

**Dhananjayrao Gadgil Library**



**GIPE-PUNE-009131**

**THE GOLD STANDARD  
IN THEORY AND PRACTICE**

BY THE SAME AUTHOR

- ✓ CURRENCY AND CREDIT  
8vo, 16s. net.
- MONETARY RECONSTRUCTION  
8vo, 10s. 6d. net.
- THE ECONOMIC PROBLEM  
8vo, 10s. 6d. net.
- ✓ ECONOMIC ASPECTS OF  
SOVEREIGNTY  
Demy 8vo, 9s. net.
- ✓ TRADE DEPRESSION AND THE  
WAY OUT  
*Paper Covers*, 8vo, 2s. 6d. net.
- TRADE AND CREDIT  
10s. 6d. net.

**THE GOLD STANDARD  
IN THEORY AND PRACTICE**

BY  
**R. G. HAWTREY**

**SECOND EDITION**

**LONGMANS, GREEN AND CO.**  
**LONDON □ NEW YORK □ TORONTO**

**1931**

LONGMANS, GREEN AND CO. LTD.  
39 PATERNOSTER ROW, LONDON, E.C.4  
6 OLD COURT HOUSE STREET, CALCUTTA  
53 NICOL ROAD, BOMBAY  
30a MOUNT ROAD, MADRAS

LONGMANS, GREEN AND CO.  
55 FIFTH AVENUE, NEW YORK  
221 EAST 20TH STREET, CHICAGO  
88 TREMONT STREET, BOSTON  
128-132 UNIVERSITY AVENUE, TORONTO

X61;1

F7

9131

*Made in Great Britain*

## PREFACE TO SECOND EDITION

**I**N this edition the four lectures given in 1926 remain as they were. Some illustrative allusions have become out of date, but to alter them would have implied that the whole was to be read as if written at the present day. And there is some advantage in what is in the main a theoretical exposition of the Gold Standard being definitely dated at a period when the Gold Standard was working effectively and was accepted as a settlement of our monetary affairs.

Recent events have thrown the subject once again into the melting pot. An additional chapter has been added describing the course of events, tracing the causes of the breakdown of the Gold Standard, and discussing the problems of the future.

What I have written represents my own personal views, and is not to be associated in any way with my official position in a Government Department.

R. G. HAWTREY.

*20th October, 1931.*

## PREFACE

**T**HIS book is composed of four lectures, which were delivered for the Institute of Bankers in November and December, 1926. They appeared in the Institute's Journal for January-April, 1927, and are here reproduced without material alteration.

Currency is better explained in terms of credit than credit in terms of currency. That is so in theory, in practice and in law. I have here expounded the gold standard in close relation to the theory of banking and credit.

Much of the ground covered is the same as in parts of my books, *Currency and Credit* and *Monetary Reconstruction*, but I have shortened and simplified the treatment, and, where it seemed desirable, have followed somewhat different lines.

The first two chapters are theoretical; the third is historical; the fourth deals with the problems of the present day.

R. G. HAWTREY.

May, 1927.

## CONTENTS

	PAGE
CHAPTER I . . . . .	I
CHAPTER II . . . . .	31
CHAPTER III . . . . .	59
CHAPTER IV . . . . .	87
CHAPTER V . . . . .	115
INDEX . . . . .	158



## CHAPTER I

**I**N examining the nature and purpose of a Gold Standard, our first step ought to be to form a clear idea of what is meant by a *Standard*, that is to say, a *Monetary Standard*.

Money is very commonly defined to be a medium of exchange. A commodity, it is said, is chosen for this purpose, and people who come to market avoid the inconvenience and complication of bartering one product against another by selling one product for an agreed quantity of the chosen commodity, which they then use to buy whatever they require. The chosen commodity is the standard. It becomes a generally accepted measure of value as well as a medium of exchange.

The precious metals have been generally chosen by mankind as the most suitable commodities for this purpose. Economists have been inclined to teach that this usage is so firmly established that it approximates to a moral principle, as if the use of a metallic currency were somehow essential to honest dealing.

Credit, it is said, is a means of economising gold and silver. A right to receive gold serves as well as the gold itself, if all that is required is a medium. A dealer in cotton who buys cotton only to sell it

again need not enter into physical possession of any actual cotton ; he can buy the right to receive cotton of specified quantity and quality, and can re-sell his right to someone else. It is only when the right to receive cotton is acquired by a manufacturer that actual cotton has to be handed over to be spun into thread.

In the same way, so long as gold is needed only as a medium of exchange, the right to receive gold fulfils the requirements, and it is only when the right is acquired by a manufacturer of plate, jewellery, gold leaf or fountain pens, or by a dentist or anyone else who wants to use it as a material of industry, that the right need be exercised, and metal handed over.

This account of the nature of money is familiar to everyone. It has the great advantage of being intelligible and self-consistent, and it has often proved useful as a practical guide. Unfortunately although it is an *approximation* to the true theory of money, it is by no means perfect or exact, and I propose to approach the subject from a different angle.

If we turn to the actual institutions by which the money of a civilised country is governed, we shall find that the foundation is always a law prescribing by what means *a debt may legally be discharged*. The law never says what may or must be used as a medium of exchange. Anyone is free to use anything as a medium of exchange. The idea of money is derived from the idea of a debt.

At first sight that conclusion may appear to be the merest pedantry or sophistry. For if the idea of money is derived from the idea of a debt, is it not equally true that the idea of a debt is derived from the idea of money? Can a debt have any other meaning than an obligation to pay money? To separate the debt from the money with which it is payable seems as transcendental an operation as to separate the grin from the Cheshire Cat.

And yet it is in practical life even more than in theory that the separation requires to be made. So long as all goes smoothly, it is convenient and legitimate to think of a debt as meaning nothing but an obligation to deliver a specified quantity of gold or silver. But in practical life, and especially in that part of it which is concerned with currency, smoothness is the exception. We study the theory of currency in order that we may be qualified to deal with the perpetually recurrent jolts and swerves by which monetary history is disturbed.

The law prescribes the means by which a debt may be discharged. A debt is one of the fundamental concepts of economics. It must not be thought of as arising only from the borrowing of money or from the postponement of payment. Every sale of goods or service rendered gives rise to a debt. The debt may be immediately discharged, but that does not affect its nature from the point of view of the means of payment. If a hat is offered for sale at 15s. and I buy it, I become indebted for 15s., and the law determines by what

means I can pay the debt whether I pay on the spot or at a future date.

Now debts are not in practice discharged only with legal tender money. A debt can be paid *by being set off against another debt*. The process can be seen in its simplest form where two traders are both buying from and selling to one another. Each records his debts and credits in his books, and they settle periodically by paying the net balance, which may be quite small in comparison with the total. Often this net balance may be carried forward repeatedly from one account to the next. All debts cannot be settled so, because anyone's debtors are usually a different set of people from his creditors. Nevertheless, this method of settlement can be indefinitely extended if there is some third party to whom creditors can assign their rights against their debtors, and upon whom they can then draw to pay their own debts.

This is the place filled by a banker. He is primarily one who offers facilities for clearing or setting off debts. It is convenient to combine with this function that of short-term lending. The banker is the debtor of his depositors, and short-term debts such as bills and advances are the most convenient assets to hold (along with money) against these liabilities. But where the two functions are separated, it is the clearing of debts, not the short-term lending, which distinguishes the banker.

A depositor can pay his own creditors by assigning to them a portion of the bank's indebtedness

to himself. A cheque is an instrument for assigning a debt. The debt is due from the banker to the drawer, and the drawer assigns his rights in it to the payee. When the payee endorses it and pays it into his own banking account, he is assigning it to his banker, who thereupon becomes indebted to him for an equal amount, and settles accounts, through the clearing, with the banker on whom the cheque was drawn. The clearing itself involves the payment of net balances from bank to bank, but these balances need not be paid with legal tender money. The banks may all keep balances with a central bank, such as the Bank of England, and draw cheques for the payment of their clearing balances.

Under normal conditions the central bank undertakes to pay its obligations in money, so that any of the debts settled at the clearing can readily be paid in money. And where payment in metallic money has not been maintained, the central bank's own notes have usually been made legal tender, and have thus themselves become "money" in the eye of the law.

But this is not necessarily or always so. In 1797 the Bank of England suspended gold payments, and was forbidden by law to pay its notes in money. Nevertheless the notes were not made legal tender. A Bank of England note remained nothing more than documentary evidence of a debt due from the Bank, with the attributes of a negotiable instrument. When the notes depreciated, gold coin ceased to circulate, and the

business of the country was carried on for some years without any standard money at all. Debts in fact were settled by being set off against other debts. In those days, it is true, payment with credit money was effected by means of bank-notes much more than by cheques. But a bank-note, like a cheque, is a means of assigning a debt due from a banker from one creditor to another, and bank notes were cleared in much the same way as cheques. Under this system the means of paying any debt was another debt; the debts possessed an existence independent of money.

In this case indeed convention took the place of law, and the Bank of England note became a customary standard. But other cases have occurred where bank credit has become temporarily divorced from money, and no central bank has existed as a rallying point. The great financial crises from which the United States suffered from time to time, before the Federal Reserve Act of 1913 set up a system of central banks, afford examples. One feature of the crises of 1907, 1893, 1873 and 1857 was that the banks suspended payment of their depositors in cash, and, while a premium on legal tender money appeared, the use of cheques continued and the machinery of clearing remained in operation. Depositors with credit balances could discharge their liabilities with cheques, but, if they wanted money, had to buy it as if it were a commodity. On some occasions even wages were paid by cheque. It was a noteworthy feature of the crisis of 1873 that there

were *three* different media of payment. Inconvertible paper was still the principal form of legal tender money; gold, which was used in foreign trade transactions, was at a premium over paper; and paper was at a premium over bank credit.

It would not be correct to say that people attributed value to bank credit solely or even mainly because they expected that at some future time the bankers would resume payment of their debts in money. All that people were concerned to ascertain before they accepted cheques was that the cheques would be honoured through the clearing house, that their own accounts would be credited with the amount, and that they in turn could then draw cheques and use their credit as a means of payment. The inability to get money save at a premium was felt not as something which struck at the foundations of the monetary system, but merely as a rather vexatious practical inconvenience.

Bank credit has become the principal medium of payment. Money, even standard money of unlimited legal tender, is no more than a subsidiary medium. Currency notes, like silver or bronze coins, are used for the smaller payments, for which cheques are not convenient. The banks supply currency notes, and used to supply sovereigns, to their customers for this purpose, just as they supply silver coin. The legal right of their customers to demand notes or gold coin for any amount in excess of £2, and the legal right of the banker to pay in silver up to £2, and no more,

whatever his customer asks, are not ordinarily of practical significance. It is only at a time of crisis that people even begin to think about these rights.

We have seen that bank credit *can* exist without money. That does not mean that this is a desirable state of things, but it enables us to understand the proposition that the idea of money is dependent on that of a debt, while that of a debt is not dependent on that of money. A debt, it is true, is reckoned, like money, in pounds, shillings and pence. But that is because money, being essentially that with which debts can legally be discharged, must be reckoned in the same units as debts. These familiar units form what is called our "money of account." The money of account in any country may be defined as the units in which debts are reckoned; it is the basis of all book-keeping. A sovereign is a coin, but a pound is not. The Coinage Acts value a sovereign at a pound. That means that they prescribe that a debt of a pound may be discharged with a sovereign. The Currency and Bank Notes Act gives the same debt-paying power to a one-pound note. The note differs from the sovereign in that it has no name independent of its value in terms of the money of account; nevertheless the distinction between the note with which we pay a debt and the debt we pay is just as valid. The word shilling is ambiguous, meaning equally a twentieth part of a pound and the coin with which a debt of that amount may be paid.

It may be pointed out that a Bank of England



note differs from a currency note in that it itself represents a *debt*. A currency note is merely money ; it is legally on just the same footing as a coin, and does not represent an *obligation* from the Government or the Bank of England or anyone else. The bank-note represents a debt due from the Bank of England, and delivery of the note assigns the rights in that debt from one person to another, just like payment by cheque. The Bank of England note has been legal tender ever since 1833. That means that a debtor may legally discharge his obligations by assigning to his creditor the rights against the Bank of England represented by the notes. But a Bank of England note is not legal tender in payments by the Bank of England itself.

All payments could be made with bank credit, provided that the solvency of the banks were adequately safeguarded, and that bank notes of small denominations were put in circulation for the smaller payments. But if the banks were left free to create credit as they pleased, there would be nothing to maintain any semblance of constancy in the value or purchasing power of the monetary unit. If they increased the supply of the means of payment, they would cheapen it. The wealth value of the monetary unit, that is to say, its value in goods and services, would fall, or in other words the prices of goods and services would rise. Likewise if the banks restricted credit and brought about a scarcity of the means of payment, prices would fall.

When we speak of prices rising or falling in this way, we mean that an influence is at work to raise or lower *all* prices, apart from any changes in the supply or demand of particular commodities. A price expresses a relation between monetary units on the one hand and a commodity on the other. A change in the price may be traceable to an increase or decrease in the supply of the commodity or to an intensification or diminution of the consumer's desire for it. Or on the other hand the change may arise from the other term of the relation, the monetary unit. If people are in a position to offer more monetary units for a given supply of goods and services, prices will rise. If they have fewer monetary units to offer, prices will fall.

The amount of monetary units which people have to offer is the total of their incomes. The national income of this country is estimated at £4,000 millions, or say £11,000,000 a day. That means that the total demand for goods and services of all kinds averages £11,000,000 a day. But, it may be asked, do not people save a part of this? Indeed they probably save something like £1,500,000 out of the £11,000,000. But what they save is directly or indirectly *spent*. For money invested is spent on fixed capital, such as houses, railways, industrial plant, etc. The output of such things must be included in the supply upon which the £11,000,000 a day is spent.

Now if this daily expenditure of £11,000,000 were increased by 10 per cent., while production

of all kinds remained unchanged, prices would very soon rise by about 10 per cent. Of course the amount spent day by day may easily vary more than 10 per cent. A purely temporary increase in spending would not affect prices. It would be met by sales of goods already in stock at existing prices. For a time even a more sustained increase in spending might be so met, but the effect would be to deplete traders' stocks of goods, and presently they would be driven to raise prices to check this process.

In currency theory the total of incomes expressed in terms of money is so fundamental that it is convenient to have a name for it. I call it the "consumers' income," and the expenditure from it I call the "consumers' outlay."

It should be clearly understood that when the currency depreciates in any country, that really means that the consumer's income is increased, or at any rate is increased relatively to the volume of production. If our national income is now £4,000 millions and in 1913 was only £2,250 millions, that does not mean that we have become richer in that proportion. Nearly all the apparent increase is due to a general rise in all prices, that is to say, to a fall in the value of the pound relative to real wealth.

Changes in the consumers' income and the consumers' outlay are inseparably bound up with another factor, that is, the total stock of the means of payment in the hands of the community. This I call the "unspent margin." It is the total

of money and bank credit in the hands of everyone who receives and pays money, whether individuals, businesses, public bodies or any others; it is so much of their money receipts as they have at any time retained unspent. But it is also the aggregate of the money and bank deposits in the community, and is found by adding together the deposits shown in the bankers' books and the money issued into circulation and not withdrawn.

It is obvious that for every individual there is a relation between his balance of money and bank credit and his income. Though his balance varies rapidly up and down, it does not usually exceed a limit representing the maximum amount that he is content to see idle. When that limit is passed, he will invest a part of his balance. The casual variations between this maximum and zero will have a fairly constant average. The existence of such an average for each individual results in a sufficiently constant relation holding between the unspent margin, which is the total of balances, and the consumer's income, which is the total of incomes.

Increased lending on the part of the banks increases the unspent margin, for lending actually creates cash. The due proportion between incomes and cash balances is thereby disturbed and has to be restored. The total of bank deposits may be compared to a reservoir, into which is being poured the daily amount lent by the banks, and out of which flows the daily amount repaid to the banks. If these two streams are equal, the

amount of deposits remains unchanged. If the stream of lending is increased, the additional money lent is quickly used by the borrowers in the production of goods, and becomes the income of those who take part in producing the goods. Traders' profits are increased, at first by more rapid sales, then by higher prices. Wages follow. In fact the consumer's income is increased.

Next the recipients of these additional incomes spend them. In so far as they buy goods, they enable the traders who sell them to repay a corresponding part of their indebtedness to the banks. In so far as they buy securities, they enable the dealers in the stock markets likewise to reduce their indebtedness. Thus when the stream of lending is increased, there ensues an increase, though probably a smaller one, in the stream of repayments. The actual increase in the contents of the reservoir in any period is equal to the excess of lending over repayments. The flow through the reservoir is increased by the additional lending and borrowing, and this stream in the course of its passage takes the form of an addition to the consumer's income.

In the same way the banks, by restricting the amount they lend, can diminish the flow through the reservoir, and curtail the consumer's income.

We shall return later on to this matter of the effect of an increase or decrease in lending, an expansion or contraction of credit as it is called, upon incomes and expenditures and prices. The essential thing to observe is that the action of

the banks in accelerating or retarding their lending has an immediate effect upon the volume of incomes and of spending, and prices must soon respond. To keep the variations of prices within reasonable limits, the banks must somehow be prevented from lending either too much or too little.

While a portion of the unspent margin is composed of bank deposits, the rest is composed of money. If the money portion is limited, the credit portion cannot be indefinitely increased. That is so even when, as in England or the United States, the credit portion is far the greater. It is possible, by regulating the supply of money, to control indirectly the supply of bank credit.

And here is one of the principal functions of the gold standard. The supply of gold is limited, and if money is gold the supply of money is limited. Paper money, if it is issued in unrestricted quantities, can do nothing to keep the lending operations of the banks within limits.

It is often supposed that the excessive issue of paper money only occurs when the power of issue is abused by Governments. The most sensational cases of over-issue and collapse have originated in this way. But over-issue may also occur, and does occur, through excessive lending by banks to traders. There is always a temptation to lend too much. Lending is the source of the banker's profit, and he seeks to lend as much as he can, unless there is some definite reason to the contrary, such as a shortage of cash reserves. And whenever the banks do succeed in increasing their

lending, the effect is felt in a stimulation of sales by traders. A vicious circle is then set up, for the bigger and more profitable their business, the more the traders want to borrow, while the more the bankers lend, the greater the stimulation of trade.

Therefore people who carry on the business of banking for profit cannot be expected to exercise a check upon lending. If there is to be such a check, there must somewhere be an influence at work which does not depend on profit-making. This influence is to be found in the authority which issues money.

If paper money were the only legal tender, the authority, whether the Government or a Central Bank of Issue, which issued the paper money would have absolute control over the situation. It could at any time cut short the supply of money and put pressure upon the ordinary banks to curtail their lending, or if need be it could stimulate them to lend by issuing abundant supplies of money.

This power places a heavy responsibility upon the note-issuing authority. It is sure to be difficult to decide in any particular set of circumstances whether there is a danger of credit being unduly expanded or contracted and whether any countervailing action is called for.

The gold standard may be regarded as a device for enabling the authority through which money is issued to solve this problem in a rough and ready way. The classical form of the gold standard

is that based on the free coinage of gold. Legal tender money consists of gold coin (supplemented by a limited amount of subsidiary token coin of silver and base metal). The money-issuing authority is a Mint, which does not issue notes, but undertakes to turn gold bullion into coin free of charge for all comers. The gold coin is simply an ingot of gold of which the weight and fineness are certified by the Mint which produced it. It is not a manufactured article but a piece of raw material suitably graded and branded. In order that it may pass as such, there must be freedom to melt and export the coin. If that condition is fulfilled, the commodity, gold, is really established as the means of payment. Every debt has become an obligation to deliver gold. All discretion on the part of the money-issuing authority has been completely eliminated; the process has become mechanical. The supply of money is simply the supply of gold; it is increased by the output of the mines and possibly by the melting down of plate and other gold manufactures, and is decreased by the industrial demand for gold and by wear and tear.

The value of the monetary unit is equated to the value of a specified quantity of gold, and the value of gold is determined, like that of any other commodity, by free dealings in a market.

The use of gold coin for this purpose is by no means a perfectly efficient device. Indeed currency history up to the invention of bank notes and paper money was mainly a record of the



shortcomings of coin as a basis for a metallic standard, whether gold or silver. It was impossible, till modern mechanical methods were introduced, to achieve exactitude in the manufacture of coin. The certificate of weight and fineness given by the Mint was therefore only reliable within a certain degree of approximation. Moreover coins in circulation are exposed to a gradual loss of weight through legitimate wear and tear, which increases the inequalities. And finally the value of even small quantities of the precious metals is such as to lead people to clip or sweat the coins which pass through their hands, that is to say either to cut little fragments off the edge, or to wash them with chemical solutions which remove a little metal from the surface. These latter practices are in nearly all countries made illegal or even criminal, but till the practice of manufacturing coins with milled edges was adopted, were difficult to detect or prevent.

So long as there is a demand for an increasing supply of money in circulation, these imperfections and malpractices do not affect the value of the monetary unit. The demand can only be satisfied by bringing gold to the Mint, and the Mint will only issue coin in exchange for the gold at the prescribed price. This is so even if the coin is imperfect. Eight hundred ounces of gold,  $\frac{11}{12}$  fine, ought to be coined into 3,115 sovereigns. If they are in fact made into 3,116 sovereigns, the Mint will not for that reason give more than 3,115.

But if for any reason there is no demand for gold bullion to be turned into coin, but on the contrary people want to turn coin into bullion, any deficiency in the gold contents of the coin becomes a matter of consequence. The demand for gold bullion can be met by melting the coin, and it is of the essence of the gold standard that it should be so met. It is for that very purpose that the money is composed of gold at all. So long as the coin can be melted, the value of the monetary unit in gold is kept up, or in other words the price of gold is kept down. But if those who seek to procure gold find the coin imperfect, so that they get less gold than they anticipated, the price of gold will rise—the monetary unit will depreciate. All the coin will not be equally imperfect, and it will only be profitable in the first instance to melt the heavier coins. It will be easy to weigh each of the coins from any batch destined for melting, and to select those above a certain limit of weight, leaving the others to be passed on as coins. Nevertheless it will not be worth while to take this slight amount of trouble unless the price of gold is *already* above the coinage price. In other words the monetary unit must already have been depreciated below its value in gold prescribed by the gold standard.

This state of things used constantly to occur with the silver standards of the Middle Ages. It occurred with the English gold coinage prior to the re-coinage of 1774, and it was on the point of occurring prior to the re-coinage of 1891. It

cannot be completely guarded against, but if coins are not allowed to be legal tender when below the prescribed weight by more than a certain small fraction, and if those which have been worn below this limit are regularly withdrawn from circulation at the public expense, the evil is reduced to a minimum.

Sovereigns are current so long as their weight is not below the proper amount by more than  $\frac{1}{8}$  per cent. The actual deficiency of weight in an average batch of sovereigns at any time between 1891 and 1914 was far less than this. Nevertheless there was always some deficiency except in the consignments of sovereigns direct from the Mint which had never been in circulation. It is an interesting feature of the Gold Standard Act of 1925 that sovereigns have now become convertible at the Bank of England into gold bullion at parity on the same terms as currency notes, and it is therefore no longer necessary to melt them except when small quantities of gold are required.

In addition to all the unavoidable imperfections of coin, a charge for the cost of coining or even for the sake of Mint profits or seignorage is also sometimes made. In England there is no actual charge, but nevertheless under the régime of free coinage, which existed till 1925, anyone who brought gold to be coined suffered a small loss in respect of the interest on the value of the gold for the period of at least three weeks required for the process.

The price at which the Bank of England buys gold is fixed by statute at £3 17s. 9d. per standard ounce. That is 1½d., or 1.6 per mille, less than the coinage price, and would be equivalent to interest at 3 per cent. for a period of about 20 days, or at 5 per cent. for 12 days. In practice people always preferred to sell their gold to the Bank rather than take it to the Mint. Even had it ordinarily been otherwise, any special pressure for coin would quickly have increased the period of delay before delivery of the coin, and the cost of interest would soon have exceeded the margin in the Bank of England's buying price. In fact, the limited capacity of Mints and the consequent delay in the execution of large orders necessarily make the "free" coinage of gold a very relative expression. If there were so urgent a need of currency that a few weeks' delay would destroy the utility of any source of supply, there might for a short time be a high premium on coin.

The essence of the gold standard is that the price of gold, the value of gold in monetary units, is fixed by law, and this determines the value of the monetary unit itself. The use of gold coin, notwithstanding its imperfections, provides a fairly close approximation to this ideal. Apart from some such restriction the value of the monetary unit would be free to vary indefinitely. Once the price of one commodity is fixed, this freedom ceases. The value of the monetary unit can only vary with that of the commodity to which it is tied.

Let us assume for the moment that gold coin is the only money of unlimited legal tender. The banks are bound to conform their operations to this condition. Their obligations have become obligations to pay gold. For payment of wages, for retail dealings and for many other transactions coin will be required. Even if small bank notes suitable for such payments are allowed to be issued, people may still prefer coin. Every bank must be prepared to pay out coin to those depositors who ask for it. It can only do so if it maintains a reserve of cash on hand sufficient to meet all probable demands.

And every bank has somehow to provide for meeting its liabilities to other banks. The daily clearing of cheques and bank notes will leave balances due from some banks to other banks. If no other arrangement were made for paying these balances, they would have to be paid in coin, and a reserve of gold would have to be held for the purpose by every bank.

Now the maintenance of a cash reserve is dead loss to a bank. A great part of its profit is derived from its loans, advances, bills and investments, and the cash holding is maintained at the cost of a corresponding diminution of these earning assets. Clearing balances are subject to large and fortuitous fluctuations impossible to foresee, and if they had to be paid in money, the reserves required would be large and burdensome. To escape the loss, the device of pooling the reserves has been evolved.

That means the creation of a Central Bank, with which the other banks can deposit their reserves. If they simply deposited their reserves for safe-keeping, and gained no other facilities, this might be a convenience, but would not enable them to diminish the amount of the reserves and the resulting loss. The advantage arises from the fact that a Central Bank is a *lender*. A bank which can borrow at need from the Central Bank can get on with smaller cash reserves; by borrowing it can draw upon the pool. That is the main purpose of pooling.

Suppose that a group of 100 banks in any community, with deposits aggregating £200 millions, maintain cash reserves of £40 millions, having no Central Bank to resort to. On an average every bank has £2,000,000 of deposits and holds £400,000 of cash. That is because the payments it has to make in cash may at any time be of such a magnitude as to reduce any smaller reserve to inconveniently low limits. For example if a bank sometimes has to meet balances of as much as £200,000 at the clearing, a reserve of £400,000 would then be reduced by half by a single payment. But suppose that the banks can get accommodation from a Central Bank. The cash they actually keep will be limited to till money, for which purpose 5 per cent. of the deposits or £10,000,000 would probably be quite enough. The rest of their reserves, amounting to £30,000,000, can be deposited with the Central Bank, and, in view of the possibility of borrowing,

the total can be reduced substantially below that sum. A bank with deposits of £2,000,000, having to make an unforeseen payment of £200,000, can obtain an advance or the re-discount of bills to that amount from the Central Bank. The banks to which it makes the payment will very likely repay former advances made by the Central Bank. All those casual and temporary payments by one bank to another which appear at the clearing thus become practically book-keeping transactions at the Central Bank. A steady drain of debit balances against a particular bank is another matter. It is probably a sign that that bank is lending too freely to its customers. The peccant bank, unless it returns to more moderate courses, will find its indebtedness to the Central Bank growing, and its supply of securities suitable to be pledged or re-discounted with the Central Bank will eventually be exhausted.

The assets of the Central Bank will be composed partly of cash, and partly of the advances and re-discounts made in favour of the other banks. Its liabilities will be the balances kept with it by the banks. We are assuming for the present that gold coin is the sole legal tender, and we will suppose that the Central Bank does not issue notes.

We assumed that the banks held £10,000,000 out of their £40,000,000 of reserves as till money, which must be in coin. Suppose that, in view of the facilities they can obtain from the Central

Bank, they can reduce the remainder of £30,000,000 by half. Their total reserves will then be £25,000,000 or one-eighth of their deposits, instead of one-fifth. The balances deposited with the Central Bank will be £15,000,000. But against these balances the Central Bank will not hold gold pound for pound. A portion will be covered by discounts and advances.

How is this portion to be determined? We have supposed coin to be the only medium of payment other than credit. Banks can pay one another by drawing on their balances at the Central Bank, but, when their customers need more money for those purposes for which credit is unsuitable, they must supply coin. If there is a drain of coin from the banks into circulation, the immediate effect is to reduce their till money. But we have assumed their till money already to be at the lowest convenient figure, and they will make good the loss by taking coin from the Central Bank, and borrowing from it if necessary to maintain their balances. Suppose that the Central Bank keeps £10,000,000 of coin against £15,000,000 of deposits, the other £5,000,000 being covered by advances and discounts. Suppose further that £1,000,000 of coin is taken by the public into circulation, reducing the till money of the other banks to £9,000,000. They will restore their till money to £10,000,000 by taking £1,000,000 in coin from the Central Bank, and will keep up their balances with the Central



Bank to £15,000,000 by borrowing £1,000,000 from it. The Central Bank will then hold only £9,000,000 of coin and £6,000,000 of advances and discounts against its £15,000,000 of deposits.

Thus the other banks look to the Central Bank as the sole source of legal tender money. They keep their reserve balances there just because it is prepared to assume this responsibility. But that puts an end to any ideal of an automatic currency. For the banks and the public do not trouble themselves about the interchangeability of gold and credit. That is the affair of the Central Bank alone. Anyone can sell the Central Bank as much gold as he likes and can procure from it as much gold as he chooses to pay for. The Central Bank is in the gold market as both buyer and seller in unlimited quantities at a fixed price.

But, it may be asked, is not this an impossible position? The dealers in any commodity can have only a limited stock on hand; when demand becomes too insistent, they defend their stock against depletion by raising the price. A Central Bank is not free to do this; it is bound to deal at a fixed price.

Now a fixed price means a fixed number of monetary units, and, if the number may not move, the value of the monetary unit in commodities can. The mountain will not come to Mahomet, but Mahomet can go to the mountain.

We have already seen that the value of the monetary unit in commodities depends upon the

action of the banks in creating credit. That action the Central Bank is in a position to control. For the one limitation on the creation of credit is the supply of cash, and the supply of cash is in the hands of the Central Bank. When more cash is needed, the banks procure it from the Central Bank by borrowing, and the Central Bank can charge what it pleases for its loans and discounts. If the banks have been lending too freely, more cash will sooner or later be required for circulation. Those banks which have been most lavish in lending will be the first to increase their borrowing from the Central Bank to make good their cash. If the Central Bank raises the rate of interest or discount which it charges, what is commonly called Bank rate, these imprudent banks will find that their additional lending is unprofitable, unless they charge as much in turn to their customers. A rise in Bank rate is quickly reflected in a rise in the market rates for loans and discounts, and thus deters traders from borrowing. The creation of credit is thereby damped down, and the value of the monetary unit in commodities is raised.

Similarly the Central Bank by lending freely can increase the cash reserves of the other banks and stimulate them in turn to lend, and the value of the monetary unit is then lowered.

The raising or lowering of the value or purchasing power of the monetary unit by these methods is a much more roundabout process than the raising or lowering of price quotations in an

ordinary market. If the banks have been lending too freely, and trade has become active, it is impossible for traders to cut down their borrowing at a moment's notice. They have entered into commitments extending some time into the future, and in many cases cannot proceed without borrowing in the interval before they deliver the goods and receive payment. And, on the other hand, if the banks have restricted their lending too far, traders will have been deterred by unprofitable markets, and it takes time to induce them to resume enterprise and take advances even on the most tempting terms.

Confined to these indirect methods of influencing the market for gold, the Central Bank must adapt its stock in trade, the gold reserve, to the possible demands upon it. A dealer in any other commodity can raise the price he asks at a moment's notice to any level necessary to prevent the exhaustion of his stocks. The Central Bank must be prepared to suffer a heavy loss of gold in the interval after the initiation of a restriction of credit before the restriction becomes fully effective.

The demand for legal tender money comes mainly from the wage-earning classes, and others, whose financial transactions are too small for them to have banking accounts. It may be that these classes receive only half the national income or less, and they certainly possess only a very small fraction of the national resources. It is also true that their share of the total stock of the means of

payment, taking money and bank credit together, is small. But their share in the total stock of legal tender money is large. All their cash is in the form of legal tender money, while the people with banking accounts only retain a comparatively small sum as pocket money. Those with banking accounts are few, while the others are many, and the amount of pocket money which the former carry varies little between good times and bad. The cash resources of the working classes vary widely. In times of distress they are compelled to draw upon their reserves of money, and in times of prosperity they reconstitute them slowly. At a time of activity working class earnings are at a maximum. That does not mean that their cash holding is at a maximum. Far from it, for it is their absorptive power that is at its height. A credit restriction may influence the outlook and intentions of traders immediately. Production will none the less continue for a time unchecked till existing commitments have been worked through, and the absorption of cash will continue not merely till a check to production begins to be felt, but till the consequent reduction of working class earnings has proceeded so far that the dissipation of cash by those in distress offsets the accumulation of cash by those who are still employed at good wages.

Therefore we see that while it is true that business is very sensitive to a restriction of credit, the demand for legal tender money only responds very tardily.

Up to this point we have assumed that coin is the only money, and that no other medium is available for wages and small retail payments. That means that if the cash reserves of the Central Bank are drained dry, no more money will be available at all. But the exclusive use of coin is not essential to the gold standard. We have already mentioned the possibility of bank notes of small denomination, which would of course be payable in gold coin just as much as other forms of bank credit. To the unrestricted issue of small notes by the banks there are objections, into which it is not necessary to enter here. But these objections do not apply to the issue of small notes by a Central Bank. Such notes need not be legal tender. The Federal Reserve notes in the United States are not legal tender. The notes of the Central Bank will be accepted in payment by everyone, whether they are legal tender or not.

The right of issuing small notes will enable the Central Bank to supplement the supply of money without drawing on its cash reserves, and so to avoid the breakdown which the exhaustion of those reserves might otherwise threaten. So long as the notes are freely convertible into gold coin, the monetary unit is fixed in terms of gold and the gold standard is maintained.

The demand for gold coin as a medium of payment within the country can be fended off by the issue of small notes, but that does not dispose of the demand for gold as a commodity. We

have already shown that the Central Bank is a dealer in gold at a fixed price, and that since it cannot raise the price it can only avoid selling gold too cheap by taking measures to raise the purchasing power or wealth value of the monetary unit.

In what sense can gold be sold *too cheap*?

The demand for gold in industry might be stimulated if it were cheapened relatively to other commodities. But the industrial demand in any one country is likely to be too insignificant to trouble the Central Bank. The vital fact is that gold is a commodity with a world market, and therefore with a world price. It is this world price to which the Central Bank has to conform.

A world price is by no means a simple conception. A price is a value relative to a monetary unit. But there is no world monetary unit. A commodity with a world market has a different price in every country, reckoned in the country's own unit. A world price only exists because the different monetary units are related together by the foreign exchange market.

## CHAPTER II

**T**HE foundation of the gold standard is the tying of the value of the monetary unit to the value of gold by the fixing of the price of gold. Inasmuch as gold is a commodity with a world market, it has a world value, and therefore the gold standard gives a world value to the monetary unit itself.

This world value of the monetary unit can only be made effective through the foreign exchange market, and our next task will be to elucidate the mysteries of that market.

The major payments of business are made with bank credit, and the banking system enables them to be cleared or set off against one another. The foreign exchange market is an organisation by which payments to be made *in different monetary units* can be cleared against one another. The indispensable condition of that process is that the different monetary units should be valued in terms of one another. A pound is one thing and a dollar is another. But if £1 can be bought and sold for \$4.86, a debit of £10,000 can be set off against a credit of \$48,600.

International trade and other international transactions give rise to debts from people in one

country to people in another. Each creditor wants ultimately to receive payment in the currency of his own country, but a debtor can in general pay only in that of *his* country. In the course of his dealings a trader may both receive and pay foreign currencies, but in the end every country's products have to be paid for in its own currency.

Therefore in general anyone who becomes entitled to a sum of foreign currency will seek to sell it for his own currency. His title will be embodied in a credit instrument. His debtor may have authorised him to draw a bill, or may have sent him a cheque. Such instruments can be transferred from one holder to another, and they form a great part of the subject-matter of dealings in the foreign exchange market.

The dealers in the foreign exchange market buy and sell foreign currencies in these and other forms, and it is the function of the market to make a price for every foreign currency. The dealers are for the most part banks. In the first place the banks do business for their own customers, buying foreign currencies from some and selling them to others. A bank is left day by day with a debit or credit balance in each foreign currency, which it endeavours to settle by buying or selling that currency in the open market. The various dealers are brought together by the market as buyers or sellers of any such currency, and thereby the credit balances of some are disposed of at the market price to meet



the debit balances of others. But there will in general remain a residus, a net debit or credit balance, which cannot be so dealt with.

Dealers in foreign currencies must hold as their stock in trade a supply of these foreign currencies or of assets which can at need be turned into them. The immediate effect of a debit or credit balance of any foreign currency in the market as a whole is to reduce or increase the stock of that currency in the dealers' hands. If the pre-existing stock be supposed normal, they will tend to correct the disturbance by quoting a higher price if the stock has been reduced, a lower if it has been increased.

But at the same time dealers in the foreign exchange markets at other centres will have been dealing in the same currency and will have been left in the same way with debit or credit balances. Those with debit balances will all tend to quote a higher price for the currency, and those with credit balances to quote a lower. The result will be that the credit balances will be offered to the centres with debit balances and the price differences will be obliterated. Thus the foreign exchange markets of the world form a single international organisation, which clears all the international transactions in the currency of any one country.

Nevertheless in the end the debits and credits in a country's currency at all the centres of the world will not exactly balance; there will still be a residue. This will take the form partly of

an increase or reduction in the stock of that currency held by foreign exchange dealers at other centres, and partly in a contrary change in the stocks of *other* currencies held by the bankers and other dealers in foreign exchange in the country itself.

For example, if the dealers abroad hold too much of the country's currency, they will offer it cheap. But that means equally that other currencies will be dear in terms of this currency. For if the price of one currency in another goes down, that is another way of saying that the price of the latter in the former goes up. The rise in the prices of foreign currencies will be an inducement to the banks of the country under consideration to sell some of them and to hold less.\* They will thereby relieve to some extent the redundancy of their own currency in the foreign exchange market. They cannot properly be said to increase their stock of their own currency, for it is they themselves who create the supply of that currency in the form of bank credits.

They can only replenish their stock of foreign currencies by buying them with their own currency, and the shortage of the former is thus equivalent in its effect upon the market to a potential redundancy of the latter. In the same way, if the banks of the country have an excess supply of foreign currencies, they can only get

\* I leave out of account the speculative tendency, which often sees in a rise or fall the prospect of a *further* rise or fall.

rid of the excess by selling it in the market for their own currency, of which they will thus cause a shortage.

In any market dealers regulate prices by the state of their stocks. A decline in their stocks means that demand is overtaking supply, and points to a rise in price; a growth of stocks means that supply is overtaking demand and points to a fall in price. This is true of the foreign exchange market; the dealers regulate the price of any currency by the state of their stock of it.

In a commodity market a rise of price checks demand and stimulates supply, while a fall of price checks supply and stimulates demand. This is equally true of the foreign exchange market. If the value of the currency of any country in terms of foreign currencies is raised, the effect is to make commodities at world prices cheaper to consumers in that country, and to stimulate imports; at the same time the cost of production of exportable products is increased in comparison with the cost of the same products abroad, and exports are checked. The increase in imports increases the demand for foreign currencies, while the decrease in exports decreases the supply. Likewise a reduction of the value of the country's currency in terms of foreign currencies would stimulate exports, and check imports. In each case the alteration in the price of the currency tends to bring about a state of equilibrium.

An excess or deficiency in the supply of any

currency in the foreign exchange market may be purely casual and temporary, and, if the dealers believe it to be so, they will make little or no change in their quotations. But if a persistent tendency in either direction makes itself felt or is anticipated, the dealers will make the appropriate change in quotations, and it is in their power thereby to correct the tendency.

Now as between any two countries which both use the gold standard this procedure will not work. For it presupposes that the price of the currency of either in relation to that of the other can vary indefinitely. If both currencies are fixed in gold, this is not so.

If there is a bullion market in any financial centre, the dealers there will be prepared to buy gold in any part of the world. The price they quote will depend upon the place at which the gold is situated. They would naturally quote all the prices in the currency of the centre where the bargain is made, and all the prices would thus be comparable with one another, without reference to the foreign exchange market. A bullion dealer in London would quote a price in sterling for gold in Montreal and another price in sterling for gold in New York. The two prices would not differ by more than the cost of transporting gold between New York and Montreal. If they did, a seller of gold at the place for which the lower price was quoted would not offer it there, but would accept the higher price quoted for the other place, and would send the gold thither.

Thus the lower price would be purely nominal, and only the higher would be operative.

It follows that the prices in any one currency of gold in different places cannot differ by more than the cost of transporting gold between the two places. This cost is usually a very small fraction of the value of the gold. Between Montreal and New York it is between  $\frac{1}{2}$  and  $\frac{3}{4}$  per cent. Even between the most distant centres it does not much exceed 1 per cent.

But in a country with a gold standard the value of gold is the value of the monetary unit. The price of the currency of one gold standard country in terms of that of another is the value of gold in the former in terms of the value of gold in the latter, and can only vary from parity by a fraction representing the cost of transporting the gold from one country to the other. By "parity" we mean a price expressing exactly the relative quantities of gold in the two units. A pound is the price of  $113\frac{1}{2}$  grains of fine gold, and a dollar is the price of 23.22 grains. The parity of  $\$4.86\frac{2}{3}$  to  $\pounds 1$ , is the ratio of these two quantities of gold.

It follows that the dealers in foreign exchange, when they are short of the currency of another gold standard country, cannot raise the price of that currency to any appreciable extent. The fractional rise which will suffice to start movements of gold thither will not be great enough to have any considerable effect on its exports or imports of goods. The scarcity of the currency

in question cannot be corrected by that stimulation of imports into the country and discouragement of exports from it, which any considerable rise in the exchange value of the currency would have accomplished. The excess of exports and deficiency of imports continue, but equilibrium is nevertheless restored by imports of gold which make up the balance.

When a gold standard country finds one of its neighbours absorbing gold in this way, it has to find the gold which it is compelled to export from the reserves of the Central Bank. And now we can see the practical significance of the Central Bank's defence of its gold by regulating the value of the monetary unit in terms of wealth. In a world in which the gold standard predominates, the market for gold is simply the market for gold standard currencies. In other words it is coincident with that section of the foreign exchange market which deals in gold standard currencies. The Central Bank's task is to keep the value of the monetary unit in the foreign exchange market as near as possible to par with other gold standard currencies. Any considerable failure in accomplishing this purpose will involve it in a gain or loss of gold both larger and more sudden than any movement to or from internal circulation. In settling the amount of the gold reserve these international movements must be the main consideration. Obviously a loss of gold is a much more serious matter than a gain. If the Central Bank receives an abnormal amount of

gold, it suffers a diminution of profits and possibly a loss of control over the market in discounts and short loans. But the loss of control, leaving the community free to borrow and lend, will tend to cheapen the currency and to restore equilibrium, and the restoration of equilibrium will itself enable the Central Bank to get rid of the superfluous gold.

On the other hand a loss of gold may exhaust the reserve altogether, and incapacitate the Central Bank from discharging its duty of selling gold at a fixed price. That means an actual lapse from the gold standard, and a reversion to the system of maintaining equilibrium in the foreign exchange market by letting the rates of exchange vary.

Therefore it is essential to the gold standard to guard against the exhaustion of the reserve. The reserve ought normally to be great enough to meet all the demands for gold likely to arise in the interval between the initiation of a contraction of credit and its final taking effect in the restoration of the exchange. The extent of these demands for gold will depend partly on the discrepancy between exports and imports that has to be met, and partly on the length of the interval. The length of the interval will depend upon the sensitiveness of the credit system to the measures taken.

The use of the gold standard gives a new significance to the conception of the foreign exchange market as an organisation for the

in question cannot be corrected by that stimulation of imports into the country and discouragement of exports from it, which any considerable rise in the exchange value of the currency would have accomplished. The excess of exports and deficiency of imports continue, but equilibrium is nevertheless restored by imports of gold which make up the balance.

When a gold standard country finds one of its neighbours absorbing gold in this way, it has to find the gold which it is compelled to export from the reserves of the Central Bank. And now we can see the practical significance of the Central Bank's defence of its gold by regulating the value of the monetary unit in terms of wealth. In a world in which the gold standard predominates, the market for gold is simply the market for gold standard currencies. In other words it is coincident with that section of the foreign exchange market which deals in gold standard currencies. The Central Bank's task is to keep the value of the monetary unit in the foreign exchange market as near as possible to par with other gold standard currencies. Any considerable failure in accomplishing this purpose will involve it in a gain or loss of gold both larger and more sudden than any movement to or from internal circulation. In settling the amount of the gold reserve these international movements must be the main consideration. Obviously a loss of gold is a much more serious matter than a gain. If the Central Bank receives an abnormal amount of



gold, it suffers a diminution of profits and possibly a loss of control over the market in discounts and short loans. But the loss of control, leaving the community free to borrow and lend, will tend to cheapen the currency and to restore equilibrium, and the restoration of equilibrium will itself enable the Central Bank to get rid of the superfluous gold.

On the other hand a loss of gold may exhaust the reserve altogether, and incapacitate the Central Bank from discharging its duty of selling gold at a fixed price. That means an actual lapse from the gold standard, and a reversion to the system of maintaining equilibrium in the foreign exchange market by letting the rates of exchange vary.

Therefore it is essential to the gold standard to guard against the exhaustion of the reserve. The reserve ought normally to be great enough to meet all the demands for gold likely to arise in the interval between the initiation of a contraction of credit and its final taking effect in the restoration of the exchange. The extent of these demands for gold will depend partly on the discrepancy between exports and imports that has to be met, and partly on the length of the interval. The length of the interval will depend upon the sensitiveness of the credit system to the measures taken.

The use of the gold standard gives a new significance to the conception of the foreign exchange market as an organisation for the

clearing of debts. Without the gold standard the clearing process is incomplete. As we saw, there is continually a residual balance due to or from any country which cannot immediately be cleared, in the sense of being cancelled against a contrary balance. The market can only deal with the residual balance by so adjusting its quotations for the currency in question that the balance will be absorbed by a suitable modification of exports and imports. But with a gold standard different currencies become approximately commensurable with one another. The residual balance can be paid in gold. For example, if at any time there is a residual balance due from England to Holland, a quantity of gold can be taken from London, where it is equivalent to pounds sterling, and transported to Amsterdam, where it becomes equivalent to guilders. Thus a clearing balance due from the sterling-using banks of England to the guilder-using banks of Holland can be paid in the international currency, gold.

These international movements of gold furnish an instructive analogy to the payment of clearing balances between banks within the limits of one country. In any clearing system a bank which lets its lending outstrip its deposits begins to lose balances at the clearing. In the same way in an international system the country which creates credit too freely loses gold. Its banks create credit by lending to their customers, and thereby put at the customers' disposal additional means

of payment. So long as the means of payment are fixed in value, the people who acquire them are enabled to draw upon the supplies of goods in world markets in competition with purchasers in other countries. The additional supplies of goods have to be paid for, and hence the exports of gold.

This does not mean simply that if £10,000,000 be added to the total of bank deposits, £10,000,000 will thereupon be exported in gold in exchange for foreign goods. The process is much more complicated, and we have already had something to say about it in the first chapter. The total of bank deposits we then compared to a reservoir, into which is being poured the daily amount lent by the banks, and out of which flows the daily amount repaid to the banks. If the stream of lending is increased, the additional money lent is quickly used by the borrowers in the production of goods and becomes the income of those who take part in producing the goods. This increase in income is felt in an increase in demand for goods in general. A part of the new demand will be applied in purely internal markets, and will enable the sellers of goods in those markets to increase their repayments to their bankers. But a part will be applied to buying imported goods and goods which might have been exported. This part will have to be exported in gold. Finally a part of the additional income received by people engaged in production will not be spent at all, but will be retained by them in balances.

This part represents the increase in bank deposits and cash in circulation (the unspent margin).

The process can be made clearer by illustrative figures. Take a country with a national income of £10,000,000 a week or £520,000,000 a year. Let the total of bank deposits be £200,000,000 and let the banks lend £5,000,000 a week and let an equal weekly amount be repaid.

Now suppose that the weekly amount lent by the banks is increased from £5,000,000 to £6,000,000. For a few days the extra £1,000,000 will accumulate in the hands of borrowers, and there will be an increase of a few hundreds of thousands in the total of deposits without any other change. Then these deposits will begin to be paid away, practically at the rate of £1,000,000 a week. The money may be applied in the first instance in payments by one merchant to another for finished products, but directly or indirectly it will go to producers, swelling the total of profits and wages by approximately £1,000,000 a week.

If the increase in lending occurs at a time when industry is not employed up to capacity, these additional wages and profits will be partly or even wholly represented by additional production. But production takes time, and in the interval before the new output comes on the market, the additional demand will be felt in sales of finished goods from stock.

The merchants and dealers who sell these goods will seek to replenish their stocks. Those who

deal in home-produced goods will do so partly by ordering fresh supplies from the producers, and partly by diverting to the home market goods which might have been sold abroad. Those who deal in foreign-produced goods will order fresh supplies from abroad. We may suppose that of the £1,000,000 a week of additional income, say, £600,000 is spent on home-produced goods, £200,000 on imported goods and £200,000 is held unspent in balances. And of the £600,000 worth of home-produced goods perhaps £100,000 might be on goods which would otherwise have been exported.

Actual weekly figures would fluctuate irregularly, and all these illustrative figures must be supposed to be averages. If they are averages for a period of 10 weeks then at the end of that period imports will have been attracted to the amount of £2,000,000 and there will have been a shortage of exports amounting to £1,000,000. £5,000,000 will have been spent on home-produced goods other than those which would have been exported. This sum of £5,000,000 may be assumed to have been applied directly or indirectly by the people who sold the goods to reducing their indebtedness to their bankers. They may have increased their cash balances instead of reducing indebtedness, but we have already assumed a separate estimate of the average increase in balances. That we put at £200,000 a week, or £2,000,000 in all.

It will be seen therefore that, with our assumptions, cash balances, the unspent margin, will

have increased by £2,000,000, and there will have been an adverse balance of trade of £3,000,000 which will have been met in gold. Probably little of the £2,000,000 of cash balances will have been taken in money. It will be mainly an addition to deposits, which will thus have been increased by about 1 per cent. The national income will have been increased during the ten weeks by £1,000,000 a week or 10 per cent. This is an increase in its *money* value. The real wealth of the community will not have been increased in the same proportion. Some increase there will probably have been, because the orders given to producers by the dealers whose sales have been stimulated will probably have increased production. But orders given to producers who are already employed up to capacity do not increase production; they only force up prices. There will be a rise in the prices of goods produced for the home market, both on this account and because of the depletion of dealers' stocks. On the other hand, the prices of exportable and importable goods (which may conveniently be called "foreign trade products") are governed by prices in world markets, which are fixed in gold.

We have supposed the increase in the weekly amount lent by the banks to be a given quantity—£1,000,000. This, like the other figures, must be regarded as an average. It is subject not merely to fluctuations but to a *progressive* tendency. At the start we must suppose the banks

to encourage traders to borrow more by offering to lend at a lower rate of interest and by other methods. As soon as the additional borrowing has begun, the other tendencies we have just been examining are set going. The increased orders to producers, to make good the depleted stocks of the dealers, involve the producers in *further* borrowing, and, unless the banks take some preventive action, this new demand for loans will bring about a further increase in their lending. We might indeed assume that the banks do take preventive measures, that they just so far diminish the encouragement they are giving to borrowers as to keep their lending to a fixed weekly amount of, say, £6,000,000. But what is much more likely to happen in practice is that the additional lending will start at a relatively small amount, say, £500,000, and will gradually grow, say, to £1,500,000, all the other consequential quantities growing in the same proportion. The loss of gold would then start at £150,000 a week and rise to £450,000 a week. In the early stages the loss of gold would not appear as an export of metal, but as a reduction in the banks' holdings of foreign currencies, and an increase in the amount of the country's currency held by foreign exchange dealers abroad. What is called an unfavourable exchange, that is to say, a rise in the prices of foreign currencies, would follow, and this would soon cause the export of gold.

It would be possible to follow out in the same way in a numerical illustration the consequences

of a contraction of credit, including a fall of prices, a diminution of production and an importation of gold.

Thus with a gold standard, either an expansion or a contraction of credit must be checked before it proceeds beyond a certain limit, or the loss or gain of gold will become excessive. But that is only so on the assumption that an expansion or contraction of credit does not occur in other gold standard countries. If there were a general and simultaneous expansion of credit in all other gold-standard countries, then a country which did not participate in the movement, but kept credit steady, would receive gold from all of them, just as if it had instituted a contraction of credit on its own account. Similarly if there were a general and simultaneous contraction of credit, the country which kept credit steady would lose gold as if it had had an expansion. The gold standard requires all countries that adhere to it to keep pace in their credit movements but, so long as they do so, it does not *prevent* such movements.

A general credit expansion would eventually involve an increase in the circulation of money in all the countries which experience it. If the money takes the form either of gold coin or of paper money backed by gold, this increase in circulation will mean a demand for gold. But whereas a country which fails to keep pace with the credit expansions and contractions of its neighbours almost immediately suffers the



consequences in an importation or exportation of gold, the increase in the circulation of money in any one country, and therefore equally in all countries taken together, takes place very tardily. Moreover this demand for money can be met by the issue of paper money, and if the issue of paper money is limited by some relation to the gold reserve that limitation is an arbitrary one imposed by law or administrative practice.

If we extend our view so as to comprehend all the gold standard countries, we may regard the Central Bank or other authority controlling the gold reserves and currency in each as one of the dealers in the world market for gold. Together they form a body of dealers undertaking to buy and sell gold in unlimited quantities at fixed prices. Their gold reserves form their stock in trade.

We are now in a position to survey the world market in gold, and see how the world value of this commodity, upon which all the most important currency units are or are soon destined to be based, is determined.

Gold is produced in large quantities in South Africa, and in moderate quantities in the United States, Canada, and a number of other countries. The total world output is now about 600 tons, of a value something over £80 millions, of which about half comes from South Africa. For a few years before the war the value exceeded £90 millions a year.

This output exceeds what may be briefly called

the industrial consumption, that is to say, the consumption for all purposes other than currency. The industrial consumption of the world includes, in Europe and America, the use of gold for plate and jewellery, for decoration, for the stopping of teeth and various miscellaneous purposes. It also includes the peculiar Indian demand. The Indian peasants are accustomed to hoard a considerable portion of their surplus wealth in the form of gold ornaments. The result is that the industrial demand for gold is exceptionally large in India in proportion to the wealth of the country, and also that it is very fluctuating, depending as it does upon the surplus resources of an agricultural population whose prosperity varies much from year to year. The absorption of gold by the Indian population has occasionally reached as much as £30,000,000 or £40,000,000 in a single year. But the industrial demand elsewhere is much less, and it is probably true that the total industrial demand of the world for gold nowadays never equals the output, and usually falls short of it by several tens of millions.

That means that the currency authorities of the world are on the whole always buyers of gold. They require reserves to meet possible payments *to one another*, not to meet possible industrial demands.

And the reserves are enormous in comparison with the annual output and industrial demand. The United States holds about £900 millions of

monetary gold, England £150 millions, France £146 millions, Spain £100 millions, Germany £80 millions. Many other countries hold considerable sums. The total of monetary gold cannot be less than £2,000 millions, and all of this, except a quite insignificant amount of gold coin in circulation, is held in reserves.

What a market is this, where the dealers hold a stock in trade equal to 25 years' supply and probably more than 30 years' demand! For generations past the currency authorities have been buying up all the superfluous gold off the market, and this is the result.

The gold standard stabilises the value of the currency unit by fixing the price of one commodity. But the value of that commodity is not the resultant of the free reactions of supply and demand. Its value is in the hands of the currency authorities themselves, who are equally well equipped both to dominate the demand by buying unlimited quantities and adding to their hoards, or to dominate the supply by letting loose a small fraction of those hoards.

The wealth value or purchasing power of gold is determined mainly by the demand for it for monetary purposes. The industrial demand takes quite a secondary and subordinate place. The next question we have to consider is, how the currency authorities use the power which they possess over the gold market. That brings us back to the question we have already referred to, of the amount of the gold reserve.

A gold reserve is held with a view to contingencies, particularly to what we may call an adverse clearing balance against the country in world markets, or, in the more usual phrase, an adverse balance of payments. It is impossible to calculate beforehand the magnitude of these contingencies, and the conclusions arrived at on the subject have everywhere been empirical. They have been picked up from experience with little assistance from theory.

It is natural to think in terms of percentages. The reserve must be in some sense proportional to the transactions out of which adverse balances may arise. Any bank usually aims at a certain proportion of cash reserves to liabilities, to cover both clearing balances and withdrawals of money into circulation. Proportions between 10 and 15 per cent are very commonly adopted by banks which have re-discounting facilities open to them.

A Central Bank of issue, having no re-discounting facilities available, would naturally keep a higher proportion. Accordingly gold reserve laws are commonly enacted requiring the gold held to be not less than, say, 30 per cent or 40 per cent, or  $\frac{1}{3}$  of the note issue. The law does not necessarily prescribe a proportion. Another method is to require the whole of the note issue in excess of a certain fixed amount to be covered by an equal amount of gold. But whatever the principle embodied in the law may be, people will criticise it or recommend it from the point

of view of the proportion of gold to liabilities which is found to emerge. The liabilities on which this proportion is taken are those of the Central Bank. Very often only its note issue is taken into account. The deposits, in so far as they are the balances held by other banks, are mainly clearing reserves. The notes represent mainly the requirements of the public for cash. Provided no change is made in the practice of paying clearing balances with cheques on the Central Bank, the deposits will not be turned into notes, though of course both deposits and note issue will be subject to fluctuations.

The justification for basing the gold reserve on the liabilities of the Central Bank is that it is only through those liabilities that gold can be drawn from the reserve. In the numerical example which we used in Chapter I (p. 22) we supposed that £200 millions of banking deposits were supported by reserves of £10,000,000 in cash and £15,000,000 in deposits at the Central Bank. We may modify our hypothesis by assuming that only paper money is used, to the exclusion of gold coin, and that the total note issue is £40,000,000, of which the banks hold £10,000,000, and the balance of £30,000,000 is in circulation. The liabilities of the Central Bank will then amount to £55,000,000, made up of £40,000,000 of notes and £15,000,000 of deposits.

If the Central Bank were required by law to maintain a gold reserve equal to two-fifths of its note issue, this minimum reserve would be

£16,000,000. But in practice it would have to hold substantially more. For if it held only £16,000,000, and any sum in notes, however small, were presented to withdraw gold for export, the reserve would immediately be reduced below the minimum. If notes to the value of £1,000,000 were presented, a reserve of £15,000,000 would remain against a note issue of £39,000,000, whereas the reserve ought to be two-fifths of £39,000,000, or £15,600,000.

If the principle of a fixed fiduciary issue were adopted, if, for example, a fixed amount of £24,000,000 were allowed to be covered by securities, and all notes issued in excess of that amount had to be covered by an equal amount of gold, then the note issue of £40,000,000 would be covered by £24,000,000 of securities and £16,000,000 of gold. If £1,000,000 of notes were presented for gold, the reserve law would be untouched, for a note issue of £39,000,000 would be covered by £15,000,000 of gold and £24,000,000 of securities. This would equally be so if £10,000,000 were presented, for then a note issue of £30,000,000 would be covered by £6,000,000 of gold and £24,000,000 of securities.

But even this system does not exempt the Central Bank from keeping a surplus gold reserve. For besides withdrawals of gold for export it has to meet withdrawals of notes into circulation. If the public need £40,000,000 in notes, then the £10,000,000 of notes presented for gold will have to be replaced. In fact, they will be replaced

among the public by notes drawn out of the banks, whose reserves will be thereby reduced from £25,000,000 to £15,000,000. That will be insufficient to provide for their till money and clearing balances, and they will proceed to make good the shortage in the only way open to them, that is to say by borrowing from the Central Bank.

The Central Bank can, if it pleases, refuse absolutely to lend, or can ration credit so as to keep its lending within a prescribed limit. If it did so refuse, it could keep within the legal limit of its note-issue despite the withdrawals of gold. But long and varied experience of financial crises has shown that it is very undesirable that the Central Bank should absolutely refuse to lend. That way lies panic. We have supposed a sudden and severe shortage of cash to occur, the total notes in circulation being reduced from £40,000,000 to £30,000,000. The effect will be an extreme unwillingness of the ordinary banks to lend, for any bank which lends more freely than the others will have to pay an adverse balance at the clearing, and when their cash holdings are reduced so low, they cannot afford to do so. Borrowers must therefore fall back on the Central Bank. If it will not lend, they cannot get money from anywhere. The least of the harmful results will be the slowing down or stoppage of many businesses for want of working capital. Others, with liabilities to meet, will have recourse to forced sales of goods or securities. Markets will be overwhelmed and

purchasers will be few. The difficulty of selling and the consequent precipitate fall of prices, will send traders with intrinsically sound businesses into bankruptcy.

These disastrous developments can be avoided if the Central Bank will continue to lend. It may insist on good security and may charge a very high rate for its loans. Even a very high rate for a short period is but a slight burden on a prosperous trader in an emergency, and it deters people from borrowing in circumstances where borrowing is not really necessary.

If the Central Bank is to adopt this policy of never refusing to lend on sound security, it must be prepared to make good any shortage in the note circulation by lending. Should it do so at a time when the circulation is already up to the legal limit, then the legal limit will be exceeded. Therefore a necessary consequence of this policy is that the Central Bank should keep a margin of its power of note issue in reserve. Or in other words it must keep a gold reserve exceeding by a suitable margin the amount prescribed by law.

In our numerical example the Central Bank, with £40,000,000 of notes issued and deposits of £15,000,000, is legally bound to keep £16,000,000 against the notes, and must therefore keep a further sum to meet export demands if it is to do so without either breaking the law or cutting down the supply of money in circulation. This is the function that was discharged by the reserve in the Banking Department of the Bank of England



under pre-war conditions, before the position was modified by the Currency and Bank Notes Act of 1914. That reserve was the margin between the actual note-circulation and the circulation legally permissible. It was, as a matter of practice, kept at about 40 per cent of the deposit liability, except at the time of big seasonal increases in deposits. The gold reserve in excess of this margin could not be touched except at the cost either of reducing the circulation or of breaking the law. Reducing the circulation meant in the last resort refusing to lend, and, when confronted with the alternatives, the Bank, reinforced by the authority of the Government, chose to break the law.\*

In France there was a maximum limit to the note issue, which was regularly raised by amending legislation if circumstances required, but there was no prescribed gold reserve. Nevertheless, the Bank of France maintained a very large gold reserve, covering a high proportion of the note issue (68 per cent in 1914).

In fact, before the war the prevalent policy everywhere was to keep large gold reserves, and it was this demand for monetary purposes that dominated the gold market. In the next chapter we shall turn for a moment to the history of the gold standard, and we shall then see how monetary policy has affected the world market for gold.

\* It should be mentioned that in practice the Bank of England does not lend direct to the Joint Stock Banks, but to the discount houses, from which the Banks can call up money.

Now the accumulation of these huge gold reserves has been the result of caution and even timidity. The authorities, political and financial, that have framed monetary policy have never had any clear idea as to the causes of gold movements or of the manner in which the remedies worked. They have therefore never felt sure that any gold reserve, however great, would be adequate. Since the war there has been a change in this respect, and we shall see in Chapter IV how this change is affecting policy.

Before concluding the present chapter, however, it will be desirable to explain a development which had already begun before the war and has played a more important part since. That is what is called a *gold exchange standard*. The gold exchange standard is a practical device for economising the use of gold in the application of the gold standard. It may be compared to the adoption of the payment of balances between banks at the Clearing House by cheque instead of with money.

Gold is used in international monetary affairs as a medium of exchange. But it is a medium of exchange not between different *commodities* (except indirectly), but between different *currencies*. When gold is sent from London to New York, the bullion market changes pounds into gold and then changes the gold into dollars. The gold has been used as a *medium* for changing pounds into dollars. Now, as has already been pointed out, when gold is used merely as a medium

of exchange and not as a material of industry, the right to receive gold will serve just as well as gold itself.

When Russia succeeded in fixing the gold value of the rouble in 1894, she found the provision of a gold reserve a serious strain upon her resources and her credit. The requisite funds had to be raised by means of large foreign loans, and the interest threatened to be a heavy burden on her budget and on her balance of payments. She therefore accumulated, in place of a part of the gold reserve, a reserve of foreign gold standard currencies in the form of bills and other liquid investments. This reserve was held in the first instance in Berlin and later also in other centres. The Government offered to buy bills on Berlin at a fixed rate of exchange, paying for them with resources which would otherwise have been used to buy gold. Having thus secured a fund of German marks, the Government could thereafter offer to sell marks to all comers at a fixed rate of exchange. To anyone who would otherwise have withdrawn gold for export a cheque or bill on a foreign centre like Berlin would serve just as well, for marks were equivalent to gold in Berlin, and the rate of exchange at which the Russian Government sold marks was so arranged that it would be slightly more profitable to anyone to buy marks than to take gold. Thus this reserve of foreign bills adequately served the purpose of a gold reserve ; and it had two great advantages, in that it yielded interest, and that its increase or

Now the accumulation of these huge gold reserves has been the result of caution and even timidity. The authorities, political and financial, that have framed monetary policy have never had any clear idea as to the causes of gold movements or of the manner in which the remedies worked. They have therefore never felt sure that any gold reserve, however great, would be adequate. Since the war there has been a change in this respect, and we shall see in Chapter IV how this change is affecting policy.

Before concluding the present chapter, however, it will be desirable to explain a development which had already begun before the war and has played a more important part since. That is what is called a *gold exchange standard*. The gold exchange standard is a practical device for economising the use of gold in the application of the gold standard. It may be compared to the adoption of the payment of balances between banks at the Clearing House by cheque instead of with money.

Gold is used in international monetary affairs as a medium of exchange. But it is a medium of exchange not between different *commodities* (except indirectly), but between different *currencies*. When gold is sent from London to New York, the bullion market changes pounds into gold and then changes the gold into dollars. The gold has been used as a *medium* for changing pounds into dollars. Now, as has already been pointed out, when gold is used merely as a medium

of exchange and not as a material of industry, the right to receive gold will serve just as well as gold itself.

When Russia succeeded in fixing the gold value of the rouble in 1894, she found the provision of a gold reserve a serious strain upon her resources and her credit. The requisite funds had to be raised by means of large foreign loans, and the interest threatened to be a heavy burden on her budget and on her balance of payments. She therefore accumulated, in place of a part of the gold reserve, a reserve of foreign gold standard currencies in the form of bills and other liquid investments. This reserve was held in the first instance in Berlin and later also in other centres. The Government offered to buy bills on Berlin at a fixed rate of exchange, paying for them with resources which would otherwise have been used to buy gold. Having thus secured a fund of German marks, the Government could thereafter offer to sell marks to all comers at a fixed rate of exchange. To anyone who would otherwise have withdrawn gold for export a cheque or bill on a foreign centre like Berlin would serve just as well, for marks were equivalent to gold in Berlin, and the rate of exchange at which the Russian Government sold marks was so arranged that it would be slightly more profitable to anyone to buy marks than to take gold. Thus this reserve of foreign bills adequately served the purpose of a gold reserve ; and it had two great advantages, in that it yielded interest, and that its increase or

decrease did not unsettle the world market in gold.

This plan was extensively imitated. Austria-Hungary adopted it, and so did India. Many other countries kept small reserves of foreign bills to the credit of their Central Banks, and used them to forestall demands upon their gold reserves.

The possibility of a gold standard country holding a reserve of foreign currencies instead of a reserve of gold introduces a new factor into the gold market. The holding of a reserve in actual metal, when an interest-earning reserve of bills would serve the purpose as well, is a loss and a burden. Since the value of gold in terms of wealth depends to so great an extent as we have seen upon the demand for it for monetary reserves, a method of economising the use of it for that purpose to an almost indefinite extent seriously threatens the stability of its value. This is a topic to which we shall return in the concluding chapter.

### CHAPTER III

SO far as Western Europe is concerned, the gold standard is a modern development. In the Middle Ages the Byzantine Empire, which preserved unbroken the great tradition of Roman civilisation, maintained a gold standard, and when this tradition spread during and after the Crusades to the Italian mercantile cities on the fringe of feudal barbarism, the use of gold spread with it. Florence had her gold florins, and Venice her gold sequins or ducats. But gold became and remained only a merchant's medium. The principal standard of value continued throughout Western Europe to be silver.

Gold coin in each country was given by law a determinate value in terms of the money of account and therefore of silver. But different countries were apt to adopt slightly different ratios between gold and silver, and endless troubles resulted. Gold always tended to flow towards those countries where it was valued highest in terms of silver, and these countries found that their silver flowed away in exchange for it. It was an inconvenience to lose the country's whole current stock of gold, for silver was an inconveniently bulky and heavy medium for the larger

commercial transactions; to lose any considerable part of the stock of silver currency was simply paralysing, for silver was the indispensable medium for the transactions of every day. The real facts in regard to foreign currencies, including not only the nominal coinage laws, but also the actual state of the gold and silver coins in circulation, were difficult to ascertain, and this state of confusion was not dispelled till the eighteenth century.

So far as Western Europe was concerned, the gold standard was practically originated in England. The valuation of gold in terms of silver had been modified several times in the seventeenth century. In 1663 Charles II issued a new gold coin called a guinea, officially valued at £1. A troy pound of gold,  $\frac{11}{12}$  fine, was coined into  $44\frac{1}{2}$  guineas. As silver,  $\frac{2}{3}$  fine, was coined at the rate of 62s. a pound, the ratio of gold to silver (after allowing for the slight difference in fineness between standard gold and standard silver) was 14.485, that is to say, a given weight of fine gold was valued at 14.485 times as much as the same weight of fine silver.

This ratio was too low. Gold was undervalued in terms of silver, in comparison with its value in the European market. But this was a time when the country was undergoing a great and rapid commercial development, and banking facilities were still in a rudimentary state, and almost non-existent outside London. Silver was too bulky a medium to be convenient for mercan-



tile transactions, and gold was almost a necessity. Creditors were willing to accept gold in payment at a premium over its official valuation. Debtors, being entitled to pay, if they chose, in silver, could stipulate for a premium on gold. The result was that guineas were treated as a commodity, the price being determined like that of wheat or iron in a free market. Yet, while their price varied, they were used as a medium of exchange, and merchants were free to make bargains expressly denominated in guineas if they chose.

The premium on guineas had risen high in consequence of the defective condition of the silver coinage, but even after the restoration of the coinage there was still a premium. In 1717, serious inconvenience having been suffered owing to a shortage of silver coin, Sir Isaac Newton, who was Master of the Mint, attributed the shortage to the fact that the current price of 21s. 6d. to a guinea over-valued the gold coin in terms of silver, and therefore undervalued silver in terms of gold. He showed that the ratio at which gold was valued in terms of silver on the Continent corresponded to a price of about 20s. 8d. to the guinea. This was not a case where the statutory valuations of gold and silver coins undervalued silver. The price of the guinea was not an official valuation at all, but a free market price. This is one of those cases where we must distinguish between the money of account, in which debts and credits are reckoned, and the

legal tender money in which debts are payable. The fault was not that the guinea was over-valued, but that the monetary unit of account was itself overvalued in terms of silver by the mint price.

The remedy adopted was to institute a statutory valuation of the guinea at 21s. This was the beginning of our gold standard. For according to Newton's calculations the guinea was still overvalued, and when the credit system of the country had accommodated itself to the new system, it was to the valuation of 21s. to the guinea that the monetary unit was adjusted. Silver was still undervalued, and little of it remained in circulation. It could only remain because it had become so worn that it was no longer profitable to melt or export it. Silver was practically relegated to the position of a subsidiary coinage, though it remained unlimited legal tender till 1774. Gold predominated as the means of payment and the standard of value.

The 21s. guinea represented an increase of 5 per cent over the valuation of 1663, which had made the ratio of gold to silver 14.485. The ratio was thus raised to 15.21, and became higher than in the rest of Europe.

In 1785, however, a new gold coinage was introduced in France. The effect was to raise the ratio of gold to silver in that country to 15½. Owing to a number of causes, into which it is not necessary to enter here, the full effect of this change upon the European gold market was not felt till after the collapse of the assignats, the

paper money of the French Revolution, in 1796.

The coinage price of silver in England was still 62s. to the troy pound of twelve ounces, or 62d. an ounce. The coinage price of gold was  $44\frac{1}{2}$  guineas to the troy pound or  $\pounds 3$  17s. 10 $\frac{1}{4}$ d. an ounce. The effect of the revised ratio of gold to silver in France was to attract gold to that country in preference to silver, and so to cheapen silver in terms of gold in the European market. The market price of silver in London fell below the coinage price of 62d. an ounce, and silver began to come to the Mint to be coined.

The virtual gold standard to which the English public had become accustomed was founded on nothing but the over-valuation of gold in the coinage system. The temporary limitation on the legal tender of silver had lapsed in 1783. If nothing were done, the country would pass back to a silver standard. In 1798 the decisive step was taken. The coinage of silver was suspended, and it again became legal tender (except by weight) only for payments not exceeding  $\pounds 25$ .

There followed a period of depreciated paper money, in which coinage laws were of merely academic interest. But before the restoration of the currency to parity, which occurred in 1819, the Coinage Act of 1816 had definitely established the gold standard. The guinea was abandoned in favour of the sovereign of 20s., but the coinage price of gold remained the same as had been adopted in Newton's day. An ounce of gold,  $\frac{11}{16}$  fine, is equivalent to  $\pounds 3$  17s. 10 $\frac{1}{4}$ d., and a

sovereign contains a small fraction more than 113 grains of fine gold. An ounce of standard silver is coined into 5s. 6d., but there is no free coinage of silver, that is to say, the Government settles the amount of silver coin to be issued at its discretion.

Meanwhile the coinage system of France, though in other respects remodelled, maintained the ratio of  $15\frac{1}{2}$  to 1 between gold and silver, which had been adopted in 1785. Silver was at that time the standard in almost all Europe. In France both silver and gold were equally the standard. That is to say, there was free coinage of both, and both were unlimited legal tender.

This is what is called bimetallism. Provided the ratio adopted in the coinage corresponded to the ratio between gold and silver in the world's markets, gold and silver would both be used as means of payment. The monetary unit would be effectively equal both to its prescribed equivalent in gold and to its prescribed equivalent in silver.

If the gold and silver markets were disturbed, so that the relative prices of gold and silver were altered, this would no longer be possible. Things cannot be equal to the same thing unless they are equal to one another. But it would not be correct to infer that a system of bimetallism is therefore utterly precarious. The bimetallic system itself affects the world market in the precious metals. If the value of silver tends to fall relatively to that of gold, the bimetallic country, offering as

it does a fixed price for silver, finds itself compelled to buy unusually large quantities of it. If the tendency is very marked, it will import so much silver that its monetary unit will begin to depreciate relatively to gold, and the result will be that it will export gold. It will thus become a buyer of silver and a seller of gold, and so long as it continues to discharge this double function the prices of gold and silver in world markets will be at the ratio adopted in the bimetallic system.

There is, however, a limit to this process. The limit is reached when all the gold in circulation in the bimetallic country has been replaced by silver. The fixed price of gold in the bimetallic system then ceases to be effective; the currency ceases for the time being to be bimetallic, and becomes one of silver alone.

In the same way, if gold tends to depreciate, gold is coined and silver coin is melted, till a point is reached at which no more gold can be absorbed, and no more silver can be withdrawn and melted.

The bimetallic country is in the position of a dealer undertaking to buy and sell unlimited quantities of both metals at fixed prices. If the stock of the metals this dealer is prepared to hold is large enough in proportion to the world demand and supply, he governs the world prices of both.

In the first half of the nineteenth century France fulfilled this condition. At that period France contained a larger proportion of the total

wealth and population of Europe than at the present day. And the French have always tended to hold a large supply of the precious metals in proportion to their wealth and population. In the period from 1815 to 1850 gold production was small, and France absorbed silver to the exclusion of gold. Bimetallism does not prevent a small premium appearing on whichever metal is being melted down for bullion, and gold was at a premium in these years. Though the premium would only be just enough to cover the cost of selecting and melting the coins and rarely if ever reached 1 per cent, its existence introduced a slight degree of inconvenience into dealings between countries with a gold standard and those with a silver standard, in that fluctuations in the rates of exchange were to that extent wider than between countries with the same metallic standard. In 1847 Holland, which like France had been bimetallic, adopted a silver standard.

On the other hand, the United States, whose trade was mainly with England, found a silver standard inconvenient. The American standard was nominally bimetallic, but gold was valued at only 15 times the value of silver, and so long as the world market followed the French ratio of 15½, no gold came to the United States for coinage. In 1834 this ratio was revised, but the new ratio was very nearly 16 to 1, and the result was an almost complete displacement of silver by gold in the course of some years.

Just before 1850 occurred the gold discoveries in Australia and California which were to revolutionise the markets in the precious metals. Floods of gold were let loose upon France, and instead of a premium on gold there was a premium on silver. The French franc from a silver unit became a gold unit. The two great financial centres of the world, London and Paris, were both gold centres.

The period of twenty-three years from 1848 to 1871 was one of wars and revolutions, and the result was to drive many important countries into the use of paper money. In 1871 Russia, Austria-Hungary, Italy and the United States were using depreciated paper. In France the notes of the Bank of France had been made inconvertible, though they were not seriously depreciated. Belgium and Switzerland had adopted bimetalism, and had, along with Italy, joined France in the Latin Union of 1865. Throughout Europe the silver standard only remained effective in Germany, Holland and Scandinavia. On the other hand, silver still maintained its position in the East.

It was in these conditions that the first step was taken in an evolution which by 1914 had established the gold standard in nearly all the world.

This first step was taken by Germany. Germany no longer derived any advantage from the silver standard in her trade with Eastern Europe, because silver had there made way for inconvert-

ible paper. The bimetallic currencies of Western Europe had passed from a state of fixity in terms of silver, with a slight fluctuating premium on gold, to fixity in terms of gold, with a slight fluctuating premium on silver. In those days German trade with the Far East was not a decisive factor, and it was moreover financed to a considerable extent through London.

Even if the ratio of gold to silver continued to be stabilised by the bimetallicism of the Latin Union, the silver standard might be expected to be a disadvantage to the German financial centres. Austria-Hungary had already been considering the adoption of a gold or bimetallic standard as soon as she should escape from inconvertible paper, and had started coining 8-florin pieces.

The French indemnity paid in 1871 and 1872 supplied Germany with ample resources for carrying out a currency reform. In 1872 was adopted a new currency unit, the mark, which was based on gold. The existing silver unit, the thaler, was valued at three marks, and the amount of gold in the mark was so determined as to make the ratio of gold to silver  $15\frac{1}{2}$ . The vital change was that henceforward there was to be free coinage of gold and no free coinage of silver. The thaler was no longer to be coined at all, and the coinage of silver was to be confined to subsidiary coins of limited legal tender, issued at the discretion of the Government.

Germany thereupon started buying gold and selling silver on a huge scale. In two years gold



to the amount of a milliard of marks or £50,000,000 had been acquired and coined. This was much more than the world's bullion markets could stand. The price of gold in terms of silver was quickly forced up. Bimetallism was not in full operation at the time. In both Italy and France the paper money had been made inconvertible, and, though in France it was not depreciated, gold could not be freely obtained there. There was nothing to relieve the sudden scarcity of gold, and the price of silver in gold began to fall. But that meant that the currencies of silver-using countries began to depreciate. And in bimetallic countries it meant that silver would take the place of gold as the principal basis of the currency unit, and the same depreciation would occur.

The only remedy was the suspension of the free coinage of silver. This was quickly adopted in Holland, Sweden and Norway and Denmark, and soon afterwards by France and her associates in the Latin Union. Silver ceased to be a standard of value in Europe. Gold became the standard throughout the Continent except in those countries which were using depreciated paper money.

The old standard silver coins remained in circulation. Germany had intended to withdraw the silver thalers, but when the price of silver fell this could only be done at a loss. The five-franc pieces of the Latin Union remained in circulation. The value of the silver in a five-franc piece was soon far below five francs, but

so long as the supply of such coins was not sufficient to meet the needs of the public for metallic currency, gold had also to be in circulation, and that meant that the value of the franc was bound to keep up to its gold equivalent.

Thus the five-franc pieces in France and the thalers in Germany became tokens, like the subsidiary silver coins, but differed from them in being unlimited legal tender. In fact, the suspension of the free coinage of silver made it possible to keep up the value of the silver coins by a limitation of supply, while the free coinage of gold determined the precise point to which their value should be kept up.

As the five-franc pieces were inconvenient to handle, the greater part of them found their way into the bank reserves. The Bank of France had a very large holding of them, and was in a position to stave off inconvenient demands for gold by offering to redeem its notes in silver of unlimited legal tender instead. Such a course would lead to a small premium on gold, but the premium could never become substantial so long as there was a supply of gold coin in active circulation, passing in and out of the other banks, and available for sale as bullion if anyone chose to accumulate it and melt it.

In course of time the stock of these token silver coins of unlimited legal tender was gradually diminished, because they were melted down and used in the production of ordinary subsidiary coins of smaller denomination and limited legal

tender, but at the outbreak of war in 1914 there were still many outstanding, especially in the Latin Union.

In the countries with nominally silver standards, but actually inconvertible paper money, the question of suspending the free coinage of silver arose at a later stage. In Austria-Hungary the paper money was found to be at par in 1879. This was due not so much to a rise in the value of the paper as to a fall in the value of silver. Had the free coinage of silver been maintained, the country would have immediately had an effective silver standard. Rather than appear as the one country with a silver standard in a gold-using Europe, the Austrians followed the example set by their neighbours and suspended the free coinage of silver. But for the moment no value was fixed for their paper money in gold, and for some years they possessed a paper standard which was *above* its nominal value in silver. In 1892 they adopted a gold unit, and in 1900 they made it effective.

Russia had a somewhat similar history, having suspended the free coinage of silver in 1893 and soon afterwards adopted a gold unit. Spain, on the other hand, though she suspended the free coinage of silver, never adopted the free coinage of gold. Her currency unit, the peseta, was represented in circulation by paper and token silver. Its value, while much above the nominal silver equivalent, remained below the nominal gold equivalent till after 1914. Otherwise practically

the whole of Europe attained an effective gold standard.

The United States had practically had a gold standard before the Civil War. In 1873, in the midst of the régime of depreciated paper to which the Civil War led, a Coinage Act had omitted the silver dollar from the list of standard coins.

But in 1879, when the paper money had been successfully raised to parity and made freely convertible into gold, protests were heard against this abandonment of silver. The silver-mining interests were politically powerful in the United States. They were suffering from the fall in the value of silver, which had been caused by the sudden cessation of the demand for it as money in Europe, and they objected to their own country joining in a movement so injurious to them. The ratio of 16 to 1, which had been so far above that prevailing in the market as to exclude silver from circulation, no longer overvalued gold. In fact, it undervalued gold to such an extent that the free coinage of silver at the old coinage price would have entirely displaced gold from circulation, and would have placed the country practically on a silver standard. A compromise was arrived at, under which silver dollars were to be coined, not freely and in unlimited quantities, but up to a prescribed annual amount.

In 1893 the amount of silver so coined became a serious embarrassment. The gold parity of the dollar was imperilled. When the great financial crisis of that year broke out, the coinage of silver

dollars was hastily but finally stopped. The question of the currency was brought into the political arena, but the silver interests were decisively beaten at the Presidential Election of 1896, and the Gold Standard Act of 1900 placed the country unequivocally on the gold standard.

The greater part of Latin America had formerly had silver currencies, but had lapsed into inconvertible paper. Those countries which emerged from this state of confusion, such as Peru, Argentina, Uruguay and Mexico, adopted gold. Others, such as Chili and Brazil, were progressing towards a gold standard. None thought of reverting to silver.

In the East controversy had centred in India. The severing of the bimetallic tie between gold and silver was a serious embarrassment to the intimate financial and commercial relations between India and England. After suffering for twenty years from the growing fluctuations in the London price of silver and therefore of silver rupees, the Indian Government decided in 1893 to suspend the free coinage of silver. The restriction of the supply of rupees soon pushed up their value above that of their silver contents. They became token coins, like thalers or five-franc pieces. But for a few years they differed from these coins and rather resembled the Austro-Hungarian paper money in having no fixed gold value.

From 1898 onwards the rupee was fixed at a rate of 1s. 4d., or 15 rupees to £1, by an ingenious

application of the gold exchange standard. Similar measures settled other Far Eastern currencies on a gold basis, till in 1914 China almost alone in the whole world retained a silver standard.

From the foregoing brief summary of the introduction of the gold standard it will be seen that the choice to be made was always between different metallic standards, silver, gold or bimetallic. Inconvertible paper money was common enough, but was not regarded as a possible permanent standard. The controversies between gold and silver or bimetallism are obsolete. The question which is discussed nowadays is whether it is possible to dispense with a metallic standard altogether.

Nevertheless the experience of the hundred years preceding the war is full of valuable lessons.

In the first place the history of bimetallism illustrates in the most convincing way the predominant power of monetary policy over the gold and silver markets. The theoretical bimetallists hoped for an international agreement establishing the free coinage of gold and silver throughout the civilised world. In the period from 1803 to 1871 bimetallism was confined to France and two or three other countries, and yet their monetary demand sufficed to keep the ratio of the world price of gold to that of silver within a fraction of their coinage ratio of 15½. The system stood successfully the strain imposed upon it when the gold discoveries of 1849 and 1850 suddenly raised the annual output of gold, which

formerly had rarely reached as much as £3,000,000, to £20 or £30 millions. In the years following 1870 there was a slackening in the output, but this by itself would rather have favoured than have threatened the continuance of bimetallism. The event which brought it to an end was the adoption of a gold standard by Germany. Here again, therefore, monetary policy was the decisive cause. It was Germany's sudden demand for £50,000,000 in gold that drove her neighbours to suspend the free coinage of silver.

In those days the stock of monetary gold was small compared to that which we see heaped up in the great banks of issue all over the world to-day. In Europe there was no great concentrated stock outside England and France. It circulated in the British Colonies. A moderate amount remained in circulation in the United States despite the use of depreciated paper money. No doubt also a considerable amount of gold was scattered all over the world in countries where it was not the regular standard, being a convenient medium for hoards and reserves. But the total of gold used for monetary purposes in the world cannot have much exceeded £500 millions.

The immediate effect of the suspension of the free coinage of silver in Europe was to concentrate the whole demand for additional metallic currency upon the gold supply of the world. As country after country passed from inconvertible paper to gold, the demand was intensified. The United States, Italy, Russia, Austria-Hungary and many

smaller countries accumulated gold reserves. The annual output of gold was insufficient to meet these demands, and the inevitable consequence was a rise in the value of gold in comparison with other commodities. So long as the bimetallic system was effective, the price of silver had always remained close to that of  $60\frac{1}{2}$ d. an ounce, corresponding to the ratio of  $15\frac{1}{2}$  between gold and silver. By 1903 the price of silver had fallen to 22d., corresponding to a ratio of nearly 43 to 1.

The world used two metallic currencies. If their relative value could change to so great an extent, it is certain that they could not *both* be stable measures of value. Their instability was due to changes in currency policy on the part of the principal countries. A great part of the demand for metallic currency had been diverted from silver to gold. The value of gold in silver had been thereby very nearly trebled. One at any rate of the two metals and probably both must have been unreliable in the essential functions of a standard of value.

Since there is nothing in the circumstances of either metal to make it more stable in value than the other, are we to be driven to the conclusion that the precious metals are inherently defective for that purpose? That would be a mistake. The true moral of nineteenth century monetary experience is rather that the defects in gold and silver as standards of value have been attributable to causes within human control. Governments



have been too prone to modify their currency systems without regard to the reactions they might cause in the world markets for the precious metals, and therefore in the currency systems of their neighbours.

The most conspicuous example is the adoption of a gold standard by Germany in 1872. But other instances might have been cited.

On the other hand, it may be contended that there have been big changes in the value of gold or silver due to increases or decreases in production. In order to pursue further our critical examination of the experience of the nineteenth century we must look beyond the relative value of gold to silver, and consider, what is really the essential test of a measure of value, the value of gold in relation to commodities in general.

In such an investigation we must rely on index numbers of prices. We take a representative selection of commodities, and work out the average of the percentages by which their prices have changed over any period. This average may be regarded as measuring the change in the general level of prices. It is, of course, affected by many other causes besides the purchasing power of money, such as changes, whether permanent or transitory, in natural supplies, changes in methods of production, or changes in the uses to which products may be put. To some extent these non-monetary causes will be eliminated in the process of averaging, but that is only so when they are moderate in extent and independent of

one another. If that condition is fulfilled, a change in the level of prices recorded by a price index will demonstrate a change in the purchasing power of money. If on an average the selected commodities have fallen 10 per cent in price, then the purchasing power of money has risen in the proportion of 100 to 90.

Index numbers of prices have been worked out for this country for the whole of the period we are considering, and the results are instructive. If we look at the general tendencies disclosed, we find four clearly marked periods between 1819, when the currency was restored to par with gold, and the outbreak of war in 1914. The first period is one of falling prices, and lasts till 1850. The second is one of rising prices, and lasts till 1873. The period from 1873 to 1896 is again one of falling prices, and finally prices rise again from 1896 to 1914.

It is a fact that the periods of rising prices were periods of large gold production, and those of falling prices of small or relatively small gold production. But the gold production between 1873 and 1890, though slightly less than between 1850 and 1873, was enormously greater than before 1850. It was almost certainly sufficient to sustain a continued rise of prices, though not so rapid a rise as in the preceding period, had conditions remained unchanged. But the suddenly increased demand for gold as currency was more than the supply could keep pace with, and equilibrium necessitated a fall of prices. The fall between

1873 and 1896 amounted to 45 per cent. In the concluding period between 1896 and 1914 the transition to the gold standard had been practically completed, and the output of gold rose far above the highest figure known before. Prices rose about 40 per cent.

The gold standard has been criticised on the ground that these changes in purchasing power make gold unfit to be a standard of value for long-period contracts, such as debentures, leases, and national and municipal debts. Undoubtedly uncovenanted gains and losses do arise in this way between debtors and creditors, but they are spread over long periods and are not formidable in comparison with the other chances of economic life. The prospect of gain or loss from a change in the purchasing power of gold is not a serious motive in the economic actions of individuals, and when it occurs people are hardly conscious of it. They measure all values by money, and are content to regard money as fixed, without testing this opinion by constructing index numbers of prices, so long as they are not confronted with such flagrant variations as may occur with inconvertible paper.

But this is not the whole case. A closer scrutiny of the statistics of prices will show that superimposed on these long-period movements is a series of periodic movements, extending over periods of from seven to eleven years. The price level rises to a maximum, drops again, and from the low point rises to a new maximum, which is

reached regularly from seven to eleven years after the one before. The extent of the movement is large, the maximum often being as much as 20 or 25 per cent above the minimum.

Is this periodic fluctuation in prices a monetary phenomenon? That is to say, are we to interpret it as a change in the value of gold? It certainly seems that we must. If we look for any non-monetary cause, we certainly shall not find it in any periodical changes in the volume of production. There is indeed a periodical fluctuation in production, but production is at its highest just when the price level is at its highest

If prices rise just when supply is plentiful that must be because demand is increasing. But what is demand? It is simply the money that people have to spend; that which I have called the consumers' outlay. The *relative* demand for different products depends on the relative intensity of people's desires for them. But the total demand for *all* products, whether goods or services, does not depend on people's desires. It is simply the total of their incomes, whatever their desires may be.

Therefore the periodic fluctuation in the value of gold must have been due to periodic fluctuations in the money income of the community. For this purpose the "community" means all the inhabitants of the gold-using countries.

Now we have already seen how this total money income may be affected by credit policy. When the banks begin to lend too freely, people have

bigger incomes to spend, and prices rise. The gold standard regulates their lending and puts a limit to it. Firstly it compels all the gold standard countries to keep pace with one another in expanding credit, for any one of them which outstrips the others loses gold. Secondly, an expansion of credit, with the consequent increase in incomes and prices, leads eventually to more legal tender money passing into circulation. If this legal tender money has to be either gold coin or paper money wholly or partly backed by gold, the effect is to encroach on the available supplies of gold in the gold standard countries, till at last the expansion of credit has to be stopped.

Now we have already seen that the flow of legal tender money into circulation in such circumstances is *very gradual*, and lags far behind the expansion of credit which causes it. The result is that, if the authorities controlling credit are guided in their action by the adequacy of their stock of gold, their intervention is bound to be very tardy. And the expansion and contraction of credit are both likely to be very slow processes in a group of countries which are all made to keep pace with one another by the rather cumbersome expedient of gold movements.

Hence the very slow rhythm of the movements in the price level, which we are now studying. So far as any inequitable disturbance of the relations of long-term debtors and creditors is concerned, these movements matter less than the long-period movements we have already

considered, because the rise and fall compensate one another. But that does not mean that they are innocuous. In fact, the periodic movement of the price level is a part of the trade cycle, which has been the subject of so much controversy among economists and business men.

If the foregoing interpretation is correct, the trade cycle is a credit cycle, and is traceable to a defect in the gold standard as a regulator of credit. Conformity to the gold standard sooner or later keeps a credit movement within bounds, but *not soon enough*. The credit cycle occurs because it takes years for the restrictive influence of gold to make itself felt.

The trade cycle is the source of very serious evils. The greatest is the occurrence of epidemics of unemployment, whenever a prolonged contraction of credit becomes necessary. The unemployment problem in its acute form is a problem of the trade cycle. Outbreaks of unemployment occur from multifarious causes in particular industries. Theoretically, unemployment might be caused in all industries together by wages being fixed above the economic level. But the epidemics of unemployment which actually vex us are caused by the paralysing influence of a credit contraction. The credit contraction works its way by cutting short the flow of purchasing power, and the shrinkage of demand discourages production. The fall of prices follows, and is in itself a relief, but the fall, while in progress, inflicts loss on traders, and so intensifies the discouragement to

production. It is the decline in production thus caused that makes itself felt in unemployment.

The fluctuations in the value of the currency unit which are characteristic of the trade cycle have another very injurious effect upon the labour market, in that wages cannot easily be adjusted to them. Any wage settlement in any industry which does not take account of the trade cycle soon requires revision. In the pre-war period some of the industries most susceptible to the influence of the trade cycle, conspicuous among which is coal mining, had adopted sliding scales of wages, depending upon the selling price of their products. But this is not always possible, and, even when it is, the adjustment is often imperfect. The result is incessant friction.

The trade cycle has also proved extremely detrimental to the interests of traders and capitalists. The great financial crises of the nineteenth century were caused by the collapse of prices that follows a too precipitate contraction of credit. When a contraction begins, all gold standard countries must participate in it, on pain of losing gold to their neighbours. A country which fails to do so and finds its gold reserves depleted, is compelled to adopt a more drastic credit contraction if it is to restore its situation and maintain the gold standard.

Bank rate is put up to a very high rate, and the immediate effect is to make all merchants and dealers in commodities very unwilling to hold stocks of goods with borrowed money. Forced

sales drive down prices, and many traders go bankrupt. Banks which have lent to the insolvent traders are threatened, and panic supervenes.

Apart from the terrors of commercial crises the alternation of feverish activity with depression is detrimental to the interests of producers and traders, in that the most conspicuous changes in their profits are brought about by causes which are not within their control, or even within their knowledge, unless they study economic conditions outside their own business.

Now it would certainly be unwarrantable to argue that the trade cycle or credit cycle is *caused* by the gold standard itself. The active cause is the inherent tendency of credit to expand. The gold standard enters into the matter in the first place as putting a limit to the possible expansion, and necessitating a subsequent contraction, secondly, as imposing a slow pace upon both expansion and contraction, and, thirdly, as allowing expansion and contraction successively to attain a very considerable extent before they are checked and reversed. Of these three characteristics the first two are in themselves desirable, and if the gold standard does not fulfil them altogether satisfactorily that is entirely because of the third. That a limit must be imposed to any credit expansion almost goes without saying. It is hardly necessary to refer to the calamities which have accompanied monetary collapse in so many countries since the war. That credit expansion and contraction, if they occur at all,



should be as slow and moderate as possible is also a proposition that should command general assent, though there may, no doubt, be exceptions to it. The defect in the gold standard is that it gives too tardy a warning that expansion has gone too far. But this defect is not inherent in the gold standard itself. It is rather a characteristic of the practice of the nineteenth century in applying the gold standard. The absorption of legal tender money into circulation, with the consequent encroachment on gold reserves, was relied on as the signal for the contraction of credit. It must be remembered that we are here considering movements which affect *all* gold standard countries together. The export of gold was regarded as a signal for credit contraction in the country which suffered it. But then it was equally a signal for credit expansion in the countries which received the gold, and the only effect was to make all gold standard countries keep pace with one another either in expansion or in contraction of credit.

If an expansion of credit was to be stopped by a shortage of gold, that shortage could only be caused by the absorption into circulation either of gold coin or of paper money backed by gold. It is this absorption which was too slow of action to be a suitable guide in the control of credit.

That is a serious defect in the pre-war currency systems, and we ought to seek for a remedy. But it is not to be regarded as a defect in the gold standard, unless the remedy turns out to be

inconsistent with the gold standard. That is a question to which we shall return in the next chapter, which will be devoted to the developments since 1914, and to the questions of currency policy at the present day.

## CHAPTER IV

**I**T might be said, and, in a sense, with truth, that the currency troubles which have plagued the world since 1914 have been due to the abandonment of the gold standard. But stated baldly and without qualification this statement is extremely misleading.

The war compelled the belligerent Governments to raise colossal sums of money at a time when the investment markets of the world were in a state of utter disorganisation. Such sums as could be raised by taxation were insignificant compared to what was required. France and Germany imposed no additional taxation worth mentioning till the war was half over. For the main portion of war expenditure borrowing was the only resource, and big war loans were floated. But the money raised by these loans was insufficient, and the balance had to be made up somehow. No belligerent could afford to let the national effort be limited to something less than the maximum by a hitch in the financial machinery.

It is fatally easy to create money out of nothing by borrowing from banks and issuing paper money. Belligerent Europe turned to this expedient, not merely to provide the indispensable balance

which might have been needed to fill the gap after every other financial resource had been exhausted, but to escape the unpopularity of heavy taxation and to avoid appealing to the investor at inconvenient moments. Some Finance Ministers found it so surprisingly easy to raise money by the issue of short-term securities like Treasury bills, that they actually seem to have preferred this to other methods. That was particularly so in France, where no long-term loan was issued till fifteen months after the outbreak of war.

Inflationary finance is about as prudent as eating the seed corn. Nothing could so aggravate the difficulties of raising money as a loss of confidence in the currency. The statesmen of 1914 never thought of that. The issue of Treasury Bills, or *Bons de la Défense Nationale*, was the line of least resistance. Compared to the direct borrowing from the Central Banks of Issue it even looked virtuous. The result was inflation, and by the end of the war inflation had in some countries got completely beyond control.

To regard the gold standard as a safeguard against this kind of financial profligacy is a delusion. The gold standard can only be established in a country by legislation. In an emergency it can be swept away at a moment's notice by new legislation. The responsibility for the currency may be formally placed upon an independent Central Bank, free from Government interference, but the most scientifically conceived plan always remains at the mercy of the legislature.

The legislature indeed may not abandon the gold standard at the very beginning as France, Germany, Russia and Austria-Hungary did in 1914, but may keep it going as long as circumstances allow. Convertibility into gold will then stave off the depreciation of the currency unit for a time. It counteracts the effects of inflationary methods of finance. The Government creates new currency to meet its needs, but when notes are converted into gold, and the gold is exported, the amount of currency is diminished. In effect the Government is enabled to finance itself by the sale of the gold instead of by increasing the supply of currency.

This resource depends on the existence of a gold standard not in the country itself, but in the foreign countries to which the gold is exported. The use of the gold would be equally effective in avoiding inflation if it were placed directly at the Government's disposal and turned into foreign credits, without the formality of issuing redundant paper money to be redeemed by it.

But a gold reserve cannot give anything more than a temporary respite from inflation. And all the evil consequences of inflation will follow as soon as the gold reserve is exhausted, or the exports of gold are stopped.

The gold standard can only act as a preventive of inflation by giving the authorities of the country an inducement to avoid inflationary methods. Avoidance of inflation requires courage in imposing heavy taxation and in drastically restricting

lending by banks to traders. A simple objective, such as the maintenance of the currency unit at par with gold, will help all who oppose inflation to make out their case and to rally support. But it will be of little value unless they understand the means by which their objective is to be attained. Nor will they hold their own in controversy if they make a mere fetish of gold; if they are to withstand the urgent demands of distracted finance ministers for the creation of the means of payment, they must be able to show how disastrous the effects of inflation are likely to be. In fact, the only possible safeguard against inflation is a comprehension by the financial authorities of its consequences. No institutions, however scientific or cunningly devised, can be a substitute for their wisdom and courage.

In 1914 the financial authorities of the world were found wanting. England alone among the belligerents maintained the convertibility of paper money into gold. Even there the export of gold, though legally free, was so obstructed, partly through the inevitable difficulties of transport in war-time and partly through official pressure, that the gold standard ceased to work. The difficulties of war finance were enormously increased by various expedients of an inflationary tendency which were resorted to.

The belligerent Governments sold much of their gold to neutral countries to pay for urgently needed supplies. But the greater part of the gold-using world was at war, and the demand of the

remainder for gold was swamped by the enormous quantity let loose. The result was a great rise of prices in the gold-using countries, that is to say a depreciation of gold itself in relation to commodities. In 1917 the greatest of neutrals the United States, became a belligerent and prohibited the export of gold, and there ceased to be any semblance of a world gold market. Nor was the market fully reconstituted in the years immediately following the Armistice. In 1919 indeed the United States withdrew the prohibition on the export of gold, and large amounts were exported to countries such as Japan and Argentina, where the gold standard still remained in operation. By May, 1920, the price level in terms of gold, as measured by the American index number, was  $2\frac{1}{2}$  times what it had been in 1913, or in other words the value of gold in terms of goods was only two-fifths of what it had then been.

There followed a violent contraction of credit in the United States, which reduced prices by more than 40 per cent in twelve months. Other countries which had till then preserved the gold standard were unable to keep pace with this precipitate movement, and soon the United States was the only country in which the gold standard remained operative. There being no other buyer of gold for monetary purposes, all the surplus gold of the world gravitated thither.

These tremendous changes in the value of gold differed in degree but not in kind from the changes

lending by banks to traders. A simple objective, such as the maintenance of the currency unit at par with gold, will help all who oppose inflation to make out their case and to rally support. But it will be of little value unless they understand the means by which their objective is to be attained. Nor will they hold their own in controversy if they make a mere fetish of gold; if they are to withstand the urgent demands of distracted finance ministers for the creation of the means of payment, they must be able to show how disastrous the effects of inflation are likely to be. In fact, the only possible safeguard against inflation is a comprehension by the financial authorities of its consequences. No institutions, however scientific or cunningly devised, can be a substitute for their wisdom and courage.

In 1914 the financial authorities of the world were found wanting. England alone among the belligerents maintained the convertibility of paper money into gold. Even there the export of gold, though legally free, was so obstructed, partly through the inevitable difficulties of transport in war-time and partly through official pressure, that the gold standard ceased to work. The difficulties of war finance were enormously increased by various expedients of an inflationary tendency which were resorted to.

The belligerent Governments sold much of their gold to neutral countries to pay for urgently needed supplies. But the greater part of the gold-using world was at war, and the demand of the



remainder for gold was swamped by the enormous quantity let loose. The result was a great rise of prices in the gold-using countries, that is to say a depreciation of gold itself in relation to commodities. In 1917 the greatest of neutrals the United States, became a belligerent and prohibited the export of gold, and there ceased to be any semblance of a world gold market. Nor was the market fully reconstituted in the years immediately following the Armistice. In 1919 indeed the United States withdrew the prohibition on the export of gold, and large amounts were exported to countries such as Japan and Argentina, where the gold standard still remained in operation. By May, 1920, the price level in terms of gold, as measured by the American index number, was  $2\frac{1}{2}$  times what it had been in 1913, or in other words the value of gold in terms of goods was only two-fifths of what it had then been.

There followed a violent contraction of credit in the United States, which reduced prices by more than 40 per cent in twelve months. Other countries which had till then preserved the gold standard were unable to keep pace with this precipitate movement, and soon the United States was the only country in which the gold standard remained operative. There being no other buyer of gold for monetary purposes, all the surplus gold of the world gravitated thither.

These tremendous changes in the value of gold differed in degree but not in kind from the changes

which we found to have occurred in the nineteenth century. They were due to changes in the monetary demand for gold. First of all a number of countries abandoned the gold standard, and let loose their gold reserves to swamp the market, much as the abandonment of the silver standard swamped the silver market after 1872. Then the United States intervened, as a buyer of gold, and raised the value of gold in the world market, just as Germany had raised it in 1873, and other countries by adopting the gold standard in subsequent years.

Attention had everywhere been attracted to the question of the currency, and at a time when the principal nations of the world were looking forward to the restoration of the gold standard as the only escape from chaos, criticism was directed against the imperfections of that standard itself. Not only had recent experience shown that the purchasing power of gold might be exposed to violent fluctuations, but the gold market had for the time being come under the arbitrary discretion of the United States. The market for gold and the market for dollars were one and the same.

In the nineteenth century people had been content to assume that the world market in the precious metals was big enough not to be disturbed by movements originating in any one country. They took it for granted that gold or silver could be bought or sold "abroad," much as an electric current can be directed "to earth,"

and that is the end of it. This was a mistake even in the nineteenth century. The steadying effect of bimetallist France, and the unsteady effect of Germany passing from silver to gold, are outstanding examples to show that the monetary demand of one great country was not small in relation to the world market. And in 1922 the world market in gold was practically coterminous with the monetary demand of one great country.

At the Genoa Conference in April, 1922, representatives from all Europe, and outside Europe from Japan and the British Empire, met together to consider their economic future. The most fruitful section of the Conference, perhaps the only one that produced any enduring results, was that which was concerned with currency. In saying that all countries must avoid inflationary finance and stabilise their currencies, and that stabilisation meant stabilisation in relation to gold, the Conference was merely repeating what had been said often enough before. What was a real step forward was a scheme of reconstruction, which recognised the influence of each country's currency system on the world demand for gold, and therefore upon the monetary affairs of all the others.

The scheme aims at the co-operation of the Central Banks of Issue of the principal countries in the regulation of credit with a view to preventing undue fluctuations in the purchasing power of gold. Before the war each Central Bank used to use its power of regulating the purchasing power

of the currency unit of its own country to keep its gold holdings up to the prescribed amount. The effect was that all the currency units had to keep near gold parity. The value of every currency in relation to every other was approximately fixed, but the value of all in terms of commodities varied, because the value of gold varied. To each country the value of gold appeared as something decided by forces independent of it, but, in fact, these forces were simply the resultant of the monetary demands of the different countries themselves. If the Central Banks co-operate together, they can control these monetary demands, and the value of gold will conform to the value of the currency units instead of the value of the currency units conforming to the value of gold.

But to control the monetary demand, they must be prepared to buy and sell gold at their respective fixed prices *without limit*. If the consequent increase or decrease in their gold reserves became unmanageable, the plan would break down. Even an excessive increase in gold reserves is not a contingency to be entirely disregarded. The gold holdings of the Federal Reserve Banks in 1924 were very near the point at which the Banks' control over credit would be impaired. But most of the countries now on a gold standard are far from being threatened with a superabundance of gold, and the danger to be more specially provided against is a shortage of gold.

That raises afresh the question of gold reserves.

The gold proportions of the Central Banks have been settled in the past by rule of thumb, with but little regard to the real extent of the probable demands upon them. What are these demands likely to be in the future and how determined?

In the first place the money in circulation need not be of gold. In those countries which before the war were the greatest users of gold coin, England, France and Germany, people have become thoroughly used to paper money. Efforts in Switzerland and Holland to reintroduce gold coin into active circulation have failed. Albania is perhaps the only country in which gold coin is really preferred, but the Union of South Africa is endeavouring to follow in her footsteps.

Gold coin is, in fact, an imperfect application of the gold standard. We have already seen how the currency unit may fall fractionally below its nominal gold value through the imperfection and the wear and tear of the coin. A gold bullion standard, such as has been established in this country by the Gold Standard Act of 1925 is free from these defects. The bullion that is bought or sold by the Bank of England is valued on its exact gold contents, and there is no such variation or uncertainty as is possible with coin.

The use of gold coin in circulation makes a special demand upon the gold reserves, for they have to meet any sudden requirements of the community for legal tender money. It is sometimes recommended as providing a second line reserve in support of the foreign exchanges. But this

second line reserve cannot easily be collected in an emergency, and is far less effective for the purpose than the same amount of gold collected in a central reserve and replaced in circulation by paper money.

If the entire needs of the community for legal tender currency are met by paper money, together with subsidiary token coins, the gold reserve is required solely for the purpose of meeting an external demand. There may be a statutory requirement that the issues of paper money be covered in whole or in part by gold, but that is merely a device for securing the accumulation of gold to meet external demands. The crucial question is therefore the probable extent of the external demands to be met.

It has already been pointed out in Chapter II that international gold movements arise when different countries do not exactly keep pace with one another in the expansion or contraction of credit. To many people this will sound like a paradox. They have been accustomed to think of gold movements as caused by fluctuations in exports and imports, or by big international payments such as those arising out of external investment.

But a little consideration will show that these causes, important as they are, do not really conflict with the general principle, but merely modify its application in particular cases. Exports and imports, whether of goods or of capital, are operations carried out *by individuals*, and the

money which passes in consequence of them is the money of individuals. If for example a country suffers a shrinkage of production and a shortage of exports, through a failure of crops or an industrial dispute, the effect will be felt in the diminished incomes of the producers. They will have less to spend, and will buy less imported goods and invest less money abroad. This curtailment of external expenditure might even be sufficient to compensate the shortage of exports so that there would be no tendency for gold to go abroad at all.

Perhaps that is not likely, but it is at any rate true that the disturbance in the balance of payments to be made good by exports of gold is only the difference between the shrinkage in exports on the one hand, and the curtailment in external expenditure on the other, caused both by the same failure of production. In the same way, when increased production stimulates exports, there will be an increase in external expenditure.

What does disturb the balance of payments is an expansion or contraction of credit, which increases or decreases the purchasing power of the population in world markets without a corresponding increase or decrease in their productive power. Sometimes an expansion of credit arises in connection with the financing of stocks and shares in the investment market. The result is increased external investment, without any corresponding increase in the real resources available for investment. Some of the famous

crises of history have been so caused. That of 1825 occurred when foreign investments were a novelty, and the long list of flotations that led up to it included many that were utterly unsound. Nevertheless, it would be wrong to attribute the crisis to a drain of gold caused by excessive external investment in itself, whether sound or unsound. Had the investment drawn only on genuine savings, representing abstention from spending in other directions, the drain of gold would have been moderate, or might not have occurred at all. The trouble arose because the capital issues were financed with bank credits; the pound was depreciated and gold cheapened by an excessive credit expansion.

The same experience has been repeated again and again. A drain of gold leading up to a crisis has been attributed wholly or partly to over-investment, but on investigation it turns out that the over-investment was based on an excessive creation of credit.

Another common cause of a heavy and sudden loss of gold has been the outbreak of a financial crisis in some other country. The American crisis of 1907 was a striking illustration. The crisis took shape in a rush of panic-stricken forced sales, and a precipitate fall in the prices of commodities. The purchasing power of the dollar suddenly rose, and that of other gold currencies had to be forced up in proportion. The change in purchasing power of the other currencies could not be effected quickly enough,



and in the interval of adaptation huge amounts of gold were sent to the United States.

The right inference from this experience is that, if the gold standard countries all agree to keep the purchasing power of their currencies stable, these sudden discrepancies, which cause exports of gold to those countries whose currencies appreciate, will not occur. That means that a policy of stabilising currencies by concerted international action will itself diminish the probable demands upon gold reserves. The gold standard countries will find it easier to keep pace, if the pace set is *steady*.

Here is a great economy of gold, though one not easily measurable. But the Genoa plan does not stop there. We have already referred at the end of Chapter II to the device known as the gold exchange standard, by which a country can keep its currency on a gold standard by the use of a reserve composed of liquid securities in the currency of another country which is on a gold standard. It can offer to exchange its own currency into that of this other country and back on demand, and so long as the two currencies are thus interchangeable, and one is fixed in terms of gold, the other will be fixed in terms of gold too.

The Genoa Conference recommended that this system should be generally resorted to by gold standard countries, certain among them undertaking the function of being "gold centres," at which gold itself should be freely dealt in. Were that plan followed out to its logical conclusion, all gold reserves except in the gold centres

themselves could be dispensed with, and even in the gold centres the only reserves strictly necessary would be such as would meet any excess of the industrial demand for gold throughout the world over the output of the mines. Since the industrial demand is at present much less than the output, it would seem that practically the whole monetary supply of the world would become redundant.

Now the starting point of the whole scheme is the stabilisation of the value of gold. If the value of gold in relation to other commodities is to remain unchanged, the supply of gold must not be increased in comparison with the demand. It follows that no part of the existing gold reserves, superfluous though they may be, can be sold.

It is easy enough for one country to sell gold to another, provided that the latter is willing to take it for monetary purposes. But what we are concerned with here is a disposal of the stock of gold held by *all* the gold-standard countries in the world for monetary purposes. The gold withdrawn from monetary purposes could only be sold for industrial purposes. But the industrial demand could be stimulated only by reducing the cost of the gold to the industrial consumer, and as the price of gold in currency units is everywhere fixed, that means a depreciation of the currency unit. Gold would then be cheapened not by lowering its price but by raising the prices of all other things.

This being ruled out by the policy of stabilisation, the gold reserves must continue to be held.

And so long as the output of gold from the mines exceeds the industrial demand, the excess must regularly be bought for monetary purposes. It will have to be bought by some of the Central Banks of issue, and added to their reserves.

The absurdity of buying more gold when the existing reserves are already excessive has led Mr. J. M. Keynes to recommend the abandonment of the gold standard. The Genoa policy of stabilising prices is to be carried out through the regulation of credit in each country. The stabilisation of gold is merely a consequence of this. Given that the currency units themselves are stable, the Central Banks stabilise the value of gold simply by undertaking to buy and sell it in unlimited quantities at fixed prices in terms of these units.

The stabilisation of the currency unit, which is the ideal of all monetary systems, is effected quite independently of the use of gold, and gold according to Mr. Keynes will have become a fifth wheel to the coach.

He argues not merely that the holding of £2,000 millions worth of gold in stock and the annual purchase of some tens of millions more to add to the stock are pure waste, but that the use of gold as a monetary standard actually endangers the stability of the currency unit. Those countries, like the United States and Spain, which possess redundant stocks of gold may flood the market and lower the value of gold. Or others which have hitherto been content to work a gold exchange standard with little gold

may start accumulating reserves and raise its value.

The main advantage of the use of a common standard by different countries is that variations of the rates of exchange are kept within narrow limits. This advantage can be secured through the instrumentality of an exchange standard without any metallic medium. Every country can keep a reserve of foreign currencies and make its currency convertible into them.

But Mr. Keynes would not even insist on a stabilisation of the foreign exchanges. If he had to choose between a fluctuation in the price level and a fluctuation in the foreign exchanges, he would choose the latter. He would rather keep the value of the currency unit fixed in terms of commodities than in terms of foreign currencies. But he would hope that if this country succeeded in stabilising the value of the pound sterling in terms of commodities, other countries would be glad to stabilise their currencies in terms of sterling, even if the vagaries of the balance of payments necessitated slight disturbances of their internal price levels.

Mr. Keynes's arguments constitute a formidable frontal attack upon the gold standard, and no supporter of the gold standard can afford to leave them unanswered.

In the first place the argument for saving the expense of accumulating gold loses much of its force on investigation. If a capital sum of £2,000 millions could suddenly be let loose for fruitful

employment the benefit would be great. But this vast sum of gold does not represent economic power in any very useful form; it is simply an accumulation of a luxury commodity of limited uses. The demand for this commodity could not be so stimulated as to use up so vast a supply even in the course of a generation or more, except at the cost of a tremendous sacrifice of value. During that period the greater part of the gold mining industry would become unremunerative. Indeed the chief economic gain to be anticipated would be the release of productive power from gold-mining for other purposes, a gain to be heavily discounted on account of the waste of skill and of capital involved in a sudden change.

The loss to communities dependent on gold-mining for their economic existence would be overwhelming, and could hardly be left altogether uncompensated. There might be on balance some net gain to the world, but certainly not nearly so great as the figures would at first have suggested, and at the most hardly great enough to be a serious consideration in the problem.

But there are other vested interests to consider, besides those of the gold-producers. The proposal assumes action on the part of the currency authorities of gold-standard countries. It is they who would be offering gold reserves for sale, and it is on them that would fall the sacrifice of value involved in the swamping of the market. When the silver standard was abandoned in the years following 1873, all the countries concerned

soon stopped selling silver when the fall in its price became serious. The same thing would probably happen with gold.

Then there are many pecuniary obligations in the world which are expressed in gold, either in gold alone, or in gold as an alternative to currency. This is sometimes the case with loans floated internationally. In the United States it is a regular practice to make loans (including the National Debt) payable in gold coin of the existing weight and fineness. The war debts to the United States are gold debts. It is a serious objection to a monetary reform that it will impair the basis of an important class of obligations.

All these vested interests would not constitute an insuperable obstacle to the abandonment of the gold standard, if there were no other advantage in its continuance. But in the world as it is, there would be undeniable dangers in cutting loose from it. An exchange standard works very well so long as conditions in the foreign countries in whose currencies the reserves are held are normal, but there can be no certainty that this will always be so. One of the foreign countries may be involved in war, its currency may become depreciated, it may institute a moratorium or a control of the foreign exchanges, so that the credits or securities held there will fall in value and will not be disposable except after an indefinite delay. Or in a less catastrophic emergency the market in which the securities must be realised might become temporarily

disorganised. Even if the securities are not unsaleable, they may still be only realisable at a heavy discount. Or again blunders on the part of the authorities controlling a foreign currency may interfere with the smooth working of the system, and perhaps cause a depreciation of their currency unit at a time when securities expressed in it have to be used.

It is not unnatural that many countries should prefer a system which retains gold as its basis, so that while they keep some foreign balances and securities to work an exchange standard, they may also have a metallic reserve, which is independent of the vagaries of foreign countries.

It may be admitted that, accustomed as so many people are to regard gold as the one fixed standard with which all other monetary standards are to be compared, they may over-estimate the relative advantages of a metallic reserve. They may forget that a depreciation of the currency unit due to a fall in the commodity value of gold in world markets is just as real as a depreciation relative to gold.

On the other hand should the scheme for stabilising gold break down, it is always possible for any country which till then has enjoyed the advantages of a stable gold currency, to cut itself loose. During the war the three Scandinavian countries temporarily demonetised gold, in that they suspended the free coinage of gold and the purchase of gold by their Central Banks. The result was that for a time their currencies were at

a premium over gold, but they had no price-stabilisation policy, and this state of affairs did not last.

The preference of most countries for gold is at the present time an indisputable fact, and stability of the rates of exchange on gold standard countries necessitates a gold standard. Stability in the foreign exchanges is valuable to any country, but it is especially important to us, because no country is so widely interested in international short-term indebtedness. The bill on London, with which so much international trade is financed, requires stable exchanges for its effective operation. If *all* rates of exchange were unstable, this business would be seriously hampered, but London would still be at no disadvantage in competing for the business that survived. But if the currencies of other countries were stabilised in terms of gold and therefore of one another, and London were peculiar in having variable exchanges on the gold-using countries, the use of London as a clearing house for international trade would soon become intolerably inconvenient.

At the present time the logic of facts has disposed of Mr. Keynes's proposals. Gold is *de facto* the international currency, and this country must do as others do and adhere to it.

A prominent part has been played by the United States in the reintroduction of the gold standard since the war. The gold standard was reinstated there in June, 1919, with the cessation of the prohibition on the export of gold. The extrava-



gant inflation and precipitate deflation which ensued in the two years that followed turned the attention of the Americans to the defects of gold as an automatic regulator of the currency.

The Federal Reserve Act of 1913, which established the Central Bank system in the United States, conformed to nineteenth century theory, in that the Federal Reserve Banks were to be guided by reserve proportions. They were bound (subject to the dispensing power of the Federal Reserve Board) to keep at least 40 per cent of their note issue in gold and at least 35 per cent of their deposit liability in lawful money.

In the summer of 1921 a year of deflation had raised the commodity value of the dollar by about 75 per cent. That meant that the \$20.67 which were paid by the Mints or the Banks for an ounce of fine gold had been increased by 75 per cent in value in terms of real wealth. The Americans were offering to that extent a higher equivalent for gold in the world's markets, and the result was that they swept up the entire disposable supply. Other gold-standard countries, such as Argentina and Japan, could not compete; they could not stand the strain of forcing up the value of their currencies, and were compelled to abandon the gold standard.

The result was an enormous concentration of gold in the Federal Reserve Banks. In April, 1922, the statutory proportions of note-issue and deposits would have required a minimum reserve of \$1,500 millions; the actual reserves were more

than double that sum. The prescribed proportions had ceased to have any operative effect.

So far as the Federal Reserve Act gave any guidance, the way was open to another gigantic expansion of credit, and in the course of 1923 the Federal Reserve Banks had to make the choice whether they should acquiesce in this prospect or adopt some new principle of credit regulation outside their statutory limitations.

An indefinite expansion of credit was unhesitatingly rejected, and the new principle of credit regulation was found in a policy of stabilisation very similar to that recommended at Genoa, except that the United States, being at the time the only gold-standard country, did not have to arrive at any form of international co-operation. Stabilisation was not interpreted to mean exact adherence to a price level measured by an index number. Indeed it is well recognised that index numbers are so subject to disturbance by non-monetary causes that a rigid conformity to them is not really in accordance with the stabilisation policy. There are other data from which the symptoms of monetary disturbances can be discerned, such as statistics of employment, production, sales, speculation in commodities or investments, etc.

The root cause of the trade cycle, as it was experienced before the war, was that the Central Banks of the world acquiesced in the progress of a credit expansion so long as the state of their reserve proportions allowed. To prevent the cycle

developing, all that is required is timely intervention by the Central Banks in the early stages. A very moderate restriction on credit expansion, exercised at a time when business first threatens to become unduly active, even though there may have been no visible rise of prices, will suffice to keep control and to avoid the need for a more drastic credit contraction later on.

That is the method adumbrated by the Genoa Conference. In America it has been reached by an independent route, and its practicability and effectiveness have been magnificently demonstrated. The experience of the United States in the past five years has shown that there is no conflict between financial soundness and economic prosperity. The apparent conflict arises only when financial soundness requires deflation. Avoid inflation, and deflation is unnecessary.

The practical application of the Genoa plan as an international scheme had to wait for the restoration of the gold standard in England and other European countries. It does not require a universal return to the gold standard, but the problems that the Genoa plan was designed to solve did not arise so long as the purchasing power of gold depended entirely on the action of one country.

England restored the gold standard in April, 1925. We may distinguish three possible forms of gold standard, the gold *specie* standard, depending on the free coinage of gold and the use of gold in the form of coin as a medium of exchange, the

gold *exchange* standard, depending on the convertibility of the currency into a foreign currency which is itself preserved at parity with gold, and finally the gold *bullion* standard, depending on the obligation of the Central Bank of Issue to buy and sell gold bullion without restriction at fixed prices.

The gold bullion standard was the invention of Ricardo, and was adopted in the Act of 1819 for the Resumption of Cash Payments. But it did not on that occasion come into practical operation. The Gold Standard Act passed in May, 1925, revives this form of gold standard. It suspends both the free coinage of gold and the convertibility of Currency Notes and Bank of England Notes into gold coin. But it obliges the Bank of England to sell gold bullion to all comers at the old coinage price of £3 17s. 10½d. per standard ounce, in amounts of not less than 400 fine ounces at a time. The Bank is already obliged by the Act of 1844 to buy gold at £3 17s. 9d. a standard ounce. The free convertibility of gold into credit and credit into gold is thus secured, and the demand for gold for internal circulation is adequately prevented. So long as people are accustomed to use paper money, the existence of a very large supply of sovereigns in other parts of the British Empire, which would be legal tender in England if imported; does not seriously threaten the continuance of this system.

England has a special position in the monetary affairs of the world. London is the City of

Financial Markets. The free working of a market requires that the total daily turnover shall be sufficiently large in comparison with any individual transaction. It is characteristic of a financial market that individual transactions may be very large, and a great concentration of business is requisite to provide a big enough turnover to absorb these large single transactions. Markets of this type with extensive international affiliations have grown up in London. Conspicuous among them are the discount market and the bullion market.

All financial centres have discount markets of a kind, in that banks discount bills for their customers at competitive rates. But the London discount market is peculiar in that it deals in bills divested of the personal relation of banker and customer. Discounting is a form of lending, and the London market lends in this way to all and sundry. London banks and accepting houses stand ready to enable foreign customers as well as British to create sterling bills drawn on London, which can be sold in the London market. London resources are thereby applied to the short-term financing of a great part of the world's trade.

The discount rate prevailing in the London market, sensitive and nicely adjusted to every change in the circumstances of the market, is a factor in the regulation of credit throughout the world. The Bank of England has the power of absolutely dominating the discount market, and is therefore the natural leader of the world in the

regulation of credit. Great as are the wealth and economic power of the United States, it is nevertheless true that internationally the power of London over credit is greater than that of New York.

The responsibility for carrying out the Genoa plan therefore devolves above all upon the Bank of England. The Genoa plan means that in using its power over world credit the Bank must look beyond the simple reserve proportions which satisfied it in the nineteenth century and take into account ulterior effects on the purchasing power of gold currencies throughout the world.

Besides being the credit centre of the world, London is also the principal bullion market. The moratorium of 1914, the obstacles in the way of gold movements during the war, the prohibition on the export of gold from 1919 to 1925, the depreciation of sterling, all these adverse circumstances have been insufficient to disestablish the London bullion market. The gold standard depends on the working of the gold market, and the gold market is an affair of minute calculations applied to many different centres. The stream of newly mined gold has to be distributed to the industrial and monetary users of gold throughout the world. Superimposed on the distribution of new gold are the movements of gold from one monetary reserve to another. The calculations on which these movements depend are intimately bound up with the quotations of the foreign exchange market. Indeed it is this intimate

relation between gold movements and rates of exchange which is the very essence of the gold standard. Here is the special business of the bullion broker and merchant, and London is the principal field of his activities.

Even when gold goes direct from Durban to Bombay without itself passing through London, the transaction is usually part of the London bullion market. The amount of gold in the United States is six times as great as the amount in England. Nevertheless it is in London and not in New York that the needs of the world for gold can be reviewed as a whole, and gold movements co-ordinated with currency policy.

If the Genoa plan can be brought into effective operation in the future, we can count on enormous benefits resulting. The effects of unstable money in the period which has passed since the war have been sensational. But the advantages of the Genoa plan are not confined to the avoidance of these calamities. Even in the golden age before the war the world was suffering unknowingly but severely from the evils of unstable money. These evils showed themselves in the form of the trade cycle, and included more particularly, first the unemployment epidemics characteristic of each succeeding trade depression, secondly the trade disputes incidental to the adjustment of wages to the varying value of money, thirdly the financial crises so often provoked by the sudden drop in prices after the climax of the trade cycle was passed.

' So great and outstanding are the evils to be remedied by monetary stability that its advocates are often accused of recommending their policy as a panacea. That is not so. Even with monetary stability economic changes and dislocations will cause occasional unemployment and trade disputes. Imprudent use of credit will occasionally cause panics. But monetary instability is the predominant cause of all these evils, and its removal would enormously reduce their extent, and mitigate their severity.



## CHAPTER V

THE foregoing chapters were written in 1926, the year after Great Britain returned to the gold standard. Unfortunately it has to be confessed that in the interval of five years that has since elapsed the gold standard as an international institution has been a disastrous failure.

In 1925, when the decision was taken to re-establish the gold standard, fears were expressed (especially by Mr. Keynes) that the pound sterling was being forced up to a value unduly high, having regard to the world price level on the one side and the prevalent rates of wages in Great Britain on the other. British wages being expressed in pounds, and world prices in gold, the relation between them would be determined by the value of the pound in terms of gold. If this value were fixed too high, the costs of British producers of importable and exportable goods would be excessive in comparison with the prices at which their competitors were selling.

In that event, either wages must be reduced, or production would shrink and capital and labour would be under-employed. Industry was at the time still in course of recovering from the tremendous depression of 1921-2. The number of

unemployed had approached 2,000,000 in January, 1922, and had fallen to 1,000,000 in 1924. A million was still a very high figure, and industry was in no condition to stand further depression.

When we turn to the actual course of events, we are left in uncertainty whether the restoration of the old gold parity did or did not make costs excessive in relation to world prices. Trade depression and unemployment did indeed continue, but the world price level was itself changing. If the American index number of wholesale prices be taken as a test, there was a fall from 103.5 in 1925 to 95.4 in 1927. The value of gold in terms of wealth was rising, and the effort required to maintain the pound at a given gold value was therefore becoming greater. As to whether unemployment would have fallen to normal if the wealth value of the pound had remained what it was in April, 1925, that is a hypothetical question. At any rate, with a *rising* value of gold and therefore of the pound there was no improvement.

Nor was the effect of the falling price level upon the state of industry confined to this country. American industry, which had attained a high degree of activity in 1925, received a distinct set back in 1926 and 1927, and the year 1926 was one of severe depression in Germany.

What was the cause of this development? We have seen how intimate is the connexion between credit regulation and the price level (pp. 12-13 and 41-6). By restricting (or relaxing) credit the central bank of any country brings about a

decrease (or increase) in the volume of lending by the other banks to their customers. There results a corresponding decrease (or increase) in consumers' income and outlay and therefore in the demand for goods. Demand here means the amount in terms of money spent by the ultimate purchasers of goods.

Early in 1925, confronted with the approaching restoration of the gold standard and with the need to raise the value of the pound up to parity, the Bank of England put Bank rate up from 4 to 5 per cent. That is a high rate. In the  $47\frac{1}{2}$  years that elapsed between the beginning of 1867 (marking the end of the Overend and Gurney crisis) and the outbreak of war in 1914 Bank rate was at 5 per cent or more for 319 weeks, or only one week in every eight. *Long* spells at or above 5 per cent (say, ten weeks or over) hardly ever occurred otherwise than at times of great trade activity. In fact the only exceptions were in the years 1878 (22 weeks) and 1884 (12 weeks), and it is significant that these years were followed by the most severe unemployment recorded before the war (11.4 per cent in 1879, and 9.3 per cent in 1885 and 10.2 per cent in 1886).

Whether a discount rate counts as high or low depends on the state of business at the time. When demand is expanding, and prices are rising, a rate of 6 or 7 per cent may hardly be high enough to check the enthusiasm of borrowers intent upon transactions promising a high profit. When demand is stagnant or shrinking, and prices

are falling, the holding of commodities involves a loss which may more than eat up the normal commercial profit, and an apparently low rate, 3 per cent or less, may fail to tempt borrowers to come forward.

At a time of excessive activity a high Bank rate is imposed to check the rise of prices. That is an incident of the trade cycle (pp. 80-4 above). But to apply a rate suitable for such a situation to a state of *depression* is to put the brake on when going uphill.\*

In the years 1925-7 a spell of 22 weeks at 5 per cent, followed, after an interval of 17 weeks at  $4\frac{1}{2}$  and 4, by 72 weeks more at 5, was an entirely unprecedented treatment of a trade depression.

Formerly depression had invariably been treated with cheap money. The dear money of 1878 and 1884 formed only a very partial exception to this rule, having in each case been both preceded and followed by long periods of cheap money (2 to 3 per cent).

Given so violent a reversal of previously accepted practice, what calls for explanation is the remarkably moderate effect as measured by the fall of prices. And no doubt it would have been far more severe if the London discount market had been the sole regulator of the world credit situation, as it practically was in the half century preceding 1914.

\* It was already possible to see this tendency at work in 1926. See my *Monetary Reconstruction*, Second Edition, pp. 151-9.

In recent years the pre-eminence of London as a financial centre has been successfully emulated by New York. And in the years 1925-8 the influence of New York was on the side of credit relaxation.

The fall of prices was the resultant of the policies of the two centres. In 1927 the American policy of credit relaxation was accentuated, and at the same time the English policy of credit restriction was moderated. There ensued a short interval in which the fall of prices was interrupted in both countries. Industry in the United States soon recovered its resilience, and in the course of 1928 began to expand rapidly. Revival, on the other hand, was hardly perceptible in England.

Thus by the middle of 1928 the two discordant policies, the easy credit of New York and the credit restriction of London, had approximately cancelled out. America had reverted to the state of prosperous activity which had prevailed in 1925; Great Britain had failed to emerge from the state of depression, which people were beginning to regard as chronic. There had, on balance, been a fall of 6 per cent in the price level as measured by the American wholesale index.

Up to that point the working of the international gold standard, though open to criticism, could not be unequivocally condemned as a failure. Great Britain had re-entered the system in a state of depression and had had the misfortune to encounter a falling price level which prevented British industry from emerging from the depression. But the fall in the price level had been so

limited as to cause no more than a moderate depression in most other countries (the situation of Germany in 1926 was in certain respects exceptional). The working of the gold standard was not ideal, but it was not more defective than in the period ending with 1914.

The year 1928 brought a new phase. The United States turned from credit relaxation to credit restriction. The rediscount rate in New York was moved up by steps from  $3\frac{1}{2}$  per cent to 5, and the Federal Reserve Banks sold securities. London and New York were no longer pulling in opposite directions. Both were pulling in the direction of restriction, and the year 1929 was to see the restriction growing more and more severe.

The change of policy in New York is to be explained partly by the heavy losses of gold (amounting to \$500,000,000 between April, 1927, and June, 1928), but still more by the desire of the authorities to restrain the wild speculation on the New York Stock Exchange. Bank advances obtained by speculators for the purchase of stocks and shares tend to have an inflationary effect. The proceeds of the advances pass into the investment market through the hands of the sellers of the stocks and shares, and become available for investment in new issues and so for the production of new capital equipment, etc. It was undoubtedly desirable in the circumstances obtaining in the United States in 1928-9 to keep this tendency in check. But that does not mean that it was desirable to carry credit restriction beyond the

point at which inflationary bank advances were prevented, and to cause a serious set-back to trade.

Productive activity in the United States reached a climax in June, 1929. From that point a decline set in, and by October the decline had become palpable enough to affect the calculations of the speculators. On the 24th October the collapse of the great speculation set in decisively.

Meanwhile in London Bank rate had been raised successively to  $5\frac{1}{2}$  per cent on the 7th February, 1929, and  $6\frac{1}{2}$  on the 26th September. In British industry there was no counterpart of the American productive activity. Depression still continued. But the country was losing gold. From £173,000,000 in the summer of 1928 the gold holding of the Bank of England had fallen to £150,000,000 in February, 1929. It recovered to £163,000,000 in June, only to fall to £132,000,000 at the end of September, 1929.

To understand the gold position, it is necessary to turn to the course of events in France. France had recently returned to the gold standard. *De facto* stabilisation had been achieved in December, 1926, with the franc at about one-fifth of the old gold parity, and the new monetary law confirming the position was passed in June, 1928.

Inflation always leaves a country short of currency. The depreciation of the unit outstrips the increase in the circulation. In France there had been some recovery from the depreciation of July, 1926, but the total note circulation of

53 milliards outstanding in December, 1926, was still, if valued at the new parity, far below normal requirements. In 1914 the monetary circulation (coin and notes) had been about 11 milliards. But that did not mean that with the new franc 55 milliards would be enough. For the world price level was 40 per cent higher than in 1914. For the moment the French internal price level was relatively much lower. The index of wages in October, 1927, was 593, equivalent to 120 in terms of gold (100 in 1910). As the internal price level rose, and economic conditions generally adapted themselves to the new monetary settlement, it might reasonably be anticipated that a monetary circulation of 70 to 80 milliards would become necessary. In June, 1928, the note issue was still no more than 58½ milliards.

In 1914 France had contained something like 8½ milliards (£340,000,000) of monetary gold, of which rather less than half was in the reserve of the Bank of France and the rest was in the form of gold coin in circulation. At the end of 1926, when the preliminary period of *de facto* stabilisation of the franc began, the Bank of France held no more than £164,000,000 (including £18,000,000 pledged as part security for the Bank's war-time debt to the Bank of England). There was a remnant (£30,000,000 or so) still hoarded by the people.

By the standards of 1914 the country was short both of currency and of gold. In order to appreciate the part that France has played in the



breakdown of the gold standard, we must trace the process by which both these deficiencies were made good.

At the outset the Government proceeded to repay the advances it had received from the Bank of France. This made a gap in the Bank's assets, a gap that had to be filled, for otherwise there would have been an equivalent gap in its liabilities, or in other words in the note issue which constituted the country's supply of currency.

The Bank of France is narrowly circumscribed in regard to the character of its assets. Apart from any exceptional powers, it can only invest in bills of exchange conforming to certain strict conditions, and in advances upon gilt-edged securities with drastic requirements as to margin. The supply of these assets is never very elastic. The transactions of the type that give rise to the bills are not easily expanded. The great French banks are accustomed to rely on their holdings of bills eligible for rediscount as their principal liquid resource, and are reluctant to reduce them. Consequently when a gap has to be filled in the assets of the Bank of France it is apt to be found that gold is the *only* asset with which it can be filled.

In 1926, however, exceptional powers were taken. The Bank was enabled to buy foreign exchange, that is to say, bills and deposits at foreign centres (mainly London and New York). During the period of *de facto* stabilisation the Bank used this power to keep the franc at its new parity, buying and selling dollars and pounds at

the appropriate rates. This was an application of the gold exchange standard. The result was the accumulation of a reserve of foreign exchange. In virtue of the Bank's offer to create francs in exchange for dollars and pounds, the reserve of foreign exchange so acquired filled the gap in its assets.

The gap was a big one. By June, 1928, the Bank held 26½ milliards of foreign exchange and had acquired 8½ milliards of additional gold (of which 1½ had been collected from hoards in France).

The power of buying foreign exchange was then withdrawn, but the Bank had already bought exchange *forward* on a very large scale and retained a great part of this as it matured and came into its hands. The result was that by the end of 1928 the Bank held 32½ milliards of foreign exchange, and, though its note issue had expanded to 64 milliards, had made little further addition to its gold.

This vast accumulation of foreign exchange in the two years, 1927-8, was felt in both London and New York as a demand for bills. It tended to lower discount rates and to bring about a relaxation of credit. More than once Bank rate became ineffective in the London market. The American policy of easy credit was reinforced, and was enabled to prevail.

But at the beginning of 1929 the Bank of France reversed its policy. It started reducing its holding of foreign exchange, and brought it

down to the limit of 26½ milliards existing in June, 1928. A gap in the Bank's assets once again had to be filled, and at a time when the note issue was still far short of normal.

Thereupon began that tremendous inflow of gold that continued with occasional intervals up to the crisis of 1931. In the period of 2½ years from the end of December, 1928, to the end of March, 1931, the gold in the Bank of France grew from 32 milliards to 56. The increase was 24 milliards or £192,000,000. The increase in the year 1929 was £80,000,000, the equivalent of the world's output of new gold for a year.

It is sometimes supposed that the French absorption of gold has been due to the creditor position of the country, as the recipient of the major part of the German Reparation payments. Undeniably that facilitates the acquisition of gold. But the gold is used for one purpose and one purpose only, as backing for the liabilities of the Bank of France. If France's creditor position or favourable balance of payments or any other circumstance leads the French people to require a larger note circulation or leads to bigger deposits being held at the Bank of France, then to that extent more backing is needed. Whether the backing takes the form of gold depends upon the powers and the practice of the Bank in regard to the acquisition of alternative assets. If the Bank had been enabled to acquire some other form of backing (for example, French Government securities), its need for gold would have been corre-

spondingly diminished. By such means the absorption of gold could have been diminished to an indefinite extent. It is the absence of such power that must be regarded as the real cause of the absorption of gold on so colossal a scale.

Here is the cause, at any rate the principal cause, of the loss of gold suffered by the Bank of England in 1929. When British industry was still struggling, entangled in a relentless depression, when American industry was already visibly reacting from its recent prosperity, Bank rate was put up to  $6\frac{1}{2}$  per cent.

It may perhaps be argued that the loss of gold did not necessitate any such measure. The Bank of England had recently been given the power to obtain from the Treasury a temporary extension of its fiduciary issue, and it would have been possible to release additional gold from the reserve by that procedure.

However that may be, the decision was to raise Bank rate. The New York rediscount rate had gone up to 6 per cent in August. At this critical stage the effect of credit stringency was greatly intensified by the psychological consequences of the Wall Street collapse. By the middle of November, 1929, the prices of stocks and shares had fallen by an average of something like 40 per cent from the level reached in September. It should never be forgotten that the real subject matter of monetary theory, as of all branches of economics, is human behaviour. Economic forces, such as credit restriction, work through the

human mind. If a high bank rate has its due effect, that is because it works as a *motive*, it is a deterrent upon borrowing and therefore upon enterprise.

I have already pointed out how a Bank rate that counts as moderate or even low at a time of activity, is to be regarded as high at a time of depression. That is because at a time of depression enterprise is far more easily discouraged.

A depression psychology had prevailed in England ever since 1921. The Wall Street crisis precipitated a depression psychology with sensational suddenness among the millions of people who had lost fortunes in America. That was so even though the losses in many cases were "paper" losses.

The set-back in trade in the United States gained impetus. Bank rates were gradually reduced, but all too slowly. They did not fall below 4 per cent either in New York or in London till March, 1930. Once again the brake was being kept on while going uphill. By the time rates were reduced to 3 per cent at the beginning of May, 1930, it had become evident that "cheap money" by itself would not be enough to start a revival.

On previous occasions the Federal Reserve Banks, when they wished to promote a credit expansion, had accompanied the reduction of their rediscount rates with extensive purchases of securities in the open market. This had the effect of increasing deposits and of reducing the pressure for rediscounts. Since deposits at the

Federal Reserve Banks are "reserves" from the standpoint of the member banks, the result was that the member banks became more willing lenders. This policy had been pursued with excellent effect in 1922, in 1924 and in 1927. And in 1930 it was again resorted to for a time. But after June, 1930, it was dropped.

From then onwards no active steps were taken to promote credit expansion at any centre. The depression was left to work itself out. Under such conditions trade gets into a vicious circle. Because demand shrinks, production falls off. Because production falls off, banks are called upon to lend less, the consumers' income contracts, and demand shrinks still further.\*

Once the vicious circle is joined, the economic system has no natural recuperative power. The only condition that sets a limit to the shrinkage of demand and the fall of prices is that the supply of money cannot contract indefinitely, for, as the consumers' income progressively decreases, a stage must *ultimately* be reached in which the normal relation between the consumers' income and the unspent margin is completely upset. One whose cash in hand has become redundant relatively to his income will proceed to reduce it by spending or investing the surplus. If people in general are doing this, the consumers' outlay exceeds the consumers' income, and demand

\* For a fuller treatment of the "Vicious circle of Depression," see my *Trade Depression and the Way Out*, pp. 1-10, 29-35, 64-8 and 73-84.

ceases to contract. So long as traders apply the proceeds of sales to repay bank advances the unspent margin goes on shrinking, but we are now considering a final phase in which the unspent margin can shrink no further.

This limit is a purely hypothetical one. Under modern conditions of credit organisation it is so remote that in reality it could never be approached. As depression becomes deeper and deeper, the relation between incomes and balances itself becomes modified. The shrinkage of profits and the embarrassments of debtors make people unwilling to invest. They hold more and more of their resources in the form of money and bank deposits.

Long before the theoretical limit of the contraction of consumers' outlay is attained, the strain on the economic system is bound to reach breaking point. For practical purposes, therefore, we may regard the cumulative effects of the vicious circle of falling prices and trade depression as *unlimited*. What we have to consider is the form that the breakdown will take.

To each country the situation presents itself in the guise of a fall in the world price level, or in other words a rise in the value of gold in terms of wealth. It must respond by curtailing its own consumers' income and outlay. Otherwise its purchases of imported goods at the low world price level will be increased, while its exporting power at diminished prices and undiminished costs will fall off. There will result an excess of imports and an outflow of gold.

There must be a contraction of credit. Under the conditions assumed this would be *already* proceeding, without any active interference from the central bank. Only if the contraction of credit does not proceed fast enough will the country lose gold. In that case a slight pressure from the central bank, acting on the pessimism of the market, will readily reinforce the contraction to the required extent.

The fall in the world price level is the outward sign of the fall in the consumers' income and outlay throughout the world. When demand shrinks, the effect is felt partly in a reduction of output and partly in a fall of prices. The two are alternatives. If prices fell in proportion to demand, there would be no reduction of output. If output were reduced in proportion to demand, there would be no fall of prices.

So long as wages and other costs remain undiminished in terms of money, a fall of prices has to be met out of profits. Any considerable fall will in many cases wipe out profits and encroach on the margin for overhead costs. Manufacturers are reluctant to let their plant be under-employed, and will meet a falling off of demand by price concessions. But the extent of the price concessions they are willing or able to make depends upon their pre-existing profit margins. If they cannot make adequate price concessions, they must curtail output, and unemployment supervenes. Theoretically unemployment is the signal for wage reductions. But wage reductions are not



always practicable, and are likely in any case to lag far behind the fall in prices.

When a world-wide trade depression is in progress, different countries will react to it in different ways. In some industrial countries where wages are relatively low, producers will make large price concessions and will continue active at the cost of a loss of profits. In others wages can be promptly cut down, and here again active production is made possible by price concessions. But in others again wages are relatively high and resist reduction. Only very limited price concessions are possible, and the result is that a disproportionate share of the total loss of business is apportioned to these countries.

When world trade conditions are normal, and producers generally are fully employed, a country with low wages has very little advantage over its competitors. Its producers sell at world prices, and secure excessive profits at the expense of their workmen. So long as they are fully employed, they have no motive for selling below world prices, and, even if they do, they do not encroach on their competitors' business as long as they do not sell increased quantities.

But when world trade is depressed, the producers with low costs are in a position to undersell those with high costs, and to throw the major part of the burden of depression upon them.

Now Great Britain re-entered the gold standard in 1925 in a state of depression. For some years industry had been under-employed and profit

margins had been low. This was not so in other industrial countries. The United States had been enjoying a period of prosperity which was the effect, and at the same time in some degree the cause, of an epoch-making improvement in the organisation and technique of production. The great European industrial countries had been through the inflation crisis that followed the war, and were in course of returning to the gold standard with devalued currencies. As we have seen, France adopted a new gold parity which made the level of French wages disproportionately low. To say that French wages in 1927 were 20 per cent higher than before the war, while the increase in prices was 40 per cent, is to understate the discrepancy. In the interval since 1914 there had been enormous improvements in productivity. American industrial wages were 120 per cent higher than before the war, British were 70 per cent higher, German not much less. (German wages had started low in 1924 after stabilisation, but had since increased.)

From 1927 onwards French wages rose steadily, but in October, 1930, the increase over the pre-war level was still no more than 50 per cent.

In the years culminating with the crisis of 1929, Great Britain was in the unfortunate position of being the one country in which industry was depressed. Whenever there was an outflow of gold and credit was contracted, the result was simply to deepen the depression.

In virtue of the international power of London

as a financial centre, credit restriction in London was felt throughout the rest of the world. When Bank rate was raised, the effect was contraction not only in Great Britain but in a greater or less degree everywhere else. That placed British producers at a disadvantage in competition with foreign producers who had lower costs. Instead of the high Bank rate making the balance of payments more favourable, it actually made it less so. It hastened the fall in the world price level, and increased the difficulty of maintaining the sales of British exports.

In 1929 this effect was to some extent masked in two ways. In the first place the *immediate* effect of a rise of short-term money rates in any centre above those prevailing elsewhere is to attract foreign money for temporary investment. While this is occurring, the effect on the balance of payments is favourable. The rise of Bank rate to 5½ per cent in February, 1929, attracted gold for a few weeks. The rise to 6½ per cent in September stopped an outflow, though it did not actually reverse it.

Secondly, the effect of credit restriction on producers is only felt after an interval. So long as existing commitments are being worked through there is no diminution of activity.

Thus the dear money policy of 1929 was destined to bear fruit in 1930. The catastrophic fall in the world price level that has occurred is the cause of the breakdown of the gold standard.\*

\* For a more detailed examination of Bank rate policy see *Trade Depression and the Way Out*, pp. 22-35 and 68-73.

At a time of monetary disturbance it is not easy to arrive at a satisfactory measure of price levels. Prices move violently relatively to one another. For example, in the past two years the prices of primary or natural products, of which the supply is not easily restricted, have fallen much more heavily than the prices of manufactured goods. The fall of retail prices lags far behind the fall of wholesale prices, and in any case satisfactory index numbers of retail prices are not to be had. The following data, however, will throw some light on the extent of the fall :—

	Wholesale Price Index Numbers.		
	1925	1929	July, 1931
British (Board of Trade)	159.1	136.5	102.2
British (Manufactured Exports) .. ..	98.3	84.8	73.2*
United States (Bureau of Labour)—			
Raw Materials ..	106.7	97.5	64.3
Finished Products	100.6	96.2	74.0
All Products ..	103.5	96.5	70.0

The fall disclosed varies between 25 per cent and 40 per cent. If we allow for the prices of finished products being artificially high (British manufactured exports in the first half of 1931 were in quantity less than two-thirds of those in the first half of 1925), we shall be understating the fall at 30 per cent. We may say that the value of gold in terms of wealth has been increased by something between 40 and 50 per cent since 1925.

\* March-June.

That indicates the magnitude of the effort that was required to remain on the gold standard.

Some countries suspended the gold standard at the very beginning of the depression. "New" countries, which are exporters of natural products, and which in normal times adapt their balance of payments to a continuous import of capital from the "old" countries, are particularly sensitive to depression, both because there is a disproportionate fall in the prices of natural products, and because the supply of new capital is cut short.

Uruguay and Argentina suspended gold payments before the end of 1929, and their currencies fell to a discount. Australia and New Zealand followed early in 1930. Other South American countries did likewise.

But up to May, 1931, departures from gold had been confined to new countries. The great industrial countries had adhered to the gold standard and faced all the requisite sacrifices.

The number of unemployed rose to 2½ millions in Great Britain, to 5 millions in Germany, and to 7 millions in the United States.

And meantime the poison was at work in another direction. The appreciation of gold means the appreciation of all debts expressed in terms of gold or of gold currencies. To the trader this takes concrete form in a depreciation of his assets while his obligations remain of the same nominal amount. To a debtor Government it takes concrete form in a decline in the yield of its revenues.

In either case it may lead to embarrassment and thence to bankruptcy or default.

Banks, whose assets and liabilities are both expressed in money units, are not directly affected by a change in the value of the unit. But they are affected by the embarrassments of their customers. Even when the customers are solvent, advances to them may be "frozen." A trader who is indebted to his banker may hold an accumulated stock of unsold goods which can be disposed of gradually at the prevailing market price, but could be sold only at a heavy sacrifice if they had to be realised at once to pay off the debt. Or again a trader who has raised an advance from his banker to make some improvement in his plant, and who relies on paying it off in two or three years out of profits, finds that his profits have dwindled to nothing.

These tendencies have been terribly rife in the United States, where bank failures numbered over 2000 in the eighteen months ended June, 1931, with deposits of \$1100,000,000. But it was not there that symptoms of panic first appeared.

Germany and the rest of Eastern Europe had emerged from the post-war inflation in 1924, with a change of attitude towards money, which made itself apparent in a conspicuously slow recovery of bank deposits towards their normal total. Industry had lost much of its working capital through the evaporation of all its cash assets, and was in urgent need of bank advances. But the banks could not increase their advances faster

than their deposits without endangering the gold standard. The result was that the rates of short-term interest rose very high, and enormous amounts of foreign money (particularly American, British, Dutch, French and Swiss) were attracted.

A part of this foreign money took the form of acceptance credits for financing imports; a part took the form of time deposits by foreign banks in the banks of the borrowing country.

That arrangement was not essentially unsound. All banking business involves the existence of a mass of short-term indebtedness which could not possibly be paid all at once. But *international* short term indebtedness has this peculiarity, that payment, when it takes place, has to be made through the foreign exchange market. If the strain is excessive, the foreign exchange market may break down. Under the gold standard the foreign exchange market is dominated by the obligation of the Central Bank to buy and sell gold at a fixed price. If an amount of external indebtedness has to be paid within a short time in excess of the Central Bank's available reserves of gold and foreign exchange, the result will be a suspension of the gold standard.

So long as the creditors retain confidence both in the solvency of the debtors and *also* in the continued maintenance of the gold standard, everything will go smoothly. As in the case of ordinary banking business, there will be continual repayments of debts which will be wholly or partly compensated by the creation of new debts. The

fluctuations in the total will be gradual and therefore manageable, under the influence of the ordinary market variations of the short-term rates of interest and of rates of exchange.

The crisis of 1931 began not with distrust of the gold standard, but with distrust of the debtors. It was precipitated by the failure of the Austrian Credit Anstalt in May. The industrial concerns in Austria and elsewhere to which that bank had made advances were embarrassed, and it had to stop payment. The direct losses were large, but the importance of the failure lay in its influence as a symptom. Foreign lenders began to fear for the safety of the advances they had made in Eastern Europe and particularly in Germany. The advances were called up to an enormous total. In the month of June, Germany lost a milliard of marks in gold. Substantial credits also were granted to the Reichsbank by foreign Central Banks. On the 13th July the crisis culminated in the failure of the Darmstadter Bank and the temporary closing of all the German banks.

For the time being the German foreign exchange market ceased working. Nor could it revive unless some arrangement were made to prevent the withdrawal of the remaining foreign advances.

This was the form that the breakdown took in its early stages. It had arisen only indirectly from the strain caused by the appreciation of gold. The trade depression and the fall of prices caused the failure of the Credit Anstalt, and the fear of the same thing happening in Germany led to the



withdrawal of foreign advances, which was the immediate cause of the crisis. When the foreign creditors arrived at an agreement to leave their money for a stated period in Germany, the foreign exchange market resumed working, and the country was once again faced with the strain of maintaining the gold standard.

In the case of Great Britain premonitory symptoms of a doubt as to the continuance of the gold standard appeared in February, 1931. Forward quotations of the foreign exchanges (on Paris, for example) fell below the gold export points. People were undertaking to buy francs in three months at a price which would exceed the cost of shipping gold from London. They were in fact paying a premium of insurance (though not a very large one) against the suspension of the gold standard within three months.

This misgiving was the outcome of doubt whether the country could or would make the efforts required to maintain the gold standard. There was no prospect of wage reductions, and yet without them there seemed every likelihood of the export trade dwindling almost to nothing. The budget situation was growing more and more formidable as business deteriorated; the yield of the revenue fell, and borrowing for the payment of unemployment benefit grew.

In March, however, France ceased for the time being to absorb gold, the foreign exchange situation improved, and the ominous symptom disappeared.

But when the German crisis broke out in the middle of July, a state of panic developed. If the enormous sums placed by English banks and accepting houses in Germany were to be indefinitely locked up, it was feared that their liquidity would be endangered, and that the international strength of London would be impaired. London was both a creditor and a debtor in international markets on a huge scale. If one large section of its credits became frozen, would its debts be secure?

Perhaps these fears were not very reasonable, and perhaps they would not have prevailed at all had there not been doubts whether after all the country could face the effort exacted from it by the gold standard. Continental nations have been familiar since the war with the situation of countries which have to devalue their currencies because the burden of indebtedness would otherwise be intolerable. Some countries have been compelled, after a short experience of a new gold parity, to devalue still further.

In the latter half of July, 1931, foreign money was withdrawn from London to an enormous amount. The Bank of England lost over £30,000,000 of gold, and, as the withdrawals continued, an effort was made to safeguard the remaining gold by raising credits in New York and Paris (first £50,000,000, and then a further £80,000,000).

With the political events of August and September it is not necessary to deal. It is enough to say that energetic measures for balancing the budget

did not prevent the continuance of the withdrawal of foreign money, and on the 21st September, the credits having been practically exhausted, the Bank of England was relieved from its legal obligation to sell gold at the coinage price.

The cause of the failure of the gold standard was simple. It was the appreciation of gold in terms of wealth. Gold had not supplied a stable unit for the measurement of values. A deplorably apt example has been afforded of the need for some measure of stabilisation such as is discussed above in Chapter IV.

The effect of the suspension of the gold standard was felt immediately in a depreciation of the pound in terms of gold currencies. At the present time the depreciation is about 20 per cent. But the value of the pound in terms of *wealth* is higher than it was two years ago. It is gold that has been changing in value, and the pound, after following gold, has now parted company and records a smaller change in value since 1929 than gold.

In reality inconvertible paper currencies often do exhibit a greater degree of stability than gold. For example, the Spanish peseta has recently depreciated heavily in terms of gold, but the price level has been remarkably steady, as is shown by the following table :—

## THE GOLD STANDARD

	SPAIN	
	Wholesale Price Index	Exchange on United States (Per cent of par)
1926	-- 181	129.5
1927	-- 172	113.1
1928	-- 167	116.3
1929	-- 171	131.4
1930	-- 172	165.4
June, 1931	-- 169	199.4

The suspension of the gold standard in Great Britain brings relief from the strain that brought it about.

In the first place it raises the external price level, the prices, that is, of foreign trade products. With a given consumers' income, purchases of foreign trade products will be diminished. At the same time the prices of foreign trade products become more remunerative to the home producer. That applies both to the producer who is competing with imported goods, and to the producer for export.

Producers, being under-employed, will tend to make price concessions, and will be enabled to do so, because their costs are reduced in terms of gold and therefore of world prices. It is often assumed that this underselling or "exchange dumping" is the only benefit derived by industry from the fall in the gold value of the currency unit. But that is a mistake. In the first instance the increased business is obtained in this way at the expense of foreign competitors. But as production increases, consumers' income increases, and the demand for foreign trade products increases. Imports, in fact,

grow as fast as exports. Otherwise the exchange would become more favourable. *On balance*, therefore, the producers of foreign trade products in the rest of the world do not suffer. Some are injured by additional competition, while others are benefited by additional demand.

Eventually, if the depreciation of the currency is great enough, the industries of the country will be normally remunerative and fully employed. Thenceforward "exchange dumping" ceases to be operative. There may be some fall in the gold prices of the country's staple exports, and some rise in the gold prices of its principal imports. (That is no more than a reversal of the advantage which a manufacturing country gets at a time of depression, when, in virtue of the same curtailment of output which causes unemployment, its manufactured exports suffer a smaller reduction of prices than its imports of natural products.)

But the essential advantage of abandoning the gold standard is that the value of the currency can be adjusted to the point at which *prices and costs are in equilibrium*. Here is the key to the unemployment problem. With a given level of wages, employment cannot increase unless the consumers' income increases. The consumers' income has to be adjusted to the external price level (the price level of foreign trade products). The external price level is directly proportional to the prices of foreign currencies, that is to say, to the rates of exchange.

The greater the depreciation of the currency,

the higher is the external price level. The higher the external price level, the greater is the consumers' income and the greater the amount of employment. When a state of full employment is attained, any *further* depreciation takes the form of excess profits. There would then result legitimate demands for increased wages, and the advantages of equilibrium and stability would be lost.

We are thus supplied with a very definite objective in the regulation of an inconvertible paper currency, the maintenance of the currency unit at that value which will just secure equilibrium between prices and wages. The "value" so determined is not itself a value in *gold*, but a value in *goods*. If the advantages of equilibrium, that is to say, of industry being remunerative and fully employed, are to be obtained, the value of the unit in gold must be varied whenever the value of gold in goods varies, so that the value of the unit in goods may be kept stable. This is precisely the plan advocated by Mr. Keynes.\*

To get the full advantage of this policy, it is important that the gold value of the pound be not fixed too high. Once off the gold standard at all, we suffer whatever disadvantages there are in

\* See above, p. 102. Mr. Keynes proposed it in 1923 in his *Tract on Monetary Reform*. In his *Treatise on Money*, which appeared in November, 1930, he had abandoned it in favour of international co-operation in the stabilisation of the value of gold. The suspension of the gold standard, however, makes the former plan appropriate at any rate to the near future.

fluctuating exchanges. Those disadvantages are much the same, whether the depreciation is 10 per cent or 20 per cent or 30 per cent or 40 per cent. To raise the value of the pound above the equilibrium point is to sacrifice a part of the benefits without avoiding the disadvantages.

There is an almost ineradicable popular belief that public policy requires a high exchange. Like all popular beliefs this has some foundation. A tendency for the exchange to rise (unless it be due to increased imports or diminished exports of *capital*) is a sign of increased exporting power or economic strength. It will be experienced by a country which has increased its efficiency or reduced its costs. So long as it is attained in this way, a high exchange is something to be proud of. People may legitimately say, "See how we have reduced our handicap." But that does not mean that it is desirable for the player to assume a reduced handicap when his skill does not deserve it.

At the present time it would be particularly foolish to make a high rate of exchange a matter of pride. For, among foreign countries, either, as in America and Germany, gold parity is imposing palpably too severe a handicap, or, as in France, the handicap has been lightened by recent devaluation.

A few years ago, when British industry was depressed in marked contrast with prosperity elsewhere, it was the fashion to take for granted the diminished competitive power of British exporters.

It was assumed that the cotton, coal and engineering industries had lost their former vigour, and that we should have to adapt our economic system to a permanently impaired exporting power.

In my opinion, this view gave insufficient weight to the injurious effects of a double dose of deflation. I do not mean that the industries in question had not deteriorated in some degree under the stress of intensified competition in various forms. But even in them a considerable revival may be looked for, and it is possible that the exporting power of the country may be found in the end to be as great as ever.

But *if it is not*, what is the use of pretending that it is? In the long run the country can only have such a standard of living, in terms of foreign trade products, as it can pay for. If the gold value of wages be fixed permanently too high, the result must be chronic unemployment. Less wealth is produced, and capital accumulation is retarded, and capital accumulation is one of the principal sources of an improved standard of living in the future.

The question of the balance of payments is merely the question of the rate of exchange under another name. So long as the gold standard continued, the question of the balance of payments was a serious one. Imports had to be kept down by contracting the consumers' income. The effect was felt not only by "visible" imports (imported commodities) but by "invisible." Invisible imports include the purchase of securities or capital



assets abroad. External investment is commonly called the "export of capital," but it is none the less an invisible import.

When the consumers' income diminishes, the margin applied to investment is likely to diminish more than in proportion, and the part employed in *external* investment is likely to fall in a greater proportion still. When the depression is very intense, external investment may dwindle so far that it is actually less than the capital movements in the contrary direction, the external borrowing, sales of securities, etc., that constitute invisible exports. A country which is ordinarily increasing its net external investments is thus placed in the position of decreasing them; it is for the time being "living on its capital."

This may reasonably be a source of anxiety, and various expedients may be adopted to remedy it. A protective tariff has the effect of making a larger consumers' income compatible with a given rate of exchange. By discriminating against the visible imports, it allows a relative increase of the invisible, and so "improves" the balance of payments.

But once the gold standard is suspended, the rate of exchange can be adjusted to the balance of payments instead of the balance of payments to the rate of exchange. If when industry is remunerative and fully employed, a margin of savings becomes available for external investment, the rate of exchange must, as a condition of equilibrium, be low enough to secure an export bal-

ance equivalent to the net external investment.

If under these conditions a tariff is imposed, it merely makes a higher rate of exchange appropriate to equilibrium. That means that the costs of the export industries are greater relatively to world prices than they would otherwise be. Alternatively the rate of exchange could be fixed as low as it would have been under free trade conditions. In that case the protected industries would be making excess profits, and there would be a tendency for wages to rise.

More generally it may be said that without a gold standard the balance of payments ceases to present a problem. Artificial measures for improving the balance of payments merely raise the rate of exchange and place the producers of foreign trade products (except those that are enjoying protection) at a disadvantage.

Granted that it is desirable to regulate our currency in such a way as to stabilise the wealth value of the pound, is it practicable? Perhaps the simplest answer is that this form of regulation can be secured by just the same methods as the gold standard itself. The Bank of England can maintain the pound at a prescribed gold parity by the appropriate measures of credit control. It is only when the value of gold is violently raised that any difficulty is experienced. The Bank could not maintain the pound at \$4.86 in September, 1931, because that required an altogether excessive contraction of credit. To maintain it at a value which does not require any contraction of credit

at all (or at any rate such slight and fleeting contractions as are needed to meet short period variations in the balance of payments) is a matter of no difficulty.

It is true that with a gold standard the Bank does not rely exclusively on expansions and contractions of credit to maintain the pound at par, but keeps the day-to-day variations from par within narrow limits by its purchases and sales of gold. There is no reason, however, why with an inconvertible paper pound purchases and sales of gold or of foreign currencies should not be used for the same purpose. Only the price at which gold would be bought and sold would no longer be a fixed par, but would be adjusted at short intervals to changes in the world price level. No doubt it would be desirable for these dealings to be confined to a small scale, for gold would be a commodity varying in price, and dealings in it would have a speculative character, involving chances both of profit and of loss. But quite small dealings would be enough. If, whenever gold had to be bought to keep the pound at the desired level, the Bank took steps to expand credit, and whenever gold had to be sold, it took steps to contract credit, the purchase or sale of gold would in either case soon be reversed.

Practical difficulty may well be found in estimating the price level. If the regulation of credit were successfully directed to keeping the official wholesale index number close to a prescribed level, this would probably be a very good approximation

to stabilisation. But it would be imperfect. It would be desirable to introduce a further refinement by making allowance for any important changes in the prices of particular commodities, which are traceable to non-monetary causes, such as variations in the yield of crops, reduced costs of manufacture, extraneous interference with sources of supply or with channels of trade, etc. Such disturbances introduce an element of doubt into the whole problem of stabilisation. But it must be remembered that stabilisation aims at keeping industry fully employed at normal profits. Failure will be signalised on the one hand by the appearance of unemployment, or on the other by the appearance of excess profits and pressure for increases of wages.\* Price index numbers therefore will not be the sole guide.

Here then is a monetary policy for the near future, a policy that is calculated to secure normal prosperity and progress for British industry independently of the vagaries of gold. But is it to be limited to the near future? Could we not be content with a stabilised paper pound indefinitely?

The objections adduced above (pp. 101-6) to Mr. Keynes's proposal retain their force. In particular stable exchanges are imperatively required

\* It may be asked whether stabilisation is intended to preclude any increases of wages whatever. It will not preclude an increase of money wages in an occupation where the circumstances justify an increase *relative to wages in other occupations*. But the progressive improvement of the position of working people would take the form not of rising money wages, but of falling prices.

for the financing of international trade from London (p. 106). At the present time a considerable part of the world is off the gold standard, including Canada, Australia, most of South America, Norway, Sweden, Denmark, Spain, India, Egypt, Portugal and most British colonies are actually maintaining fixed parities with sterling. China remains on a silver standard. In all these countries, though international short-term financing is placed at a disadvantage, London is no worse off than competing centres. It is possible that there may be more lapses from the gold standard in the future, and that more of the countries that lapse will seek to maintain parity with sterling. In that way sterling might really become a rival standard to gold, as Mr. Keynes hoped.

But we cannot count on that. What is to be our policy if gold continues to be regarded as the "normal" monetary standard in the rest of the world? I think we should absolutely refuse to return to gold till there is some adequate safeguard against undue fluctuations in the purchasing power of gold. It is intolerable to be confronted from time to time with the alternatives of going through ordeals like those of the last two years, or of suspending the monetary standard. The case is made no better by the prospect of a *rise* in the gold price level in the course of two or three years, which, if uncontrolled, may well rival the outrageous inflation of 1919-20. For it is obvious that the demand for gold has gone too far. It has

been absorbed in recent months in the United States, France, Belgium and Switzerland, not to meet ordinary requirements, but to provide hoards of idle "money" (notes or deposits) for people who for the moment distrust all forms of investment. Since July panic psychology has been paramount. For the moment the effect is actually to intensify the appreciation of gold. But when panic passes, the idle balances will begin to circulate and prices will recover.

If we are to return to the gold standard, we must at any rate wait till a reasonable degree of stability of value is in sight. By the time industry in the remaining gold standard countries is once again fully employed at no more than normal profits, we should be prepared to consider taking the step. But we should not do so unless we could be sure of some degree of international co-operation.

The Genoa Resolutions supply a basis for this. But it is open to doubt whether they could be put into operation. The opportunity afforded by the general agreement arrived at in 1922 was lost. On the whole European opinion has become decidedly hostile. Perhaps the disasters of the last two years may bring it round again, but that is not certain.

The United States on the other hand offers a more hopeful field. It is a great misfortune that Governor Benjamin Strong of the New York Federal Reserve Bank, who had been responsible for the American experiment in stabilisation in

1922-8 (above, pp. 106-9) died in 1928. But the policy still commands a great amount of support, and the American authorities would at any rate be open to conviction on the subject.

If it were possible to arrive at an agreement on policy with the United States, that would probably be enough without the participation of any other country. Such an agreement need not bind the parties to co-operate in the detailed measures of credit regulation. But it should be understood that they would both resort to credit restriction when the world price level threatened to rise, and to credit relaxation when the world price level threatened to fall. They should consult with a view to reaching an agreed opinion as to what the tendency of the world price level is at any moment. Where there is a conflict of opinion, they should endeavour to compromise till events should clear up their doubts.

In credit regulation a mistake does little harm in a period of a few months. The evils of the pre-war trade cycle arose from measures of credit expansion or contraction, as the case might be, being pursued for years after they ought to have been modified. The American experiment of 1922-8 was not free from lapses. Spasms of depression occurred in 1924 and 1927, but were quickly corrected by low rediscount rates, and liberal purchases of securities. If the problem of stabilisation be treated in a practical spirit it should encounter no serious difficulties.

If Great Britain and the United States set to

work to stabilise gold prices, they must be prepared to meet fluctuations in the gold holdings of other countries, which *ex hypothesis* are unwilling to commit themselves to a policy of stabilisation.

Ever since the United States accumulated gold in the period 1921-4, the Federal Reserve System has been in a position to be almost indifferent to gains or losses of gold. The fluctuations in the country's gold holdings have in fact been very great :—

	Monetary Gold Stock of the United States Millions of Dollars.	
November, 1924	..	4527
March, 1925 ..	..	4339
April, 1927 ..	..	4610
June, 1928 ..	..	4109
October, 1929 ..	..	4386
December, 1929	..	4284
September, 1931	..	5015

In the last few weeks there has been an outflow of gold exceeding \$600 millions. The movements since 1929 have been exaggerated owing to crisis conditions. As pointed out above (p. 99) once gold is stabilised, gold movements should be very much diminished.

The Bank of England is also placed in a position to increase or decrease its gold holding within wide limits, through changes in the fiduciary issue under the Currency and Bank Notes Act, 1928. (The recommendations of the Macmillan



Committee for a modification of this Act are intended to secure a greater practical degree of elasticity). It may be assumed that when the time comes to re-establish the gold standard, it will be under conditions which enable the country to attract an adequate supply of gold without undue effort. One of the fundamental difficulties of the last six years has been the inability of the Bank of England to attract gold over short periods or to retain gold without intensifying a trade depression which was already grave.

Elasticity of gold reserves may acquire additional importance in the future in consequence of the discredit cast upon the gold exchange standard by the depreciation of sterling. Every Central Bank that has relied on a reserve of sterling to maintain the gold standard finds itself saddled with a loss which may either reduce its reserve below the statutory proportion, or threaten its formal solvency. Frightened by this experience, some Central Banks have been turning their holdings of dollar bills and their deposits in the United States into gold and bringing the gold home. The implied distrust of the dollar appears at first sight irrational in view of the magnitude of the American gold reserves. But it should not be forgotten that countries are driven off the gold standard not so much by the exhaustion of their gold reserves, as by the strain of remaining on the gold standard being found intolerable.

If this distrust of reserves of foreign exchange

persists, economy of gold on the lines recommended by the Genoa Conference will be impossible. If, however, Great Britain and the United States co-operated in a stabilisation policy, it would be possible for them so far to adopt the Genoa policy as to hold reserves in each other's currency. The main practical purpose of that device is that it would enable them in effect to pool their gold reserves.

The reason why an Anglo-American combination might attempt the stabilisation of the value of gold with some prospect of success is that New York and London are incomparably the most important international financial centres. Their discount markets affect international trade all over the world, and they are therefore in a position to initiate a world-wide expansion or contraction of credit. Other financial centres are not only comparatively restricted in the area they can influence, but they deal with a less responsive class of borrowers than are to be found in the great financial and commercial markets of England and America. In a country where the credit system is less highly developed, the changes in the monetary circulation tend to have a greater direct influence on the state of trade, and bank rate policy counts for less. An Anglo-American stabilisation policy would therefore penetrate to the rest of the world partly through the direct effect of the London and New York discount markets on world trade, and partly through such gold movements being allowed to take place as are appropriate to the monetary

conditions which it is desired to bring about in the rest of the world.

When the time is ripe for a return to the gold standard, if the pound has been maintained at a stable purchasing power and if gold is settling down into stability, it is clear that the pound will have to be stabilised at its then gold value, without regard to the old historic parity. The advantage of the old parity was that, once the country had returned to it by a great effort, people would expect great efforts to be made to retain it. For that reason it would command a greater degree of confidence than a new rate chosen to suit the circumstances of a particular moment.

But now that the effort to maintain the old parity has failed, it might actually command less confidence in the future than a lower rate. Recent French experience has shown that a devalued currency may command a high degree of confidence, just because it is well within the country's power to maintain it.

Nevertheless, if it happened that a rise in world prices occurred just sufficient to bring the pound back to its old parity without effort, there would be some advantage in retaining it there and starting world stabilisation from that point.

A rise in world prices *may* go too far. We should not absolutely rule out stabilisation at a rate *above* the old parity, if it were clear that the world's gold supply was adequate to allow it without a fall in the price level.

## INDEX

### ACCOUNT—

- money of, 8, 59, 61
- unit of. *See* Monetary unit
- Albania, preference for gold coin in, 95
- America. *See* United States
- America, Latin, 73, 151
- Argentina, 73, 91, 107, 135
- Assignats, collapse of the, 62-3
- Assignment of debts, 4, 5, 6
- Australia, 135, 151
- Australian gold discoveries, 67
- Austria-Hungary: currency reform in, 68, 75; gold exchange standard, 57; gold unit adopted, 71; paper money, 67, 68, 71, 73; silver, free coinage suspended, 71; war finance, 89
- Austrian Credit Anstalt failure, 138

BALANCE of payments, 97, 98, 133, 146, 147, 148

Balances. *See* Unspent margin

### Bank—

- assets, 4
  - clearing balances, 5, 6, 21, 40, 51
  - credit, 9, 31
    - as medium of payment, 7, 9
    - existing without money, 6, 8
    - expansion, effects of, 9, 13, 14, 23, 26, 27, 53
    - restriction, effects of, 9, 13, 14, 130
  - deposits compared to a reservoir, 12-13
  - foreign exchange business, 32, 34, 137
  - lending, 4, 12-15, 21, 26-7, 40-2, 44-6, 53, 80-1, 87-8
  - notes, 5, 6, 29
  - profits, derivation of, 14, 15, 21
  - rate, 26, 54, 83, 117-18, 127, 133, 156
    - during depression, 118, 127
    - effects of a rise in, 26, 83-4, 118, 127
  - reserves of cash, 21, 22, 24, 50, 53
  - pooling of, 21 *et seq.*
- Bank, Central—
- assets of, 23
  - clearing settlements, 5, 23
  - credit control, 26, 27, 39, 53
  - currency unit regulation, 38, 88, 93-4
  - foreign exchanges, and, 38, 39
  - gold market, functions in, 25, 27, 30, 39, 47, 48

- Bank, Central—*continued*—  
 legal tender money, sole source of, 25  
 lending by, 22-6, 53-5  
 liabilities, 23  
 reserves, 24, 29, 50  
   inclusion of foreign bills in, 58  
 gold reserves, 27, 38, 39, 50 *et seq.*, 93, 95  
   main considerations, 38-9  
   right to issue small notes : effect of, 29  
   surplus, 52, 54
- Bank of England, 5, 54-5, 95  
 Bank Charter Act, 1844, 110  
 Bank rate, 117, 121, 124, 126, 133  
 discount market, and, 55 *n.*, 111-12  
 fiduciary issue, 126, 154  
 Genoa plan, and, 112  
 gold, buying price for, 20  
   obligation to buy and sell, 110, 141  
 gold holding, 121, 140, 154  
 notes, 5, 6, 9, 110  
   and currency note, 8-9  
 reserve, pre-war, 54-5  
 sovereigns convertible into bullion at, 19  
 suspension of gold payments, 1797, 5
- Bank of France, 67, 70, 122-5  
 assets, character of, 123  
 foreign exchange accumulation, 124  
 gold reserve, 55, 123-4  
 holding of five franc pieces, 70  
 inconvertible notes, 67  
 stabilisation measures, 123-4
- Banker, 4, 5  
 Banking system, 31, 60  
 Belgium, 67  
 Bimetallism, 64 *et seq.*, 68, 69, 73, 74, 75, 76, 93  
 Brazil, 73  
 Bullion : demand for, 18 ; convertibility of sovereigns into, 19 ;  
   market, 36, 111
- CALIFORNIAN gold discoveries, 67  
 Capital accumulation, 146  
 Central Bank. *See* Bank  
 Charles II, 60  
 Cheque, 5  
 Chili, 73  
 China : silver standard in, 74, 151  
 Circulation—  
   drain of coin into. *See* Money, demand for  
   effects of a general credit expansion on, 46, 47  
   effects of, on coinage, 17, 19, 95  
   withdrawals of notes into, 52-3

- Clearing, Bankers, 5, 40
  - international movements of gold analogous to, 40
  - payment of balances, 5, 51
- Coal-mining industry, 83
- Coin, shortcomings of, 17, 18, 19
- Coinage Acts, 8, 63
- Coinage, 60
  - circulation, effects of, on, 17, 19, 95
  - free of gold, 16, 17, 20, 70
    - loss in respect of interest, 19, 20
    - suspended, 110
  - free of silver, 64
    - suspended, 63, 64, 69, 70, 71, 75
    - effect of suspension, 75
  - gold, 16, 17, 18, 20, 21, 59, 95, 96
  - illegal practices with, 17
  - price of gold : England, 17, 63
  - price of silver : England, 63, 64
  - shortcomings of, 17
    - gold contents, deficiency of, 17, 18, 19
  - silver issue at Government discretion, 64
    - defective in seventeenth century, 61
    - legal tender, limitation on, 63, 68
    - unlimited, 62, 64, 70
    - subsidiary (England), 62
    - suspended (1798), 63
- Consumers' income, 11, 12, 13, 117, 128, 129, 130, 143, 144, 146, 147
  - daily expenditure, 10, 11
  - reaction to expansion or contraction of credit, 13
- Consumers' outlay, 11, 80, 117, 128, 129, 130
- Contraction of credit. *See* Credit
- Credit—
  - contraction, 45-6, 53, 130
    - effects of, 53-4, 82, 83-4, 116-17
    - control of, by Central Bank, 15, 26, 53, 54, 109, 116-17
    - cycle, 82, 84
  - expansion—
    - effects of, 13, 41, 46, 80, 81, 98, 108, 116-17
    - illustrative figures, 42 *et seq.*
    - progressive tendency in, 44-5
  - expansion or contraction, 13, 84-5, 153
    - and balance of payments, 97, 98
    - and gold movements, 81, 83, 96, 97
  - imprudent use of, 114
  - limitation on : effect of gold standard, 26, 81, 82, 84, 85
  - nature of, 1, 2
  - regulation : Genoa plan, 93 *et seq.*
  - restriction, 120, 126 ; effects of, 27, 28, 133
- Crises, financial, 53, 56, 83, 84, 98, 113, 138 *et seq.*
  - United States, 6, 7, 72, 98

- Crusades, the, 59
- Currency (*and see* Foreign exchange)  
 depreciation, 11, 105, 140, 142-4  
 legislature, the, and, 88  
 notes, British, 7, 9, 110  
 restoration (1819), 63, 78  
 stabilisation, international, and gold reserves, 99 *et seq.*  
 systems, defect in, 85  
 theory: object of study of, 3  
 troubles since 1914, 87, 92  
 unit stabilisation, 49, 101, 144  
 fluctuations, 83
- Currency and Bank Notes Act, 1914, 8, 55; 1928, 154-5
- DARMSTADTER Bank, 138
- Debt, Debts—  
 assignment of, 4, 5, 6  
 discharge of, 2, 3, 4  
 process of setting off, 4, 6  
 idea of, 2, 3, 8  
 nature of, 3
- Deflation, 109
- Denmark, 69, 151
- Depreciation of the monetary unit, 18, 65, 89, 100
- Depression—  
 effects on "New" countries, 135  
 reaction in different countries, 131, 135  
 vicious circle of, 128-9
- Discount market, 55 *ff.*, 111
- Discount rate (London market), 111, 117, 118
- Dollar, 37, 72, 92, 107
- ENGLAND. (*See also under* Bank of England, London *and* Great Britain)  
 coinage, 63; *and see* Coinage  
 gold reserve, 49  
 gold standard in, 60, 62, 63  
 ceases to function, 90  
 restoration of, 109, 115, 116, 117, 131  
 suspension (1931), 139-42  
 paper money, 90, 95, 110; *and see* Currency notes  
 war finance policy, 90
- Exchange, medium of, 2  
 "Exchange dumping," 142, 143
- Exchange, rate of, 145, 147, 148
- Exports, 96, 97  
 effect of currency fluctuations on, 35, 37-8, 40
- External price level, 143, 144
- FAR Eastern currencies, 67, 74
- Federal Reserve Act, 1913, 6, 107, 108

- Federal Reserve Banks—  
 concentration of gold in, 94, 107  
 credit expansion policy, 127-8  
 Federal Reserve note, 29  
 Financial crises. *See* Crises  
 Financial markets, 110 *et seq.*; *and see* Foreign exchange  
 Financial soundness and economic prosperity, 109  
 Fixed fiduciary issue, 52  
 Florence, 59  
 Forced sales in a crisis, 53, 136; effect on prices, 54, 83-4, 98  
 Foreign exchange market, 31 *et seq.*, 106, 112-13, 137  
 balances, residual, in, 40  
 credit expansion, effect of, on, 40 *et seq.*  
 illustrative figures, 42 *et seq.*  
 function of, 31, 32, 33  
 gold standard, effect of, in, 36-40, 137  
 prices, rise and fall of, in, 34, 35, 36  
 effect on commodities, 35  
 speculative tendency in, 34 *n.*  
 supply and demand in, 35, 36  
 unfavourable exchange, 45  
 Foreign exchange reserves: distrust of, 155-6  
 Foreign investments, 98, 146-8  
 Foreign trade products, 44  
 France. (*See also* Bank of France *and* Latin Union)  
 Assignats, the, 62-3  
 Bank of, 55, 67, 70, 122-5  
 bimetalism in, 64-6, 67, 74, 93  
 Bons de la Défense Nationale, 88  
 coinage system, 64  
 gold coinage of, 1785, 62, 63  
 depreciation, 121  
 gold absorption, 125-6  
 gold reserve, 49, 55, 122  
 gold standard breakdown, and, 123 *et seq.*, 139  
 internal price level, 122  
 monetary circulation, 121-2  
 note issue, 121, 122, 124, 125  
 note issue limitation, 55  
 paper money, 69, 95  
 silver, free coinage suspended, 69  
 silver of unlimited legal tender in, 70  
 stabilisation, 121, 122, 123, 132, 157  
 wages, post war, 122, 132  
 war finance policy, 87, 88, 89  
 wealth and population, 65, 66  
 Franco-German war indemnity, 68  
 Free coinage. *See* Coinage  
 French Revolution Assignats, 62-3



- GENOA conference, 1922, 93, 152; currency reconstruction plan, 93 *et seq.*, 99, 101, 108, 109, 112, 113, 156; gold exchange standard, and, 99, 156
- German Reparation payments, 125
- Germany—
- crisis of 1931, 138, 139, 140
  - currency reform, 68
  - gold reserve, 49
  - gold standard, 68-9, 75, 77, 92-3
  - industrial depression, 116, 120, 135
  - paper money, 95
  - post-war financial position, 136 *et seq.*
  - silver standard, 67, 68, 69
  - trade with Far East, 68
  - war finance policy, 87, 89
- Gold—
- bullion standard, 95, 110
  - coinage price. *See* Coinage
  - cost of transporting, 37
  - debts, 104, 135
  - demand for, 29, 75, 76, 78, 92, 103, 110, 117, 151, 152
    - in industry, 30, 48, 49, 100, 101
  - demonstration, instance of, 105
  - discoveries of 1849 and 1850, 67, 74
  - exchange standard, 56-8, 99, 104-5, 110, 124, 155
    - Genoa conference, and, 99-100
    - India, 73-4
    - Russia, 57
  - export of, prohibited: England, 112; United States, 91, 106
    - international medium, as, 56
  - market, 30, 55, 91, 92, 93, 112
  - monetary stock in the seventies, 75
  - movements, 38, 40, 41, 45, 46-7, 52, 96, 97, 98, 99, 112-13, 129, 130, 154
    - illustrative figures, 42 *et seq.*
  - price of (*see also* Coinage) 18, 20, 25, 29-30, 31, 49, 64-5, 94, 149, 154. *See also* Value, *infra*
  - production, 47, 76, 77, 78, 79, 100, 101
    - total world output, 47, 74-5
  - purchase and sale of, by Bank of England, 20, 110, 141
  - purchasing power, determination of, 49. *See also* Value, *infra*
  - ratio of, to silver. *See* Ratio
  - reserves, 38, 39, 47 *et seq.*, 94-5, 155
    - coin as second time reserve, 95, 96
    - Genoa Conference recommendations, 99 *et seq.*, 156
    - determination of future demands, 50, 95, 96
    - increase, excessive, in, 38-9, 94
    - inflation, and, 89
    - laws, 50-1
    - pre-war policy, 55-6
    - post-war change, 56

Reserves—*continued*—

- various countries, 48-9
  - specie standard, 109
  - standard, 36-41, 59, 60, 62, 63, 69, 72, 74, 79, 88, 92, 106, 107, 112, 115, 119, 120, 132, 135
    - breakdown (1931), 115, 123 *et seq.*, 133, 138-41
    - classical form of, 15-16
    - coin, exclusive use of, not essential, 29
      - an imperfect application of, 95
    - credit movements and, 26, 81, 82, 84, 85
    - defect in, 82, 85, 107
    - foreign exchanges and, 36, 37-8, 39, 40
    - forms of, 109
    - foundation of, 31
    - functions of, 14, 15, 18, 149
    - inflation, prevention of, and, 89
    - spread of, 59
  - suspension of (1931), 139-42
    - effects of, 142 *et seq.*
    - in "New" countries, 135
  - value, or purchasing power, 16, 29, 30, 31, 76, 77, 79, 91-2, 94, 98, 100, 105, 116, 129, 134, 135, 141, 151
    - determination of, 47-9
    - effect of appreciation of, 135, 138, 145
    - for long period contracts, 79, 81
    - periodic fluctuation in, 80
    - world market. *See* Market, *supra*
- Gold Standard Act, 1925, 19, 95, 110
- Great Britain (*see also* England):
- gold losses, 121, 126, 132, 140
  - gold standard in—
    - re-establishment of, 115, 116, 117, 131
    - suspension of (1931), 139 *et seq.*
    - considerations for the future, 152, 155, 157
  - industrial depression, 115, 116, 119, 121, 126, 127, 131, 132, 133, 145-6
  - wages, and the gold standard in, 115
- Guineas, 60, 61, 63

HOLLAND: bimetallic system in, 66; paper money, 95; efforts to introduce gold coin, 95; silver, free coinage suspended, 69; silver standard, 66, 67

IMPORTS, 96, 97, 129, 146-7; "invisible" imports, 146-7

effect of currency fluctuations on, 35, 37-8, 40

Income. *See* Consumers' income

Income, national, 10, 11, 27

Inconvertible paper money, 7, 71, 72, 74, 75, 79, 141, 144, 149

Index numbers of prices, 77, 78, 79, 108, 116, 119, 134, 149

fluctuation in, 80

- India: gold demands of, 48; gold exchange standard, 57;  
 rupee price, 73-4; silver, free coinage suspended, 73
- Industry, demand for gold in, 30, 48, 49, 100, 101
- Inflation, 88, 120, 121; avoidance of, 89-90, 109; gold reserve,  
 and, 89
- International trade, 31-2
- Investments, 10, 97-8; foreign, 98, 146-8
- Italy, 75; (*and see* Latin Union)  
 paper money, 67, 69
- JAPAN**, 91, 107
- KEYNES**, Mr. J. M.: proposals of, regarding gold standard, 101-6,  
 115, 144 *and n.*, 150, 151
- LATIN UNION**, 67, 68, 69  
 five franc pieces of, 69, 70, 71  
 silver, free coinage suspended in, 69
- Legal tender money, 2-4, 5, 7-8, 15, 16, 21, 25, 62, 95  
 demand for, 27, 28, 81, 85, 96  
 gold reserve and, 96
- Lending by banks, 4, 12-15, 21, 26-7, 40-2, 44-6, 53, 80-1, 87-8
- Loans, international, 104
- London: bullion market, 112-13; clearing house for inter-  
 national trade, *as*, 106; credit centre, *as*, 111, 112;  
 discount market, 55 *n.*, 111, 118-19; financial centre,  
*as*, 67, 110-12, 118-19, 133, 140, 156
- MACMILLAN** Committee, 154-5
- Margin, unspent. *See* Unspent margin
- Markets, financial. *See subject headings*
- Metallic currency, use of, 1
- Metallic standard, 74, 76  
 fluctuations in rates of exchange, 66
- Mexico, 73
- Middle Ages, silver standard of, 18
- Mint, 16, 17, 19, 20  
 profits, 19
- Monetary disturbances, data indicating, 108
- Monetary unit, 18, 20, 25, 62  
 commodity value, 9, 25-6, 78, 94, 100-2, 105  
 gold standard, and, 31, 49  
 gold value, 16, 18, 20  
 interrelation of monetary units, 30, 31
- Money**—  
 of account, 8, 59, 61  
 in circulation, need not be of gold, 95  
 control of, 94  
 defined, 1  
 demand for, 17, 24, 27, 28, 47  
 idea of, 2, 3, 8

Money—*continued*—

- medium of payment, as, 7, 8
- supply: and control of bank credit, 14
- unstable, evils of, 113, 114

Moratorium, 1914, 112

NEWTON, Sir Isaac, 61, 62

New York, 112, 113, 119, 156 (*see also* United States)

New Zealand, 135

Norway, 69, 151

Note issuing authority: responsibility of, 15

Notes. *See under* Bank and Currency

OUTLAY, consumers'. *See* Consumers' outlay

Overend and Gurney crisis, 117

PAPER money, 47, 63, 67, 68, 69, 71, 95, 96, 110, 141; gold cover for, 96; lending operations, and, 14, 15; limitation on, 47; over issue, 14

Paris, 67

Parity, 37

Payment—

- means of, 9
- with bank credit, 9

Peru, 73

Pound sterling, the, 8, 37, 98, 115, 116, 141, 144, 148; stabilisation problem, 148-9; the old parity, 157

Precious metals, the: as monetary standard, 1; as standard of value, 76-7, 92

Price, prices—

- index numbers, 77, 78, 79, 80, 108, 116, 119, 134, 149
- periodic fluctuations in, 79-80, 81-2
- nature of, 10, 30
- rise and fall of, 9-11, 13, 14, 35, 78-83, 91, 98, 116, 118, 119, 130, 134

Production—

- credit expansion, increased by, 13, 41, 42, 44
- credit restriction, effects of, on, 28, 82-3
- increase or decrease in, effects of, 97
- periodical fluctuation, 80

RATIO between gold and silver, 59, 60, 61, 62, 65, 68, 72, 74, 76

France, 62, 63, 64, 66

United States, 66, 72

Recoinage, 18

Reserves: and a currency stabilisation policy, 99; and demand for legal tender money, 85; (*see also under* Bank reserves, Gold reserves, and *Names of countries*)

Retail prices, 134

Ricardo, 110

Russia, 75, 89: gold exchange standard, 57; gold reserve difficulties, 57; gold unit adopted, 57, 71; paper money, 67; silver, free coinage suspended, 71

SAVINGS, 10, 98

Scandinavia, 67, 105, 151

Seignorage, 19

Shilling, 8

Short-term loans, 4, 133, 137; international, 137-8

Silver coinage. (*See also under* Coinage)—

defective, 61

five franc pieces, 69, 70, 71

legal tender, limitation on, in 1783, 63, 68

unlimited, 62, 64, 70

subsidiary (England), 62

issue at Government discretion, 64

thalers, 68, 69, 70

Silver standard, 59-61, 64, 66, 67, 69, 74, 77, 151

abandoned, 69-70, 92, 103

inconveniences, 59-61

various countries, 67

South Africa: gold production, 47

South Africa, Union of: preference for gold coin in, 95

Sovereign, 8, 19, 63, 64

Spain, 49, 71, 101, 141-2, 151; the peseta, 141-2

Stabilisation of currencies, 99 *et seq.*

Stabilisation problem, 148 *et seq.*, 156

Standard, monetary, 1

Sterling as rival standard to gold, 151

Strong, Governor Benjamin, 152-3

Sweden, 69, 151

Switzerland, 67, 95; *and see* Latin Union

TARIFF protective, 147, 148

Trade cycle, 82, 83, 84, 108, 113, 153

Traders' profits, 13

Treasury Bills, 88

UNEMPLOYMENT, 82, 83, 113, 116, 117, 130, 135

problem, and gold standard suspension, 143, 144

United States (*see also* New York)—

Bank failures, 136

Central Bank system, 107

Civil war, depreciated paper, 72

credit contraction in, 91, 120-1, 126

credit regulation in, 108, 109, 153

credit relaxation policy, 119-20, 124

Federal Reserve Act, 1913, 6, 107, 108

Federal Reserve Banks, 94, 107, 120, 127, 128

Federal Reserve notes, 29

financial crises in, 6-7, 72, 98

United States—*continued*—

- gold export prohibition, 91, 106
- gold reserves in, 48, 91, 101, 107, 108, 113, 120, 154
- gold standard in, 72, 73
  - post-war reintroduction of, 91, 92, 106
- Gold Standard Act, 1900, 73
- inflation and deflation in, 107
- loans payable in gold, 104
- paper money, 67, 72, 75
- productive activity, 119, 121, 132; set back, 127
- silver standard in, 66
  - abandonment of: protests against, 72
  - compromise on, 72-3
  - standard nominally bimetallic, 66
- Stock Exchange speculation in, 120-1, 126, 127
- war, the, entry into, 91
- Unspent margin, 11-12, 14, 42, 43-4, 128-9
- Uruguay, 73, 135

## VENICE, 59

## WAGE reductions, 130-1

Wages, post-war, various countries, 132; monetary stabilisation problem and, 150

Wages settlements, 83, 113

Wall Street collapse, 126, 127

## War, the—

- debts, 104
- financial policy, various countries, 87, 88, 90
- gold depreciation, and, 91
- loans, 87
- money requirements, and, 87
- prices, rise of, and, 91
- United States entry into, 91

Wholesale prices, 134

Working classes, demand for legal tender money by, 27, 28

World price level, 115, 116, 122, 129, 130, 133, 153

**CHECKED**  
 \_\_\_\_\_  
 2068-04