was intended to raise the prices of the chief crops in America which were dependent on an export balance. The idea was that the Government should take over the disposing of these export balances, if necessary at a loss, which was to be spread in some way over all the producers, but nothing came of that Bill. In the Presidential election of 1928, however, both parties again found themselves driven to make promises to the farmers and in 1929 the Hoover administration set up the Farm Relief Board to deal with cotton and wheat, which had just got into operation before the Wall Street crash in October of that year. The strange tale of the operations of that Board has been told by the writer elsewhere,[1] and all that can be said here is that with a revolving

[1] *The Marketing of Cotton* (Pitmans, 1933), chap. viii.

fund of $500 millions the Government found themselves embarked on a policy of sustaining prices, the only effect of which was that they were left with enormous stocks of wheat and cotton, bought at prices which have never been seen since. The next step was the Veterans' Bonus Bill, the effect of which was to convert into immediate cash payments the various annuities due for war services, and this, it was said, involved payments of about $700 millions. Next came the National Credit Corporation with a fund of $500 millions to be used in liquefying the frozen assets of the banks, and this was followed by a Depositors' Relief Corporation and the Real Property Defence Pool with similar objects. But all these schemes proved inadequate, and in January 1932 the National Credit Corporation, which had hardly started work, was replaced by the new Reconstruction Finance Corporation with total funds of $2,000 millions. This was used primarily to liquidate the position of the banks in America, and large loans were also made to some of the railways, but it had very little effect on industry in general.

The next move from Washington was a great drive against hoarding, and to make this clear it is necessary to give some account of the American currency system. As will be seen from Table XXI there are no less than seven different kinds of paper dollars in America. The gold certificates are backed entirely by gold, the silver certificates entirely by silver, but the bulk of the issue is the Federal Reserve notes, which are backed to the extent of 40 per cent. by gold and the balance by commercial securities, bills, &c. Of the metallic currency in circulation, gold formed about a half.

To explain subsequent events it is necessary to state here that the banking system of the United States is of a rather inchoate character, without any real central bank. The Federal Reserve system established in 1913 a Federal Reserve Bank in each of twelve districts throughout the United States, the most important being of course New York and Chicago, but not one of them had anything like the position of the Bank

of England, though the Federal Reserve Board to some extent controls and co-ordinates them all. But the greatest anomaly in the system was the existence alongside of the Federal Reserve banks and the National banks, which are more or less under the control of the Federal Reserve system, of a huge number of small banks scattered throughout all the states of the Union, each state having its own banking laws, and these are therefore described as state banks. Many of them are very small compared with our ideas and it was among these small banks, especially in the country towns, that the mortality was greatest.

The first attempt to introduce some reform of this system was actuated by the threatened difficulties which arose from the drain of gold to France. The Americans have a peculiar way of regarding their gold holdings. The Federal Reserve notes must have a backing of 40 per cent. gold, and for ordinary banking business the banks under the Federal Reserve system must hold 35 per cent. of their sight liabilities in gold. Whatever gold is held in America in excess of these requirements is known as their 'free' gold, and in 1932 as the result of the enormous increase of Federal Reserve notes and the withdrawals of gold by France, the amount of this free gold was dwindling rather seriously. But the difficulty was largely accentuated by the fact that, owing to the scarcity of commercial bills as the result of the depression, the Federal Reserve Banks had great difficulty in finding commercial bills for the 60 per cent. cover, and they were therefore forced to hold much more than 40 per cent. in gold. The result was that even in 1932 there was vague talk of America being driven off the gold standard.

It was primarily to meet this difficulty that the Glass-Stegall Bill was passed in February 1932 to reform the statutes of the Federal Reserve system. The main provision of this was that the Federal Reserve banks could hold government bonds instead of commercial bills for the 60 per cent., and it was estimated that this would set free about $700 millions of gold

which would enable America to clear off the whole of the French balances. At the same time the Bill made other provisions which were intended to facilitate the supplies of credit and increase the margin of free gold.

In the meantime, however, the world was again coming under the shadow of the problem of war debts and reparations, with which must be considered the various short-term loans to European countries which had become more or less frozen in the summer of 1931. England's loan of £4 millions to Austria and the $100 millions loan by England, France, the U.S.A., and the B.I.S., to Germany were being renewed from time to time. Apart from these, the commercial and banking loans to Germany were also being renewed under the 'Standstill' agreement, which came into effect as the result of the meeting in London on July 21, 1931, and the Basle Conference on August 18, 1931. But the major question was reparations and the debt to America. President Hoover had acted in June without consulting Congress, and it was taken for granted that Congress would resent it. In the meantime the French premier, M. Laval, had met Hoover in October 1931, and as the result of their meeting a *communiqué* was issued which stated that 'the initiative' in the matter of intergovernmental obligations should be taken at an early date by the European Powers principally concerned within the framework of agreements existing prior to July 1, 1931.

When Hoover did meet Congress the explosion was even worse than had been expected and to cut a long story short, Congress only agreed to the moratorium with the addition of the following rider: 'It is hereby expressly declared to be against the policy of Congress that any of the indebtedness of foreign countries to the United States should be in any manner cancelled or reduced; and nothing in this joint resolution shall be construed as indicating a contrary policy, or as implying that favourable consideration will be given at any time to a change in the policy hereby declared.'

Thus the question of war debts and reparations had reached

a complete impasse, Germany, supported by the report of a Committee at Basle, asserting the complete impossibility of her paying any more reparations, France proclaiming that if Germany would not pay her, she would not pay any one else, England reiterating from time to time the terms of the Balfour Note, that we asked no more from our debtors than we had to pay to America, and America refusing to entertain any proposal for cancellation or reduction. It was under these conditions that the Lausanne Conference at last met in June 1932, and out of this hopeless position, to the surprise of the whole world, Mr. Ramsay MacDonald actually succeeded in getting an agreement which practically wiped out German reparations by a final but still conditional payment of £150 millions. But the acclamation with which this was received was quickly checked when it became known that behind the settlement lay a 'Gentlemen's Agreement' between France and England that the settlement was not to come into force unless they were able to make a consequential settlement on reasonable terms with America. At the same time Mr. MacDonald issued invitations for a World Economic Conference to be held forthwith to discuss all the other problems of the world, which America agreed to attend on condition that the discussions excluded war debts and tariffs!

After Lausanne.

In spite of these qualifications, however, Lausanne was hailed by the world as the beginning of the end of the depression, and the feeling of hope which it engendered was strengthened by the startling announcement that England proposed to convert £2,000 millions of war debt from a 5 per cent. basis to $3\frac{1}{2}$ per cent. This was regarded as a great step forward, because it was taken to indicate a general movement for the reduction of the rate of interest, and it was quickly followed by other countries converting their state debts and then by private debtors of all kinds converting maturing obligations to a lower rate. The result was a new wave of optimism which, beginning with

the New York Stock Exchange in July, sent prices of all commodities on the upward track again, with cotton leading on the ground of a prospective crop failure. But once more the rally was short-lived, and September saw things on the down grade again to fall steadily till about the end of February.

In the meantime the Ottawa Conference of the British Empire had met in September, and it soon became clear that the results, so far as the hope for reduction of tariffs was concerned, had been entirely negative. Nor could anything be done with regard to the proposed Empire currency *bloc* which it was hoped would form the nucleus of a sterling *bloc* including all the other countries that were off gold. Canada was not favourable because she preferred to keep her currency as near as possible to the U.S. dollar; South Africa still refused to go off the gold standard, and the practical difficulties of rehabilitating silver, which was part of the scheme, proved insuperable.

The next development was the U.S. Presidential election which resulted in Roosevelt's sensational victory. No sooner was this out of the way than England and France, acting upon the unofficial request which had been made after Lausanne that nothing should be said to America about war debts till after the election, presented joint letters to Washington requesting reconsideration of the war debts, but Washington's reply, that they saw no reason to do anything of the sort, brought a shock of disappointment, and a fresh note was put forward giving an elaborate statement of reasons. In the course of these negotiations, a curious change was noticeable in the tone of press comments in this country. At first every one had assumed that as the result of the operations of the Exchange Equalization Fund, which had been set up by the Budget of April 1932, we held ample funds in dollars to meet the payment if it had to be made, but now it was stated that we had no dollars at all, and that if the payment must be met we should have to buy them at a tremendous loss, because on the rejection of our request, the exchange had dropped to the new low

record of $3 14 This, however, was rather an argument *ad misericordiam* and it proved as ineffectual as all the other arguments, for on December 15 we had to pay $95 millions, but France at the last minute refused to pay.

It is worth noting here how this payment was made. The Bank of England simply transferred £19,632,831 of gold in its vaults, 'earmarking' it for the Federal Reserve Bank in New York, who then paid over the equivalent in dollars to the U.S. Treasury, and, as a matter of fact, shipments of the gold actually began. This of course made a very big hole in the Bank of England's gold, and with Christmas approaching, involving a normal increase of the note circulation, the reduction of the Reserve might have been very serious, but a very interesting expedient was adopted to meet this difficulty. The Macmillan Committee Report had brought out the fact that ever since the War the Clearing Banks had been carrying a very large amount of notes in their cash reserves, the amount being estimated at about £100 millions, which was obviously far more than any probable requirements of the public for currency. It was therefore suggested to the banks that instead of drawing on the Bank of England for their usual currency requirements at Christmas they should meet these out of this stock; and the result was that the note circulation which had already begun to rise on December 14, actually fell by £2 millions the following week instead of rising still further, and this movement continued till Christmas. The result was that about £15 millions of notes were in effect returned from circulation temporarily and the Bank's reserve was maintained to that extent.

But the immediate effect of our payment was a quick recovery in the exchange, and very soon money was flowing back into London again, with the result that the Bank was actually able to buy back the remainder of the £19 millions of gold. This was the beginning of a new series of large purchases of gold by the Bank of England, which in the course of the next few months raised the Bank's gold holding from the low point o

£120 millions in December to £192 millions in August. This movement was the visible sign of a very remarkable change in the attitude of the world to England's credit. Money continued to flow back to London in huge quantities and the Bank, moved presumably by the fear of being caught again with all this 'bad money', as it had been in September 1931, apparently decided that the only safe thing was to hold the balance in gold. This, as it turned out, was the beginning of a general feeling of alarm with regard to the situation in America, which in the course of another month was to produce the most dramatic development of all—the banking crisis in the United States, which resulted in America going off the gold standard.

Early in January 1933, Mr. Roosevelt made an unexpected new move in the matter of the debts by intimating that his administration would be glad to receive representatives from the British Government forthwith, to discuss not only the debt position but also other world problems. At first the invitation was only to those powers who had paid in December, but it was soon extended, and to anticipate a little, it eventuated in the visit of Mr. Ramsay MacDonald to Washington in April, followed by representatives of France, Italy, and Canada. The object of these meetings was, of course, not to reach definite agreements, but to prepare the ground for the World Economic Conference, and the most important result was that the date of that conference was fixed for June 12.

In the meantime the general financial situation was developing in other directions. In December/January South Africa at last went off the gold standard and the resulting rise in the price of gold in South Africa produced a boom in 'Kaffirs'. France was having great difficulty in balancing her budget, which resulted in another ministerial crisis, and in Germany the accession of the Nazis to power caused some uneasiness.

But all these events were overshadowed by the sudden development of the American banking crisis. In December 1932, there had been a demand in Congress for publication of the loans of the Reconstruction Finance Corporation. Some

one published the list unofficially, which forced the hands of the authorities, and the effect, as they had predicted, was an immediate fresh outburst of alarm as to the position of the banks that had been assisted. During 1932 the position with regard to hoarding and bank failures in America had greatly improved, but this started a new wave of unrest, and early in February 1933 an important bank in New Orleans got into difficulties and the state of Louisiana declared a bank holiday for one day. This was quickly followed by difficulties in Detroit, and the state of Michigan went one better by announcing a bank holiday for four days. The trouble spread with traditional rapidity into a general run on the banks, and on Saturday, February 25, Congress had to rush through an Act which practically conferred power on all states to declare bank holidays or a moratorium, or to restrict the right of depositors to withdraw their funds from the banks.

On Thursday, March 2, the bank in New Orleans which had started all the trouble was again in difficulties and the cotton market there was closed, while the Federal Reserve rate in New York was raised from $2\frac{1}{2}$ to $3\frac{1}{2}$ per cent. Withdrawals of currency for hoarding purposes mounted rapidly, and this time there was a marked preference for gold certificates or for actual gold, and there was also a considerable amount of earmarking gold in New York for foreign account. On Saturday, March 4, things suddenly came to a head with the banks in New York and Chicago closing down, which of course involved the closing of the Stock Exchanges and the commodity markets, and the suspension of all dealings in foreign exchange, the last quotation of sterling being $\$3.44\frac{3}{4}$.

On the very day of the crisis Roosevelt was inaugurated as President, and he at once declared a banking moratorium for the whole of the United States for four days, afterwards extended to a week, which included a complete gold embargo both internal and external. When the banks were allowed to reopen it was done gradually by the setting up of four categories, those which were known to be sound and could reopen at once,

those which on examination were found to be sound and would then reopen, those which it was thought could ultimately be made sound, and lastly those which were hopeless and would have to be reorganized. The same principles were applied to the State banks as to the National, and it may be noted here that by the end of March about 12,000 out of the total of 18,000 banks in the whole country had reopened, though a few of them had to close again. Exchange transactions were also resumed on March 13, and to everyone's surprise showed no change at all from the previous close, though much higher rates had been talked about in the interval. The Stock Exchange reopened on the 15th and the commodity exchanges on the 16th, and most of them at first marked big rises which, however, were quickly lost.

The two most urgent questions which faced the new administration were, what was to be done about the gold embargo, which involved the question of going off the gold standard, and how to provide further currency without involving an increased drain on the threatened gold supplies. The first question was met by continuing the gold embargo, both internal and external, but with certain limited exceptions in the latter case, which were further modified on April 5, and an Exchange Dictator was appointed to control exchange operations. Thus, technically, America was just as definitely off the gold standard as England was in April 1919, but the Treasury officials stoutly denied any such intention and the world seemed prepared to take their word for it, for the dollar kept very steady. The currency problem, as it turned out, solved itself. At first it was proposed to revive the old method of Clearing House certificates, last adopted in the American crisis of 1907, but this was soon replaced by a proposal for a Federal issue of $2,000 millions of emergency currency without gold backing. Very little of this, however, was issued, for the immediate effect of Roosevelt's bold policy was to create a new feeling of confidence, and large amounts of currency, especially of gold under the threat of severe penalties, were returned to the banks. In the meantime

Roosevelt also faced promptly the necessary balancing of the budget, and Congress immediately passed stringent economy measures, while at the same time the first step was taken towards the abandonment of Prohibition by legalizing light beer, which it was estimated would bring in a large revenue.

Thus it looked as if the crisis had passed. The drain of gold had been stopped and, as will be seen from Table XX, the total gold holdings of the country were still enormous, while the possible foreign claims against it were relatively small, being probably less than the amount of free gold in the country. There seemed, therefore, no reason why the embargo on gold exports should become permanent, nor why there should be any large measure of inflation, but before the middle of April there were signs of a new move.

The 'lame duck' session of Congress, which had met between the Presidential election and the inauguration of the new President, developed a positive mania for Farm Relief legislation and one proposal after another was introduced, but the Farm Relief Bill embodying some of them only passed through Congress two days before the expiry of Hoover's period of office, and was never signed by him. When Congress reassembled under the new President a new Farm Relief Bill was introduced, embodying features of all the previous proposals, but in the later stages of the passage of this Bill through Congress, one Senator suddenly proposed the addition of a whole section conferring upon the President extraordinary powers of inflation which included: (1) the right of the Government to issue $3,000 millions of bonds to the banks, and if the banks would not take them up to issue currency for that amount. (2) Provisions for the rehabilitation of silver, *inter alia* by authorizing the acceptance of payment in silver to the extent of $200 millions from foreign debtors, this silver to be used as the backing of a further issue of silver certificates. (3) Power to the President to reduce the gold value of the dollar to such an extent as he thought fit up to 50 per cent.

Apparently Roosevelt could not resist the pressure behind

these proposals, for the inflationists had begun to realize that, as the result of only partial reopening of the banks and the failure to put the emergency currency into circulation, the country was really suffering after all from a new dose of deflation. Whatever the reason, the fact is that on April 19 it was suddenly announced that the gold embargo would again be strictly enforced, the modifications made on April 5 being abrogated, and this time it was officially admitted that America had thereby ceased to be on the gold standard. The result was a dramatic fall in the rate of exchange which lost about fifty points in two days and soon carried the rate over $4, and this was the signal for a wave of inflationary optimism which carried commodity prices and the stock exchange to new high levels.

Any doubt that might possibly have remained as to whether America was still on the gold standard was finally removed when, on May 1, the American Government refused to meet its interest payments to foreign holders in gold or at the gold value, and this example was of course promptly followed by other American debtors, even where the contracts contained the special clause requiring payment in gold, which therefore became practically a dead letter. Germany immediately adopted a similar course.

The World Economic Conference, 1933.

The fiasco of the World Monetary and Economic Conference was so complete that it hardly deserves a heading as a stage in history. From the first it became apparent that there was a deep cleavage of opinion on the question of monetary stabilization, which was the fundamental issue before the Conference. All the countries still on the gold standard wanted at least temporary stabilization and a scheme to secure this was drawn up with the concurrence of the American representatives, only to be promptly turned down by the President. America, being definitely committed to a policy of inflation, was determined to see how that would work out before considering any measure of stabilization. The result was a further depreciation of the

dollar which actually carried the sterling rate above par to $4·87\frac{1}{2}$ on July 19. Having thus failed to settle the major issue it was realized that discussion of other questions was futile and the Conference adjourned on July 27, with only one definite achievement to its credit, an agreement relating to the sales of silver by the Indian Government.

In June the half-yearly payments of war debts to America again fell due. This was one thing on which Congress had not given Roosevelt full powers, though the Farm Relief Bill authorized the American Treasury to accept silver up to $200 millions in payment of debts due by any foreign government to the United States at a price not exceeding 50 cents per ounce. It was apparently under this clause that our Government finally decided to make a token payment of $10 millions in silver at the agreed rate, so that it is said the payment cost Britain approximately £1,620,000.[1] Italy also made a token payment but France again defaulted entirely.

Thus in September, 1933. the world position might be described as on the whole no farther forward than it was a year earlier, after the Lausanne Conference. Practically nothing had been done towards disarmament, the settlement of War Debts or the reduction of tariffs. Though prices were again well above the lowest point of the summer of 1932 there was still very little confidence that the recovery would be lasting and continuous. American inflation had produced a sharp rise of prices which reached its peak in the third week of July but this was followed by a sharp reaction and a period of hesitation and uncertainty largely due again to internal developments. Roosevelt was not content with a rise of commodity prices and stock exchange values. His policy of the 'new deal' required that the purchasing power of American consumers must keep pace with the rise of prices, and he therefore proceeded to inaugurate a great scheme of industrial control under the title of the National Industrial Recovery Administration, which included higher wages, shorter

[1] *The Economist*, June 17, 1933.

hours, the abolition of employment under 16 and the right of labour to collective bargaining. These were temporarily embodied in the 'Blanket Code' which was to apply to every industry until it evolved a special code of its own. But all this necessarily involved higher cost of production which in the case of cotton was seriously increased by the Process Tax of 4·2 cents per lb. imposed on all cotton consumed by the American industry, in order to pay for the compensation promised to the planters for abandoning part of the acreage already planted under cotton for the 1933 season. The fate of all these revolutionary schemes in America was still hanging in the balance, the chief bone of contention apparently being the question of collective bargaining, which has always been the *bête noire* of American employers. The rest of the world stood by watching the struggle with painful interest, because it was realized that if the President failed to make ends meet he would be forced to use his powers of direct inflation, which would mean further depreciation of the dollar and would probably result in driving France and the remaining gold countries off the gold standard.

STATISTICAL APPENDIX

TABLE I.—THE WORLD'S PRODUCTION OF GOLD AND SILVER SINCE THE DISCOVERY OF AMERICA, AND THE PROBABLE STOCK OF GOLD.

(In millions of £'s)

Average of the Years.	*Gold.*		*Silver.*		*Gold and Silver. Total.*	*Gold per cent. of Total.*
	Annual.	*Total.*[1]	*Annual.*	*Total.*		
			Soetbeer.			
1493–1520	0·8	22·7	0·6	17·1	39·8	57
1521–1544	1·0	24·0	1·1	27·0	51·0	47
1545–1560	1·2	18·9	3·8	61·6	80·5	24
1561–1580	1·0	19·1	3·6	72·8	91·9	21
1581–1600	1·0	20·6	4·9	98·8	119·4	17
1601–1620	1·2	23·8	4·8	96·4	120·2	20
1621–1640	1·2	23·2	3·9	78·3	101·5	23
1641–1660	1·2	24·5	3·5	70·3	94·8	26
1661–1680	1·3	25·8	3·1	62·8	88·6	29
1681–1700	1·5	30·0	3·3	63·6	93·6	32
1701–1720	1·8	35·8	3·3	65·0	100·8	36
1721–1740	2·7	53·2	4·0	79·8	133·0	40
1741–1760	3·4	68·7	5·0	100·7	169·4	41
1761–1780	2·9	57·8	6·2	124·0	181·8	32
1781–1800	2·5	49·6	8·1	162·7	212·3	23
1801–1810	2·5	24·8	8·0	80·0	104·8	24
1811–1820	1·6	16·0	4·9	48·6	64·6	25
1821–1830	2·0	19·8	4·1	41·3	61·1	32
1831–1840	2·8	28·3	5·3	52·8	81·1	35
1841–1850	7·6	76·4	6·9	68·7	145·1	53
1851–1855	27·8	139·1	8·0	40·1	179·2	75
1856–1860	28·1	140·7	8·2	41·2	181·9	75
1861–1865	25·8	129·1	10·0	49·8	178·9	72
1866–1870	27·2	136·0	12·0	59·9	195·9	70
1871–1875	24·3	121·3	17·2	86·2	207·5	58
Forward .		1,329·2		1,749·5	3,078·7	43

[1] It is quite impossible to estimate the stock in existence before 1493.

In calculating the Aggregate Stock at any period one-third is deducted for loss and industrial consumption.

TABLE I—(*continued*)

Year.	Gold. Annual.	Gold. Total.	Silver. Annual.	Year.	Gold. Annual.	Gold. Total.	Silver. Annual.
	Forward	1,329·2			Forward	2,427·5	million oz.
1876	23·1 [1]		18·2 [2]	1906	81·1		166
7	25·0		19·3	7	82·3		185
8	26·0		19·8	8	88·7		203
9	23·4		19·1	9	92·0		211
1880	22·8		19·1	1910	90·9		222 [5]
		120·3				435·0	
1	22·4		19·8	1	91·9		226
2	21·4		21·2	2	93·2		231
3	20·7		21·7	3	94·5		210
4	21·7		22·2	4	90·5 [5]		172
5	21·7		21·9 [3]	5	96·6		173
		107·9				466·7	
6	22·4		20·3	6	93·6		181
7	22·0		22·0	7	86·4		186
8	23·0		23·9	8	79·1		203
9	24·6		26·8	9	75·2		180
1890	24·7		26·6	1920	68·5		174
		116·7	million oz.			402·8	
1	25·4		138	1	67·9		171
2	27·5		153	2	65·6		210
3	31·2		166	3	75·6		246
4	37·7		168	4	80·8		239
5	40·5		169	5	80·8		245
		162·3				370·7	
6	41·9		157	6	82·2		254
7	48·9		164	7	82·5		254
8	59·3		173	8	83·7		257
9	63·2		167	9	82·8		261
1900	52·8		173	1930	88·5		248
		266·1				419·7	
1	54·3		173	1	94·3		193
2	59·3		163	2	101·5		160
3	65·9 [4]		168	3			
4	69·8		164	4			
5	75·7		170	5			
		325·0			—	195·8	
Forward		2,427·5				4,718·2	
Deduct one-third for loss and industrial consumption						1,572·7	
Leaves probable world's stock at end of 1932						£3,145·5 millions.	

[1] Layton, *Introduction to the Study of Prices*, Appendix B.
[2] Soetbeer, *Materials for the Illustration and Criticism of the Currency Question* (Gold and Silver Commission, 1888. Appendix.
[3] Shaw, *History of Currency*, p. 155.
[4] *Economist.*
[5] Samuel Montague & Co.

TABLE II.—AVERAGE PRICE OF SILVER, 1870–1932

	Pence per oz. fine in London		*Pence per oz. fine in London*		*Pence per oz. fine in London*
1870	60½	1891	45 1/16	1912	28 1/16
1	60 9/16	2	39 13/16	3	27 9/16
2	60¼	3	35⅝	4	25 5/16
3	59¼	4	29	5	23 11/16
4	58 5/16	5	29⅞	6	31 5/16
5	56 13/16	6	30¾	7	40⅞
6	53	7	27 9/16	8	47 9/16
7	54¾	8	26 15/16	9	57 1/16
8	52 9/16	9	27 7/16	1920	61 9/16
9	51 3/16	1900	28¼	1	36⅞
1880	52¼	1	27 3/16	2	34 7/16
1	51⅝	2	24⅛	3	31 5/16
2	51 13/16	3	24¾	4	34
3	50 9/16	4	26⅜	5	32⅛
4	50 11/16	5	27 13/16	6	28 11/16
5	48⅝	6	30⅞	7	26 1/32
6	45⅜	7	30 3/16	8	26¾
7	44⅝	8	24⅜	9	24 7/16
8	42⅞	9	23 11/16	1930	17 11/16
9	42 11/16	1910	24 11/16	1	14 19/32
1890	47¾	1	24 5/16	2	17 27/32

The lowest price before the War was 21 1/16*d* on Nov. 27, 1902. On Feb 11, 1920 it was 89½*d*. On Feb. 9, 1931 it was 12*d*.

TABLE III.—INDEX NUMBERS, 1782–1932

The following continuous Index Number from 1782 to 1926 is derived from three sources: (1) Jevons's Index Number from 1782 to 1860; (2) Sauerbeck's from 1860 to 1870, and (3) the Board of Trade Index Number from 1871 to date. The first two have been recalculated to fit into the third, which is based on the year 1900 as 100.

See Layton's Appendix A and references there given.

Year.	*No.*	*Year.*	*No.*	*Year.*	*No.*	*Year.*	*No.*
1782	168	1820	172	1858	127	1896	88·2
3	168	1	157	9	128	7	90·1
4	156	2	147	1860	132	8	93·2
5	151	3	148	1	131	9	92·2
6	143	4	147	2	135	1900	100·0
7	146	5	172	3	137	1	96·7
8	146	6	150	4	140	2	96·4
9	143	7	150	5	135	3	96·9
1790	146	8	135	6	136	4	98·2
1	149	9	132	7	133	5	97·6
2	156	1830	135	8	132	6	100·8
3	166	1	137	9	131	7	106·0
4	165	2	130	1870	128	8	103·0
5	196	3	125	1	135·6	9	104·1
6	220	4	130	2	145·2	1910	108·8
7	185	5	133	3	151·9	1	109·4
8	198	6	143	4	146·9	2	114·9
9	218	7	140	5	140·4	3	116·5
1800	255	8	140	6	137·1	4	117·2[1]
1	233	9	153	7	140·4	5	143·9
2	183	1840	145	8	131·1	6	186·5
3	208	1	142	9	125·0	7	243·0
4	198	2	125	1880	129·0	8	268.1
5	220	3	118	1	126·6	9	296·5
6	217	4	115	2	127·7	1920	358·0
7	215	5	123	3	125·9	1	229 7
8	242	6	123	4	114·1	2	185·0
9	262	7	130	5	107·0	3	185·1
1810	237	8	113	6	101·0	4	193·6
1	227	9	107	7	98·8	5	185·4
2	202	1850	107	8	101·8	6	172·5
3	192	1	110	9	103·4	7	165·0
4	190	2	108	1890	103·3	8	163·4
5	182	3	123	1	106·9	9	159·0
6	152	4	138	2	101·1	1930	139·2
7	195	5	133	3	99·4	1	121·3
8	220	6	137	4	93·5	2	118·5
9	187	7	142	5	90·7		

[1] 1914, Jan.–July, 113·6; Aug.–Dec., 122·6.

TABLE IV.—(*a*) WHOLESALE AND RETAIL PRICES, 1914–22

Economist Index Numbers of Wholesale Prices and Ministry of Labour Cost of Living (Retail Prices)

Date.	*Cereals & Meat.*	*Other Foods.*	*Textiles.*	*Minerals.*	*Miscellaneous.*	*Total.*	*Ministry of Labour Cost of Living.*
Percentages on July, 1914							
End of							
1914 Sept.	112	115	99	102	116	108	—
Dec.	124	118	82	103	124	109	110–115
1915 Mar.	145	121	97	139	144	129	115–120
June	141	122	98	134	141	127	125
Sept.	140	134	108	134	139	129	130
Dec.	154	126	118	154	153	142	135
1916 Mar.	164	143	129	184	165	157	135–140
June	171	148	129	194	183	164	145–150
Sept.	176	152	152	185	194	173	150–155
Dec.	223	157	184	178	201	192	165
1917 Mar.	232	173	200	180	231	205	170–175
June	247	186	234	182	230	220	180
Sept.	211	206	245	177	244	219	175–180
Dec.	222	194	272	181	243	228	185–190
1918 Mar.	214	197	288	180	239	229	190–195
June	220	220	294	185	250	238	200–205
Sept.	215	221	313	192	251	243	215–220
Dec.	225	222	293	187	240	236	220
1919 Mar.	222	222	243	182	234	222	210
June	231	228	283	202	247	241	205–210
Sept.	242	232	321	225	243	257	220
Dec.	249	250	396	247	263	287	225
1920 Mar.	261	260	484	269	309	325	232
June	261	264	416	277	281	306	252
Sept.	260	263	383	282	278	298	264
Dec.	232	227	210	262	230	231	265
1921 Mar.	209	206	167	216	203	199	233
June	203	189	158	210	185	187	219
Sept.	193	195	204	188	177	192	210
Dec.	160	181	179	164	168	170	192
1922 Mar.	169	195	168	151	161	167	182
June	173	192	184	149	160	171	184
Sept.	151	194	181	150	148	163	178
Dec.	149	200	193	152	146	166	178

TABLE IV.—(*b*) WHOLESALE AND RETAIL PRICES, 1920–33

	1920		1921		1922		1923		1924	
	Wholesale [1]	*Retail* [2]	*Wholesale*	*Retail*	*Wholesale*	*Retail*	*Wholesale*	*Retail*	*Wholesale*	*Retail*
Jan.	296·6	230	245·9	251	164·0	188	157·0	177	165·4	179
Feb.	310·3	230	225·2	241	161·8	186	157·5	176	167·0	178
Mar.	319·0	232	210·8	233	160·0	182	160·3	174	165·4	173
April	325·2	241	204·8	228	160·3	181	162·0	170	164·7	171
May	325·5	250	201·7	219	160·6	180	159·8	169	163·7	169
June	322·4	252	197·7	219	159·9	184	159·3	169	162·6	170
July	316·9	255	194·1	222	160·3	181	156·5	171	162·6	171
Aug.	313·1	261	190·0	220	156·3	179	154·5	173	165·2	172
Sept.	311·4	264	187·0	210	154·3	178	157·8	175	166·9	176
Oct.	302·3	276	180·7	203	155·2	180	158·1	175	170·0	180
Nov.	286·9	269	172·8	199	157·6	180	160·8	177	169·8	181
Dec.	263·8	265	167·9	192	155·8	178	163·4	177	170·1	180

	1925		1926		1927		1928		1929	
Jan.	171·0	179	150·1	173	143·8	172	141·3	166	138·3	165
Feb.	168·7	179	147·6	172	142·6	171	140·1	164	138·4	166
Mar.	166·0	175	144·1	168	140·8	165	140·6	164	140·3	162
April	161·9	173	143·6	167	139·9	164	143·1	164	138·6	161
May	158·6	172	144·9	168	141·4	163	143·6	165	135·8	160
June	157·2	173	146·9	170	142·1	166	142·6	165	135·6	161
July	156·9	173	149·1	170	141·4	164	141·1	165	137·4	163
Aug.	156·2	174	149·8	172	141·3	165	139·3	165	136·0	164
Sept.	155·1	176	150·9	174	142·6	167	137·6	166	135·8	165
Oct.	153·9	176	152·1	179	141·8	169	138·1	167	136·1	167
Nov.	152·7	177	152·4	179	141·1	169	137·9	168	134·0	167
Dec.	152·1	175	146·1	175	140·4	168	138·1	167	132·5	166

	1930		1931		1932		1933		1934	
Jan.	131·0	164	106·9	152	105·8	147	100·3	141		
Feb.	127·8	161	106·2	150	105·3	146	98·9	139		
Mar.	124·5	157	105·9	147	104·6	144	97·6	137		
April	123·7	155	105·7	147	102·4	143	97·2	136		
May	122·0	154	104·4	145	100·7	142	99·2	136		
June	120·7	155	103·2	147	98·1	143	101·7	138		
July	119·2	157	102·2	145	97·7	141	102·3	139		
Aug.	117·8	157	99·5	145	99·5	141	102·5	141		
Sept.	115·5	156	99·2	145	102·1	143				
Oct.	113·0	157	104·4	146	101·1	143				
Nov.	112·0	155	106·4	148	101·1	143				
Dec.	108·9	153	105·8	147	101·0	142				

[1] Board of Trade, Basis year 1913 = 100.
[2] Ministry of Labour, July 1, 1914 = 100.

TABLE V.—(*a*). CURRENCY NOTE ISSUE, 1914–28

(Published officially every Thursday. In £'s—000's omitted)

Date.	Notes Outstanding.	Investment Reserve Account.	Advances to Banks and Savings Banks.	Redemption Account.			
				Gold & Notes.		Government Securities.	Bank of England.
					Per cent. on Total Issue		
1914 Aug. 26	21,535	—	10,112	—	—	—	11,423
Oct. 7	29,273	—	3,082	5,000	17·1	11,924	9,268
1915 Jan. 6	37,971	—	364	19,500	51·4	14,924	3,184
April 7	40,787	—	159	27,500	67·4	8,623	4,505
July 7	48,059	303	139	28,500	59·3	9,586	10,138
Oct. 6	75,237	446	494	28,500	37·7	20,400	26,289
1916 Jan. 5	103,040	741	393	28,500	27·7	64,621	10,467
April 5	109,437	1,030	190	28,500	26·0	75,718	6,059
July 5	123,817	1,949	140	28,500	23·1	91,731	5,395
Oct. 4	132,991	2,733	130	28,500	21·5	101,266	5,827
1917 Jan. 3	148,770	3,929	104	28,500	19·2	118,097	5,998
April 4	150,049	5,479	3,570	28,500	18·9	115,583	7,876
July 4	163,982	6,814	575	28,500	17·4	136,209	5,502
Oct. 3	180,749	7,652	334	28,500	15·8	154,062	5,566
1918 Jan. 2	212,451	9,529	714	28,500	13·4	187,629	5,137
April 3	230,851	10,179	714	28,500	12·3	206,306	5,451
July 3	256,228	11,609	679	28,500	11·1	233,295	5,363
Oct. 2	278,888	12,906	615	28,500	10·2	256,659	6,020
1919 Jan. 8	317,931	15,608	555	28,500	9·0	300,134	4,349
April 2	332,123	16,400	470	28,500	8·6	315,077	4,476
July 2	342,952	16,641	360	28,500	8·3	327,321	3,412
Oct. 1	335,021	16,524	570	29,850	8·9	317,536	3,589
1920 Jan. 7	347,996	17,286	470	32,500	9·3	330,481	1,831
April 7	340,700	16,419	190	35,000	10·1	321,180	749
July 7	360,122	16,768	190	44,600	12·4	331,847	253
Oct. 6	356,176	16,945	Silver Coin [1]	47,250	13·3	325,655	216
1921 Jan. 5	360,615	17,074		47,950	13·3	329,584	155
April 6	342,560	16,485		47,950	14·0	310,944	151
July 6	325,407	14,572	3,000	47,950	14·7	288,892	137
Oct. 5	313,347	15,929	3,000	47,950	15·3	278,182	143
1922 Jan 4	319,863	14,720	3,000	47,950	14·9	283,484	149
April 6	302,977	15,839	5,000	47,900	15·8	265,692	174
July 6	297,904	12,865	6,000	48,150	16·1	256,461	158
Oct. 4	291 143	13,268	7,000	48,150	16·5	249,108	153
1923 Jan. 3	295,414	12,915	7,000	48,150	16·3	253,013	166
April 4	288,075	12,879	7,000	49,450	17·2	244,352	152
July 4	289,237	12,169	7,000	49,450	17·4	244,795	161
Oct. 4	283,943	12,312	7,000	49,450	17·4	239,695	110

[1] From April 20, 1921.

Date.	Notes Outstanding.	Investment Reserve Account.	Silver Coin.	Redemption Account.			
				Notes and Gold.	Per cent on Total Issue.	Government Securities.	Bank of England.
1924 Jan. 2	292,692	12,605	7,000	49,450	16·9	248,688	159
April 2	285,238	12,704	7,000	49,450	17·3	241,374	117
July 2	292,115	12,869	7,000	49,450	16·9	248,373	161
Oct. 1	287,499	12,618	7,000	49,450	17·2	243,578	89
1925 Jan. 7	293,022	12,573	7,000	53,950	18·4	244,471	174
April 1	288,635	12,361	7,000	53,950	18·6	239,913	133
July 1	293,501	13,128	7,000	53,950	18·4	245,536	143
Oct. 7	294,478	12,416	7,000	56,250	19·1	243,453	191
1926 Jan. 6	293,933	12,717	7,000	56,250	19·1	243,228	171
April 7	297,726	12,892	6,550	56,250	19·2	247,680	138
July 7	296,019	12,607	6,550	56,250	19·0	245,626	200
Oct. 6	290,770	12,427	6,300	56,250	19·3	240,489	158
1927 Jan. 5	291,169	12,437	6,300	56,250	19·3	240,879	177
April 6	293,542	12,239	5,650	56,250	19·1	243,696	185
July 6	300,037	12,642	5,650	56,250	18·7	250,626	153
Oct. 5	297,673	12,631	5,650	56,250	18·8	248,252	152
1928 Jan. 4	297,621	12,714	5,650	56,250	18·9	248,284	151
April 4	296,217	12,197	5,500	56,250	19·0	246,533	131
July 4	300,157	12,461	5,400	56,250	18·7	250,791	176
Oct. 3	259,947	12,394	5,400	56,250	19·0	246,553	138
Nov. 21 (Final return)	286,750	12,151	5,250	56,250	19·6	237,402	

TABLE V.—(*b*) ESTIMATED CIRCULATION OF NOTES AND COIN IN GREAT BRITAIN AND IRELAND, 1921–33

(From the Bank of England's Monthly Statistical Summary)
(In millions of £'s.—Monthly Averages)

Date.	Notes.			Coin.	Deductions.		Estimated net Circulation.
	England.	Scotland.	Ireland.		Scotch and Irish Note Cover.	In Clearing Banks.	
1921 Jan.	461·0	28·7	23·8	99	43·4	112·2	456·9
April	450·1	28·1	21·8	96	40·9	113·2	441·9
July	433·8	27·2	18·6	96	36·8	111·9	426·9
Oct.	417·7	25·4	19·5	94	35·8	108.7	412·1

Date.	Notes.			Coin.	Deductions.		Estimated net Circulation.
	England.	Scotland.	Ireland.		Scotch and Irish Note Cover.	In Clearing Banks.	
1922 Jan.	415·8	24·7	18·8	94	34·4	111·7	407·2
April	407·6	24·1	18·6	94	33·6	112·6	398·1
July	401·3	24·4	17·4	92	32·8	108·3	394·0
Oct.	390·8	23·1	17·7	91	31·8	106·4	384·4
1923 Jan.	387·1	22·8	17·2	91	31·0	106·8	380·3
April	368·8	22·8	17·2	90	31·0	103·4	382·4
July	393·3	23·6	16·7	89	31·2	103·8	387·6
Oct.	383·7	22·1	16·9	88	29·9	103·6	377·2
1924 Jan.	387·8	21·8	16·5	89	29·3	106·5	379·3
April	392·7	21·8	16·6	89	29·4	104·9	385·8
July	397·7	23·2	16·3	88	30·5	102·9	391·8
Oct.	387·5	21·9	16·6	88	29·5	102·5	382·0
1925 Jan.	385·1	21·8	16·3	89	29·1	106·8	376·3
April	387·1	21·5	16·3	88	28·7	102·5	381·7
July	388·1	22·4	15·3	87	28·7	103·8	380·3
Oct.	379·7	21·1	15·7	87	27·8	105·5	370·2
1926 Jan.	375·0	21·2	15·2	87	27·4	104·4	366·6
April	379·9	21·4	15·5	88	27·9	104·0	372·9
July	379·2	21·8	14·5	88	27·4	100·1	376·0
Oct.	372·4	20·4	15·2	88	26·5	105·3	364·2
1927 Jan.	367·0	20·5	14·7	88	26·2	104·3	359·7
April	378·1	21·1	15·1	88	27·1	108·2	367·0
July	379·6	22·1	14·4	87	27·5	103·2	372·4
Oct.	375·2	20·9	14·7	87	26·6	107·6	363·6
1928 Jan.	372·7	21·3	14·7	86	26·9	107·2	360·6
April	374·5	21·2	15·0	84	27·3	103·3	364·1
July	377·4	22·3	14·4	82	27·7	100·8	367·6
Oct.	371·2	21·0	15·6	83	25·8	106·3	358·7
1929 Jan.	365·1	21·2	16·4	84	23·6	108·2	354·9
April	361·6	21·1	16·6	84	21·8	102·9	358·6
July	370·1	22·3	16·6	83	23·0	103·8	365·2
Oct.	361·9	21·0	17·4	83	21·7	105·6	356·0
1930 Jan.	357·0	21·2	17·5	84	21·4	107·0	351·3
April	361·0	21·4	18·0	82	21·7	105·4	355·3
July	366·2	22·6	17·2	81	22·9	103·5	361·6
Oct.	358·4	21·1	17·5	81	21·3	103·8	352·9
1931 Jan.	352·9	21·2	17·0	81	21·2	102·7	348·2
April	354·9	20·8	17·0	81	20·6	97·6	355·5
July	359·4	22·0	16·2	80	21·6	96·3	359·7
Oct.	358·0	20·8	16·5	77	20·4	91·0	360·9
1932 Jan.	354·0	21·4	16·3	78	21·0	89·6	359·1
April	375·1	21·0	16·6	71	20·6	87·9	357·2
July	368·2	22·1	16·1	71	21·6	92·3	363·5
Oct.	361·6	20·7	16·0	70	20·1	94·1	354·1
1933 Jan.	358·5	20·2	16·6	69	19·7	90·0	354·6
April	375·2	20·9	17·1	69	20·6	99·8	361·8
July	379·2	22·2	16·8	69	21·9	99·0	366·3
Oct.							

TABLE VI.—(*a*) STATISTICS OF THE BANKERS' CLEARING HOUSE, LONDON, 1868–1932

(From the Secretary's Annual Statement)

(In millions of £'s)

Year.	*Total.*	*Per cent. on 1868.*	*Daily Average.*	*Allocation.*		
				Town.	*Metro-politan.*	*Country.*
1868	3,425	—	11·0	*Per cent. of Total.*		
1878	4,992	146	16·3			
1888	6,942	203	22·6			
1898	8,097	237	26·3			
1899	9,150	268	29·9			
1900	8,960	262	29·2			
1	9,561	279	31·2			
2	10,029	293	33·1	91·3		8·6
3	10,120	295	33·0	91·2		8·7
4	10,564	308	34·2	91·6		8·3
5	12,288	358	40·2	92·4		7·5
6	12,711	371	41·4	92·1		7·8
7	12,730	371	41·5	91·5		8·4
8	12,120	354	39·4	85·8	5·3	8·7
9	13,525	394	44·1	86·8	5·0	8·0
1910	14,659	427	47·9	86·6	5·2	8·1
1	14,614	426	48·1	86·1	5·4	8·3
2	15,962	466	51·8	86·5	5·2	8·1
3	16,436	479	53·5	86·3	5·2	8·4
4	14,665	428	48·2	84·7	5·8	9·3
5	13,408	391	43·7	81·3	6·9	11·6
6	15,275	445	50·1	80·7	7·0	12·2
7	19,121	558	62·9	82·1	6·1	11·7
8	21,198	618	69·7	80·3	6·7	12·9
9	28,415	829	94·1	81·6	6·3	11·9
1920	39,019	1,139	127·5	84·1	5·3	10·4
1	34 931	1,019	113·8	86·6	4·7	8·5
2	37,161	1,084	121·8	88·2	4·2	7·5
3	36,628	1,069	119·3	88·1	4·2	7·6
4	39,533	1,154	128·4	88·6	4·0	7·3
5	40,437	1,181	131·7	88·5	4·1	7·3
6	39,825	1,163	129·7	88·7	4·1	7·0
7	41,551	1,213	135·3	88·6	4·2	7·1
8	44,205	1,291	144·0	88·9	4·1	6·8
9	44,897	1,311	146·2	88·9	4·1	6·8
1930	43,558	1,272	141·9	89·0	4·1	6·8
1	36,236	1,058	118·0	87·8	4·6	7·5
2	32,112	938	104·3	86·7	5·0	8·3

ABSTRACT OF RECORDS TO DATE.

	£
Record day, Monday, June 30, 1930	282,157,000
Record week, week ended July 2, 1930	1,121,133,000
Record month, January 1929	4,274,313,000
Record year, 1929	44,896,677,000

TABLE VI.—(*b*) CLEARING HOUSE STATISTICS

(Quarterly)

	1925	1926	1927	1928	1929	1930	1931	1932	1933
Total . .	40,437	39,825	41,551	44,205	44,897	43,558	36,236	32,112	
1st Quarter .	10,540	10,119	10,430	11,092	11,559	11,539	10,245	7 601	8,204
2nd „ .	9,938	9,773	10,510	11,296	10,752	10,979	9,840	8,031	7,433
3rd „ .	9,534	9,656	9,850	10,555	11,154	10,684	8,991	8,275	
4th „ .	10,425	10,277	10,760	11,262	11,431	10,357	7,159	8,205	
Town . .	35,801	35,346	36,820	39,311	39 936	38,783	31,816	27,834	
1st Quarter .	9,367	8,949	9,246	9,857	10,316	10 292	9.079	6 493	7,092
2nd „ .	8,789	8,689	9,331	10,080	9 514	9,782	8.745	6,970	6,361
3rd „ .	8,402	8,589	8,701	9,371	9.941	9.529	7,932	7,256	
4th „ .	9,243	9,119	9,541	10,003	10,1 5	9,180	6,060	7,115	
Metropolitan.	1,678	1,661	1,758	1,854	1,882	1,812	1,668	1,6 o	
1st Quarter .	419	428	442	466	479	477	449	420	423
2nd „ .	415	402	437	459	470	455	417	395	401
3rd „ .	412	399	422	447	456	434	395	380	
4th „ .	432	432	456	482	476	447	406	415	
Country .	2,958	2,818	2,973	3039	3,079	2,964	2,752	2,668	
1st Quarter .	753	741	742	770	764	771	717	689	689
2nd „ .	733	683	742	757	769	742	677	665	671
3rd „ .	720	668	726	736	756	720	664	638	
4th „ .	751	726	763	776	790	730	694	675	
Provincial .	1,790	1,628	1,710	1,673	1,599	1,348	1,200	1,238	
1st Quarter .	483	454	433	448	427	385	319	318	317
2nd „ .	437	384	409	414	387	333	287	298	315
3rd „ .	422	380	419	391	386	311	285	312	
4th „ .	448	410	449	420	399	319	308	311	

TABLE VII.—WEEKLY RETURN OF THE BANK OF ENGLAND

Accounts pursuant to the Act 7th and 8th Victoria cap. 32 for weeks ended Wednesday, July 5, 1914 and November 21, 1928

ISSUE DEPARTMENT

	July 5, 1914.	*Nov.* 21, 1928.		*July* 5, 1914.	*Nov.* 21, 1928.
	£	£		£	£
Notes issued . . .	56,908,235	180,964,085	Government debt . .	11,015,100	11,015,100
			Other securities . . .	7,434,900	8,734,900
			Gold coin and bullion .	38,458,235	161,214,085
	56,908,235	180,964,085		56,908,235	180,964,085

BANKING DEPARTMENT

	£	£		£	£
Proprietor's capital . .	14,553,000	14,553,000	Government securities . .	11,005,126	48,240,327
Rest	3,431,484	3,204,147	Other securities . . .	33,623,288	34,757,491
Public deposits[1] . . .	13,318,714	14,398,189	Notes	27,592,980	48,161,710
Other deposits . . .	42,485,605	99,472,105	Gold and silver coin . .	1,596,419	870,504
Seven-day and other bills .	29,010	2,591			
	73,817,813	132,130,032		73,817,813	132,130,032

[1] Including Exchequer, Savings Banks, Commissioners of National Debt, and Dividend Accounts.

TABLE VIII.—BANKING STATISTICS OF

(From *The Economist* Banking

1. DEPOSITS.[1]

	1900	1913	1914	1915	1916	1917	1918	1919	1920
BANK OF ENGLAND .	44	71	155	162	179	166	173	200	190
JOINT STOCK BANKS:									
England and Wales .	587	809	896	993	1,155	1,365	1,583	1,874	1,962
Scotland . .	107	126	133	141	167	197	222	260	279
Ireland . . .	49	71	75	78	84	99	132	166	200
PRIVATE BANKS .	40	27	33	33	39	45	51	56	51
Totals . .	827	1,104	1,292	1,407	1,624	1,872	2,161	2,556	2,682

[1] For earlier figures of Deposits

2. BANK NOTES IN CIRCULATION.

BANK OF ENGLAND .	30	30	36	35	40	46	70	91	133
JOINT STOCK BANKS:[2]									
Scotland . .	8	8	10	13	15	19	25	28	29
Ireland . . .	7	8	11	15	19	22	31	29	25
	45	46	57	63	74	87	126	148	187

[2] The note issues of the English Joint Stock Banks

3. BANK RATE.

Highest . . .	6	5	10	5	6	5½	5	6	7
Lowest . . .	3	4½	3	5	5	5	5	5	6
Average . . £	3 19 3	4 15 5	4 0 9	5 0 0	5 9 3	5 3 0	5 0 0	5 3 0	6 14 4

4. PRINCIPAL ASSETS.

BANK OF ENGLAND:									
Coin and Bullion .	29	35	69	51	54	58	79	91	128
Investments . .	34	32	33	51	76	77	90	111	126
Other Securities in Banking Dept. .	29	52	106	112	106	95	92	107	86
JOINT STOCK BANKS									
England & Wales:									
Cash & Call Money.	144	236	276	262	369	428	481	453	449
Investments . .	128	121	146	311	323	340	347	399	369
Discounts, &c. .	395	540	553	504	543	686	835	1,130	1,263
Scotland:									
Cash & Call Money.	26	34	35	37	42	48	57	66	73
Investments . .	33	38	45	67	70	72	94	112	103
Discounts, &c. .	70	78	78	65	85	112	114	130	153
Ireland:									
Cash & Call Money.	12	17	22	23	33	40	57	55	47
Investments . .	18	24	26	35	38	42	65	77	81
Discounts, &c. .	37	49	48	45	43	51	52	75	110
Private Banks:									
Cash & Call Money.	11	6	7	8	10	12	16	13	12
Investments . .	15	8	8	9	9	10	13	14	6
Discounts, &c. .	21	17	21	19	23	25	25	32	36
	1,002	1,287	1,473	1,599	1,824	2,096	2,417	2,865	3,042

[3] Excluding Irish Free

THE UNITED KINGDOM, 1895–1932

Numbers. In millions of £'s)

1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
123	133	132	174	169	143	139	120	116	175	174	145	
1,975	1,834	1,822	1,814	1,807	1,848	1,893	1,951	1,911	1,977	1,821	2,064	
291	268	247	243	241	239	242	249	251	256	244	276	
213	210	201	198	191	184	49[3]	50	49	49	49	54	
48	51	33	29	28	30	30	31	29	27	22	15	
2,630	2,496	2,435	2,458	2,436	2,414	2,353	2,401	2,356	2,484	2,310	2,554	

see Layton, Appendix D.

127	125	128	128	145	141	139	388	380	369	364	371	
25	23	22	22	22	21	21	21	21	21	21	21	
19	17	17	17	16	15	4[3]	4	4	4	3	3	
171	165	167	167	183	177	164	413	405	394	388	395	

and of the Private Banks are now extinct.

7	5	4	4	5	5	5	4½	6½	5	6	6
5	3	3	4	4	5	4½	4½	4½	3	2½	2
6 2 4	3 13 9	3 9 9	4 0 0	4 11 0	5 0 0	4 13 0	4 10 0	5 10 0	3 8 5	3 18 7	3 0 2

128	127	128	129	145	151	152	159	151	153	125	124
55	70	69	88	84	54	60	312	312	325	349	369
83	78	81	104	103	97	83	55	51	84	82	41
439	423	414	438	442	444	493	494	481	472	415	446
376	424	404	361	318	308	291	293	285	329	329	521
1,280	1,103	1,117	1,132	1,168	1,209	1,221	1,269	1,251	1 281	1,166	1,188
70	64	64	61	60	60	61	63	62	64	60	68
115	126	112	104	95	91	89	83	84	98	101	137
151	122	114	123	131	133	139	150	154	146	134	123
43	32	34	31	26	24	8[3]	7	6	6	6	8
82	103	95	94	92	87	19[3]	20	20	22	21	22
119	105	102	104	104	102	33[3]	33	33	32	31	32
8	9	3	3	3	4	4	4	4	4	2	2
6	12	5	6	5	5	6	6	4	6	2	3
36	33	28	23	22	24	23	24	24	20	21	12
2,991	2,831	2,770	2,801	2,798	2,793	2,682	2,972	2,922	3,042	2,844	3,096

[3] State since 1927.

TABLE IX.—CLEARING BANKS STATISTICS

(*a*) Half Yearly, 1913–20

(In millions of £'s)

Date.	*Deposits.*	*Cash in hand and at Bank of England.*	*Percentages on Deposits.*	*Call Money.*	*Discounts, Loans, and Advances.*	*Investments.*
1913 Dec. .	670·6	111·1	16·6	90·3	362·4	96·6
1914 June .	708·5	108·9	15·4	94·0	455·7	109·3
Dec. .	785·5	166·6	21·2	76·6	431·2	131·0
1915 June .	899·2	201·1	22·4	98·1	489·2	162·3
Dec. .	870·9	171·0	19·6	66·3	376·5	280·0
1916 June .	940·8	180·0	19·1	80·8	448·7	283·3
Dec. .	1,032·1	241·6	23·4	91·6	452·0	288·7
1917 June .	1,015·5	182·9	18·0	71·1	548·6	265·5
Dec. .	1,224·2	230·9	18·9	162·9	578·6	289·8
1918 June .	1,287·6	243·1	18·9	157·4	666·1	285·5
Dec. .	1,441·5	265·6	18·4	187·8	722·3	309·9
1919 June .	1,673·8	333·9	19·9	316·4	779·5	322·5
Dec. .	1,703·1	309·2	18·2	105·5	1,001·5	365·1
1920 June .	1,758·7	298·1	17·0	94·3	1,002·4	368·4
Dec. .	1,798·1	304·1	16·9	112·9	1,137·0	344·5

TABLE IX.—CLEARING BANKS STATISTICS

(*b*) Quarterly Averages, 1919–31

See p. 310.

TABLE IX.—CLEARING BANKS STATISTICS

(*c*) Monthly Averages, 1931–33

Date.	*Deposits.*	*Cash in hand and at Bank of England.*	*Percentages on Deposits.*	*Call Money.*	*Discounts.*	*Loans and Advances.*	*Investments* [1]
1931 Jan. .	1,873·3	197·7	*10·6*	144·3	329·7	923·9	322·8
Feb. .	1,819·6	190·0	*10·4*	115·9	301·2	924·9	335·3
Mar. .	1,763·9	184·0	*10·4*	114·1	240·4	936·1	337·0
April .	1,735·7	178·5	*10·3*	117·0	211·0	940·3	334·3
May .	1,737·8	179·4	*10·3*	131·5	224·0	934·6	315·7
June .	1,781·9	187·4	*10·5*	133·2	265·7	923·0	314·2
July .	1,787·7	183·8	*10·3*	130·5	281·0	913·0	324·9
Aug. .	1,745·0	179·8	*10·3*	113·2	263·6	908·5	327·1
Sept. .	1,717·8	173·7	*10·1*	106·9	236·9	910·8	329·3
Oct. .	1,724·0	176·1	*10·2*	114·4	237·5	909.7	328·9
Nov. .	1,706·4	173·1	*10·1*	109·4	240·5	900·2	325·0
Dec. .	1,737·0	184·4	*10·6*	119·4	246·4	899·9	321·7
1932 Jan. .	1,714·0	179·8	*10·5*	117·3	239·3	904·9	308·1
Feb. .	1,658·6	172·8	*10·4*	109·8	207·5	902·3	304·4
Mar. .	1,676·4	174·0	*10·4*	112·5	216·8	902·1	306·7
April .	1,680·5	173·3	*10·3*	112·4	240·1	881·0	312·3
May .	1,699·0	179·1	*10·5*	113·1	246·5	871·4	325·0
June .	1,764·4	191·3	*10·8*	113·4	277·7	852·2	364·2
July .	1,803·9	190·7	*10·6*	123·0	317·4	836·2	372·4
Aug .	1,850·6	192·6	*10·4*	117·5	374·4	816·2	387·2
Sept. .	1,864·9	192·7	*10·4*	113·7	392·2	802·7	406·6
Oct .	1,893·4	192·5	*10·2*	116·8	390·5	795·1	435·2
Nov. .	1,898·4	193·4	*10·2*	116·3	391·2	785·1	448·6
Dec. .	1,983·1	206·5	*10·4*	126·6	407·9	773·4	496·2
1933 Jan. .	1,982·8	214·0	*10·8*	113·8	431·2	764·4	496·7
Feb. .	1,956·7	207·6	*10·6*	111·8	385·5	765·6	522·5
Mar. .	1,925·2	207·0	*10·8*	108·7	348·1	766·2	534·4
April .	1,930·4	218·7	*11·3*	104·7	337·8	763·6	541·4
May .	1,944·0	205·6	*10·6*	97·7	346·1	774·8	554·6
June .	1,978·2	213·2	*10·8*	101·2	351·8	775·2	568·7
July .	1,973·4	204·6	*10·4*	95·9	362·8	767·6	578·8
Aug. .	1,965·6	208·1	*10·6*	90·7	359·0	758·2	588·2

[1] Including investments in affiliated banks.

TABLE IX.—CLEARING BANKS STATISTICS. (*b*) QUARTERLY AVERAGES, 1919–31

(Compiled from the *Macmillan Committee Report*)

Quarter ending.	*Current Accounts.*	*Deposits.*	*Total.*	*Cash.*		*Total.*	*Percentages on Deposits.*	*Money at Call.*	*At short notice.*		*Total.*	*Discounts.*		*Total.*	*Loans and Advances.*	*Investments.*
				In hand.	*At Bank of England.*				*To Money Market.*	*To Stock Exchanges.*		*Treasury Bills.*	*Commercial Bills.*			
1919 Mar. .	955·4	450·7	1406 1	105·9	87·9	193·8	*13·8*	25·0	104·2	14·4	143 5	202·4	91·7	294·0	488·5	325·4
June .	1015·4	489·9	1505 3	113·6	140·0	253 6	*16·8*	25·1	119·0	14·9	159·0	180·9	91·0	271·9	515·6	329·1
Sept. .	1017·7	498·8	1516·6	112·4	93·6	205·9	*13·6*	21·7	86·6	17·3	125·6	127·8	104·6	232 4	620·1	375·2
Dec. .	1075·1	540·0	1615·0	117·9	93·9	211·8	*13·1*	20·0	53·7	24·1	97·8	126·0	140·0	266·1	694·4	376·0
1920 Mar .	1123·0	572·3	1695·3	104·8	77·7	182·5	*10·8*	21·4	55·6	25·4	102·3	88·5	152·8	241·3	818·4	375·4
June .	1099·1	600·4	1699·5	101·8	89·0	190·8	*11·2*	23·3	49·3	22·6	95·1	77·2	134·1	211·2	855·6	369·8
Sept. .	1076·9	641·6	1718 5	106·7	73·9	180·6	*10·5*	24·7	55·8	21·1	101·5	129·1	140·3	269·4	834·5	367·5
Dec. .	1091·5	674·0	1765·5	109·8	94·3	204·1	*11·6*	26·0	56·6	18·9	101·5	167·5	149·8	317·2	817·9	358·2
1921 Mar. .	1049·3	694·3	1743·6	110·2	83·7	193·9	*11·1*	22·0	49·9	18·9	90·8	167·3	148·9	316·2	825·8	351·2
June .	1005·2	720·8	1726·0	112·5	96·9	209·4	*12·1*	26·5	54·6	19·1	100.2	184·8	132·4	317.2	808·9	345·3
Sept. .	1014·9	740·9	1755·8	112·3	89·4	201·7	*11·5*	30·2	58·0	16·9	105·1	262·4	129·3	391·7	778·1	342·0
Dec. .	1029·5	759·6	1789·1	108·0	114·3	222·2	*12·4*	30·2	56·8	17·2	104·2	283·8	125·6	409·4	748·0	356·8
1922 Mar. .	1016·2	749·5	1765·6	109·3	90·9	200·2	*11·3*	32·6	58·6	21·7	112·8	255 0	120·1	375·1	728·9	407·7
June .	999·1	730·3	1729·4	107·0	98·1	205·2	*11·9*	32·8	61·8	24·4	119·0	201·2	112·8	314·0	707·0	434·7
Sept. .	982·5	689·3	1671·8	109·1	83·6	192·7	*11·5*	26·7	58·9	24·3	109·9	190·3	108·8	299·0	697·8	436·7
Dec. .	995·6	667·4	1663·0	104·5	98·9	203·4	*12·2*	26·6	56·0	23·2	105·8	185·5	111·7	297·3	713·6	403·1
1923 Mar. .	980·3	644·2	1624·5	105·2	81·1	186·3	*11·5*	25·5	59·4	25·2	110·1	166·5	117·0	283·5	726·6	381·1
June .	965·5	638·6	1604·1	101·1	89·5	190·6	*11·9*	25·4	61·7	27·6	114·8	136·3	118·7	255 0	731·0	371·0
Sept. .	953·7	646·1	1599·8	104·7	83·2	187·9	*11·7*	23·7	60·3	22·0	106·0	140·7	121·7	262·4	725·4	379·8
Dec. .	962·9	665·1	1628·0	104·2	95·4	199·6	*12·3*	24·5	59·3	23·1	106·9	140·9	121·7	262·6	735·0	378·7

1924	Mar. .	948·5	667·8	1616 3	103·8	83·7	187·5	*11·6*	23·1	55·4	20·3	98·8	118·8	126·0	244·8	756·6	383·9
	June .	953·7	662·9	1616·6	102·7	93·3	196·0	*12·1*	25 8	54·4	22·8	103·0	97·5	125·7	223·2	774·1	369·1
	Sept. .	943·8	662·9	1606·6	103·9	80·0	183·8	*11·4*	24·9	59·3	22·2	106·4	103·9	124·5	228·4	775·4	361·7
	Dec. .	954·2	669·3	1623·5	104·7	96·2	200·9	*12·4*	24·4	59·5	26·0	109·9	98·9	125·8	224·7	790·7	344·2
1925	Mar. .	937·3	669·7	1607·0	105·3	79·0	184·3	*11·5*	24·4	59·9	31·8	116·0	89·4	131·5	220·9	810·9	325·4
	June .	908·9	685·8	1594·7	103·0	91·4	194·4	*12·2*	23·9	58·8	29·8	112·5	72·5	119·2	191·7	831·4	309·5
	Sept. .	910·4	686·5	1596·9	104·9	79·0	183·9	*11·5*	26·3	65·8	28·3	120·4	106·9	125·7	232·6	822·5	292·8
	Dec. .	933·6	678·7	1612·2	101·5	95·3	196·8	*12·2*	24·6	60·0	32·4	117·0	95·0	134·1	229·1	821·8	294·0
1926	Mar. .	914·2	670·9	1585·1	104·4	78·9	183·4	*11·6*	24·8	57·8	31·8	114·5	82·2	122·1	204·3	846·1	287·7
	June .	911·1	676·9	1587·9	103·5	88·8	192·3	*12·1*	25·9	60·4	30·8	117·0	82·0	109·9	192·0	855·2	279·3
	Sept. .	920·8	691·4	1612·2	102·4	83·7	186·1	*11·5*	24·0	68·3	30·7	123·1	120·0	101·6	221·7	856·7	283·2
	Dec. .	939·6	710·7	1650·3	101·9	92·9	194·8	*11·8*	25·2	66·1	35·0	126·3	119·5	97·5	217·0	874·1	287·7
1927	Mar. .	913·2	721·4	1634·6	104·5	79·5	183·9	*11·3*	24·8	67·1	35·0	126·9	119·7	94·1	213·7	889·5	278·2
	June .	924·7	723·4	1648·1	106·6	91·6	198·2	*12·0*	24·1	71·6	39·6	135 2	92·9	100·2	193·1	899·7	270·5
	Sept. .	933·8	718·7	1652·5	106·0	78·5	184·5	*11·2*	25·7	78·0	39·6	143·3	110·4	99·2	209·6	904·3	270·8
	Dec. .	956·8	742·4	1699·2	103·4	91·8	195·2	*11·5*	26·4	84·8	44·0	155·1	127·2	100·2	227·4	903·2	270·7
1928	Mar. .	938·3	738·7	1677·6	106·0	72·9	178·9	*10·7*	29·5	77·9	47·8	155·2	102·7	109·2	212·0	915·3	277·7
	June .	945·4	741·8	1687·2	100·2	86·1	186·3	*11·0*	28·1	78·1	49·8	156 0	87·6	115·9	203·6	923·7	269·5
	Sept. .	952·8	761·8	1714·6	103·6	80·7	184·3	*10·7*	27·8	78·9	44·2	150·8	121·4	125·6	247·0	921·6	275·1
	Dec. .	977·8	778·5	1756·3	108·0	94·8	202·8	*11·5*	28·3	75·8	50·1	154·2	119·1	122·1	241·2	933·7	279·1
1929	Mar. .	955·7	788·3	1744·0	104·8	81·6	186·4	*10·7*	25·8	69·5	45·8	141·2	107·1	132·2	239 3	960·7	278·4
	June .	940·3	790·2	1730·5	100·4	85·5	185·9	*10·7*	28·8	73·4	46·9	149 2	80·3	120·5	200·8	970·1	276·7
	Sept. .	937·5	797·1	1734·6	105·5	72·7	178·2	*10·3*	28·5	78·6	44·9	151·9	104·2	121·8	226·0	966·8	275·5
	Dec. .	927·2	816·0	1743·1	106·7	91·8	198·6	*11·4*	32·5	82·4	35·9	150·9	101·6	116·9	218·5	958·3	269·5
1930	Mar. .	890·3	799·2	1689·5	104·6	71·6	176·3	*10·4*	34·6	74·7	32·6	141·8	95·1	111·9	207·0	958·9	265·9
	June .	917·7	814·6	1732·3	101·5	88·4	189·9	*11·0*	30·8	75·8	33·9	140·6	99·4	141·5	240·8	947·5	268·4
	Sept. .	926·7	823·5	1750 2	104·0	79·7	183·8	*10·5*	32·3	85·6	24·7	142·5	144·5	131·5	276·0	922·1	288·7
	Dec. .	948·5	842·9	1791·3	104·0	98·4	202·4	*11·3*	34·7	84·2	22·7	141·6	175·7	123·9	299·5	905·3	303·2
1931	Mar. .	923·3	823·2	1746·5	101·4	76·8	178·3	*10·2*	30·9	72·4	21·4	124·6	164·3	109·8	274·1	902·3	331·5

TABLE X.—BANK OF ENGLAND'S WEEKLY RETURN

(*a*) First Week of Each Quarter, 1914–28

(In millions of £'s)

Date.	*Coin and Bullion.*	*Note Circulation.*	*Deposits.*	*Securities in Banking Department.*	*Reserve.*	*Proportion.*	*Bank Rate.*
						%	
1914 Jan. 7	37·1	29·0	53·7	45·2	26·5	49 3/8	4½
April 1	39·0	29·5	67·5	57·8	28·0	41 5/8	3
July 1	40·0	29·8	71·6	60·7	28·7	40 1/8	3
Oct. 7	56·8	34·8	164·5	141·9	40·4	24 1/8	5
1915 Jan. 6	68·8	35·9	157·2	123·7	51·4	32 1/4	5
April 7	53·8	34·9	202·9	183·4	37·3	18 3/8	5
July 7	53·3	35·1	207·8	189·0	36·6	17 5/8	5
Oct. 6	61·2	32·9	179·7	150·6	46·8	26	5
1916 Jan. 5	51·1	35·2	164·0	147·6	34·4	21	5
April 5	56·5	33·9	157·7	134·3	41·0	26	5
July 5	60·3	36·4	162·6	138·0	42·4	26	5
Oct. 4	54·6	37·1	169·6	151·4	36·0	21 1/4	6
1917 Jan. 3	55·0	39·9	169·5	154·0	33·5	19 3/4	6
April 4	54·7	38·9	179·1	162·6	34·2	19 1/8	5
July 4	55·2	40·2	172·3	156·6	33·5	19 1/2	5
Oct. 3	55·7	41·8	171·3	157·1	32·3	18 7/8	5
1918 Jan. 2	59·2	46·6	190·5	177·3	31·1	16 1/4	5
April 3	61·4	48·0	186·6	172·8	31·9	17 1/8	5
July 3	65·3	54·9	190·2	179·2	28·9	15 1/4	5
Oct. 2	72·2	62·3	167·7	157·4	28·4	16 7/8	5
1919 Jan. 1	80·0	70·2	241·2	230·8	28·2	11 3/4	5
April 2	84·9	75·2	156·1	146·0	28·2	18 1/8	5
July 2	88·6	79·9	191·5	182·2	27·1	14 1/8	5
Oct. 1	88·2	84·1	137·1	152·7	22·5	14 1/4	5
1920 Jan. 7	91·3	90·3	158·8	157·2	19·4	12 1/4	6
April 7	112·1	106·8	158·7	152·6	23·8	15	6
July 7	120·7	122·7	134·9	136·3	16·4	12 1/4	7
Oct. 6	123·2	127·8	156·0	159·8	13·8	8 7/8	7
1921 Jan. 5	128·3	131·6	171·7	174·5	15·2	8 7/8	7
April 6	128·3	129·2	145·7	145·8	17·6	12 1/8	7
July 6	128·4	129·1	148·8	148·9	17·7	11 7/8	6
Oct. 5	128·4	125·7	147·0	143·5	21·2	14 3/8	5½
1922 Jan. 4	128·4	125·7	192·0	188·8	21·2	11	5
April 5	128·9	122·9	146·5	139·8	24·4	16 5/8	4½
July 5	128·5	124·5	148·3	143·8	22·4	15	3½
Oct. 4	127·4	123·2	138·9	133·9	22·7	16 3/8	3
1923 Jan. 3	127·5	124·1	157·8	153·9	21·9	13 7/8	3
April 4	127·5	124·1	127·1	121·6	23·2	18 1/4	3
July 4	127·6	127·0	143·2	140·8	20·4	14 3/8	4
Oct. 3	127·7	124·8	120·3	115·9	22·6	18 7/8	4
1924 Jan. 2	128·1	127·5	163·6	161·2	20·3	12 3/8	4
April 2	128·1	126·4	130·9	127·6	21·5	16 3/8	4
July 2	128·3	127·8	151·9	149·6	20·2	13 3/8	4
Oct. 1	128·4	122·3	128·1	120·5	25·9	20 1/4	4

Date.	*Coin and Bullion.*	*Note Circulation.*	*Deposits.*	*Securities in Banking Department.*	*Reserve.*	*Proportion.*	*Bank Rate.*
						%	
1925 Jan. 7 .	128·6	127·6	130·1	127·3	20·8	15 7/8	4
April 1 .	128·7	121·3	136·3	127·4	27·2	19 7/8	5
July 1 .	157·6	146·6	155·6	142·9	30·7	19 3/4	5
Oct. 7 .	157·9	144·0	119·1	103·0	33·7	28 3/8	4
1926 Jan. 6 .	144·7	143·4	136·8	133·8	21·0	15 3/8	5
April 7 .	146·7	141·9	120·1	113·3	24·5	20 3/8	5
July 7 .	150·5	142·2	122·1	112·1	28·1	23	5
Oct. 6 .	154·9	140·2	122·7	105·9	34·4	28	5
1927 Jan. 5 .	151·4	139·8	152·6	139·3	32·3	20 1/2	5
April 6 .	151·3	137·9	124·3	108·7	33·2	26 1/16	5
July 6 .	151·1	138·3	123·6	109·4	32·6	26 5/16	4 1/2
Oct. 5 .	151·2	137·0	130·9	114·6	33·9	25 15/16	4 1/2
1928 Jan. 4 .	152·3	137·7	156·3	140·0	34·3	21 5/16	4 1/2
April 4 .	157·2	136·6	114·9	92·1	40·4	35 1/16	4 1/2
July 4 .	173·4	137·2	146·5	108·5	56·0	38 1/4	4 1/2
Oct. 3 .	168·2	135·0	112·5	77·8	53·0	47 1/16	4 1/2
Nov. 21 .	162·1	132·8	114·4	83·1	49·0	42 13/16	4 1/2

TABLE X.—BANK OF ENGLAND'S WEEKLY RETURN

(*b*) Monthly Averages since November 28, 1928

(In millions of £s)

		Coin and Bullion	*Note Gold. Percentage on Circulation.*	*Total Deposits.*	*Of Which Bankers'*	*Securities in Banking Dept.*	*Reserve.*	*Proportion.*	*Bank Rate.*
								%	
1928	Nov. 28	159·8	29·2	121·0	62·4	86·0	52·8	43·6	4½
	Dec.	156·3	31·5	115·7	68·8	96·9	36·7	31·7	4½
1929	Jan.	153·7	28·5	121·9	67·6	90·2	49·8	41·6	4½
	Feb.	150·5	26·5	113·5	62·4	74·6	57·0	50·3	4½–5½
	Mar.	152·6	27·1	113·9	62·0	76·1	56·2	49·3	5½
	April	155·7	27·9	116·8	62·6	79·4	55·3	47·4	5½
	May	161·5	28·1	109·6	59·8	67·8	59·6	54·3	5½
	June	162·9	28·1	115·9	63·8	72·4	61·3	53·2	5½
	July	152·1	29·5	116·3	65·0	91·2	43·2	37·3	5½
	Aug.	139·5	29·6	115·3	61·4	103·0	30·4	26·3	5½
	Sept.	136·3	28·5	115·9	65·2	101·4	32·7	28·3	5½
	Oct.	132·1	27·9	112·7	63·6	99·3	31·4	27·8	6½
	Nov.	133·3	27·1	112·1	58·3	93·1	36·8	32·7	6–5½
	Dec.	139·6	29·7	107·7	62·5	95·2	30·2	28·3	5½–5
1930	Jan.	149·5	26·9	131·5	75·6	95·8	53·7	42·0	5
	Feb.	151·6	25·1	108·2	55·8	62·0	64·3	59·6	5–4½
	Mar.	153·8	25·7	108·1	59·9	62·4	64·1	59·2	4½–4–3½
	April	161·4	27·7	119·0	65·2	75·3	61·6	51·6	3½
	May	161·1	27·1	116·1	60·9	69·2	64·7	55·7	3
	June	157·3	27·9	112·8	63·0	73·8	56·9	50·5	3
	July	155·7	28·8	117·1	70·3	84·4	50·7	43·3	3
	Aug.	154·7	28·9	112·7	63·0	81·9	49·0	43·3	3
	Sept.	156·8	27·7	110·0	66·0	71·0	57·3	52·1	3
	Oct.	159·1	27·2	115·0	61·0	71·0	61·8	53·7	3
	Nov.	159·5	26·6	110·5	57·8	62·8	65·4	59·1	3
	Dec.	151·3	29·5	123·0	81·4	98·5	42·4	35·5	3
1931	Jan.	143·9	26·1	117·1	64·4	83·2	52·0	44·4	3
	Feb.	141·3	25·1	107·3	60·1	71·3	54·1	50·4	3
	Mar.	142·7	25·6	103·4	60·8	68·3	53·4	51·7	3
	April	146·5	26·5	105·3	56·6	70·3	52·8	50·2	3
	May	150·4	26·5	104·5	58·0	65·8	56·5	53·9	3–2½
	June	158·8	26·5	116·4	68·7	69·4	64·9	55·6	2½
	July	155·8	27·4	118·0	69·3	78·5	57·5	48·6	2½–3½
	Aug.	134·4	23·0	117·6	59·2	83·9	52·0	44·0	4½
	Sept.	136·2	22·3	132·4	60·2	93·5	57·1	43·3	4½–6
	Oct.	136·8	23·0	135·7	68·2	98·4	55·0	40·6	6
	Nov.	121·6	22·8	120·6	60·2	97·8	40·5	33·6	6
	Dec.	121·4	24·3	136·4	86·7	120·8	33·4	24·9	6
1932	Jan.	121·3	22·0	132·4	75·6	106·9	43·5	33·0	6
	Feb.	121·3	20·6	118·3	70·7	86·5	50·0	42·2	6–5
	Mar.	121·4	22·7	120·7	75·0	98·4	40·6	33·6	5–4–3½

		Coin and Bullion	*Note Gold. Percentage on Circulation.*	*Total Deposits.*	*Of Which Bankers'*	*Securities in Banking Dept.*	*Reserve.*	*Proportion.*	*Bank Rate.*
								%	
1932	April	121·4	22·8	120·1	72·3	97·2	40·5	33·8	3½–3
	May	123·1	23·0	127·5	76·3	104·1	41·2	32·2	3–2½
	June	134·1	23·3	142·3	84·7	109·5	50·7	35·6	2½
	July	137·5	25·1	134·7	85·0	107·1	45·5	33·7	2
	Aug.	139·6	25·3	133·9	83·9	105·6	46·4	34·6	2
	Sept.	140·2	24·0	136·3	86·1	100·9	53·6	39·4	2
	Oct.	140·4	23·7	134·6	79·6	97·3	55·0	40·8	2
	Nov.	140·4	23·6	138·2	86·7	100·3	55·7	40·3	2
	Dec.	130·5	25·6	140·5	98·0	122·8	35·7	25·5	2
1933	Jan.	121·5	23·1	159·4	113·9	138·3	39·2	24·9	2
	Feb.	132·7	22·9	151·6	93·3	118·5	51·2	33·6	2
	Mar.	164·4	24·4	157·2	100·2	99·6	75·8	38·4	2
	April	182·1	30·5	149·7	100·8	99·3	68·1	45·5	2
	May	187·0	30·1	148·1	92·2	91·0	74·9	50·6	2
	June	189·0	30·7	156·5	101·9	100·6	73·8	47·1	2
	July	191·1	31·2	167·1	95·2	112·0	73·1	44·2	2
	Aug.	191·5	31·4	162·4	90·1	108·1	72·5	44·6	2

TABLE XI.—LONDON COURSE OF EXCHANGE

(From *The Times* and *Economist*)

On.	*Usance.*	*Price negotiated on change. Thursday, July 16, 1914.*	*Meaning.*	*Par of Exchange.*	*Comparative Rates on Thursday,*	
					December 7, 1916.	*January 20, 1921.*[7]
Amsterdam, &c. . .	cheques	12·23/8–12·25/8	Florins and stivers to £1	12·107	[1] 11·65–67	11·35–38
,, . . .	3 months	12·45/8–12·51/8	,, ,,	,,	[2] 11·80–85	11·55–60
Antwerp and Brussels .	,,	25·50–25·55	Francs and centimes to £1	25·22½	—	[5] 54·75–55·25
Hamburg, Berlin, &c. .	,,	20·63–20·67	Marks and pfennigs ,,	20·40	—	[1] 230–235
Paris	cheques	25·17½–25·20	Francs and centimes ,,	25·22½	[1] 27·79–82	57·50–58·00
Paris and Marseilles .	3 months	25·36¼–25·41¼	,, ,, ,,	,,	28·15–20	58·25–75
Switzerland . . .	,,	25·37½–25·42½	,, ,, ,,	25·22½	[1] 24·15–25 24·50–60	24·02–12 24·52–62
Austria	,,	24·41–24·45	Kronen and heller ,,	24·02	—	—
St. Petersburg (Petrograd) and Moscow . .	,,	24½–24¾	Pence to 1 rouble	25·6	[1] 163–165 [3] 165¼–7¼	— —
Genoa	,,	25·56¼–25·61¼	Lire and centesimi to £1	25·22½	[1] 32·15–25 32·63–73	105·50–106·50 nominal
New York . . .	60 days	481 1/16–481 3/16	Pence to $1	49·32	—	[6] 377½ 8½
Madrid	3 months	45 1/16–45 3/16	,, 5 pesetas	47·6	[4] 22·12–22 50–50½	28·15–25 41½–42
Lisbon and Oporto . .	,,	45 9/16–45 13/16	,, 1 milreis	53¼	[1] 31–32	6–7
Copenhagen . . .	,,	18·48–18·52	Kroner and öre to £1	18·159	[1] 17·50–60	19·90–20·10
Christiania . . .	,,	18·48–18·52	,, ,, ,,	18·159	[1] 16·87–97	20.10–30
Stockholm . . .	,,	18·48–18·52	,, ,, ,,	18·159	[1] 16·30–40	17.53–63
Buenos Ayres . .	Cable	—	Pence to 1 peso (dollar) gold	—	—	50–51
Calcutta and Bombay .	Demand	—	Pence to 1 rupee	—	—	1/5⅛–1/4 15/16

[1] Cable rates. [2] The Dutch rates are now quoted in florins and *cents*. A stiver is 5 cents.
[3] The Russian long rate is now quoted in roubles and kopeks to £10. [4] The Spanish cable rate is pesetas to £1.
[5] Cheques. [6] Now cents per £. Cable rate. [7] Last date on which the London Course of Exchange was published.

TABLE XII.—FOREIGN EXCHANGES ON LONDON (From *The Times* and *The Economist*)

Country.	*Usance.*	*Meaning.*	*Par.*	*Rate of Exchange.* *July* 16, 1914.	*July* 19, 1918.	*June* 9, 1933.	*Usance.*	*Meaning and Par.*
Paris	Cheque	Francs and centimes to £1	25·22½	25·16¾–17¾	27·16	93⅛–⅜	T.T.	124·21 francs to £1
Brussels	Cheque	„ „ „	25·22½	25·29½–30½	—	26·30–40	„	35 belgas to £1
Berlin	Sight	Marks and pfennings to £1	20·43	20·49–50	—	15 7/16–9/16	„	*
„	8 days	„ „ „		20·46½	—			
Vienna	Sight	Kronen and heller to £1	24·02	24·16–18	—	33–38	„	34·58½ schillings to £1
Amsterdam	„	Florins and cents „	12·107	12·11¾–12¼	9·18	9·06–·09	„	*
Italy	„	Lire and centesimi „	25·22½	25·26–28	43·14	71½–¾	„	92·46 lira to £1
Switzerland	„	Francs and centimes to £1	25·22½	25·18½–19¼	18·73	18·75–85	„	*
Madrid	„	Pesetas and centesima „	25·22½	26·05–15	17·28	44½ ¾	„	*
Lisbon	„	Pence to 1 milreis	53¼	46 15/16–7/16	3c¾	109½–110½	„	110 escudo to £1
St. Petersburg (Petrograd)	3 months	Roubles and kopeks to £10	94·57	95·75–85	nom. (Moscow)			
		„ „ „		95·10	—	7·10½–12¼	„	9·458 roubles to £1
Christiania	Sight	Kroner and öre to £1	18·159	18·23–26	15·04	20–20⅛	„	* (Oslo)
Copenhagen	„	„ „ „	18·159	18·23½–26¼	15·24	18·25–35	„	*
Stockholm	„	„ „ „	18·159	18·23–26	13·41	19 7/16–9/16	„	*
Bombay and Calcutta	Telegraphic transfers	Shillings and pence to 1 rupee	1s. 4d.	1s. 3 31/32	1s. 6 1/16	1·5 29/32–31/32	„	1s. 6d. to rupee
Hongkong	„ „	„ „ 1 dollar	—	1s. 10⅜	3s. 3⅝	1·3½–⅝	„	*
Shanghai	„ „	„ „ 1 tael	—	2s. 5⅝	4s. 8½	1·7 7/16–9/16	„	Shillings and pence to 1 dollar
Singapore	„ „	„ „ 1 dollar	—	2s. 3 15/16	2s. 4 1/16	2·3 29/32–7/8	„	*
Yokohama	„ „	„ „ 1 yen	24·58d.	2s. c⅜	nom.	1·8 25/32–¾	„	* (Kobe)
Alexandria	„ „	Piastres to £1	97½	97⅜	[2] 97¾	97⅜–⅝	Sight	*
Rio de Janeiro	90 days	Pence to 1 milreis	16	[1] 15 15/16	[1] 11 13/16	4¾–5⅛ (n)	90 days	5·899 pence to 1 milreis
Valparaiso	„	„ 1 peso	—	[1] 9¾	[1] 16 15/16		„	Dollars to £1
Buenos Ayres	„	„ 1 peso or dollar (gold)	47·58	[1] 47 11/16	[1] 51 3/16		T.T.	*
Monte Video	„	„ „ „	51	[1] 51 3/32	[1] 6c⅛	29–31	„	*
New York	Cable transfers	Dollars and cents to £1	4·866	4·87 7/16–11/16	4·76 7/16	3·67¼–¾	Cable	*

The rates marked [1] are telegraphed on the preceding day; [2] sight rate; * unchanged.

TABLE XIII.—EFFECT OF THE WAR ON THE FOREIGN EXCHANGES

(From the *Economist* War Supplement, December 19, 1914, &c.)

Cheques, Telegraphic or Mail Transfers.	*Normal Rate.*	*Rate just before War.*	*Extreme rates about August 1, 1914.*		*To December 19, 1914.*	
			Lowest.	*Highest.*	*Lowest.*	*Highest.*
Paris	25·22½	25·16	24·00	25·00	24·00	25·50
Switzerland	25·22½	25·17	Nominal		24·00	26·00
Brussels and Antwerp	25·22½	25·29	24·00	26·00	24·00	27·50
Amsterdam	12·107	12·15	11·90	12·60	11·70	12·60
Italy	25·22½	25·50	26·00 sellers, no buyers		24·00	28·50
Madrid	25·22½	26·10	24·00	25·90	24·45	26·70
Lisbon	53⅛	46½	42		35½	41
St. Petersburg (now Petrograd)	94·57	97·20	125 sellers, no buyers		110	120
Christiania	18·159	18·30	About 18·50		18·30	19·20
Copenhagen	18·159	18·30	About 18·50		18·30	19·20
Stockholm	18·159	18·30	About 18 50		18·30	19 20
Berlin	20·40	20·53½	21·00 sellers, no buyers		—	—
Vienna	24·02	24·32	24·60 sellers, no buyers		—	—
New York	4·866	4·93	About 6·50		4·93	5·10

TABLE XIV.—NEW YORK EXCHANGES ON EUROPE, 1914–1927

In the first week of each quarter since July, 1914. (From *Commerce and Finance*, New York, and the *Economist*)

Date.	*England.*	*France.*	*Italy.*	*Russia.*	*Germany.*	*Austria.*	*Holland.*	*Switzerland.*
1914 July 6	100	101	100	100	100	100	100	99
Oct. 5	102	102	98	—	98	98	101	102
1915 Jan. 4	100	100	97	83	93	86	101	99
Apl. 5	99	97	89	83	86	76	97	96
July 6	98	92	85	74	86	75	100	96
Oct. 4	97	90	83	69	88	77	100	98
1916 Jan. 3	97	88	79	57	80	64	108	98
Apl. 3	98	87	78	62	76	61	106	99
July 3	98	88	81	59	77	63	102	98
Oct. 2	98	89	80	62	73	59	101	97
1917 Jan. 2	98	89	75	58	75	58	102	102
Apl. 2	98	88	67	55	—	—	101	101
July 5	98	89	72	43	—	—	102	109
Oct. 4	98	89	67	30	—	—	103	111
1918 Jan. 3	98	90	61	25	—	—	104	118
Apl. 5	98	90	58	25	—	—	117	121
July 4	98	90	58	27	—	—	125	130
Oct. 2	98	95	82	27	—	—	116	110
1919 Jan. 2	98	95	82	27	—	—	103	107
Apl. 3	96	87	72	27	—	—	100	104
July 3	93	78	65	27	—	—	95	95
Oct. 2	87	61	53	27	—	—	94	93
1920 Jan. 8	77	46	39	27	8·4	0·25	93	91
Apl. 8	82	36	22	27	8·4	0·25	94	94
July 1	81	48	31	—	11·0	0·36	89	94
Oct. 7	72	35	20	—	6·7	0·19	77	83

Date.	*England.*	*France.*	*Italy.*	*Russia.*	*Germany.*	*Austria.*	*Holland.*	*Switzerland.*
1921 Jan. 6	74	31	18	—	5·8	0·11	79	89
Apl. 7	80	37	22	—	6·8	0·13	86	90
July 7	76	41	25	—	5·6	0·76	81	87
Oct. 6	78	38	21	—	3·4	2·7	80	92
1922 Jan. 5	84	41	22	—	2·1	0·17	91	100
Apl. 6	90	47	27	—	1·3	0·07	94	100
July 6	92	42	23	—	0·9	0·02	96	99
Oct. 12	91	39	22	—	0·1	0·01	96	97
1923 Jan. 4	96	37	26	—	—	0·01	98	97
Apl. 5	96	34	26	—	—	0·02	98	96
July 5	94	30	22	—	—	0·01	98	90
Oct 4	94	31	24	—	—	0·01	98	93
1924 Jan. 5	89	26	22	—	—	0·01	94	90
Apl. 5	89	30	23	102	—	0·01	93	90
July 3	89	26	22	100	—	0·01	93	92
Oct. 4	93	27	23	100	—	0·01	96	99
1925 Jan. 3	98	28	22	100	100	101	100	101
Apl. 4	98	27	21	100	100	100	99	100
July 4	99	24	19	100	100	100	100	100
Oct 3	99	24	21	100	100	100	100	100
1926 Jan. 2	99	19	21	100	100	100	100	100
Apl. 3	99	18	21	100	100	100	100	100
July 3	100	14	18	100	100	100	100	100
Oct. 2	99	15	20	100	100	100	100	100
1927 Jan. 1	99	20	23	100	100	100	100	100
Apl. 2	99	20	24	100	100	100	100	100

TABLE XV.—MONEY MARKET RATES

(From *The Economist*)

(1) LONDON.

Rates.	*Friday. 17/7/14*	*Friday. 19/7/18*	*Friday. 16/7/26*	*Friday 17/7/31*	*Friday. 21/7/33*
Bank Rate	3	5	5	2½	2
Market Discount Rates:					
60 days Banker's drafts	2	3 7/16–½	4 5/16	2 5/16	⅜–7/16
3 months „ „	2⅛	2½–9/16	4 5/16	2⅜	7/16
4 „ „ „	2¼–5/16	3½–9/16	4 5/16–⅜	2 7/16–½	½–9/16
6 „ „ „	3 1/16	3½–9/16	4⅜–7/16	2¾	¾–13/16
Loans, Day to day	1¾	3	4	1½–2	¼–1
„ Short	1¾	3¼	4	2	⅜–1
Deposit Allowances:					
Banks	1½	3	3	1	½
Discount Houses at call	1¼	3	3	1	½
„ „ at notice	1¾	3	3¼	1¼	¾
Discount Treasury Bills (3 months)	—	3½	4 5/16	2⅜	5/16–1 1/32

(2) FOREIGN.

	July 17, 1914.		*July* 19, 1918.	*July* 16, 1926.	*July* 17, 1931.	*July* 21, 1933.
	Bank Rate.	*Market Rate.*	*Bank Rate.*	*Bank Rate.*	*Bank Rate.*	*Bank Rate.*
Paris	3½	2¾	5	6	2	2½
Berlin	4	2¼	5	6	10	4
Amsterdam	3½	3¼	4½	3½	2	4
Brussels	4	3⅛	5	7	2½	3½
Vienna	4	3⅞	5	7½	10	5
Rome	5	4¼	5½	7	5½	4
Zürich	7½	2 13/16	4½	3½	2	2
Petrograd	5	Nominal	6	—	—	—
Madrid	4½	4	4½	5	6	6
Lisbon	5½	5½	5½	9	7½	6
Stockholm	4½	4½	6½	4½	3	3
Christiania	5	5	6	5½	4	3½
Copenhagen	5	5	5	5	3½	3
N.Y. Federal Reserve	—	—	—	—	1½	2½

TABLE XVI.—FOREIGN TRADE OF THE UNITED KINGDOM, 1861–1926

(From the Statistical Abstracts and Annual Statement of Trade)
(In millions of £s, excluding bullion and specie)

Year.	*Total Imports (General).*	*Net Imports (Special).*	*Re-exports.*	*Exports of Home Produce (Special).*	*Total Exports (General).*	*Apparent Excess of Imports.*
1861	—	183	—	125	—	58
1871	—	271	—	223	—	48
1881	—	334	—	234	—	100
1891	—	374	—	247	—	127
1901	522	454	68	280	348	174
2	528	463	66	283	349	180
3	543	473	70	291	360	182
4	551	481	70	301	371	180
5	565	487	78	330	408	157
6	608	523	85	376	461	147
7	646	554	92	426	518	128
8	593	513	80	377	457	136
9	625	533	91	378	470	155
1910	678	574	104	430	534	144
1	680	577	103	454	557	123
2	745	633	112	487	599	146
3	769	659	110	525	635	134
4	697	602	95	431	526	171
5	852	753	99	385	484	368
6	949	851	98	507	604	345
7	1,064	994	70	527	597	467
8	1,316	1,285	31	501	532	784
9	1,626	1,461	165	799	963	663
1920	1,933	1,710	223	1,334	1,557	376
1	1,086	979	107	703	810	276
2	1,003	899	104	720	823	180
3	1,096	977	119	767	886	210
4	1,277	1,137	140	801	941	336
5	1,321	1,167	154	773	927	394
6	1,241	1,116	125	653	779	463
7	1,218	1,095	123	709	832	386
8	1,196	1,073	120	724	844	352
9	1,221	1,111	110	729	839	382
1930	1,044	957	87	571	658	386
1	861	797	64	391	454	407
2	703	652	51	365	416	287

TABLE XVII.—MONTHLY TRADE RETURNS OF THE UNITED KINGDOM, 1913–27

(From the Monthly Accounts of Trade and Navigation)
(In millions of £'s)

	Jan.	*Feb.*	*Mar.*	*Apr.*	*May.*	*June*	*July.*	*Aug.*	*Sept.*	*Oct.*	*Nov.*	*Dec.*
1913 Imports	71·2	63·8	61·3	63·0	61·3	58·3	61·8	56·0	61·4	71·7	68·5	71·1
Exports[1]	56·2	50·9	51·3	53·1	53·2	51·4	55·5	52·3	49·3	56·2	52·8	53·1
Excess	15·0	12·9	10·0	9·9	8·1	6·9	6·3	3·7	12·1	15·5	15·7	18·0
1914 Imports	68·0	62·1	66·9	61·6	59·1	58·3	59·4	42·3	45·0	51·4	55·5	67·3
Exports	57·4	51·5	54·1	50·7	52·4	48·6	52·2	28·6	31·9	35·8	30·2	32·1
Excess	10·6	10·6	12·8	10·9	6·7	9·7	7·2	13·7	13·1	15·6	25·3	35·2
1915 Imports	67·2	65·2	75·5	73·6	71·6	76·0	75·7	69·4	70·3	67·8	71·6	70·3
Exports	35·1	33·0	38·2	42·1	43·9	42·6	44·1	39·8	39·9	39·1	44·0	41·6
Excess	32·1	32·2	37·3	31·5	27·7	33·4	31·6	29·6	30·4	28·7	27·6	28·7
1916 Imports	74·9	67·3	86·1	75·7	83·8	87·0	76·7	76·1	77·4	81·2	88·9	75·4
Exports	45·6	44·9	46·4	44·9	58·0	56·1	54·2	55·5	50·6	52·4	49·6	45·9
Excess	29·3	22·4	39·7	30·8	25·8	30·9	22·5	20·6	26·8	28·8	39·3	29·5
1917 Imports	90·6	70·9	81·1	84·5	87·6	86·1	90·1	100·6	86·3	94·3	109·8	84·8
Exports	55·3	46·3	51·7	44·3	49·8	50·1	54·4	54·3	46·4	54·9	47·1	40·3
Excess	35·3	24·6	29·4	40·2	37·8	36·0	35·7	46·3	39·9	39·4	62·7	44·5
1918 Imports	99·0	99·0	107·2	119·9	125·9	101·5	109·1	110·2	98·0	117·6	116·8	116·2
Exports	44·9	41·8	39·2	42·2	48·4	47·1	45·7	45·8	41·9	44·9	46·1	41·4
Excess	54·1	57·2	68·0	77·7	77·5	54·4	63·4	64·4	56·1	72·7	70·7	74·8
1919 Imports	134·5	106·7	105·8	112·1	135·6	122·9	153·1	148·7	148·6	153·5	143·5	169·6
Exports	51·9	52·0	62·1	71·8	75·8	76·5	77·1	90·1	82·2	98·7	107·4	117·6
Excess	82·6	54·7	43·7	40·3	59·8	46·4	76·0	58·6	66·4	54·8	36·1	52·6
1920 Imports	183·3	170·4	176·6	167·1	166·4	170·3	163·1	153·3	152·8	149·6	144·2	142·7
Exports	131·3	108·6	130·7	126·7	139·6	136·5	155·3	128·3	130·8	128·4	132·5	109·3
Excess	52·0	61·8	45·9	40·4	26·8	33·8	7·8	25·0	22·0	21·2	11·7	33·4
1921 Imports	117·0	97·0	93·8	90·0	86·3	88·2	80·5	88·6	86·9	84·7	89·3	85·4
Exports	102·7	76·2	75·7	68·4	50·3	45·2	52·5	61·3	63·8	72·7	72·7	68·6
Excess	14·3	20·8	18·1	21·6	36·0	43·0	28·0	27·3	23·1	12·0	16·6	16·8
1922 Imports	76·5	69·4	87·9	80·6	88·7	84·3	81·7	82·6	76·8	84·9	95·6	94·9
Exports	71·6	68·5	74·7	64·7	67·0	60·9	68·7	67·5	68·9	68·7	75·6	67·4
Excess	4·9	0·9	13·2	15·9	21·7	23·4	13·0	15·1	7·9	16·2	20·0	27·5

[1] Including Re-exports of Foreign and Colonial merchandise throughout.

		Jan.	*Feb.*	*Mar.*	*Apr.*	*May.*	*June.*	*July.*	*Aug.*	*Sept.*	*Oct.*	*Nov.*	*Dec.*
1923	Imports	99·8	83·9	90·0	86·4	89·4	89·4	76·9	88·4	83·2	99·9	101·6	109·2
	Exports	76·7	67·3	70·0	75·3	83·3	73·8	68·3	66·2	71·9	82·5	75·9	74·5
	Excess	23·1	16·6	20·0	11·1	6·1	15·6	8·6	22·2	11·3	17·4	25·7	34·7
1924	Imports	101·2	96·7	103·7	86·2	122·0	88·6	108·1	102·2	100·9	120·5	118·7	131·6
	Exports	77·5	81·2	73·8	74·6	83·4	72·0	81·5	75·3	72·8	81·5	80·5	81·4
	Excess	23·7	15·5	29·9	11·6	38·6	16·6	26·6	26·9	28·1	39·0	38·2	50·2
1925	Imports	128·9	110·1	112·9	110·3	104·3	111·0	98·7	91·7	97·9	108·8	114·6	134·3
	Exports	82·3	83·2	83·1	73·3	78·7	69·5	76·2	74·5	71·3	80·5	74·5	80·4
	Excess	46·6	26·9	29·8	37·0	25·6	41·5	22·5	17·2	26·6	28·3	40·1	53·9
1926	Imports	117·7	96·9	106·9	102·5	81·2	97·5	100·3	101·1	101·7	111·0	113·3	113·3
	Exports	72·1	76·0	78·5	64·0	53·3	60·9	66·7	58·4	58·8	63·5	64·1	61·2
	Excess	45·6	20·9	28·4	38·5	27·9	36·6	33·6	42·7	42·9	47·5	49·2	52·1
1927	Imports	113·6	93·9	113·5	100·6	96·4	99·3	93·4	90·1	101·4	105·0	107·4	105·4
	Exports	65·3	63·7	72·9	64·4	75·6	66·6	65·8	68·2	68·7	70·6	81·2	69·1
	Excess	48·3	30·2	40·6	36·2	20·8	32·7	27·6	21·9	32·7	34·4	26·2	36·3
1928	Imports	100·4	98·9	110·5	96·8	99·4	99·4	95·5	97·7	87·7	102·7	106·8	101·5
	Exports	70·0	68·9	76·2	66·2	70·4	70·9	69·3	71·0	63·5	73·2	74·6	69·5
	Excess	30·4	30·0	34·3	30·6	29·0	28·5	26·2	26·7	24·2	29·5	32·2	32·0
1929	Imports	116·5	90·9	98·6	104·1	103·4	91·5	93·5	101·0	98·4	110·2	108·2	106·4
	Exports	76·7	66·0	68·6	70·6	77·9	59·5	74·5	72·1	61·8	73·7	71·4	66·4
	Excess	39·8	24·9	30·0	33·5	25·5	32·0	19·0	28·9	36·6	36·5	36·8	40·0
1930	Imports	101·8	88·2	93·4	83·9	91·1	83·4	85·2	79·9	78·6	90·9	79·4	89·7
	Exports	66·4	60·6	61·6	54·7	60·1	50·7	57·4	49·1	48·1	54·1	50·9	43·7
	Excess	35·4	27·6	31·8	29·2	31·0	32·7	27·8	30·8	30·5	36·8	28·5	46·0
1931	Imports	75·5	63·7	70·6	70·0	69·6	68·6	70·2	65·3	68·3	80·7	83·2	77·0
	Exports	43·6	37·6	39·4	39·1	39·6	35·5	39·2	33·0	33·6	38·1	36·8	37·6
	Excess	31·9	26·1	31·2	30·9	30·0	33·1	31·0	32·3	34·7	42·6	46·4	39·4
1932	Imports	62·1	70·2	61·2	53·6	56·0	57·9	51·9	53·3	54·3	60·8	61·6	60·6
	Exports	36·4	35·5	36·6	39·4	34·6	33·9	32·6	32·0	29·1	34·1	35·2	36·6
	Excess	25·7	34·7	24·6	14·2	21·4	24·0	19·3	21·3	25·2	26·7	26·4	24·0
1933	Imports	54·1	49·1	56·3	51·2	57·3	53·8	53·7	56·8				
	Exports	33·4	32·4	36·5	29·9	34·6	33·7	34·2	35·3				
	Excess	20·7	16·7	19·8	21·4	22·7	20·1	19·5	21·5				

TABLE XVIII—VOLUME OF BRITISH IMPORTS AND EXPORTS, 1913–32

(From the Reports of the Liverpool Steamship Owners' Association)

	1913	1914	1915	1916	1917	1918	1925	1926	1927	1928	1929	1930	1931	1932	1933
Weights of Imports (tons—000's):															
Food, Drink, and Tobacco	18,705	16,750	16,050	15,270	13,160	11,380	18,600	18,000	19,000	18,500	19,000	18,800	21,400	20,700	
Raw Materials	28,943	24,270	24,380	22,340	17,520	19,740	25,200	20,500	27,500	24,000	27,000	24,600	19,200	19,100	
Manufactures	8,354	6,030	4,890	3,500	2,350	1,980	11,200	14,000	15,000	14,000	14,500	15,300	14,600	12,500	
Total	56,002	47,050	45,320	41,110	33,030	33,100	55,000	52,500	61,500	56,500	60,500	58,700	55,200	52,300	
Tonnage Entrances (tons net—000's):															
British ships	32,292	28,929	22,862	20,217	18,795	19,791	37,968	43,523	40,421	40,220	40,747	40,787	38,212	35,511	
Foreign ships	16,772	14,132	10,864	9,842	4,433	3,416	17,536	20,658	20,168	20,117	21,954	22,928	22,088	20,549	
Total	49,064	43,061	33,726	30,059	23,228	23,207	55,504	64,181	60,589	60,337	62,701	63,715	60,300	56,060	
Average weight of imports per 100 tons net of shipping entrances	114	109	134	137	142	142	99	98	104	94	96	92	91	93	
Weights of Exports (tons—000's):															
Coal, Coke, &c.	76,687	61,830	45,770	41,158	37,800	34,174	54,090	21,863	54,304	53,684	64,401	58,350	45,909	41,895	
General	15,116		not	available			13,200	11,500	13,600	14,300	15,400	12,500	9,100	9,000	
Transhipment	1,821						1,700	1,250	1,300	1,350	1,550	1,400	1,250	1,100	
Total	93,624						68,990	34,613	69,204	69,334	81,351	72,250	56,259	51,995	
Tonnage Clearances (tons net—000's):															
British ships	40,101	32,516	20,380	17,752	16,927	14,966	41,413	33,858	42,363	43,378	45,342	42,620	38,164	34,850	
Foreign ships	27,718	23,453	19,149	17,844	9,149	7,771	20,897	13,094	21,134	21,070	23,342	23,233	20,175	18,540	
Total	67,819	55,969	39,529	35,596	26,076	22,737	62,310	46,952	63,497	64,448	68,684	65,853	58,339	53,390	
Estimate of cargo other than coal carried per 100 tons net of clearances	57						42	35	41	42	46	38	29	31	

TABLE XIX.—U.K. BALANCE OF TRADE, VISIBLE AND INVISIBLE

(From the Board of Trade Journal in January each year)

Year.	1913	1920	1922	1924	1925	1926	1927	1928	1929	1930	1931	1932
Visible.												
Imports. Merchandise	769	1,933	1,003	1,277	1,321	1,241	1,218	1,196	1,221	1,044	861	703
Bullion and Specie[1]	74	61	45	50	52	50	40	58	71	95	107	160
Total	843	1,994	1,048	1,327	1,373	1,291	1,258	1,254	1,292	1,139	968	863
Exports. Merchandise	635	1,557	823	941	927	779	832	844	839	658	454	416
Bullion and Specie[1]	62	104	58	62	62	38	36	70	87	90	140	140
Total	697	1,661	881	1,003	989	817	868	914	926	748	594	556
Excess of Visible Imports	146	333	167	324	384	474	390	340	366	391	374	307
Invisible.												
Excess of government receipts from Overseas						1	1	15	24	19	14	−25
Net National Shipping Income	94	340	110	140	124	120	140	130	130	105	80	70
Net Income from Overseas Investments	210	200	175	192	239	285	285	270	250	220	170	140
Net receipts for Short Interest and Commissions	25	40	30	60	60	60	63	65	65	55	30	30
Net receipts from other sources	10	15	10	15	15	15	15	15	15	15	10	15
Total Invisible Exports	339	595	325	410	438	484	504	495	484	414	304	230
Estimated Net Balance	+193	+262	+158	+86	+54	+10	+114	+155	+118	+23	−70	−77
New Overseas Investments	198	60	135	134	88	112	139	143	94	109	46	29

[1] Both gold and silver.

TABLE XX.—GOLD HOLDINGS OF VARIOUS COUNTRIES, 1913-33

(From the Federal Reserve Monthly Bulletin) (In millions of $'s)

	1913	1920	1922	1924	1926	1927	1928	1929	1930	1931	1932	1933 *Jan.*	*Feb.*	*Mar.*	*Apr.*	*May.*	*June.*
World's Total	4,857	7,239	8,402	8,956	9,210	9,568	10,027	10,305	10,916	11,289	11,897	11,925	11,741	11,939	11,975	11,917	
U.S.A.	1,290	2,451	3,506	4,090	4,083	3,977	3,746	3,900	4,225	4,051	4,045	4,074	3,808	3,916	3,977	3,991	3,996
France	679	686	708	710	711	954	1,253	1,633	2,100	2,699	3,254	3,221	3,176	3,152	3,170	3,173	3,185
	1,969	3,137	4,214	4,800	4,794	4,931	4,999	5,533	6,325	6,750	7,299	7,295	6,984	7,068	7,147	7,164	7,181
Percentage of World's Total	40·5	43·3	50·2	53·6	52·1	51·5	49·9	53·7	57·9	59·8	61·4	61·2	59·5	59·2	59·7	60·1	
Rest of World	2,888	4,102	4,188	4,156	4,416	4,637	5,028	4,772	4,591	4,539	4,598	4,630	4,757	4,871	4,828	4,753	
U.K.	165	754	743	748	729	737	748	710	718	588	583	602	692	836	905	907	922
Germany	279	260	239	181	436	444	650	544	528	234	192	196	183	176	98	89	45
Spain	92	474	487	489	493	502	494	495	471	434	436	436	436	436	436	436	436
Italy	267	206	219	221	224	242	266	273	279	296	307	308	325	331	343	352	356
Belgium	48	51	52	53	86	100	126	163	191	354	361	362	366	371	371	371	371
Holland	61	256	234	203	166	161	175	180	171	357	415	413	410	381	374	336	309
Switzerland	33	105	103	98	91	100	103	115	138	453	477	477	488	489	460	397	361
Russia	786	—	3	73	85	97	92	147	249	328	368	(Not published since Aug. 1932)					
Argentine	256	474	473	444	451	529	607	434	412	253	249	249	249	249	249	249	249
Australia	22	122	127	130	110	106	109	90	75	52	42	42	42	21	3	3	
Brazil	90	33	46	54	56	101	149	150	11	—	—	—	—	—	—	—	—
Canada	117	113	147	151	158	152	114	78	110	78	84	84	84	81	77	77	
India	124	116	118	109	109	119	124	128	128	162	162	162	162	162	162	162	
Japan	65	556	606	586	562	542	541	542	412	234	212	212	212	212	212	212	

TABLE XXI.—U.S. MONEY IN CIRCULATION

(From the Federal Reserve Monthly Bulletin)

(In millions of $'s)

End of	*Dec.* 1928	*Dec.* 1929	*Dec.* 1930	*Dec.* 1931	*Dec.* 1932	*Jan.* 1933	*Feb.* 1933	*Mar.* 1933	*Apr.* 1933	*May* 1933	*June* 1933	*July* 1933		
Paper:														
Gold Certificates	991	880	1,118	877	601	591	649	393	323	280	265	252		
Fed. Res. Notes	1,808	1,862	1,641	2,603	2,716	2,707	3,405	3,621	3,362	3,167	3,061	2,973		
Treasury Paper:														
Silver Certificates	410	417	404	389	371	350	362	376	360	359	361	365		
Treasury Notes 1890	1	1	1	1	1	1	1	1	1	1	1	1		
U.S. Notes	294	265	296	288	294	287	301	266	261	265	269	275		
Fed. Res. Bank Notes	4	3	3	3	3	3	3	17	50	99	125	129		
Nat. Bank Notes	616	597	623	656	822	836	861	879	915	922	920	914		
	4,124	4,025	4,086	4,817	4,808	4.775	5,582	5,553	5,272	5,093	5,002	4,909		
Coin:														
Gold	395	384	368	409	468	479	571	367	335	324	321	320		
Silver dollars	46	42	37	33	29	28	28	28	28	28	28	28		
,, subsidiary	291	294	281	271	258	250	252	258	255	256	257	258		
Minor Coin	116	119	119	117	113	111	111	112	112	112	113	113		
	848	839	805	830	868	868	962	765	730	720	719	719		
	4,972	4,864	4,891	5,647	5,676	5.643	6,544	6,318	6,002	5,813	5,721	5,628		

TABLE XXII.—POSITION OF VARIOUS CENTRAL BANKS

(From S. Montague & Co.'s Weekly Review and the Federal Reserve Bulletin)

Date.	*Gold.*	*Funds abroad.*	*Total.*	*Note Circulation.*	*Gold percentage.*	*Deposits, &c.*	*Total Sight Liabilities.*	*Total reserve percentage.*
Bank of France (In millions of francs)								
1929 Mar. 1	34,063	11,474	45,537	64,226	53·0	17,806	82,032	55·5
1930 Feb. 28	42,855	6,956	49,811	71,116	60·3	15,904	87,020	57·2
1931 Feb. 27	55,924	7,005	62,929	78,947	70·8	24,303	103,250	60·9
1932 Feb. 26	75,059	6,268	81,327	83,189	90·2	28,536	111,725	72·8
1933 Feb. 24	81,017	2,601	83,618	83,986	96·5	20,957	104,943	79·7
June 30	81,243	2,585	83,828	84,708	95·9	19,713	104,421	80·3
Sept. 29	82,095	1,287	83,382	82,994	98·9	20,928	103,922	80·2
Germany, Reichsbank (In millions of R.M.)								
1929 Feb. 28	2,729	90	2,819	4,553	59·9	695	5,248	53·7
1930 Feb. 28	2,444	384	2,828	4,722	51·8	620	5,342	52·9
1931 Feb. 28	2,285	166	2,451	4,428	51·6	663	5,091	48·1
1932 Mar. 2	928	149	1,077	4,268	21·7	1,254	5,521	19·5
1933 Feb. 28	769	152	921	3,356	22·9	1,178	4,534	20·3
June 30	189	85	274	3,482	5·4	658	4,140	6·6
Sept. 30	367	40	407	3,625	10·1	692	4,317	9·4
U.S.A. Federal Reserve Banks (In millions of $'s)								
	Total Gold.	*Against F.R. Notes.*	*Total Reserve.*					
1929 Feb. 28	2,677	1,224	2,830	1,665	73·5	2,409	4,073	69·5
1930 Feb. 28	2,965	1,674	3,151	1,656	101·1	2,327	3,983	79·1
1931 Feb. 28	3,070	1,743	3,244	1,478	117·9	2,399	3,877	83·7
1932 Feb. 29	2,938	2,125	3,140	2,651	80·2	1,937	4,588	68·4
1933 Feb. 28	2,952	2,299	3,126	3,417	67·3	2,236	5,653	55·3
June 30	3,543	2,828	3,813	3,093	94·4	2,494	5,587	68·2
Sept. 27	3,592	2,749	3,821	2,973	92·5	2,808	5,781	66·1
Bank of England (£000's)								
	Note Gold.	*Reserve.*	*Total.*					
1929 Feb. 27	92,253	59,002	151,256	352,253	26·2	107,669	459,922	32·9
1930 Feb. 26	86,812	65,167	151,979	346,812	25·0	98,932	445,744	34·1
1931 Feb. 25	87,665	53,927	141,593	347,665	25·2	108,605	456,271	31·0
1932 Mar. 2	76,786	44,667	121,453	351,786	21·8	120,982	472,768	25·7
1933 Mar. 1	84,284	66,733	150,967	359,284	23·5	165,457	524,741	28·8
June 28	115,125	75,459	190,584	375,125	30·7	161,348	536,473	35·5
Sept. 27	110,753	81,013	191,766	370,753	29·9	157,779	528,532	36·3

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