# 4786 Deasenjayarao Gadgil Library GIPE-PUNE-004786

# THE ECONOMICS OF THE GOLD STANDARD

# THE ECONOMICS OF THE GOLD STANDARD

BY

D. T. JACK, M.A. DEPARTMENT OF POLITICAL ECONOMY. UNIVERSITY OF GLASGOW

# LONDON P. S. KING & SON, LTD. ORCHARD HOUSE, 2 & 4 GREAT SMITH STREET WESTMINSTER

1925

×61;1.3 4786

Printed in Great Britain by The C.A. Press, Cowley, Oxford

PREFACE. 47 8 THE problems of the Gold Standard, like all problems, can be viewed from different angles, and the following study does not pretend to be exhaustive. The chief aim has been to explain the meaning of the Gold Standard and the machinery by which it is maintained. From that point of view, particular attention has been given to the probable long-period effects rather than to the more immediate consequences. Long-period views in these days are not always popular and are frequently received with impatience; but they cannot be ignored.

The argument that trade and industry stand to benefit by stable exchanges which the return to gold secures, has been much repeated in recent discussions. Much less familiar are the disadvantages even of stable exchanges if these exchanges are uneconomically high. Such a result bears most heavily upon export trades, and under present conditions of commerce, tends to intensify the existing depression in these trades, until the internal value of the currency is raised to correspond with the high exchanges. That more immediate problem has not been dealt with in these pages, since a full discussion would have diverted the book from its main purpose.

The immediate question nevertheless remains of great practical significance, and no good can come from ignoring it. The dilemma of the present situation would seem to be clearly defined, though none the less difficult in its solution. Granted that the present high level of the sterling exchange is the product of, and is maintained by, a group of special causes, and granted also that the high prevailing rates do

# Preface.

not correspond with the relation of British gold prices to the level of world gold prices, equilibrium might be attained in one of two ways. The first involves the repeal of the Gold Standard Act of 1925, thereby allowing the actual exchange to return to its natural level. The practical objections which would be brought against any such suggestion are obvious. Confidence would be shaken, and while the present additional burden imposed on the export trades might be removed, the reactions consequent upon exchange fluctuations would involve considerable disturbance and uncertainty.

The second alternative requires the raising of the internal value of the currency, or, in other words, a certain further amount of deflation. In so far as that process carries with it a series of conflicts over wages, much friction is inevitable. It is sometimes forgotten that while the high exchanges prove burdensome to the export trades, they should tend towards the cheapening of food imports. How far exactly the appreciation of sterling will operate in this way cannot yet be estimated; but to the extent to which it takes place and leads to a lower cost of living index figure, the amount of friction to be met during the transition might be reduced.

Great expectations, however, are to be avoided. No easy way of escape from the dilemma can be found and it would be useless to expend time in search of one. If, on the other hand, the fundamental elements in the position were clearly recognised the line to be taken might be followed with a minimum of disturbance. D. T. JACK. The University, Glasgow. August, 1925.

# **CONTENTS**

CHAP.	P	AGE
I	THE MEANING OF THE GOLD STANDARD	1
II	Gold in the International Market	25
111	THE RETURN TO GOLD	41
IV	THE EFFICIENCY OF THE GOLD STANDARD WITH A VIEW TO THE FUTURE	70

# CHAPTER I.

#### THE MEANING OF THE GOLD STANDARD.

By the passing of the Gold Standard Act in May, 1925, the United Kingdom reverted to a form of monetary organisation which had prevailed for over a century. That reversion sought to restore the condition of things which had been abandoned since 6th August, 1914, by the passing of the Currency and Bank Notes Act of that date. In the following pages it is proposed to consider certain of the implications of this "return to gold," for experience has shown to most people to what extent purely monetary forces can affect the economic structure of modern communities. The problem of prices which became so uncertain in its solution where inflationary and deflationary methods were adopted, remains the problem which is most anxiously considered by practical men of affairs. To many, the "return to gold" implies the final grounding of the anchor of price; others again express the fear that the anchor has not really been grounded and that a protruding rock has been caught instead. But all are agreed that a safe anchorage is essential.

The starting point must necessarily be a consideration of what exactly we mean by a standard of value and how precisely the gold standard operates. Here we need not enter into the various ways in which the word "standard" has been employed. It will be sufficient to look at the matter comparatively. Writers on money constantly insist on the necessity for having some unit of measurement which will enable people to compare the values of different goods and services, just as the weights and lengths of objects are measured by comparison with some selected standards of weight and length. The standard of value therefore is simply the unit for the measurement of exchange or economic values.

The standard of value is generally identified with the unit of account or of money, and when values are expressed in terms of this unit of account we have the phenomena of prices. The essence of the gold standard is simply that the unit of account shall be a legally-defined weight of gold, which may or may not be a gold coin. The reason for this latter qualification will appear later. Here it will be sufficient to consider what conditions are essential to the maintenance of the gold standard.

These conditions are briefly three in number. (1) The first is the one already mentioned, that the unit of account shall be a fixed weight of gold, gold being selected partly because of its physical properties, but more on account of its

being in itself an article of value and with a value which in terms of other things is relatively highly stable. In this country the Coinage Act of 1870 defined the weight of the sovereign as 123.27447 grains troy of standard gold, with a standard of fineness of eleven-tweliths. In the United States the golden eagle, which is equivalent to \$10, weighs by law 258 grains of standard gold with a standard of fineness of nine-tenths. (2) In modern communities, however, gold coins where they exist are not the only means of payment which circulate. Briefly we may summarise the other means of payment as what are called " token coins," generally of less valuable metals such as copper or silver, which by law are legal tender only for limited amounts; notes issued by banks of issue or by the state; and bank deposits which can be operated upon by cheque. But where the gold standard is fully maintained, all other alternative forms of money should be convertible into gold on demand. Otherwise it would be impossible to ensure that the value of these alternative means of payment would be identical with the value of gold. Convertible paper, i.e. notes which on demand at the office of issue can be changed into gold, are therefore primarily a means of economising in the use of gold. They give in many cases a greater convenience to the public, while the fact that they are convertible and can only be issued under conditions of convertibility imposes a definite limit to the extent to which they can be issued.

(3) The third condition is usually expressed by saying that there must be a free market for gold. That implies two things: (a) that gold money can at will be converted into gold bullion and gold bullion into coin equally at will; and (b) that gold, either in the form of coin or metal, can be exported from the country or imported into the country without hindrance. Without these conditions there could be no guarantee that the value of gold coin would be equal to the value of gold itself as metal. Thus during the war, as we shall see, the value of the gold metal in a sovereign was greater than the value of the gold sovereign itself, and to that extent, had there been no D.O.R.A. to exercise a restraint, it would have been highly profitable for people with gold sovereigns to melt these sovereigns into metal and sell the metal for currency notes.

But before we proceed to describe the prewar monetary organisation and the working of the gold standard, it will be convenient to say something on the meaning of that vague phrase "the value of money." Popular speech still has a way of talking as if the value of money were fixed and unalterable, and as if when prices change the values of other goods have changed without any change taking place in the value of money. Thus it is said that  $\int I$  will always buy 20/- worth of goods. Such a statement is clearly an identical proposition which means that  $\int I$  will always buy  $\int I$ .

The value of coal in terms of wheat is the

quantity of wheat which will be exchanged for a given quantity of coal, and if the coal rises in value, that means that the same quantity of coal will exchange for a greater quantity of wheat. That again is the same as saying that as the value of coal in terms of wheat rises, the value of wheat in terms of coal falls, and the same quantity of wheat will exchange for a smaller quantity of coal. In exactly the same way the value of coal in terms of the unit of money will be the number of money-units which will be given in exchange for a given quantity of coal : and a rise in the value of coal means that a given quantity of coal will exchange for a greater number of money-units. In short, the value of one article in terms of a second will vary inversely with the value of the second article in terms of the first. Now the value of coal in terms of the unit of money is its price; consequently when the price of coal is high the value of the unit of money in terms of coal is low, and vice versa. Instead, however, of taking one article to measure the value of money, we generally take articles in general, and by the value of money we mean the purchasing power of the unit of money over these articles in general. Suppose we consider a standard collection of several articles. It follows that the value or purchasing power of the unit of money will be the greater the more of these collections it can buy; and the number of collections it can buywill depend upon the prices of the articles. It

is in that sense that the value or purchasing power of the unit of money is said to vary inversely with the level of prices. That level of prices is measured by specially constructed index numbers which are now familiar to most people in at least a general way. It is not possible here to enter into any description of the methods whereby these indices are constructed. But it is at least clear from what has been said that the problem of giving stability to the value of money is the same problem as that of giving stability to the general level of prices; and the efficiency of whatever monetary standard is adopted will be tested by the stability of the price level in that country in which the standard in question is maintained.

The value of any article depends upon the general conditions of demand and supply, and the same general truth holds with regard to money. Since money is used to effect payments or more generally to discharge debts created by the sale of goods and services, the total demand for money may be considered as depending upon the total of money payments in a given period. If now we suppose that all the articles exchanged in a community in this given time consist of uniform collections of general commodities, then the price of each unit collection will depend upon the amount of money given in exchange for the total number of collections offered. The more money is offered for the same number of collections the greater will, be the price of each, and therefore the less will be the value or purchasing power of each unit of money. Similarly, the more collections of commodities are offered for the same number of money-units, the lower will be the price of each collection and therefore the greater the value or purchasing power of each unit of money. That gives us in its simplest form what is known as the Quantity Theory of Money.

It is convenient to give the statement of the theory in an algebraical form. In considering the total of money payments made in a given period, it has to be noticed that that total is not found simply from the total amount of money which circulates. Since each unit of money serves to make several payments, the total of money payments is really the product of the number of units of money and the average number of payments which each unit of money makes. Representing therefore the quantity of money in circulation by M and the rapidity of circulation by V, the total of money payments will be MV. On the other side of the equation we can take T to represent the total number of collections of uniform commodities, and P to represent the price of each collection. The formula for the Quantity Theory on the above reasoning therefore becomes :

#### M V = P T.

But in addition to the ordinary forms of cash which circulate in modern communities, there must also be considered those payments which are made by means of cheques drawn against bank deposits. Payments in this form are particularly suited to certain kinds of transactions, and the practice of making cheque payments is an increasing one. Before the war, it was estimated that in the United States 80 per cent of the total payments made in the course of a year were made by cheques and not by cash. If then we allow for cheque payments, and make M' represent the total of checkable deposits and V' the rapidity with which these deposits circulate, we can state the complete formula:

M V+M' V'=P T, or P= $\frac{M V+M' V'}{T}$ 

This formula shows us clearly what are the relations which exist between the different factors which affect the value of money or the general level of prices, P. Any increase in the quantity of means of payment unaccompanied by any change in the number of payments which each unit makes, and unaccompanied by any change in the volume of trade or the number of transactions T, will reflect itself in a proportionate rise in prices. In the same way, any change in the volume of trade unaccompanied by any change in M, M', V, or V' will reflect itself in a proportionate change in the price level. But in practice, these factors do not act independently of each other. An increase or decrease in M or M' generally has some effect on V and V', so that the net effect on P may be greater or less than the apparent change in M or M' would suggest. Again, T may change at the same time that changes are taking place in the other factors. In order therefore to find the net effect on P, the changes in each factor have to be considered.

We can bring the analysis a stage nearer to actual conditions by examining the working of the banking system. That system falls under two heads: (1) the issuing of notes; and (2) the provision of cheque facilities.

(1) Early banks were simply places for the safekeeping of valuables, as in the case of the goldsmiths in this country in the 17th century. Historically what happened was that a person who placed say (1,000 of gold with a goldsmith, would accept a receipt for his deposit, and that receipt was simply a promise on the part of the goldsmith to pay (1,000 in gold to the depositor whenever he should demand it. But in the course of time, when persons with such promissory notes had debts to meet, instead of taking their receipts to the goldsmith, cashing them and paying the debt with the gold they obtained, they simply transferred the note to the creditor and discharged the debt in that way. And so in time these notes, instead of being made payable to specific persons, were made payable to the bearer of the note, and in that form they correspond to the typical bank-note of to-day.

9

B

This is not the place, however, for a history of methods of note issue. In this country the right of note-issue was confined to the Bank of England, with certain minor banks of diminishing importance and certain of the banks of Scotland and Ireland. The power to issue notes was limited by the ability to meet all demands for the repayment of these notes in gold. The Act regulating the note issue of the Bank of England was the famous Charter Act of 1844, which required the Bank to hold against every note which it issued an equivalent in gold and silver, except for a small fiduciary or uncovered circulation (secured by government stocks) which in 1844 was fixed at £14,000,000 and which had increased for reasons connected with the terms of the Act of 1844 to £18,450,000 by the beginning of the late war. Silver, however, was not held as cover after 1861. In 1923, an Order in Council raised the uncovered circulation of the Bank of England to £19,750,000. To issue uncovered notes in excess of the fiduciary limit involved a breach of the Charter Act which conferred upon the Bank its privileges. Consequently when particular circumstances arose which obliged the governors to exceed the limit, their first action was to apply to the Government for a bill of indemnification.

The note issues of the banks, apart from the Bank of England, were diminishing in importance and in England and Wales may be neglected. In 1844 they amounted to £8,200,000, but by 1900 they had declined to  $f_{1,200,000}$ . In 1844 the circulation of the Bank of England notes amounted to  $f_{20,200,000}$ ; at the end of 1913 it amounted to  $f_{29,600,000}$ .

This arrangement had one great defect, viz. that it provided the country with a noteissue of a highly inelastic character. We shall see how other countries sought to get over this difficulty. In this country, under emergency pressure, the only means open to the Bank whereby its note-issue might expand temporarily to meet some crisis during which it was unable to increase its gold holding, was by a suspension of the very Act which was supposed to regulate its action. In 1847, 1856 and again in 1866 such action was necessary, though in 1847 and 1866 the Bank did not ultimately avail itself of the privileges of the suspension of the Act. But the anomalous position which was liable to arise, led some people to the conclusion that while it was intended to prevent complications by limiting the note-issue of the Bank in the form of the Act of 1844, complications in time of crisis were only avoided by suspending the application of the Act for the time being.

The position at the outbreak of war in 1914 was similar and might equally well have been followed by another period of suspension. In point of fact, however, an alternative method was adopted which seemed to preserve the convertibility of the note circulation, and the adoption of this alternative gave many people to imagine that the gold standard had not been abandoned at all.

That alternative method was embodied in the Currency and Bank Notes Act of 1914 (4 and 5 Geo. 5, Ch. 14). By this Act the Treasury was enabled to issue Currency Notes of denominations of 10/- and £I, and these notes were to be fully qualified as legal tender.

In this way the notes of the Bank of England remained convertible and the emergency issue was provided by the Treasury, though it did so through the Bank. But in order to consolidate the gold holding of the country, appeals were made that the new currency should be freely used and that the public should allow its holding of gold coin to be mobilised and exchanged for the new notes. A further appearance of convertibility was preserved by sub-section three of the first section of the Currency and Bank Notes Act of 1914. That sub-section read as follows : "The holder of a Currency Note shall be entitled to obtain on demand, during office hours at the Bank of England, payment for the note at its face value in gold coin, which is for the time being legal tender in the United Kingdom." That in fact meant that an attempt was being made to render convertibility the legal characteristic of the Currency issue. But it was no more than a legal fiction, for while legally any person could obtain gold at the Bank in exchange for either Bank notes or Currency notes, the D.O.R.A. saw to it that there was no use

to which the gold could be put once it was obtained. It could not be melted; nor could it be sent abroad in payment of foreign obligations.

The withdrawal of gold from circulation into the coffers of the note-issuing banks enabled these institutions to increase their issues. In 1910 it was estimated that the gold circulation of the United Kingdom outside of the banks of the country amounted to £84m. During and after the war, the amount of the Bank of England notes held by the public increased from an average of £29.1m. in 1913 to £56.8m. in 1918, and £127.3m. in 1921. At the beginning of April 1925 it was £121m. The Currency Note issue increased to £343m. at the end of 1919.

Other countries had different methods for regulating their note-issues. In Germany, the Reichsbank was enabled under certain conditions to issue notes in excess of the legal maximum on payment of a tax of 5% of the amount of the excess. The law of 1875 fixed the Reichsbank's issue at [12]m., but that was increased through the lapsing of the rights of other banks, and before the war the figure was [271m. For reserve purposes, the Reichsbank was obliged to hold one-third of the total note-issue in the form of specie; the remaining two-thirds might take the form of good bills. In 1913, the note circulation of the Reichsbank amounted to approximately [130m.; in 1918 it was [1,109m. In June 1914, the proportion of the gold reserve

to the note-issue was 54% as against the legal requirement of  $33\frac{1}{3}$  per cent.

The Bank of France has enjoyed the sole right of issue in France since 1848. The practice adopted there was quite different from the practice in either England or Germany. Maximum limits to the amount of the note-issue are prescribed by law and there is no provision for emergencies other than by a hasty revision of the legal maximum. In practice several such revisions have taken place, and the legal maximum was raised gradually from 1,800 million francs in 1870 to 6,800 million in 1914. In June 1914, against a note circulation of 6,051 million francs, the metallic reserve was 4,697 million, or 75%.

In Holland the practice was that the ratio of the metallic reserve to the total issue should be fixed by royal decree. In 1864 this proportion was fixed at 40%; the remainder to be covered by bills and collateral on loans. In 1914<sup>1</sup> the ratio was reduced to 20%, though in June of that year the actual ratio was 53%. In Denmark, notes might be issued to any amount provided a bullion reserve of 50% was maintained and the remainder covered by diquid assets in the ratio of 125 kroner of liquid assets for 100 kroner of notes. In Italy, normal maxima were prescribed by law, but within these limits the three banks of issue had to maintain reserves of fixed minima, and additional cover of 40% of the normal circulation. Of the total reserve, 75%

<sup>1</sup> Shortly after the outbreak of the war.

was to consist of gold; 14% in silver, and the remainder in foreign bills.

In the United States the Federal Reserve System instituted in 1913 definitely set out to provide an elastic currency. A gold reserve of 40% must be maintained by the Reserve Banks against their notes, but there are powers of suspension on payment of a graduated tax on the deficiency.

The upshot of this wide survey is to show that legislation has given particular attention to the conditions under which notes might be issued. These regulations have been adopted primarily with a view to limiting the power of issue of banking institutions. We shall see how the same attention was not given to the other function of the banks.

(2) This second function of banking institutions lies in the provision of cheque facilities for the operation of deposits. It would take us too far afield to consider the growth of the use of bank deposits and the uneven growth of the practice in different countries. But it may be noticed that where the supply of other means of payment was inelastic, as in this country and in the United States before 1913, deposit banking was most advanced; and where the monetary circulation had a greater elasticity, as in France and Germany, deposit banking was less advanced. Some idea of the extent to which cheque facilities have increased may be derived from an examination of the total clearings in

the different countries. In the United Kingdom total clearings increased between 1900 and 1910 from  $\pounds 9,593m$ . to  $\pounds 15,403m$ . In the United States, clearings increased from  $\pounds 16,916m$ . to  $\pounds 33,797m$ . between the same two dates. Transactions in the Paris clearing-house, which in 1872 were only  $\pounds 64m$ ., amounted to  $\pounds 3390m$ . in 1901 and 1,044m. in 1907. In Germany, "giro" transactions increased from approximately  $\pounds 606m$ . in 1884 to  $\pounds 2,298m$  in 1907. A comparison of the volume of clearings per head of population in the four countries in 1907 gives the following results:

	•				Total.	Per head.
U.S.		•••	•••		£30,985m.	£347.
U.K.			•••		13,453m.	306.
Germa	ny		•••		2,298m.	37.
France		***	•••	•••	1.044m.	27.

It is necessary, however, to keep in mind that the term "deposit" covers two distinct types of liabilities. That is the distinction between "current account" and "time deposits." Only the first of these can be operated by cheque, so that in considering the volume of means of payment at any time, time deposits ought to be left out of account. These time deposits, while they may be converted into demand deposits, are more akin to investments and cannot be used for immediate payment. In the United States, banks are obliged to distinguish in their returns deposits of these two types; in June 1913, checkable or demand deposits constituted fully 80 per cent of the combined total of time and demand deposits. In this country no such distinction is required by law, but Lehfeldt<sup>1</sup> accepts the proportion of 60 per cent of the total of bank deposits (excluding the Bank of England) as constituting the checkable deposits of the country. But no proportion can be regarded as rigid. Numerous influences are at work to change the ratio, and in that connection the changing conditions of business are particularly important. Thus when trade is depressed, time deposits are likely to increase and demand deposits to decrease without any necessary change taking place in the combined total. Again, with a trade revival, time deposits are likely to diminish as they are withdrawn for investment in industry, in which case they are likely to reappear as increased current accounts. In the United States, for example, sight deposits in 1913 were 26.6% higher than in the previous year, while time deposits were 31.1% lower.

The question as to the way in which deposits arise is important. In the first place they can arise out of the simple process whereby individuals place a certain amount of money at the disposal of a bank until such time as they may require to withdraw that money to pay their debts. But no bank could exist as a mere place of deposit in this way. Experience soon shows that while these deposits are repayable on demand, in practice no general and instantaneous demand ever takes place. For that reason

<sup>2</sup> Gold Prices and the Witwatersrand, p. 46.

bankers are in a position to lend out a portion of the funds at their disposal, these funds so loaned thereby being placed at the disposal of borrowers who can use them to advantage. By means of bank loans to customers (and the same process holds good where the bank discounts a customer's bill) deposits are increased on the liabilities side of the balance sheet, while on the assets side there is a corresponding increase in the securities or advances of the bank. But while legislatures have as a rule prescribed the conditions under which banks of issue shall issue notes in relation to the cash reserves which they hold, very little action has been taken to ensure that the banks shall not expand their deposit-liabilities beyond a reasonable figure. No legal limits exist (except in two cases to be mentioned) though there are practical limits to the extent to which a bank can increase its liabilities in this way; because deposits are repayable on demand and persons with such deposits can exercise the right to draw cash from the bank if they so desire. Now while a bank loan involves a corresponding increase in both sides of the balance sheet, it does not involve an increase in the cash holding of the bank. It is therefore the relation between the cash holding of the bank and the deposit liabilities that must be carefully watched. Experience shows that a certain normal ratio is essential, and it is the maintenance of that normal ratio which ultimately regulates the bank's power to increase its deposit liabilities.

The precise ratio which any particular bank ought to preserve between its cash holding and its deposit liabilities will depend upon the nature of these liabilities. In some cases, banks require that a customer shall maintain his current account at a certain minimum figure. But whatever the nature of the accounts, the actual ratio will be such that it can properly be described as "safe." Before the war, the cash reserve of the Bank of England was fully 50% of its liabilities in respect of both public and other deposits. At the end of 1913, the cash reserves of all the banks in the country (including the Bank of England) represented 18.2% of their deposit liabilities. The ratio, however, varied with different banks. For the Bank of Ireland the proportion was 14%; for Barclay's Bank, 16.6%; for the Clydesdale Bank of Scotland. 14.7%; for Lloyds, 17.7%, and for the Midland. 18.3%. The limit to the extent of banks' deposit liabilities in this country is therefore not a legal one; but one which is dictated by considerations of practice and expediency.

Two exceptional cases must, however, be mentioned. These are the cases of the Federal Reserve System in the United States and the new Reichsbank Act in Germany. In the former case the Federal Reserve Banks are obliged by law to maintain a minimum reserve in legal tender to the extent of 35% of their demand deposits; and the new German Act requires that the Reichsbank shall maintain a reserve in defined liquid assets of 40% of their day-today obligations.

What, then, are these cash reserves which the banks hold ? So far as the ordinary joint stock banks of the United Kingdom are concerned, their cash reserves consist partly of actual cash in their tills and partly of their own deposits at the Bank of England, which acts in relation to the ordinary banks in the same capacity as the ordinary banks act towards their private customers. The Bank of England in fact is the bank of the Government, and the bank of the other banks. Its private business is small, and so when we find in the weekly statement the items of "public deposits" and "other deposits," we refer the first to the deposits which are to the credit of the Government and the second as in the main the deposits of the other banks. But while the cash reserves of these ordinary banks are composite in this way, the cash reserves of the Bank of England consist only of the notes and gold and silver coin held in the Banking Department.

It is clear that while the supply of cash is relatively inelastic, any increase in the volume of bank deposits unaccompanied by any increase in the cash reserves of the banks must lower the ratio of these reserves to the deposit liabilities. But it should not be thought that there was anything mystical about the maintenance of a certain ratio. A diminution of the actual cash reserves might come about from two apparent sources, though the underlying cause would be one and the same. Banks grant loans; these loans are used by the borrowers to make purchases, and to that extent the increase in bank loans has meant an increase in the means of payment; and that increase should, ceteris paribus, tend to bring about an upward movement in prices. With higher prices, more cash will be required for those smaller (mostly retail) payments which are not made by cheque, and the only source from which that increased demand for internal purposes can be met is the cash reserves of the banks. Secondly, a rise in prices, or a fall in the value of gold, if that fall is unaccompanied by any similar movement in other gold-using countries, will mean that gold will be worth more in these countries than it is in the first. And if unchecked, that fall in the value of gold in the first country will tend to encourage an outflow of gold to those other countries where its value is greater. From these two sources, therefore, the one internal and the other external, the cash reserves of the banks would tend to fall.

The instrument which regulated the supply of means of payment under gold standard conditions was ultimately the Bank Rate of the central bank. That Bank Rate, as in this country, was the minimum price which the Bank of England would charge for advances to borrowers, but its efficiency as a regulator depended upon the immediacy of its influence on the

Market Rate. Two cases may illustrate the connection between the two rates. If for any reason the Bank Rate was below the Market Rate, borrowers would naturally seek to obtain their loans from the central bank rather than from the ordinary banks; and the increased demand for loans from the central bank would tend to raise the price of these loans, while the reduced demand for loans from the other banks would tend to bring about a fall in the price of loans from these other banks; and these influences would continue to operate until the two rates were properly adjusted.

The other case is the more probable and the more difficult to follow. Let us suppose that the ordinary banks have been making loans freely, with the result that the ratio of their cash reserves to their deposit liabilities has fallen below what is regarded by them as a safe proportion. Since they have no control over the supply of legal tender, the only way in which they can increase their cash reserves is by borrowing from the Bank of England. If they succeed in so borrowing, the "other deposits" at the Bank of England will be increased, while there will be a corresponding increase in the "other securities" on the assets side of the balance sheet. The net effect of that operation, however, would be that the ratio of cash to deposit liabilities in the case of the Bank of England would fall, while a certain drain on the actual cash reserve would take place for the reasons already outlined. At that point a rise in the Bank Rate, by raising the price which the ordinary banks would have to pay for the loan which enabled *their* cash reserves to be increased, would under most conditions compel these banks in turn to raise the price which they charged for loans from them. Sometimes, however, the Market Rate did not respond quickly enough to a rise in the official Bank Rate. In that case, the Bank of England would itself enter the market as a borrower, and by increasing the demand for loans, would exercise an influence to compel a rise in the Market Rate.

The influence of the Bank Rate did not, however, cease at this point. Its most important function was probably to be found in the part which it played in the international moneymarket. But it will be convenient to consider that influence in the next chapter. The points of the present chapter may be summarised.

(1) The essence of the gold standard consists in the legal identification of the unit of account with a fixed weight of gold. To maintain such an arrangement did not involve a gold coinage for circulation. In this country there was such a gold coinage, and that fact led many people to imagine that the gold circulation was the chief qualification for the existence of the standard. What was really essential was that there should be a free market for gold and that other forms of money should be fully convertible into gold.

23

(2) Means of payment consist in the main of gold, notes and checkable deposits. The conditions under which notes are issued under goldstandard conditions have been carefully defined by law, so that the convertibility of these notes would be assured. Deposits can be increased in consequence of bank loans, but except in two cases, no legal limits have been imposed on the extent to which banks can make loans to customers. Practical limits nevertheless exist, since experience shows that a certain ratio between cash reserves and deposit liabilities must be maintained.

(3) An excessive creation of bank-money leads to a drain on the gold reserves in two ways: (a) by the internal drain consequent upon higher prices; and (b) by the external drain consequent upon the fall in the value of gold inside the country in question.

(4) The regulator of the supply of means of payment is the Bank Rate of the central bank, and the efficiency of that regulator, so far as the banking system is concerned, depends upon its ability to influence the Market Rate quickly. The function of the Bank Rate in conserving the gold supply of the country still remains to be considered.

#### CHAPTER II.

# GOLD IN THE INTERNATIONAL MARKET.

FROM the arguments of the preceding chapter, we are now in a position to understand how, before the war, the fact that most of the commercial countries of the world had adopted the gold standard for their monetary systems gave a certain uniformity to the value of money in these different countries. The unit of account, of course, differed in each country; that is, while all were on the gold standard, the unit of account or standard of value in each country was a different weight of gold; but the value of any given weight of gold had a marked uniformity in all parts of the world market. The explanation of this phenomenon has already been indicated. Any fall in the value of gold in one of these countries (indicated by a rise in prices in that country) relatively to the value of gold in other gold-standard countries would generate a movement of gold out of that country into those others where its value was greater. Generally speaking, that tendency brought with it two results. The inflow to those countries which received the gold would tend to lower its value in these countries, i.e. to raise prices; and the

C

efflux from the country which lost some of its gold would tend to raise its value in that country, *i.e.* to lower prices. And these two sets of forces would continue to be effective until equilibrium was restored. This, of course, does not mean that prices in all gold-standard countries would be exactly the same. But it does mean that the price levels in these countries would be so closely related that no great gold movement would take place from one centre to the others. In short, the operation of the gold standard, especially where many important countries had adopted it, tended to establish a price-stability over these countries.

So far we have viewed the process in a purely general way. It remains to consider the mechanism by which this process of adjustment was effected. We have already had occasion to consider the regulating influence of the Bank Rate over the power of the banks to grant loans to customers. It might, therefore, be said that any change in the price at which money could be borrowed would affect the demand for loans, a rise in that price reducing the demand and a fall in price stimulating the demand for loans. Such an argument is true, but apt to be mis-Recently, when periodic discussions applied. took place round the rumour of a probable rise in the Bank Rate, loud complaints were heard that such an occurrence, apart from any beneficial effects it might have on exchange-rates (discussed below), would involve a serious additional burden on the industries of the country, through the higher price which they would have to pay for bank loans.

In that connection two sets of practical considerations have to be borne in mind if we are to avoid undue exaggeration. In the first place, for reasons connected with banking practice, the effect of a rise in the Bank Rate will depend upon the rates ruling before and after the rise took place. Borrowers for industrial purposes do not borrow at the official Bank Rate (which, as we have seen, is the minimum price at which the Bank of England will discount bills), but at anything from  $\frac{1}{2}$  to  $1\frac{1}{2}$  per cent above that official rate, according to the standing of the borrower. But the borrowing rate for such loans has a minimum which does not change much with certain changes in the Bank Rate. Some years ago that minimum price was 6 per cent; more recently it was 5 per cent. Consequently so long as the Bank Rate was below 4 per cent, the majority of industrial borrowers would be unaffected by any change in the Bank Rate which did not raise it above that level. In June 1922 the Bank Rate was reduced from 4 per cent to 31 per cent, and in July of the same year there was a further drop to 3 per cent. A year later the Rate was raised to 4 per cent, at which it remained till March 1925, when it was brought to its present level of 5 per cent.<sup>1</sup> For

<sup>1</sup>Since writing the above the Bank Rate was reduced to 4½ per cent on August 6th.

the above reasons, therefore, the raising of the Rate to 4 per cent in 1923 did not have much appreciable effect on industrial borrowers. With the rise to 5 per cent in March of this year there might be some difference, but to regard that difference as involving a colossal increase in the burden of industry appears on closer examination to be a wild exaggeration.

For a business working with the aid of funds borrowed from a bank, a rise of I per cent in the price to be paid for such assistance does not mean more than 1/8 per month for every [100 borrowed. It is, of course, difficult to say precisely what the total additional burden would be. Most companies do not distinguish bank loans in their financial statements, but there are some which do, and the *Economist* recently<sup>1</sup> attempted an analysis of the increased burden on the basis of those latter companies. Out of a sample of over 300 companies, 63 companies were found which made the necessary distinction in their balance sheets. These 63 companies had a total paid-up capital of £78.9m., and their total bank loans amounted to £9.25m. or 11.7 per cent of their paid-up capital. The addition to the working expenses of these companies in consequence of an increase of I per cent in the price paid for bank loans would therefore amount to £92,500 per annum or 0.12 per cent of their total capital.

The point of this analysis is not to repudiate <sup>1</sup> March 31, 1925.

well-worn explanations, but rather to suggest a proper sense of proportion. The general theory remains unscathed. If manufacturers are less affected, the influence of the Bank Rate is clearly felt by merchants and traders who work on borrowed funds. An increase in bank loans, other things remaining the same, by increasing the total of checkable deposits also increases the available means of payment of the community. Since that increase has not yet brought forward any corresponding increase in the volume of trade, prices will move upwards. The consequent fall in the value of gold reduces the gold reserves of the banking system which are concentrated in the central bank-the reasons for the drain on these reserves have already been explained-and the ratio of cash reserves to deposit liabilities will fall still further. A rise in the Bank Rate, provided it is effective in causing the other Market Rates to move in harmony, will reduce the demand for loans and will render certain forms of undertaking no longer remunerative. The cancelling of loans thus brought about, by contracting the available means of payment, will tend to lower prices (or at least will check the rise), and the rise in the value of gold will tend to prevent any further outflow to other centres. By regulating the supply of means of payment, price stability is thereby assured within narrow limits.

This general argument is not invalidated by the doubts which have been cast on the com-

plaints of industry when a rise in the Bank Rate is in sight. It is probable that the real effect on industry is more psychological<sup>1</sup> than pecuniary. But before we can understand the more important influence of the Bank Rate, we must first work out its relations to what is called the " rate of discount " and to the foreign exchanges.

Under that head we have to consider the facilities which exist for the liquidation of debts as between the nationals of different countries. These debts are obligations incurred in the course of international trade, but there is great danger in interpreting that term too narrowly. Debts arise in various ways. The British importer who buys from abroad owes some foreign exporter for the value of the goods which he received, and the price to be paid will generally be expressed in terms of the currency of the creditor. In the same way, foreign importers owe in sterling for goods which have been received from British exporters. But visible imports and exports (those recorded in the monthly trade returns) do not represent the only factors in the demand for different currencies. Debts may be incurred not merely in respect of material goods, but equally in respect of immaterial services and loans made to or by a country. It is therefore preferable to regard the problem as a problem of the "balance of indebtedness" rather than as a simple problem of the "balance of trade."

<sup>1</sup> Cf. Lavington: The Trade Cycle, p. 44, and Hawtrey: Monetary Reconstruction, p. 108.
The instruments used for the settlement of obligations incurred in these ways are known generally as bills of exchange, and the rate of exchange is the price of such a bill quoted in terms of a particular currency. The rate of exchange between two currencies is but a particular case of exchange value in general; and just as the exchange value of coal in terms of wheat is the number of units of wheat which will be exchanged for a given quantity of coal, so the rate of exchange between two currencies will be the number of units of the second currency which will be exchanged for a given number of the first currency units. What happens in practice, is that a creditor in one country will draw a bill to the amount of the debt; that bill will be accepted by the debtor abroad and will be returned to the creditor, who can then sell it (or have it discounted) to those who have themselves to make remittance to the country of the debtor. These bills are drawn in different terms. Some are called "sight bills"; that means, that when floo in London buys a dollar bill for \$460, and when that bill is sent to New York and presented to the person on whom it is drawn (or his agent) \$460 will be immediately received. Others are "telegraphic transfers"; that is, when a message has been telegraphed to New York, a certain number of dollars will be immediately obtained from the paying banker. Others again are "dated bills"; these are bills which do not mature for three, four or six

months (plus three days' grace) after the date on which they are drawn. When it comes to discounting one of these bills (i.e. when the holder of the bill wants to obtain ready money), he takes the bill to a bank or discount house, which exchanges the bill for ready money; the amount which is received will depend upon the nature of the bill. What is known as the rate of discount is the price which the discounter of the bill will have to pay for the privilege of receiving ready money before the bill matures. That price takes the form of a deduction from the face value of the bill, and the amount deducted will depend among other things upon the length of time which must still elapse before the bill matures. If, for example, a bill of a nominal value of floo is discounted with three months to run, and the discount rate is 3%, the discount house or bank would give not floo for the bill but £99 5s.; the other 15s. representing the rate of interest on f100 for three months at 3% per annum. Any rise in the rate of discount will therefore reduce the amount which will be given for a bill when it is discounted. Thus a rise to 4% would mean that instead of receiving 199 5s. as before, the person who discounted the bill would receive only 199.

On any day there will be a demand for bills and a supply of them; and the price or rate of exchange ruling on that day will depend upon the strength of these two forces. If bills in London on New York are offered in excess

of the amount demanded, the price will tend to fall; that is, dollars will fall in value relatively to sterling, and £100 will buy a greater number of dollars than before. Similarly, if bills in London on New York are less than the amount demanded, the price of dollars will tend to rise and floo will buy fewer dollars than before. It is not possible here to enter into the details of the exchange market and to show how arbitrage dealings tend to level rates on any country in different centres. We are chiefly concerned not with day-to-day fluctuations, but with longer movements. What we may call the normal rate of exchange for any period will depend upon the relation of the debts due to a country to the debts owed by it. If the balance of indebtedness is against this country over that period, the rate of exchange will tend to move against this country. That is, pounds will buy less of foreign currencies than before. If this country owes less than it is owed, the exchange will move in its favour; i.e. sterling will buy more than before of foreign currencies. The question which arises is : Are there any limits to exchange movements of this kind?

Under gold-standard conditions the answer is that there are. We have seen that goldstandard countries have as their standards of value legally defined weights of gold. These weights of gold need not be the same, but once they are known it is always possible to work out for any given weight of gold its equivalent value in terms of different currencies. Thus when we know the weight of pure gold in the sovereign and in the \$10 eagle, we can deduce that the same weight of pure gold will be equivalent to  $\int_{I}$  in England and to \$4.86<sup>2</sup>/<sub>3</sub> in America. Ratios worked out in this way constitute the Mint Pars of Exchange.

These mint parities do not correspond necessarily with the actual rates ruling on any day, for these actual rates depend upon conditions of demand and supply. But the mint parities under gold-standard conditions are norms round which the daily movements take place. And there are outside limits above and below which the actual rates are not likely to pass. These outside limits are known as the gold points. Suppose the cost of shipping gold from New York to London, including freight and insurance, is 5 per mille-that is the cost would be 0.024 cents for every \$4.867-then American debtors would not buy bills on London at a price which exceeded \$4.89. For if the rate rose above that figure it would be cheaper for them to buy gold in New York and send that gold to London in payment of their debt. On the other hand, if the rate fell below parity, there would be another point below which it would be cheaper for American creditors to withdraw gold from London rather than sell their bills at a lower rate. These gold points are not wholly rigid; they can be affected by changes in the cost of freight and insurance; but in normal times they are very steady.

Why then should rates of exchange move definitely in one direction or in the other ? The answer must be found by returning to the consideration of the internal values of the respective currencies. If we suppose that in this country, by the increase in the means of payment in the way described, prices tend to move upwards; this country will be a good place for foreigners to sell to and a bad place for them to buy from. And in that way a movement will set in causing the balance of indebtedness to be adverse to this country. With the consequent fall in the exchanges, gold will tend to flow abroad. If this continued and gold was allowed to flow abroad steadily, it would soon become impossible to maintain convertibility so far as the other means of payment were concerned and the gold standard would soon be abandoned. There is nothing in the nature of things to prevent all the gold-holding from leaving the country provided prices continue to rise through the excessive growth of checkable deposits. The gold standard can only be preserved if the necessary corrective to the price movement is applied.

The corrective is applied through the influence of the Bank Rate on the rate of discount. Already we have seen how the Bank Rate affects internal borrowings, and it was suggested that in practice this influence was often exaggerated. The emphasis placed on what was already said was done solely with a view to the present considerations, which appear to

be the more important. So far as this country was concerned it has to be remembered that the financial position before the war was unique. in the sense that the United Kingdom was the "financial centre of the world." For that reason London was the centre from which foreigners most readily obtained short loans of ready money. Since large sums were loaned abroad in this way, the effect of a rise in the rate of discount was to reduce the volume of that short foreign indebtedness, by compelling a liquidation of a certain amount of the short loans outstanding. Such a process, by increasing the demand for sterling, would tend towards an improvement in the rate of exchange.

Thus a low rate of discount in this country encouraged foreign borrowings from London, and a rise in the rate of discount had the effect of checking these borrowings and calling in some of the loans. The other side of the process is that floating balances are to a certain extent free to move from centre to centre, and these could be transferred to London provided the rate of interest to be obtained in London made the transference worth while. A rise in London rates relatively to those ruling in other centres would therefore tend to attract floating balances to London, and with that movement a demand for sterling would be set up which would lead to an improvement in the exchanges. Thus by discouraging foreigners from borrowing and encouraging foreigners to lend, the adverse movement would be effectively checked.

The working of this process may be analysed further. We have seen how a rise in the discount rate lowers the price of a bill. That being the case, those with bills to discount will not willingly sell owing to the higher rate of discount. London as the chief financial centre was the most convenient centre to which foreigners could send their bills to be discounted: a rise in the discount rate would check this tendency. Bills in London on the other hand would be cheap, and to that extent purchasers would be attracted. It might be, for example, that dollars were sold in London in order that the proceeds might be invested in the purchase of bills in London owing to the low price at which they could be bought. Thus by involving purchases of sterling for foreign currencies that process would tend to improve the rate. Again the same process might be reinforced by the cheapening of British securities in consequence of the higher interest rates, because foreign funds would be attracted in order to invest in these securities at the low price at which they could be bought.

The working of the gold standard, so far as the exchanges were concerned, can therefore be summarised. Assuming that in any given period there was an adverse balance of indebtedness and that the exchanges moved against this country in consequence, gold would flow abroad. To some small extent that outflow would itself compensate for the excess of the country's indebtedness. But its real significance was that it caused a drain on the gold reserves of the country to be felt, and that in turn set in motion the machinery whereby the rise in prices was checked and a downward movement precipitated. In those other countries which received the outflowing gold, prices would tend to move in the opposite direction, and to that extent further gold exports would be stopped. The important underlying principle throughout is the connection between gold and prices, and the machinery which serves under gold-standard conditions to improve the exchanges which are adverse is the same machinery which corrects the price movement which caused the exchanges to become adverse.

The stability of exchange rates in pre-war days under the gold standard was not due to the existence of the gold points in any mysterious sense, but to the stability of gold prices in those countries which had their currency systems on a gold basis, and to the freedom given to gold to flow to those places where its value was for the time-being higher and from those other places where its value was for the time-being lower.

From what has been said it should be clear why the position of London before the war was particularly strong, and why the machinery upon which the maintenance of the gold standard depended was particularly effective. The reason was mainly that this country was a large creditor so far as other countries were concerned, so that whenever there were signs of an adverse exchange movement it was always possible to compel the liquidation of certain of the debts of foreigners to this country.

The maintenance of the gold standard in other countries had as a rule to be effected rather differently. Where a country was a debtor rather than a creditor in the international market, it was impossible to strengthen its exchange position in the way open to the United Kingdom. The arrangement best suited to such cases was known as the "gold-exchange standard." That differed from the pre-war simple gold standard as maintained in this country in that the local currency was not directly convertible into gold. What really happened was that the central bank was prepared to convert local currency into foreign currencies at a fixed rate; and it was able to do this not so much because of large gold reserves which it maintained, but because it held gold balances abroad or held large balances of foreign bills or other liquid assets. And whereas in this country an adverse exchange movement was countered by reducing the amount loaned abroad, in gold-exchange standard countries the movement had to be met by increasing the amount borrowed abroad.<sup>1</sup> By so doing

<sup>3</sup>Cf. Keynes, Indian Currency and Finance, p. 18 fl.

the central bank would add to the amount of its balances held abroad and would therefore be able to continue converting its local currency into foreign currencies at the fixed rate.

In gold-exchange standard countries the local currency, in so far as it was not directly convertible into gold, was really a token currency. And as the standard it was not regulated automatically as in this country, where gold could pass freely from a metallic to a currency use and vice versa; but deliberately in such a way as to make convertibility into other currencies possible. And so again we are driven back to the fundamental position that underlying exchange movements the principle of price remains of greatest importance.

## CHAPTER III.

#### THE RETURN TO GOLD.

THE abandonment of the gold standard involved the breakaway from those conditions which have been described. We have seen how underlying the complications of the currency and banking systems which prevailed in gold, standard countries before the war was the dominant fact that with a currency linked to gold through convertibility and in the absense of restrictions to the movement of gold from country to country, the value of gold tended to the same level in all these countries. That in fact meant a certain uniformity as well as stability of price levels. The break from the gold standard followed inevitably through inflationary measures, differing in form in different countries, but leading in all cases to a rise in prices out of all proportion to any fall which might have taken place in the value of gold itself. It is not possible, nor is it necessary, in these pages to discuss either the nature or the extent of the methods which were adopted. It is sufficient to point to the fact itself, that had gold exports still been possible, and prices allowed to rise in consequence of the increase of paper money or of checkable deposits (or of both), the gold stocks of those countries which succumbed to the temptations of war finance, would have flowed rapidly to those other countries, such as the United States and certain of the neutral countries, where the gold standard was still maintained. With inflation as a definite policy therefore, the prohibition of gold exports was the only way in which a complete loss of existing gold stocks might be prevented.

Several results of this may be noticed. (1). In those countries which resorted to inflation, there was no longer any close relationship between prices there and prices in gold-standard countries. Since the level of prices depends largely upon the supply of means of payment, the course of prices depended upon the new conditions governing that supply. There was therefore a close correspondence between the increase in the supply of means of payment and the rise in the price level.

(2). Though the free export of gold was no longer permitted in those inflating countries, a redistribution of gold stocks nevertheless took place. This followed for two reasons. New gold produced during the war found its way for the most part to the United States. At the same time a series of payments in respect of goods, services, and loans, made by belligerent countries to neutral countries involved large transfers of gold to these neutral countries. Thus with a reduced demand for gold in the belligerent countries which had abandoned the gold standard and an increased supply in the gold using countries, a rise in gold prices naturally followed.

(3). In the long run the rate of exchange between two currencies must depend upon the purchasing power of the one currency in its country as compared with the purchasing power of the other in the second country. These respective purchasing powers are expressed in terms of the two price levels. So far, therefore, the principles underlying the foreign exchanges remained unchanged. But with the disparity in price levels as between gold-using and non-gold-using countries, new normal exchange rates might be expected to correspond. closely with the changed relativity of price levels. To some extent, this result was obscured during the war by the policy of "pegging the exchanges," a form of control practised by this country up till 1919. The details of this arrangement need not be considered, though it may be noticed that with the removal of the control exchange rates definitely readjusted themselves to the new conditions.

(4). With exchange rates so divorced from gold parities, those parities had for the time being no more than an historical importance. Nor could one speak of any parity except the parity which depended upon the price levels in two countries, and as these price levels were subject to almost continual alteration, the new "purchasing-power parities" were equally irregular.

To give some colouring to the foregoing summary, it may be convenient to have presented some data showing the extent of the movements to which we have referred. In the first table are shown index numbers of wholesale prices in the United Kingdom, France, Italy, and the United States, monthly averages being selected for the purpose.

-			-	-			
	1919	1914	1916	1918	1920	1922	1924
U.K. (Statist.)	100 .	100	160	226	295	154	164
France (Offic.)	`	100	188	344	506	332	499
Italy (Bachi.)	100	95.1	201.2	409.1	524.3	562.3	585
U.S.(Bradstreet	. <b>)</b> 10 <b>0</b>	96.7	128.4	203°2	197.2	133.7	140'3
It will be	notice	d tha	t whi	le the	rise	in p	rices
was not co	nnne	a to	one o	ora:	iew (	count	ries,
that rise w	ras m	ore n	narked	l in t	hose	coun	tries
which reso	rtea	to w	ar-tim	ie iss	ues	or m	con-
vertible pa	per,	and v	was le	ess m	arked	lon	the
U.S. where	the r	ise rep	oresen	ted th	le dep	precia	tion
of gold for	reas	ons a	lready.	7 give	en.		

The second table shows rates of exchange in London on different centres up to 1921.<sup>1</sup>

•	On Paris. (France.)	On New York. (Dollars.)	On Amsterdam. (Florins.)	On Italy. (Lire.)	On Berlin. (Marks.)
	Max. Min.	Max. Min.	Max. Min.	Max. Min.	Max, Min-
1914	 25'45 28'01	5 12 4 896	12'50 11'75	29'0 25'275	20'70 20'49
1915	 28'20 25'18	5'02 4'56	12 225 10 85	91'55 25'95	
1916	 29'02 27'67	4'787 4'745	11'725 10'50	82'90 29'60	
1917	 27'83 27'17	4'77 4'76	11'835 10'35	42'80 32'75	
1918	 27 65 25 86	4 775 4 761	11.48 9.03	45'5 80'375	
1919	 45'40 25'98	4'767 8'70	11'88 9'87	53 8 90 975	200 88
1920	 68'80 40'95	4 025 8 31	11'50 8'79	107 50'25	<b>970 192</b>
1921	 61'80 51'40	8'96 8'545	11'45 11'98	109'3 81'25	277 218

<sup>1</sup> Taken from Emil Diesel, Exchange Rates of the World, 1914-1921. Vol. I. The effect of pegging operations is clearly seen in the cases of the rates on Paris and New York. The Italian rates were stabilised during the last half of 1918, though the result is not evident from the yearly figures which are quoted.

The following show the rates of exchange in Berlin on Amsterdam and New York.

		Ameter	rdam.	Now	York.
		Max.	Min.	Max.	Min.
1914		190.20	168'80	4.20	4'15
1915	•••	234.20	184.25	5.27	4:57
1916		251.20	217 25	5.28	5 18
1917		315	221	5.23	5.23
1918	•••	364	215 <sup>.</sup> 75		
1919		1151	340.22		
1920		3975	1200	103.75	34.72
1921	•••	10650	1860	310	55.20

The next table gives for the United Kingdom, and the United States, the price indices of the *Economist* and the Bureau of Labour, together with the average actual rate of exchange for the month expressed as a percentage of the pre-war parity, and the purchasing-power parity calculated from the index numbers quoted.

		Economist.	Bur. of Lab.	<b>P.P</b> . <b>P</b> .	Actual Ezchange
1919	Aug.	242	216	89.3	87 6
	Dec.	273	223	81.7	78.4
1920	lune	291	243	83-5	81-1
	Dec.	220	176	81.4	71.4
1921	June	179	142	79°3	78
	Dec.	162	140	86.4	85.3
1922	lune	163	150	92	91° <b>5</b>
	Dec.	158	156	98.7	94.6
1923	June	160	153	95.6	94'8
	Dec.	170	151	88.8	89.5
1924	ane	168	145	86 3	88.0
	Dec.	180	157	87 2	96.4
1925	Mar.	174	161	96.9	98
	May	165.8	155	93.5	99.74

The redistribution of monetary gold through the war period is indicated in the next table, which compares the data for the end of 1919 with the corresponding data for the end of 1913.

		1915.	1919.	Incr. or Decr.
United King	dom	£35'0m.	£119 <sup>.</sup> 9m.	+£74 9m.
France		140.7	142.8	+ 2.1
Italy		48.2	41.2	- 7'0
Germany		58 <sup>.</sup> 5	56 <sup>.</sup> 6	- 1'9
Spain		19 <sup>.</sup> 2	97.0	+ 77.8
Holland		12.6	52.6	+ 40"0
Switz		6.8	18.0	+ 11.2
Sweden	•••	5.7	15.2	+ 9.8
Denmark		4.4	12.2	+ 81
Belgium		10.0	10.6	+ 0.6
Norway		2.6	8.1	+ 55
United State		395.4	572.9	+ 177.5
Canada		27.8	39.2	+ 11.7
Argentina	•••	59.0	74.5	+ 15.5
Australia		38.2	45.9	+ 7.7
Brit. India		25.2	29.6	+ 41
S. Africa		8.2	7.3	- 0.9
N. Zealand		5.3	7.9	+ 2.6
Japan		22.7	112.4	+ 89.7

The significance of these changes will be considered in more detail in subsequent pages; here it may be noticed that the apparently large increase in the gold stock of the United Kingdom is to be explained by the withdrawal of gold from internal circulation to augment the reserves of the Bank of England. The figures cited refer to the gold reserves of the noteissuing banks in the different countries; gold in circulation was not important except in the case of the United Kingdom, the United States and France.

We can pass now to consider under what

conditions those countries with depreciated paper currencies might return to the gold standard as that was accepted before the war. As before that problem presents itself as a problem of prices, and just as the break away from gold prices involved the abandonment of the gold standard, so the return to gold for these countries involves the restoration of a certain relation between prices in these countries and prices in the United States where the gold standard has remained in operation. To effect that end means the adoption of one of two policies. The first is to deflate the inflated currency until the price level in that country is brought back to the level of gold prices in America. The second, which is the only alternative open to countries where inflation has been carried to excess, is to devaluate the inflated currency by the adoption of a new mint parity.

The latter alternative may be examined first. In practice the restoration of the gold standard by devaluation might be accomplished in two ways. First a new currency might be issued and exchanged for the depreciated paper in such a way that one new currency unit would be equivalent to a given number of depreciated currency units. In that way, provided stability of prices was secured by guarding against the over-issue of the new currency, and provided also that the gold reserve of the country remained adequate to meet any demands which might be made upon it, it might be possible to restore the gold standard at the legal weight of gold which had formerly been employed. An alternative procedure to this, which would involve no new currency issue, would be found by making a certain alteration in the weight of gold which was legally defined as the standard.

An example may serve to illustrate this second method. By the coinage Act of 1870, the sovereign in this country weighed 113 grains of pure or fine gold. The dollar in the United States was equivalent to 23.22 grains of pure gold. Consequently the Mint Par of exchange worked out at \$4.86<sup>‡</sup> to the f. Suppose now that in this country, prices were 10 per cent above the level of gold prices as measured in the United States. If then prices in this country were maintained stable at that level, the gold standard might be restored by reducing the weight of gold in the sovereign by 10 per cent, i.e. to 101.7 grains. Under these conditions the new Mint Parity would no longer be quoted at \$4.86<sup>3</sup> but at approximately \$4.38.

The method of restoring the gold standard by means of devaluation is the only method possible to those countries where inflation has carried the price level very far from the level of gold prices. Deflation in such cases would have to be carried to so great lengths that it would be impossible for the economic organisation of the country to avoid disaster. In the case of Germany, the return to gold, it may be noticed, was effected by the issue of a new Rentenmark currency to replace the old depreciated marks to be withdrawn; and the new issue was so made that the pre-war parity would still serve to indicate the relation between the standard weight of gold in Germany and the standard weight in other goldusing countries. In Russia and Austria new standards were adopted along with the substitution of new for old currency. In the same way, devaluation would seem to offer the most satisfactory solution for such countries as France, Belgium and Italy, where prices are more than five times what they were before the war, should these countries decide to return to the gold standard in the near future.

The chief example of the return to gold by the former method of deflation is, of course, to be found in the case of the United Kingdom. The decision to pursue this method dates from the end of 1919, when Mr. Austen Chamberlain, then Chancellor of the Exchequer, intimated in Parliament that a Treasury Minute would be issued embodying the recommendations of the Cunliffe Committee. These recommendations were the result of a special Committee appointed at the beginning of 1918 to enquire into the currency and exchange problems which might be expected to arise during the period of reconstruction after the war, and also to suggest any modification (if any) which should be made in the working of the Bank Act of 1844 and in the functions of the Bank of England.

Two Reports were issued, one in August, 1918,

and the other in December of the following year. Both of these recommended the gold standard as the most satisfactory basis for the currency of the country, with the quite minor difference from the pre-war arrangement that a gold coinage for internal circulation was unnecessary. The chief points of the first (main) Report may be mentioned briefly. (1) The practice of government borrowing, which in this country was a chief factor in the machinery of credit inflation, should be stopped, and national finances so arranged as to make certain the normal balance of the budget. (2) The machinery of credit control which functioned before the war, viz., the Bank Rate acting through the several market rates, "should be kept in working order." (3) The policy of consolidating the gold reserves of the country in the Bank of England should be effectively followed. (4) When the free market for gold is restored, it is advisable that gold for export, either in the form of coin or bullion, should be procurable only from the Bank of England in exchange for notes. In that way, the authorities of the Bank would be provided with greater knowledge of gold movements and to that extent would be the more able to exercise the necessary supervision. (5) The principle of a fixed fiduciary note issue as embodied in the Bank Act of 1844 was endorsed. The proposals (a) for a gold reserve of a prescribed proportion of the total note issue, and (b) for a maximum fiduciary issue with provision that this maximum

might be exceeded on payment of a tax on the amount of the excess, were both examined and rejected.

(6) The question therefore remained as to the amount of the fiduciary issue and the amount of the gold reserve.

"Assuming the restoration of an effective gold standard, and given the conventional standards of banking practice and the customs of the public as regards the use of currency, the amount of legal tender (other than subsidiary coin) which can be kept in circulation, including the currency holdings of the banks and the Banking Department of the Bank of England. will determine itself automatically, since, if the currency becomes redundant, the rate of discount will fall and prices will rise; notes will be presented in exchange for gold for export and the volume of the currency will be reduced pro tanto. If, on the other hand, the supply of currency falls below the current requirements, the rate of discount will rise, prices will fall, gold will be imported, and new notes taken out in exchange for it.

". . . The total circulation being automatically determined, it will follow that the higher the amount fixed for the fiduciary issue the lower will be the amount of the covered issue, and, consequently, of the central gold reserve and vice versa; while, if the fiduciary issue were fixed at a figure which proved to be higher than the total requirements of the country for legal tender currency, the covered issue, and with it the central gold reserve, would disappear altogether. It is clear, therefore, that the amount of the fiduciary issue must be fixed at a figure low enough to make sure, not merely that there will always be some covered issue, but that there will always be a covered issueof sufficiently substantial amount to secure that the covering gold which constitutes the central reserve. never falls so low as to give rise to apprehension as to the stability of the gold reserve."

The practical problem then, so far as the gold reserve was concerned, was to fix on an amount which would neither be too great as to become a needless and in the end a burdensome luxury, nor too small as to endanger the gold reserve The two questions of the fixing of the itself. fiduciary issue and the fixing of the gold reserve were therefore one and the same. But so far as the fiduciary issue was affected, the Committee found it impossible without experience gained during the reconstruction period to fix any adequate figure. Before the war the total of legal tender money in the country, including bank holdings and excluding subsidiary coin, amounted to £180m., of which £18.45m. represented the fiduciary issue. In July, 1918, the total of legal tender was [383m., of which the fiduciary issue amounted to [249m. But in the interval changes had taken place in the habits of the people and in the " conventional standards in regard to banking reserves " that no adequate estimate of the future fiduciary issue could be formed from these data. The Committee therefore approached the problem from the other side by considering what size of gold reserve might be considered adequate for the post-war period and the return to the gold standard. Before the war the total gold holding of the country was estimated at [161.5m., including gold in circulation. The proposals of the Committee foreshadowed that in the future gold would no longer be used for purposes of internal circulation, nor would separate banks maintain a gold reserve for themselves. In short, the entire gold holding of the country would be concentrated in the Bank of England. The recommendation, therefore, was that the fiduciary issue should be fixed ultimately with a view to maintaining a centralised gold reserve of £150m., and that until this reserve had been secured along with "a satisfactory foreign exchange position for at least a year," the fiduciary circulation of the country should be reduced. When reductions were made, it was suggested that the actual maximum of one year should be maintained as the legal maximum of the following year, subject to the reservation that "Section 3 of the Currency and Bank Notes Act, 1914, under which the Bank of England may, with the consent of the Treasury, temporarily issue notes in excess of the legal limit, should be continued in force."

The second Report of the Cunliffe Committee contained no departure from the recommendations of the Interim Report, and in December, 1919, the legal maximum for the fiduciary issue for 1920 was fixed at £320.6m. It may be noticed that while the Reports did not necessarily signify that deflation would be brought about by reducing the total means of payment in the country, it had that result. Reductions in the fiduciary issue, provided these had been made good by increased gold holdings, would have kept the total supply intact. But increased gold holdings could not take place owing to the premium on gold in this country.

The process of deflation may, therefore, be summarised. A definite limit was to be placed on the uncovered issue of Treasury Notes, and issues in excess of this would be covered by Bank of England notes. In that way the Bank would experience a drain on its reserves and would therefore resort to the usual procedure of raising its Rate. That deflation would continue until the price level in this country had been brought into relation with the level of prices in the United States, or until the rate of exchange had returned near to the gold parity. When that position was reached and the position appeared to be a stable one, there would still remain a certain uncovered note circulation, and that residue might be regarded as the normal postwar fiduciary issue which could be added to the fiduciary issue of the Bank of England to be covered by government securities when it was decided to amalgamate the two note issues.

Treasury Notes came to be covered in part by Bank of England notes for the first time in August, 1919, and by the beginning of 1920 the amount of that cover was £4m. The progress of that item can be gathered from the following table, showing the amount of that cover at different dates.

9	Feb., 1921	•••	•••	•••	•••	£19 <sup>∙</sup> 45m.
8	Feb., 1922	•••	•••			19 <sup>-</sup> 45m.
7	Feb., 1923	•••		•••	•••	21 <sup>-</sup> 15m.
6	Feb., 1924	***	•••	4+4	•••	22 45m.
4	Feb., 1925	•••	***	•••	•••	26 95m.

To understand the deflation process in practice it is necessary to take note of the check to the speculative activity of 1919 applied through the raising of the Bank Rate from 5 to 6 per cent on November 6, and again to 7 per cent in April, 1920. This deflation of credit led to a fall in prices and with lower prices Treasury Notes were returned to the banks, and from the banks they passed to the Bank of England. The next stage consisted in the cancelling of these returned notes. The Bank of England passed the notes over to the Currency Note Department, which thereupon demanded that the Treasury should repay some of the advances made to it by the Currency Note Department. This repayment by the Treasury involved a diminution of the " Public Deposits " at the Bank of England and at the same time a decline in the government securities held in the Currency Note Account. Thus this latter item declined from £305m. at the end of 1918 to [248m. at the end of 1924.

At the same time, however, a process of credit deflation was taking place in the United States. In January, 1920, the Federal Reserve rediscount rate for ordinary commercial bills was 6 per cent. In June it was adjusted to 7<sup>2</sup>/<sub>4</sub> per cent, and later to 8 per cent. The resulting fall in prices was

more rapid in the United States than in this country.

· .		<b>U.S.</b>	Bur. of Lab.	U.K. Economist.
May, 1920	•••	•••	247	305
Dec., 1920			176	220
July, 1921	•••	•••	141	178

The actual rate of exchange fell from 79 per cent of parity in May, 1920, to 70.7 per cent in November, rising again to 81.5 per cent in May, 1921, and dropping back to 74.8 per cent in July of the same year. The course of exchange during the succeeding years is given in the following table.

				Pe	rcentage of P	STI
Dec., 1921	•••	•••	 		85 3	
June, 1922			 		91.2	
Dec., 1922	•••	•••	 •••	•••	94 <sup>.</sup> 6	
June, 1923	•••		 		94.8	
Dec., 1923			 		89°5	
June, 1924			 		88'5	
Dec., 1924		·	 		96.4	
Feb., 1925			 	•••	98.0	
May, 1925		•••	 •••		99.74	

The rapid rise during the latter half of 1924 is particularly important and must be considered in relation to the previous fall from the end of 1923; because the chief explanation of this fall is to be found in the "flight from sterling" consequent upon fears of further inflation in this country. One factor in the improvement during 1924 was the return of British funds which had gone abroad during the scare period. Three other influences were also important. The fall in the New York rate of discount from  $4\frac{1}{2}$ per cent to  $3\frac{1}{2}$  per cent in June, 1924, and to 3 per cent in August, while the Bank Rate in

England was maintained at 4 per cent, provided an inducement for the transfer of floating balances to London, where they not merely earned a higher rate of interest but also stood to gain from any appreciation of the sterling exchange. For example, if \$4,340 of liquid balances had been transferred to London in July, 1924, they would have exchanged for roughly f1,000 in London; in January, 1925, that [1,000 could have been retransferred to New York and converted into \$4.750 in addition to the higher interest which would have been obtained in London as compared with the rate obtainable in New York. Thus, in addition to the inducement of higher interest, there was a certain speculative element due to the expectation that this country would return to the gold standard. That expectation was not unconnected with the fact that the Gold and Silver Export Control Act of 1920 expired at the end of 1925, when it would have to be renewed or else allowed to lapse. Only in the event of the country deciding to restore the gold standard could the latter alternative be adopted. A third factor was the permanent outflow of American funds for investment abroad and particularly in Europe, under the influence doubtless of the Dawes Scheme. According to one estimate 1 foreign borrowings in New York reached a total of \$1.107m. as compared with \$331m. in 1920.

<sup>a</sup> Cf. Economist, Jan. 24, 1925. The National City Bank of New York gives the figure as \$1,200m.

The heaviest period of these borrowings was from October, and it may be noticed that it was from October that the rise in sterling was most conspicuous. Thus the sterling exchange rose from 92.1 per cent of parity in that month to 96.4 per cent in December and 98 per cent in February of the present year.

The change in the course of gold movements in the United States is worth noticing in this connection. In 1923, net gold imports amounted to \$294m.; and in 1924 to \$258m. For the first five months of 1925, gold exports exceeded imports by \$148m.

The next stage in the process of the return to gold by this country was marked by the appointment in June, 1924, of a Committee to consider the question of the amalgamation of the note issues of the Currency Note Account and of the Bank of England. This Committee presented its Report in February, 1925, though the first public intimation of its character was given only in the Budget Speech of the Chancellor of the Exchequer in April. In the course of the Committee's investigations the proposals for a devalued sovereign and for a new commodity standard to replace the gold standard were both considered and rejected, the second on the ground of impracticability, the first on the ground that the rise in the rate of exchange on New York made a return to gold on the old basis possible. The question therefore which was chiefly discussed, was the arrangements which should be

made for affecting a return to the gold standard on the basis of the old pre-war parity.

When the Committee was appointed, the sterling exchange stood some 12 per cent below parity, and that rate corresponded "on the surface" fairly accurately with the purchasing power parity as measured by price index numbers in this country and in the United States; though a warning was added against too rigid an interpretation of purchasing power parities calculated in this way. Any improvement therefore in the exchanges in the direction of the gold parity, apart from psychological and speculative factors, would involve either a fall in prices in this country to the United States level, or a rise in the price level in the United States to the British level, of a combination of both. In fact, such a readjustment did take place. The index numbers quoted below are those of the Federal Reserve Board.

June, 1924	•••	U.B. 154	U.K. 174	P.P.P. 88'5	Actual Exch, 88'6	(Percent. of Parity.)
July		156	174	89.6	89 7	
Aug.	•••	158	173	91.3	92.4	
Sept.		156	172	90.7	91.6	
Oct.	•••	159	175	90.9	92.1	
Nov.	•••	160	176	90.9	94.6	
Dec.	•••	165	177	93.2	96.4	
Jan., 1925		168	178	94 3°	97 9	
Feb.		167	178	93.8	98 0	

It was this readjustment, in fact, which brought the Committee to a decision. At the beginning of its enquiry it was agreed "that the return to parity and the resumption of the free gold market, though it ought not to be much longer delayed, could not be regarded as a matter of such extreme urgency as to justify a credit policy calculated to bring down domestic prices if the same practical result could reasonably be expected to be attained within a very few months by a policy designed merely to prevent them from rising concurrently with a rise elsewhere." With the readjustment, the two price levels were not wholly brought together, but the discrepancy was reduced and a further readjustment still remained necessary to complete the process.

Two other sets of considerations influenced the decision of the Committee. There was the fact that the upward course of the sterling exchange had been due in part to psychological and speculative factors. To what extent these factors were important cannot be estimated quantitatively, though they may be known to exist. But the fact that they were present indicated that any decision to keep sterling free from any attachment to gold would be followed by a sharp and disturbing set-back to the rate of exchange. Consequently "to allow the exchange to fall back now, with the certainty of having later on to raise it again would be a shortsighted policy, injurious to trade and industry."

The second consideration was the fact that the return to gold was being effected by other countries and by South Africa, Holland and Switzerland in particular. Consequently basing future policy on the expectation—which the Committee considered to be reasonable—that financial conditions in America were likely to remain stable, the risk attached to the re-opening of the gold market was reduced.

Assuming that the price index numbers provide a satisfactory basis for the calculation of purchasing power parities, it remained clear that the actual rate of exchange ruling since the beginning of the year represented an over-valued pound. Consequently, if that rate was to be maintained, some readjustment of prices in this country (assuming no change took place in American prices) would be necessary. But once that first readjustment was completed, a further readjustment of 11 per cent more would suffice to restore and maintain the gold parity. The main recommendation of the Committee was therefore in favour of an early return to the gold standard, in which case the embargo on gold exports should be allowed to lapse at the end of 1925. In the meantime the Bank of England might be enabled to provide gold for export, and that should be done whenever the actual exchange stood at a figure below the new gold export point. In that way the necessary readjustment of prices would be effected since the Bank would make good "any consequential drafts upon the reserve in the Banking Department in accordance with traditional practice."

The recommendations of the Committee were endorsed by the Chancellor and passed through

Parliament in the form of the Gold Standard Act, 1925. And it is curious to notice that the Act which restored the gold standard should be one which relieved the Bank of England from the obligation to pay any of its notes in gold coin. In the same way, the subsection of the Currency and Bank Notes Act, 1914, which enabled a holder of a currency note to claim payment in gold at the full face value of the note, was repealed. Convertibility was to take a new form, new at any rate in practice if not in theory. This new form of convertibility was defined in Section 2 of the Act.

"So long as the preceding subsection remains in force the Bank of England shall be bound to sell to any person who makes a demand in that behalf at the head office of the Bank during the office hours of the Bank, and pays the purchase price in any legal tender, gold bullion at the price of three pounds, seventeen shillings and tenpence halfpenny per ounce troy of gold of the standard of fineness prescribed for gold coin by the Coinage Act, 1870, but only in the form of bars containing approximately four hundred ounces troy of fine gold."

Thus, in practice, gold can only be withdrawn in lots to the minimum value of roughly  $\int I,700$ . It may be noticed also that this plan was identical with the proposal submitted by Ricardo first in 1811 that the Bank should deliver uncoined bullion in exchange for payment in legal tender in lots of not less than 20 fine ounces.

With the passing of this Act, moreover, the right to take gold bullion to the Mint for coinage

purposes was restricted to the Bank of England. That provision was really technical in character, since under the Act of 1844 any individual could take bullion to the Bank of England and obtain its equivalent value in notes at the rate of  $\int_{3}$  17s. 9d. per standard ounce. The sole difference, therefore, was that whereas before the war gold sovereigns could be obtained from the Bank in exchange for bullion, now only banknotes would be received.

Finally Section 2 of the Act of 1925 declared that :

"any money required for the purpose of exchange operations in connection with the return to a gold standard may be raised within two years after the passing of this Act in such manner as the Treasury think fit, and for that purpose they may create and issue, either within or without the United Kingdom and either in British or in any other currency, such securities bearing such rate of interest and subject to such conditions as to repayment, redemption or otherwise as they think fit, and may guarantee in such manner and on such terms and conditions as they think proper the payment of interest and principal of any loan which may be raised for such purpose as aforesaid."

The securities so issued were to be redeemed within two years from their date of issue. Two such loans were arranged; the first with the Federal Reserve Board, and the second with Messrs. J. P. Morgan, for amounts of \$200m. and \$100m. For the Federal Reserve Loan interest is paid only in respect of any part of the loan which may be used, and for the other a

commission of  $1\frac{1}{4}$  per cent for the first year and  $\frac{5}{8}$  per cent for the second year will be paid whether or not the loan is actually used. Interest on the used portions of the loan was at the rate of one per cent above the Federal Reserve discount rate with a minimum of four per cent and a maximum of six per cent, or at the discount rate when the discount rate of the Federal Reserve Board exceeded the latter figure.

The purpose of these arrangements was to enable the exchange to be maintained in the event of a reaction setting in. And in order to prevent any fall in the exchange on account of debt repayment to the United States, it was announced in the Budget Speech that \$166m. had been quietly accumulated by the Treasury or an amount sufficient to cover the next two instalments due to the United States Government.

These arrangements have been subjected to several forms of criticism. (1) In the accumulation of the \$166m. for the payment of the two instalments on the debt to the United States, the Treasury must have bought at rates below those which now rule in the exchange market, and to that extent incurred unnecessary expense. It is quite impossible to weight the precise importance of this charge, first because it is not known at what price the dollars were bought, and also because it is quite an hypothetical enquiry to consider what the precise difference would have been on balance had no such purchases been made. (2) The Gold Standard Act placed no limit to the amount which the Treasury might borrow for the maintenance of the exchange. This may, it is true, embody an undesirable financial principle; but it is doubtful whether any particular danger may be expected in the case in question.

(3) More important is the criticism that in arranging foreign credits the Treasury ignored the opinion of the Currency Committee, which stated definitely that " such assistance, if it took the form of foreign credits to be used on any considerable scale to mitigate the effect of the policy upon credit conditions in the United Kingdom, would really serve to counteract the very forces on the operation of which we rely for its success." It is true that the Committee also recognised that the knowledge that such credits were available would tend to discourage any speculative movement which might otherwise have depressed the exchange considerably below the gold parity, but it was upon the usual machinery of the Bank Rate that chief reliance was placed. Thus Section 30 of the Report reads as follows :

"We believe that the existing gold reserves are amply sufficient . . . and that a conviction that there will be no hesitation in using them, even though this may involve a temporary increase in Bank Rate, will go far to obviate the danger. . . If, however, it is thought necessary to make assurance doubly sure by the provision of a gold credit, we feel strongly that recourse should not be made to it unless and until substantial gold exports have taken place and are already producing their normal effects on the monetary situation at home, and in the event of the credit being actually drawn upon, the amount drawn should, until it has been repaid, be treated from the point of view of the Bank of England's monetary policy as equivalent to a corresponding loss from its own reserves."

Moreover, it was clearly stated in the Budget Speech that other methods would be adopted in priority. Unless in fact these other methods are so used before resort is had to the foreign credits which have been arranged, the price adjustment necessary in this country, both to maintain the exchange and to restore parity, would not likely take place. One qualification, however, is necessary. If during the remainder of the year British prices remained stable, while United States prices rose by the same amount that British prices would otherwise have to fall, equilibrium would be restored without the use of a higher Bank Rate. But that is a matter for the future.

(4) It has been alleged that even assuming the desirability of the return to the gold standard, the "favourable moment?" for that return had not yet arrived. This is probably the most important objection that has been raised. It may be argued first of all on the grounds of the relativity of price levels, which would seem to indicate an overvalued pound. So far as this objection is concerned, there is the quite valid reply of the Currency Committee that it would be
folly to allow the exchange to fall back to a low level, as it would if the expectation of the return to gold remained unfulfilled. And, as already pointed out, it is always difficult to say with what degree of accuracy comparative price levels can be used for any calculation of this kind. At first, when the embargo on gold exports was removed, a considerable outflow was recorded, but that movement has been more than made good by purchases of gold by the Bank of England. The real testing period must come during the autumn months, when the "autumnal drain" due to payments for grain and cotton imports should be felt.

Another factor in the question concerns the relation of sheltered to unsheltered trades, the latter being defined for the present purpose as those which are subject to foreign competition. It is well known that it is precisely in these latter export trades that the depression is most acutely felt. Now any appreciation of the sterling exchange may be regarded as a definite advantage to those who depend for raw materials on abroad, for with the rise in the exchange foodstuffs and raw material imports should be cheapened. But with the exception of the cotton industry, the export industries of this country do not stand to gain much from any rise in the exchange in this way. On the other hand, if such imports are cheapened through the rise in sterling, that same rise makes the selling position of the export trades still more difficult. Prices for these trades are determined by competition in the world market, and consequently the rise in sterling means that sales abroad fetch lower prices in terms of the local currency of this country. The position with an overvalued pound therefore is that imports are encouraged and exports discouraged, and in that way a definite tendency must set in to cause the balance of payments to be adverse to this country. The real danger is that the fall in the exchange from this cause may coincide with the seasonal movement of the autumn months.

Two counteracting influences may, however, be noticed. So long as short money rates in London stand at a level above similar rates in New York, floating balances are likely to be transferred to and maintained in London. The second influence is the obstacles put in the way of the raising of foreign loans in the London market. During 1924 these loans were discouraged under pressure from the Bank of England. It is true that foreign capital issues in London during 1924 were higher than those in 1923, but the increase was'in foreign government loans for reconstruction purposes. For other than government purposes, the total for the year was maintained at a low level. And while it is also true that the nature of the loan makes no material difference to the effect on the exchanges, it has to be remembered that, apart from the embargo, foreign loans would have been much larger than they actually

were. The following table shows the estimates of the *Economist*.

NEW CAPITAL ISSUES IN LONDON.

1919. Foreign Countries.		1919.	1918.	1922-	1923.	1924.	1925. (First six
Govt Other	• 	89 6m. 83 8m.	\$26'9m. 85'9m.	414'8m. 41'0m.	£26'5m. 18'8m.	£40°6m. 11°8m.	5'2m.
Total		99'9m.	81°4m.	55'Bm.	44'8m.	<b>\$2</b> 4m.	5 2m.

It might be that the continuance of this embargo was still required, but that again depends upon whether the authorities propose to maintain the exchanges by artificial means or whether they propose to place chief reliance on the Bank Rate to check the drain of gold and effect the necessary contraction of prices. Provided the latter policy is pursued, the existence of a free gold market serves to check any excessive lending abroad, since any excess leads to a drain on the gold reserves and so acts on the credit situation in the usual way.

For the immediate future much must depend upon American policy both as regards prices and money rates. Should the expectation, which is now general, that United States prices will rise during the succeeding months prove correct, the position so far as this country is concerned would be considerably improved. On the other hand, should a dear money policy be adopted in New York, the difficulties which now exist would be considerably increased.

### CHAPTER IV.

# THE EFFICIENCY OF THE GOLD STANDARD WITH A VIEW TO THE FUTURE.

In this chapter an attempt will be made to consider the probable future position of gold in relation to its efficiency as a standard of value; and since the best view of the future is often obtained from a glance at the past, we shall begin the enquiry with a brief survey of the value of gold in earlier periods. That survey need not be taken further back than the nineteenth century, during which period the gold standard in its pre-war forms came more and more into general use.

This country was the first to lead the way by its formal adoption in 1816 of the single gold standard which in fact had really been in operation for some time. It is true that during the Napoleonic Wars the country had made use of inconvertible paper; but the coinage returns from the reign of William III. show that the quantity of gold coined was increasing while that of silver was steadily declining. The reason for that movement was simply that the market ratio of gold to silver was more favourable to silver than the mint ratio. That latter ratio was 1:15.21; i.e. 15.21 ounces of silver were worth I ounce of gold, according to the ratio established by mint law. The market ratio on the other hand was somewhere about 1:14.5, so that silver was worth more as metal than as coin in this country, and for that reason tended to pass out of circulation.

In 1819, provision was made for the resumption of convertibility, which was to take place in 1823; but the Bank, finding that it could undertake this responsibility at an earlier date, began to do so in 1821. From that date to about 1848, the course of gold prices was downward, for although gold production showed a certain increase over the period, that increase was insufficient to meet the needs of an expanding population with a growing volume of trade.

The second period lies between 1848 and the early seventies, and coincides with the new gold discoveries in Australia and America. Taking the first fifty years of the century, the total world production of gold was estimated at 1257m; for the third quarter of the century alone that production amounted to 1625m. So far as this country was concerned it was also the period when the extension of credit facilities introduced new economies in the use of gold and to that extent the new gold supplies were enabled to exercise a greater influence on gold prices. But in point of fact there were other

modifying influences. Between 1848 and 1872 gold production according to Soetbeer amounted to f604m. Over the same period the total gold coined at the mints of England, France, the United States and Sydney amounted to £598m., and of that total [260m. represented the share of France. France, it must be remembered, was at this time a double-standard country, with a mint ratio of gold to silver of 1:15<sup>1</sup>, which had been adopted since 1785. Now so long as the market ratio of the two metals corresponded closely to this legal ratio, no great movement of the metals was likely to take place in France. Soetbeer's calculations indicated that up to 1850, the average yearly movements in the market ratio fluctuated between 15.95:1 and 15.62:1, and that the ratio was fairly stable. After 1848, however, the price of silver rose in consequence of the new gold discoveries. From 1831 to 1850 the average price of silver had been 593d.; for the twenty years ending 1870 the average price was 61<sup>1</sup>/<sub>4</sub>d. With the cheapening of gold it became definitely profitable for France to export silver for foreign payments and to absorb gold for internal use. And so we find over the period, large gold imports and silver exports, together with a heavy increase in the gold reserve of the Bank of France and a heavy decline in its silver reserve. This movement was not confined to France, but was in a less degree common to other double-standard countries. But the increased demand for gold brought about in this

way acted as a certain check to the depreciation, which would otherwise have been more marked. The same general effect was produced by the new gold demand for India and the East. These eastern countries had formerly exported gold in exchange for silver, which they hoarded in large quantities; but from this time onward they exercised a growing demand for gold as well as silver and absorbed large quantities of both metals from the West.

The third period falls between 1873 and 1896. Over that period the course of gold prices was downward, due in part to the falling off in gold production and in part to the increased demand consequent upon the adoption of the gold standard by Germany, the United States, Scandinavia, France and other countries. And finally, the fourth period may be taken as coinciding with the gold discoveries in South Africa at the end of the century and during the present century. That increased production of gold was on a particularly large and rapid scale. Thus, whereas the world's gold production in 1882 was estimated at 153 tons, in 1890 it was 177 tons and in 1910 it was 712 tons. The general effect of these new supplies was to precipitate a general rise in gold prices.

It has not been possible in the space to undertake any quantitative comparison of the rates of increase in gold production, population and the volume of trade, nor to deal statistically with the other relevant factors on the monetary side, such as the growth of deposit banking and changes in the velocity of circulation of the different means of payment. What we are here concerned with is the actual extent of the changes in price levels over the main periods which have been distinguished. If we take for that purpose the index numbers of Jevons and Sauerbeck, we get the following results. The index quoted is the average for the five-year periods.

Period.		Index.	Percentage Change.
1821-1825	•••	154	- 259
1846-1850	•••	116))	4.5 /0
1871–1875		138 []	+ 20%
1894	•••	82 1	- 40%
1906-1910	•••	102 ' {	+ 25%

Thus it is abundantly evident that gold prices are capable of definite movements coincident with changes in gold production, and though these movements have been small relatively to those price movements which have been commonly experienced since 1914, the fact of their existence points to a certain practical weakness in the gold standard as we knew it before the war. How far these pre-war movements had reactions within the different countries which experienced them, and how far these reactions affected the distribution of real resources in communities and affected economic welfare in general, opens up a difficult problem which cannot be discussed here. It must at any rate be clear that there is no necessarily close connection between the gold requirements of the world for monetary purposes and the fresh supplies of the metal The Efficiency of the Gold Standard. 75

which are made available for that use. It is true that rising prices consequent upon great gold discoveries will tend to react on the profitableness of gold-mining, while falling prices will tend to encourage fresh developments; but that is only one of many influences which in practice are important. Gold discoveries in the past often came in rushes and were followed by periods of quieter growth or rapid decline.

On the side of demand changes were no less common. So far as the monetary use of gold is concerned, all the most important commercial countries before the war had adopted the gold standard, so that important changes consequent upon the adoption of the standard by other countries were hardly to be expected. The demand for gold by the East on the other hand was always uncertain. Frequently that demand was useful in providing an outlet for redundant supplies of the metal when production was increasing rapidly. But the outbreak of famine or plague in these quarters often led to the unloading of hoards and thereby tended to cause a fall in the value of gold in the West. So far as the future is concerned, it may not be unreasonable to expect that any improvements in the East which diminish the risk of such occurrences will at the same time lessen the uncertainty of the demand for gold on that side.

The demand for gold for industrial purposes has been more regular, and throughout the century has shown a steady increase. During

the last quarter of the century the increase in the industrial consumption was much slower, as might be expected, owing to the rise in the value of the metal. In the decade 1871-80 the amount consumed in this way was £115m.; in the two following decades it was £121m. and £128m. For the first two decades of the present century the amount may be given as £185m. and £210m. respectively.

It may be useful to compare the estimates of Mr. Kitchin and the U.S. Statistical Abstract of the world's monetary gold stock.

		Kitchin.	U.S. Statist. Abst.
1840	•••	···· ·	£197m.
184 <b>3</b>	•••	£200m.	
1850		—	230m.
1858		400m.	
1860			433m.
1870	•••	—	556m.
1880			643m.
1890			720m.
1894		800m.	
1900		··· ·	989m.
1910	•••		1,454m.
1913		1,600m.	· ·
1915		· · · · · · · · · · · · · · · · · · ·	1,735m.
1919			1,928m.
1920		<b>1,9</b> 50m.	·

It is important to consider in what way the world's monetary gold stock was distributed before the war, in order that some comparison may be made with the present position. In that connection all we can put forward with any degree of accuracy must refer to the gold reserves of the banks of the different countries. The monetary gold stock of the world on the basis The Efficiency of the Gold Standard. 77

of the reserves of the banks of the different countries at the end of 1913 has been estimated at (1,190m). That figure includes gold in circulation in the United States, but not for other countries. The difference between that figure and Mr. Kitchin's figure for the total gold stock of the world may be taken to represent the gold in circulation in the different countries. The following table shows the distribution of the (1,190m). Alongside are placed the estimates given in the Statist for the gold reserves at the end of 1924.

		1918	1924.
France	•	<b>£</b> 141m.	£146m.
Russia	•••	179m.	15m.
U.K	•••	35m.	156m.
Germany	•••	58m.	37m.
Total Europe	***	586m.	625m.
U.S.A		395m.	840m.
Argentina	•••	59m.	90m.
Canada		28m.	33m.
Total America		532m.	976m.
Total Asia		48m.	128m.
Total Africa	•••	10mi.	15m.
<b>Total Australasia</b>	•••	43m.	33m,
GRAND TOTAL		1,190m.	1,777m.

These latter figures, of course, must be regarded as purely tentative estimates. Even so they serve to show that while the total gold reserves of the world increased by about 50% between 1913 and 1924, that increase was considerably greater than the increase in the world's monetary gold stocks during the same period. The explanation for the discrepancy is to be found in the withdrawal of gold from internal circulation in many countries to augment the reserves of the banks of issue. Thus the gold stock of this country appears to have been considerably increased, but the increase was almost wholly due to the replacement of sovereigns and halfsovereigns by currency notes.

It will be seen that while the total gold stock of Europe increased, that of America increased much more rapidly. The gold stock of the United States in 1913 represented 25% of the world's stock, and 40% in 1924. The following table shows the gold holding of the United States.

Coin in	Bullion in	Coin in nat.	Coin in	Total gold
Treasury.	Treasury.	banks.	circul.	stock.
\$988m.	\$304m.	\$233m.	\$381m.	\$1,905m.
776	1,855	65	469	3,165
237	2,141	90 215	473 397	2,942
	Coin in Treasury. \$988m. 776 237 333	Coin in Treasury. Bullion in Treasury. \$988m. \$304m. 776 1,855 237 2,141 333 3,303	Coin in Treasury. Bullion in Treasury. Coin in nat. banks.   \$988m. \$304m. \$233m.   776 1,855 65   237 2,141 90   333 3.303 215	Coin in Treasury. Bullion in Treasury. Coin in nat. banks. Coin in oircul.   \$988m. \$304m. \$233m. \$381m.   776 1,855 65 469   237 2,141 90 473   333 3.303 215 397

Between 1913 and the end of 1923 gold imports into the United States exceeded gold exports by \$1,963m., whereas the total gold stock increased by \$2,342m. Thus, while the domestic production of gold was one factor, the bulk of the increased gold holding of the United States came from abroad.

The gold reserves of Europe, which in 1913 represented roughly 50% of the world's reserves, made up 35% in 1924. But the redistribution of gold within Europe and in favour of those countries which remained neutral throughout the war should also be noticed.

### The Efficiency of the Gold Standard.

			Dec., 1918.	Dec., 1924.
Denmark	•••		£4'4m.	£11 <sup>.</sup> 5m.
Holland	•••		12 6m.	41 7m.
Norway		•••	2.6m.	8 <sup>.</sup> 1m.
Spain		•••	19 <sup>.</sup> 2m.	100 <sup>-5</sup> m.
Sweden			5.7m.	13 <sup>.</sup> 0ma,
Switzerland			6'8m.	20 1m.
TOTAL			51'3m.	194'9m.

Thus the reserves of these six countries increased by 280% between the two years.

The next point is to consider the relation of these reserves to the note circulations of the different countries. In 1913, the total note circulation of the countries of the world amounted to  $\int 1,778$  m., so that the gold reserves of that year represented 66.8% of the note circulation. In 1924, the total note circulation was  $\int 3,213$  m. —or an increase of 80% over pre-war—with a gold reserve of 55.3%<sup>1</sup>. Taking separate countries, we find that in the majority of cases the ratio had fallen considerably, but there were some in which the reverse was true. The next table indicates the extent of the increases.

RATIO OF GOLD RESERVES TO NOTE CIRCULATION.

				1918.	1924.
U.S.		•••	•••	74.7%	97.1%
Greece		•••	•••	10.3%	41.7%
Holland	•••			48.4%	53.8%
Portugal	•••		<i></i>	9.1%	10.3 %
Spain	•••			24.9%	73·1%
Sweden	•••			46.5%	47.4%
Switzerla	ba		•••	54.1%	56.1%
Japan	•••	•••		56.0%	63.7%
S. Africa	•••		•••	35.6%	97.8%
Australia	•••	÷.		37.1%	43.7%

<sup>1</sup> Statist, May, 1925 (Banking number).

79

In this country the proportion had fallen from 118.1% to 37.5%; in France from 61.5% to 35.9%; in Germany from 45.1% to 19.4%; in Italy from 68.9% to 25.2%; and in Belgium from 23.6% to 14.2%. From these data it might be expected that with a general restoration of the gold standard, a considerable redistribution of gold stocks would be necessary. The last mentioned countries in fact might be expected to provide the chief future demand for gold. If, for purposes of illustration, we take the note circulation of France, Belgium, Germany and Italy as at the end of 1924, and assume that gold reserves of pre-war proportions were desired, the gold stocks of these countries would require to be increased by roughly f220m. On the other hand, the United States might lose something like [200m. of its present gold holding without experiencing any credit stringency. Calculations of this kind, of course, cannot be made to prove much, since changes have occurred in so many of the relevant factors since 1913. But it does seem reasonable to conclude that the existing world gold stocks, provided these are properly organised, are sufficient to maintain prices at about their present gold level. Moreover, it is possible to maintain the gold-exchange standard without having large internal stocks of gold in those countries which adopt the arrangement. Under this arrangement, the gold reserves may take the form of gold balances held abroad, perhaps in the United States.

The future course of gold prices is a matter of pure conjecture. The main relevant facts may, however, be noticed. Cassel has estimated, on the basis of the sixty years from 1850, that the maintenance of a stable level of gold prices required an annual addition to the existing monetary gold stock of the world of 3 per cent of that stock. Whether or not the annual demand for gold in years to come will be similar to the pre-war demand must depend, among other things, upon the increase in population and the increase in wealth, together with any economies in the use of gold resulting from changes in the monetary habits of the people. Lehfeldt<sup>1</sup>, put the pre-war annual increase of numbers at between 11 and 2%; and the increase in production at the rate of 3 to  $3\frac{1}{2}$ % per annum. On that basis, the annual growth of wealth might be referred in about equal proportions to the increase of numbers and the increase in individual wealth.

It is not improbable that the rate of natural increase of population (at least in Western countries) will during the present century show a decline; and it would not be valid to expect of the twentieth century that individual wealth should increase at the same rate as that which occurred in the nineteenth. For the future rate of increase of numbers (though this cannot be regarded as constant) Lehfeldt suggests \*

81

<sup>&</sup>lt;sup>2</sup> Gold, Prices, and the Witwatersrand, ch. II.

Restoration of the World's Currencies, pp. 138-139.

that "it seems unlikely that even in the part of the world occupied by European races, the increase will exceed  $\frac{3}{4}$  per cent." Furthermore, it is unlikely that gold will enter into circulation on the scale of pre-war times; while fresh economies in the monetary use may follow from the consolidation of reserves or of other arrangements which permit of smaller reserves. These influences would tend to mitigate the effect of any possible shortage in the gold supply. On the assumption that no such changes took place in the monetary systems, Lehfeldt concludes that "an increase of 2 per cent per annum in the monetary stock of gold should serve to keep its value constant."

The demand for gold for the arts and for the East is always an uncertain factor. Thus India's gold consumption dropped from £20m. in 1917 to f0.1m. in 1918, rose to f29.6m. in 1919, and fell to £3.5m. and £0.9m. in the two succeeding years. In 1922 it recovered to £26.6m. The amount of gold used for industrial purposes as we have seen is much less irregular in its movements, but still uncertain. In 1912 the U.S. Mint estimate of the world's industrial consumption of gold was £25.6m., with an average of £24m. for the three years 1910-12. Of that latter amount the United States was responsible for f.6m. For the years 1911-15 the average for the United States was £7.1; for 1919-20 it was £11m., and for 1921-23, £6.8m. In 1922-1923 the world's industrial consumption averaged The Efficiency of the Gold Standard. 83

 $\pounds$ 31.4m. A world industrial consumption under normal conditions of  $\pounds$ 30m. would not therefore be unreasonable, though the figure would increase during the century.

From Kitchin's figures (see Dict. of Pol. Econ.) on the basis of the 85 years ending 1919,  $56\frac{1}{2}$ % of the world's gold production was added to the stock of gold money. Taking a conservative view, and accepting Lehfeldt's figure of 2% (above) we might conclude that an annual gold output of 4% of the existing monetary stock was necessary. With a present gold stock of  $\pounds 2,100$ m., that would mean an annual gold production of  $\pounds 84$ m. Since 1917, however, the actual gold production has been well below that figure. Gold production since 1919, according to the U.S. Mint Report for 1924, has been as follows :—

1919	•••	£75.2m.	
1920	•••	68'3m.	
1921		67.9m.	
1922	•••	65°6m.	
1923	•••	75 4m.	
1924	•••	79.0m.	(Mr. Kitchin's estimate for 1924.)

It is too soon to form an opinion as to whether the improvement in 1923 and 1924 has been merely temporary or whether it indicated a normal post-war output. Different authorities have expressed the view that for some time gold production will decline. The Report of the Joint Committee set up by the U.S. Department of the Interior in 1918 to study the gold situation reported in the following year, and expressed the opinion that "the future of gold production is problematical. The gold output of the world seems to have passed its zenith and to be on the decline." But the cautious addition was made that "it is unwise to predict that important discoveries of new deposits will not be made."<sup>1</sup> In the same way, Mr. Kitchin holds to the expectation of a diminishing gold output falling from  $f_{79m.}$  in 1924 to  $f_{74m.}$  in 1930. Assuming that the same rate of decrease continued during the two succeeding decades, gold production would be  $f_{67m.}$  in 1940 and  $f_{59\frac{1}{2}m.}$  in 1950.

Dr. Gregory<sup>2</sup> has based certain tentative calculations on the assumption that the note issue of the world at gold parity value must increase at the rate of 3 per cent per annum and that a gold reserve of 50 per cent is maintained against that note issue. The conclusion which is reached on this method is that "by 1937 the gold output and the addition to required reserves would about balance : before that date there would be a surplus available for industrial uses and the East, without prices falling or reserve ratios declining; after that date either consumption must decline, or reserve ratios alter, or production must increase." Other things remaining the same therefore, "the figures suggest that there may be some rise of prices in the immediate future, followed by a fall in about a decade."

<sup>1</sup> Op. Git., p. 20.

\* The Return to Gold, pp. 58-9.

An alternative method is to compare, on the basis of Kitchin's estimates of future production, the world's gold stock in the future with estimates of what the required stock would have to be in order to keep the value of gold stable. If we assume that in 1921 the world's monetary gold stock was  $\pounds 2,000$  m., and assume also that one-half of the annual production is added to that stock, the total stock would be  $\pounds 2,375$  m. in 1931,  $\pounds 2,723$  m. in 1941 and  $\pounds 3,033$  m. in 1951.

The following table shows the required gold stock (1) assuming that an annual addition of 3% of the existing stock is required; (2) that an annual addition of  $2\frac{1}{2}\%$  is required; and (3) that after 1930 the annual addition is 2%. The basis for the calculation will be taken as  $f_{1,000m}$ . for the world's gold stock<sup>1</sup> in 1901.

#### REQUIRED GOLD STOCK.

		(1)	(2)	(8)
1901	•••	<b>£1,000m</b> .	£1,000m.	
1911		1,343m.	1,281m.	
1921	•••	1,803m.	1,640m.	<b>£1,640m</b> .
1931	•••	2,420m.	2,092m	2,000m.
1941	•••	3.250m.	2.671m.	2,440m.
1951		4,365m.	3,409m.	2,970m.

It is clear then that much must depend upon the future gold requirements for stable prices. If the required increase to the existing stock of gold continues at the rate of 3 per cent per annum, the probable actual gold stock should exceed the required stock till about 1933, after which, on the above assumptions, a fall in gold prices might begin to make itself felt. If the required

<sup>1</sup> Both actual and required.

addition should be  $2\frac{1}{2}$  per cent per annum, the turning point might be about 1943. And if a 2 per cent annual increase proved sufficient, no fall in gold prices in the near future need be expected. On the whole it would seem as if some point between the first two dates would be most reasonable.

In conclusion there is a further point. Two schools of monetary theorists have made their appearance since the close of the war. On the one side are ranged those who regard the return to the gold standard as the best means of attaining lasting stability in exchange-rates and also of preventing those great fluctuations in price levels which were experienced under the regime of paper standards and inflation. On the other side are ranged those who point to the difficulties in the way of a return to gold, especially in countries where price-levels are considerably removed from the level of gold prices; and who propose a system of stabilisation to be effected by regulating the supply of means of payment with a view to maintaining stable price-levels.

Too often it is assumed that in the issue between the gold standardists and those who advocate a "managed" paper currency system, the idea of management is confined to the latter. This is not so. It may equally be that it is necessary to exercise some management over the gold standard once it is generally reestablished. Thus in the Genoa resolutions on currency in 1922, we find Resolution 9 advocating an international convention which should have for its purpose the co-ordinating of the demand for gold with a view to avoiding any unnecessary scramble for reserves. If competition of this nature became keen, a rise in the value of gold might well be expected, even though that rise was unnecessary. To avoid this, management might take the form of the introduction of the gold-exchange standard in most countries with the exception of a few "suitable centres" such as the United States and this country where the gold market would be quite free. In those countries which adopted the arrangement, the local currency would not be convertible into gold, but convertible into other currencies at parity; and instead of maintaining large gold reserves which would be necessary if the local currency was directly convertible into gold, these countries might hold reserves for the most part in the form of bankbalances in gold-standard countries and in foreign bills. Such an arrangement would involve very considerable economies in the use of gold, and would tend to prevent " undue fluctuations in the purchasing-power of gold." But it would also require for its success " the practice of continuous co-operation among Central banks of issue, or banks regulating the credit policy of the several countries." The objection that if we go this length we need not employ gold at all is one which must ultimately be met

on practical grounds. The days of enlightenment have not yet become sufficiently enlightened that we can trust to a paper standard alone. To that extent the gold standard presents advantages; not without drawbacks, but attended with fewer risks.

CHECKED

### MONEY: Its Connection with Rising and Falling Prices.

By EDWIN CANNAN, M.A., LL.D., Professor of Political Economy in the University of London. Fourth Edition. The latter portion has been entirely re-written and much new matter added. Crown 8vo. 106 pp. 3s. 6d.

### THE PAPER POUND OF 1797-1821.

A Reprint of the Report by the Committee of the House of Commons, 1810, on the High Price of Gold Bullion, with an Introduction by EDWIN CANNAN, M.A., LL.D., Professor of Political Economy in the University of London. Second Edition. Demy 8vo. 122 pp. Cloth, 6s.

#### WEALTH: A Brief Examination of the Causes of Economic Welfare

By EDWIN CANNAN, MAA, LL.D., Professor of Political Economy in the University of London. Second Edition. Tenth Impression. Crown 8vo. 304 pp. Cloth, 6s.

Chamber of Commerce Journal.—" 'The various chapters deal with the subject-matter of economics ; the sundamental conditions of wealth : so-operation. of combination and division of labour ; population ; the social order ; the controlling power of demand ; the subject of the subject is and the wealth of nations ... . His lucidity of treatment is admirable..., His book will assuredly secure for itself a prominent and lasting position is the economic literature of this country."

### RESTORATION OF THE WORLD'S CURRENCIES.

By R. A. LEHFELDT, D.Sc., Professor of Economics in the University of the Witwatersrand, Johannesburg; Author of "Gold Prices and the Witwatersrand."

Demy 8vo. 160 pp. Cloth, 6s.

Times Literary Supplement..." It preserves a studious impartiality, and is marked throughout by wide reading and observation, as by sound and careful thought and reasoning."

Financier .- "To the general reader interested in current economies the book will be found of absorbing interest and should prove of invaluable service to students."

# P. S. KING & SON, Ltd., 2 & 4 GREAT SMITH ST., WESTMINSTER.