

THE FALL OF PRICES

A BRIEF ACCOUNT OF THE
FACTS, THE PROBABLE CAUSES
AND POSSIBLE CURES

By

JOHN A. TODD

M.A. (OXON.), B.L. (GLASGOW)

PRINCIPAL OF THE CITY SCHOOL
OF COMMERCE, LIVERPOOL

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Principal of the City School of Commerce, Liverpool

Author of *The Mechanism of Exchange, The Science
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CONTENTS

	PAGE
Chapter One. INTRODUCTORY	1
Importance of the question—Theory of scarcity of gold—History repeating itself—1873-96—The revival of Protection.	
Chapter Two. THE FACTS	4
Need of historical perspective—Previous price movements—Nineteenth century—1896-1914—The war and post-war booms—Deflation—The Gold Standard, 1925—The new fall.	
Chapter Three. IS THERE TOO LITTLE 'MONEY'?	14
Meaning of 'Money', Currency v. Credit instruments—Statistical tests—Currency (Bank and Treasury Notes)—Credit, the Bank of England, the 'Big Five', Clearing House—Other countries—World gold reserves—U.S.A. and France.	
Chapter Four. AN ALTERNATIVE THEORY	38
The things which have suffered most—Increased supplies—Reduced consumption, especially in U.S.A.—The Wall Street Crash—The remedy, increased consumption or reduced production.	
Chapter Five. POSSIBLE CURES	47
Increased gold production—Economies in use of gold, More silver against notes, Cheaper cheques—International gold movements, the Bank of International Settlements.	
STATISTICAL APPENDIX	
Table I. INDEX NUMBERS AND GOLD PRODUCTION, 1782-1930	60
Table II. WHOLESALE AND RETAIL PRICES, MONTHLY, 1920-30	61
Table III. WHOLESALE PRICES OF DIFFERENT GROUPS OF COMMODITIES, 1929-30	62
Table IV. PRICES OF INDIVIDUAL COMMODITIES 1913-29-30	63
Table V. THE AMOUNT OF 'MONEY' 1920-30	64
Table VI. GOLD HOLDINGS OF VARIOUS COUNTRIES 1913-30	66
INDEX	67
DIAGRAMS	
I. PRICES AND GOLD PRODUCTION, 1782-1930	5
II. WHOLESALE AND RETAIL PRICES MONTHLY AND THE AMOUNT OF 'MONEY', 1920-30	at end
III. WHOLESALE PRICES OF DIFFERENT GROUPS OF COMMODITIES, 1929-30	11

Chapter One

INTRODUCTORY

Importance of the question—Theory of scarcity of gold—History repeating itself—1873-96—The revival of Protection.

THE new fall of prices, which began in October 1929 and still showed no signs of having reached bottom at the end of 1930, is of peculiar importance in many ways. In the first place it has led to the revival of the theory that all our industrial troubles are due to monetary causes, and particularly to the world scarcity of gold. This is of course a case of history repeating itself. When England returned to the gold standard in 1925 most people prophesied that it would result in a further fall of prices which, however, was on the whole not so bad as had been expected. The expectation was part of the general theory of credit inflation which had been evolved during the war, or rather during the post-war period of inflation and the deflation slump of 1920. It could not then be pretended that these great movements of prices were due to any change in the gold supply, but it was argued that credit inflation or deflation was the immediate cause of the trouble and that when the world returned to the gold standard, the old pre-war methods of control of the credit system by gold would inevitably be revived, and the necessary expansion of credit would be limited by the gold supply.

The writer is old enough to remember an earlier period of falling prices when this theory of the relation between gold and prices first became common knowledge. From 1873 to 1896 we experienced what was then thought to be a catastrophic fall of prices; and the consequent depression of trade and industry was far worse than anything we are experiencing now, for in

those days there was no 'dole' and unemployment meant virtual starvation.

Perhaps the most striking similarity between those days and to-day is that they have resulted in the revival of the same cure—Protection. It was the long period of depression of the 'eighties and 'nineties that made Chamberlain's campaign appeal to so many people; but Chamberlain was unlucky. He started his campaign a few years too late, and though he did not know it, prices had already turned upwards. It was some years before the cause of this recovery and its effects were fully realized; but with the revival of trade which carried through to the war the agitation for Protection lost all its force and the question dropped out of sight. Protection is no cure for a world-wide fall of prices due to monetary causes.

Although history repeats itself, however, it is never quite the same, and the difference this time is that, while it is commonly believed that reduced gold production is somehow at the bottom of the whole business, the man in the street is extremely vague as to how it works and why gold should matter. He realizes that gold is now a matter of no importance to *him*, because he never sees any. He has given up entirely the habit of using gold as currency, and when it is suggested that our whole credit system is in some way linked up with, or controlled by, the gold supply, he quite frankly admits that all these things are beyond him; that he does not know what the gold standard means if it does not mean sovereigns in his pocket, and that he prefers to leave the whole question to experts. But these experts in their discussion of the question have tended to concentrate on one point which is sinking into the mind of the man in the street and is producing very undesirable conse-

quences. That point is that somehow or other it is all the fault of the banks, that the big banks, under the orders of the Bank of England 'and/or' the Treasury, are adopting a policy of restricting credit; and the popular conviction is growing that the banks have thus in some way ceased to be our servants and have become our masters. Hence the demand in certain quarters for the nationalization of banking.

For all these reasons it is very important that the whole question should be studied and expounded in a way which the man in the street can understand. The writer hopes that that is not impossible. It may be too soon yet to arrive at any definite conclusions on the question, because, as has happened on every previous occasion, we may not be quite clear as to the cause of the movement until it is all over and prices have begun to go up again. The proper attitude to the question in the meantime therefore is one of agnosticism. The man in the street does not know enough to form any definite opinion about these theories, but he wants to know, and if the theory is true he wants to know what can be done about it, for something must be done. Money is a good servant, but a very bad master; and with all the accumulated knowledge of the past century we are not prepared to allow the general level of prices to be at the mercy of a casual fact of nature, which is more or less what the world's annual gold production still is. If the world's gold supply matters so much, then steps must be taken either to make the supply adequate or to discover and apply methods of doing with less of it.

Chapter Two

THE FACTS

Need of historical perspective—Previous price movements—Nineteenth century—1896-1914—The war and post-war booms—Deflation—The Gold Standard, 1925—The new fall.

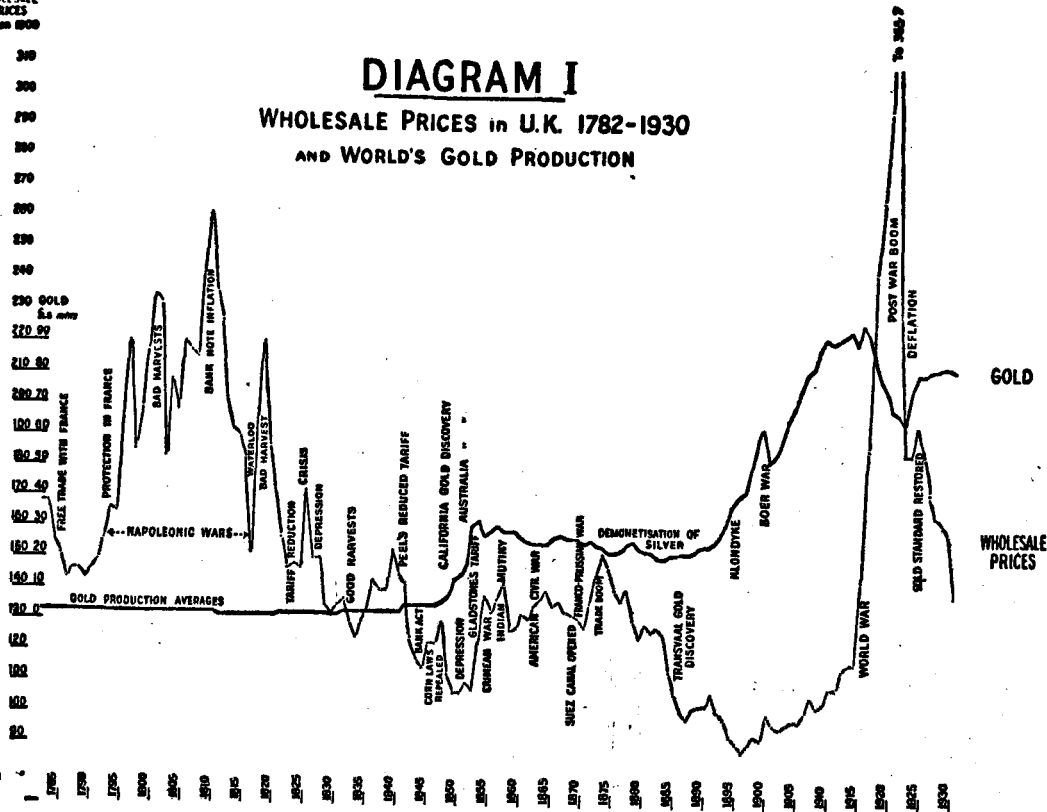
THE first essential is to get at the facts and to place them in their proper perspective. The popular impression seems to be that this fall of prices is something new and unprecedented, both in its nature and its extent; but that is far from being true. We have had greater falls of prices not only since the war, but also during the nineteenth century; and we have also had equally great movements of prices in the other direction, for the whole history of prices in modern times has been a constant succession of movements both up and down, which of course are equally disturbing and objectionable. A consecutive record of the annual average wholesale prices in the United Kingdom can be carried back to 1782, and this is given in Table I in the Appendix and is shown graphically in Diagram I on the opposite page.

From this record it is easy to divide the history of the last 150 years into a series of distinct periods of rising and falling prices as follows: During the Napoleonic Wars prices rose to an unprecedented height, and this was followed after the war by an equally rapid decline which, with marked fluctuations, some of them due to specific causes indicated in the diagram, carried on to about 1850. From then till 1873 there was a definite recovery, which was again followed by a period of decline till 1896, when the general level of prices was the lowest recorded in statistical history. From 1896 to 1914 a substantial recovery took place, but in 1914

WHOLESALE
PRICES
% on 1800

DIAGRAM I

WHOLESALE PRICES in U.K. 1782-1930
AND WORLD'S GOLD PRODUCTION



before the outbreak of the war there was a slight check which might have been the beginning of a new downward movement. The war, however, intervened and prices rose rapidly till the middle of 1918. A slight check which began in August of that year would probably have been merely seasonal, but the coming of the Armistice resulted in a short-lived slump which continued the downward movement till April 1919. This was followed by what proved to be the greatest rise of all and came to be known as the post-war boom, which reached its peak in March 1920 at a height far above the previous record of the Napoleonic Wars. The deflation slump which then began produced a decline as disastrously sudden as the rise had been; and with the exception of a brief recovery in 1923-4 it has continued more or less ever since.

Judging by the annual averages as shown in this diagram, one is inclined to jump to the conclusion that the new fall of prices is merely a continuation of the long post-war decline, but it is necessary to examine this a little more closely. Before doing so, however, it is interesting to note how far the facts indicate any connexion between these great movements of prices and the world's gold production; and for that purpose the annual figures of gold production so far as available are included in Table I and are shown on the diagram. An examination of these proves that gold production could have had very little to do with the question up till the middle of the nineteenth century, because the world's total production until then was almost negligible, and varied very little. But the discovery of the Californian gold-fields in 1847, followed by those of Australia in 1851, produced an entirely new position; and the relations between the increased supplies and the rise of

prices is clearly shown by the diagram. The increased rate of production, however, was barely maintained after 1853; but the effect of this on prices was not seen till 1873 when, as the result of the demonetization of silver, which threw the greater part of the world's demand for legal tender on gold alone, instead of gold and silver jointly, the total supply of metallic money became inadequate, and prices fell steadily till 1896. Even before then, however, owing to the application of the Cyanide process in the Transvaal, followed by the discovery of the Klondyke field in 1896, gold production had again begun to increase rapidly, but the effect was not realized until well into the new century. The recovery of prices, however, continued until the eve of the war, though again the rate of gold production was beginning to show signs of slackening.

Thus from 1850 to 1914 there is a strong *prima facie* case for the supposed connexion between gold production and the general level of prices, but from 1914 onwards this connexion completely disappears. The world's gold production of course fell off heavily during the war when prices were soaring, and after the war the fall of prices coincided with a substantial recovery of the gold supplies from 1923 onwards, though this was far from carrying the figures up to pre-war records. Since 1924 the annual gold production has run about level, but the recent report of the Gold Delegation of the League of Nations¹ indicates that there is no prospect of an early increase of the supplies, and that on the contrary future production is likely to diminish.

It must of course be remembered that what matters in regard to the world's gold supply is not merely the

¹ Interim Report of the Gold Delegation of the Financial Committee, League of Nations, C. 375, M. 161, 1930, ii.

annual production but the total accumulated supply. Gold is very nearly indestructible, and setting aside the quantity which is taken every year for industrial uses, the amount used for monetary purposes, whether as coinage or bank reserves, is added to the previous world's total. Each year's addition is therefore a very small percentage of the total accumulated supply, and as the total increases it requires a larger production every year to maintain the same percentage rate of increase of the total supply. If therefore the world's demand for gold for monetary purposes is steadily increasing, and the above report gives statistical evidence on that point, the fact that the world's production of gold has become more or less stationary is in effect equivalent to a reduction of the rate of increase of the supply.

To return to a more detailed examination of the history of prices since the war, Table II in the Appendix gives a record of the monthly movement of the Board of Trade's Wholesale Index Number since the beginning of 1920, i. e. just before the peak of the post-war boom, and these figures are shown on Diagram II. This brings out the fact that the first downward rush of the post-war decline apparently touched bottom in September 1922. Then came a period of rising prices on the whole with two substantial dips till January 1925, but this was followed by a rather severe decline till April 1926, followed by a rise till November, and then another sharp decline till April 1927. From then till October 1929 the fluctuations were comparatively small, though the tendency was slightly downward on the whole; but in that month there began a new sharp fall which by December 1930 had carried the figure down to 108.9 per cent. on 1913, bringing us back nearly to pre-war prices. The point is that this latest fall is not

by any means the worst since the war, because, even leaving out the *débâcle* of 1920-1, the previous fall from January 1925 to April 1926 was greater and the short fall from November 1926 to April 1927, was steeper than the present fall.

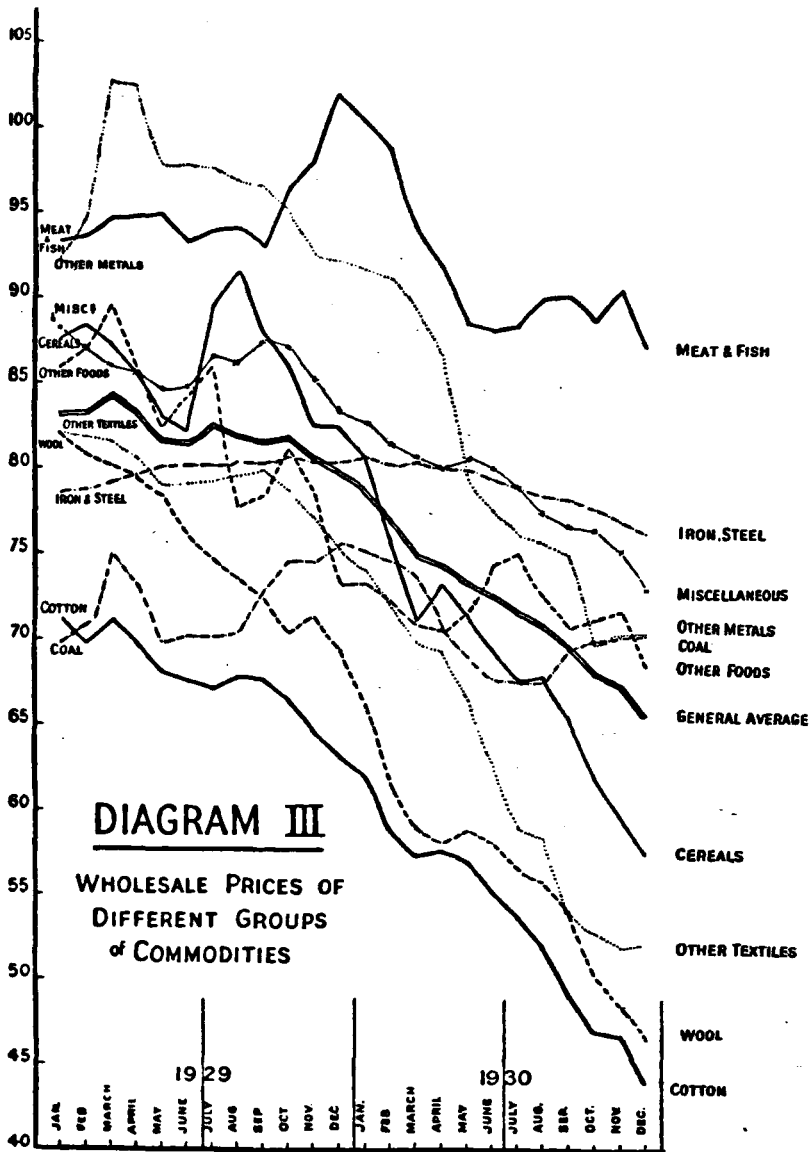
All these figures refer to wholesale prices, but it is desirable to note here the comparative movements of the Ministry of Labour's Index Number of Retail Prices (Cost of Living). These figures are also included in Table II and are shown on Diagram II, which brings out clearly the relation between the two movements. During the whole of the war and the post-war boom retail prices showed a distinct lag behind the movements of wholesale prices both upwards and downwards. At the top of the boom retail prices did not rise so high nor so soon as wholesale, and when the fall began they fell later and more slowly, with the result that in 1921 they were above wholesale and they have remained so ever since, with a marked widening out of the two lines since January 1925. It is to be noted, however, that the retail line follows a fairly regular seasonal curve, falling during the summer and rising again during the winter, but in 1930 the autumnal rise was very quickly checked.

In comparing the wholesale and retail index numbers, however, it must be remembered that they are not really the same. In the first place the retail or Cost of Living index number includes many items, such as rent, which are not in the wholesale index number at all. Again, the latter deals very largely with raw materials, while the retail prices include the whole cost of manufacture and wholesale distribution. Both of these include a large proportion of labour costs; and as wages have fallen comparatively little since the post-war period there is

bound to be a widening out between the cost of the raw material and the price of the finished article as it reaches the retailer.

It is possible to carry our examination of wholesale prices still farther. Since January 1929 the Board of Trade has divided its total index number into ten groups, three relating to food prices and seven to other commodities, and the history of the various groups is shown in Table III and in Diagram III on the opposite page. The general result brought out by the diagram is very confused, but on examination it is possible to see certain general trends. Thus among the food groups, all of which at the beginning of 1929 were well above the general average, cereals have suffered a heavy fall and are now below it. Meat and fish rose till Christmas 1929, which is perhaps seasonal, but have fallen again, and are now rather lower than where they began. Other foods have on the whole followed the general average line, but with substantial fluctuations. The most striking results, however, are shown by the non-food groups. Wool, cotton, and other textiles have all fallen considerably more than the general average, but iron and steel have been almost steady throughout the whole period, and coal has risen on the whole; while other metals, which began high and rose at first considerably, have now had a very severe fall.

It should be noted that the relative position of these lines to each other on the diagram matters very little, because it depends mainly on the relative positions of these commodities during the 'base year' on which all the percentages are calculated, and which in this case is 1924. Thus at that time cotton was comparatively high, with the result that it now shows the lowest percentage of all on the base year.



This irregular distribution of the price movement through different groups of commodities obviously calls for a still more detailed examination of the price movements of individual commodities, and the materials for such a comparison are given in Table IV, which shows the change from October 1929 to October 1930. In order to put these changes in their proper perspective the prices of October 1928 are also given. All the prices are expressed as percentages of 1913, which gives a useful comparison with pre-war levels. An examination of this table makes it possible to classify most of the important commodities into two main groups as follows: (1) those which have not fallen very much during the past year, so that they are still above pre-war, and (2) those which have fallen so heavily since October 1929 that they are now below 1913 levels. The outstanding cases are wheat—which in December 1930 touched the lowest level since the seventeenth century—sugar, tobacco, cotton, hemp, jute, silk, wool, copper, tin, and lead. Finally, silver and rubber have established new low records for all time. In February 1931 silver was down to 12.00*d.*, per oz. as against the high record of 89.50*d.* in 1920 and the pre-war low record of 21.68*d.* in 1902. Rubber, which was 8*s.* 9*d.* per lb. in 1910, has been down to 3 $\frac{3}{16}$ *d.*! It is the fact of these dramatic falls in the price of so many important staple commodities that is primarily responsible for the amount of attention, and especially newspaper talk, which has been attracted by the recent fall of prices. As usual the public is inclined to judge the general course of events by these outstanding cases, and pays little attention to the exceptions at the other end of the scale; but it is just the fact of these exceptions at both ends that makes it so difficult to draw a general

conclusion. One would expect that if the fall of prices is due to some general cause, such as monetary conditions, the effect would be more or less uniform. That argument of course must not be pressed too far, because in any general movement there are always disturbing conditions which apply only to particular commodities and which would produce such discrepancies; but the discrepancies in this case are extreme and may help us later on in the search for an explanation of the cause of the fall of prices as a whole. In the meantime therefore we must go on to consider what light these facts throw on the theory that the fall has been due mainly to monetary causes.

Chapter Three

IS THERE TOO LITTLE 'MONEY'?

Meaning of 'Money', Currency v. Credit instruments—Statistical tests—Currency (Bank and Treasury Notes)—Credit, the Bank of England, the 'Big Five', Clearing House—Other countries—World gold reserves—U.S.A. and France.

THOSE who put forward the theory that the fall of prices is due to too little money are not as a rule very specific as to just what they mean by money, nor how there has come to be too little of it. They merely point to the fact that the world's gold production in recent years has not been maintained at the top figures and then assume that, because we have returned to the gold standard, the amount of money must be in proportion to the world's production of gold, and must therefore be inadequate. They do not take the trouble either to prove by statistics that the amount of money has been inadequate, nor to show by argument why that amount must necessarily be in strict proportion to the world's gold production. The first omission we shall do our best to supply by an examination of the statistics in this chapter. In the first place, however, a discussion may be attempted as to the relation between gold production and the supplies of 'money'.

It is impossible within the limits of this book to explain fully the whole intricate structure of our monetary system. The writer has attempted to do this in the *Mechanism of Exchange*¹ which, though in itself only a text-book and therefore subject to similar restrictions of space, does describe fairly fully the composition of our currency and banking systems, and the lessons of the

¹ *The Mechanism of Exchange, a Handbook of Economics (Currency, Banking and Trade)*, 3rd edn., 1927, Oxford University Press.

war and post-war period as to the fluctuations of the various parts of that system. The argument, however, may be summarized here in this way: The first question is what we mean by money. For the sake of clear thinking the writer has always found it desirable to distinguish between two main classes of instruments of exchange, namely Currency and Credit instruments, and these may be defined as follows:

Currency includes standard metallic money, token money, i. e. silver and copper, and paper money, which in England means bank-notes, now including both the old pre-war Bank of England notes and the Treasury notes, the issue of which was handed over to the Bank of England by the Currency and Bank-Notes Act of November 1928. The feature of this class of money is, in the words of Walker's definition, that it 'passes freely from hand to hand in full payment for goods, in final discharge of indebtedness, being accepted equally without reference to the character or credit of the person tendering it, and without the intention on the part of the person receiving it, himself to consume or enjoy or otherwise use it than by passing it on sooner or later in exchange'. It might be said that such money passes current on its face value.

Credit. The great bulk of the money's work of a commercial country like England is not done nowadays in currency; in the business world payments are made mostly by cheques or other forms of bank paper such as bills of exchange, bank drafts, &c. The common feature of all these forms of credit instruments, as they are generically termed, is that they are means of doing money's work without the passing of currency. If any other name than credit instruments could be devised for such forms of money it would be desirable, because

there is an unfortunate play on words in calling them credit. Credit to the man in the street means deferred payment, but payment by cheque is not deferred payment, yet a cheque is a credit instrument. The real common factor in all these forms of money is that they imply payment by cross entries in a banker's books; and they are properly called credit instruments because the whole system of using such documents rests on the credit of the person who gives the cheque, and the bank on which it is drawn. If a shopkeeper accepts a cheque from a customer he is placing confidence (and that is the meaning of the word credit) in two things: (1) that the customer has an account at the bank containing funds to meet the cheque, and (2) that the bank is able to meet its obligation to its customer and to produce his money when called upon by presentation of the cheque. The latter act of faith is the one we are apt to forget, because our confidence in banks in recent years has become so strong; but it is equally essential to the whole transaction. Thus the credit system is based on confidence or credit, but a very large proportion of the transactions carried out by credit instruments involves no material period of deferred payment at all, e.g. in the settlement of a property transaction the purchaser gives a cheque for the price of the property to his solicitor, who lodges it in his bank and draws another cheque in favour of the seller's solicitors. They lodge this in their account and draw their own cheque to their client. Thus the price has passed three times, but no currency need be employed at all, for each party to the transaction trusts the other party; the three transactions are carried out by credit instruments though there is no deferred payment.

This distinction is of some practical importance be-

cause when the man in the street talks about the credit system he is apt to think that it means merely the system by which large industrial and commercial concerns borrow money from their banks to enable them to carry on their business. If he happens to be a Corporation official whose monthly salary is paid direct into the bank to his account and he pays his bills by cheques, it never occurs to him that he is using the credit system; he is 'paying cash as he goes' for everything. Nevertheless his transactions are part of the credit system and just as important as those of the cotton-spinner who borrows money from the bank to finance a purchase of cotton; and these transactions of his form part of the total volume of 'money'. The amount of money therefore is not entirely a matter of whether the banks are willing to lend freely to their borrowing clients. There is, as a matter of fact, a close connexion between the total volume of Clearing House transactions, i. e. of cheques passing through the banks, and the amount of money which commercial and manufacturing interests can borrow from their banks; but the volume of credit does not depend solely on the amount of such lending.

Credit instruments, then, are merely means of doing money's work without the passing of currency, and the total volume of money is the amount of currency plus the amount of these credit instruments. The respective parts played by currency and credit instruments might easily vary. Suppose, for example, that the cheque stamp were abolished altogether and that we all suddenly developed the habit not only of having a bank account but of paying everything by cheque, even down to such small sums as the price of our lunch; suppose that this habit extended right down to the ordinary wage-earners, who at present of course do not keep

bank accounts at all, and that their weekly wages were paid by the works to the credit of their accounts in a bank. The result would be an enormous increase in the volume of credit, as shown by the bank deposits and the Clearing House returns, and there would be much less need for currency, so that the bank-note issue could be restricted. The object of all this is to make it clear that the amount of 'money' includes the extent to which credit instruments are used as well as currency; and this clears the way for the next question which is the real point of the whole discussion. What is the relation between gold on the one hand and (a) the amount of currency, and (b) the volume of credit transactions on the other?

So far as currency is concerned the answer is simple; it rests on the provisions of the Bank Act 1844 as amended in 1928, that gold must be held by the bank against all its notes above the amount of the Fiduciary Issue, which is now £260 millions. As to other forms of currency (which, as we now use no gold, means only silver and copper) the amount of these is so small and so comparatively stable that it does not matter. The amount of this token currency is of course strictly controlled by the government, who alone have the right to issue it and whose business it is to see that they always have the necessary amount in circulation, neither more nor less. If, for example, there is a temporary scarcity of silver, there is always a reserve in the Mint or in the Bank of England which can be drawn on. If there is a redundancy either of silver or copper or of any particular coin, it quickly finds its way to the banks and thence to the Bank of England, where it stays until it is wanted again.

The next question, however, is not so simple. What

is the relation between the volume of credit and the amount of gold, either the amount of gold produced in the world in a year, or the accumulated stock of gold turned into coinage or set aside as bullion for reserve purposes in the vaults of the world's banks? It is here that restriction of space makes it most difficult to explain the argument as fully as is required, but the writer's argument, as more fully worked out in the *Mechanism of Exchange*,¹ may be summarized as follows: Before the war we had gradually evolved a very efficient system of gold control over the volume of credit which he called the 'Gold bottle-neck' of credit. Under that system the Bank of England, using the lever of the Bank-Rate, was able to control the whole banking system of London, which meant more or less the banking system of the world, for the foreign exchanges depended in the long run on gold movements, and the cost of these was directly influenced by the bank rates in the respective countries. But during the war this gold bottle-neck was completely smashed in many of the belligerent countries, and was very severely stretched even in England, especially in the latter part of the war. When we returned to the gold standard in 1925 it was supposed that we were replacing the pre-war gold bottle-neck. As will be shown later, however, there are certain differences in the post-war system which differentiate it from the pre-war conditions; and the question is whether it is still true, as it certainly was before the war, that the volume of credit, and therefore the amount of 'money' in the country, bears a direct relation to the gold supply. The best approach, however, to that question, as to all others, is through the facts. Let us first of all find out by whatever statistical methods are

¹ See Chapters IX, X, and XIII.

available exactly what movements there have been in the volume of money in this country.

The first part of the question which relates to bank-notes and currency notes is easily answered. Section A of Table V gives the statistics of the issue of currency and bank-notes quarterly throughout the whole period from 1920 to date. Currency notes and bank-notes are added together before the amalgamation of the two issues in November 1928, but in doing so it must be remembered that from 1921 onwards the Treasury were holding first gold and then Bank of England notes in the Redemption Account against the Currency Note issue. The amount of these notes therefore must be deducted from the total in circulation to avoid duplication.

The next step is to get some index of the amount of gold actually held against the total notes in circulation. At first there were two separate funds of gold (*a*) the gold in the Bank of England against their notes and (*b*) the gold held (in addition latterly to Bank of England notes) against the Treasury notes. With regard to the former it must be noticed that part of the gold in the Issue Department held against the note issue is really a cross entry on the two sides of the account. Of the total note issue a certain number belongs to the Banking Department, being the major part of the Bank's Reserve. This amount must be deducted from the total issue to give the Circulation, and also from the total gold to show the amount of gold really held against the notes in circulation. This is worked out in Section A of Table V, and the total gold held against Bank of England notes and Currency notes, which might be called the Total Note Gold, is then calculated as a percentage of the total note Circulation. The table shows

how this percentage has moved throughout the whole period. During 1920-22 it was being steadily pulled up from 25 per cent. to about 33 per cent., which as it happens is just about the same figure as in pre-war days; but from 1925 onwards this percentage has been steadily reduced till in November 1930 it was only about 26 per cent. This result is of course in a way an accident. As a matter of fact since about 1922 the total note issue has not been reduced at all. What has happened is that the amount of notes in the Reserve has on the whole been increasing, and this produces a rather interesting result. Our system of control of the bank-note issue was originally laid down by the Bank Act, 1844, and has not been substantially modified by the 1928 Act. The principle of it is a fixed fiduciary issue, now £260,000,000, and all above that must be covered by gold. The result is that the smaller the total issue the larger is the proportion which the fixed fiduciary issue bears to that total, and therefore the smaller is the proportion of gold to the total. If, however, the total issue remains substantially unchanged, but the number of notes belonging to the Banking Department increases, then a similar result is produced. The smaller the Circulation the smaller is the proportion of gold held against the notes, because the fiduciary issue remains unchanged and the balance which must be covered by gold bears a smaller proportion to the total. Thus the rather curious result is arrived at that *the more notes there are in the Reserve the smaller is the proportion of gold required against the bank-notes in circulation.*

It is certain that such a result was never foreseen by the framers of the 1844 Act, but it would be interesting to know whether it was realized by those who were responsible for leaving the principle of the original Act

untouched when they passed the new Act of 1928. Whether they knew it or not, the fact remains that we have hit on an exceedingly astute device for reducing the amount of effective gold cover required for the bank-notes in circulation. The curious fact is that even those people who watch the Bank Return every week, regarding it as the barometer of the financial position, pay no attention at all to this factor.

Turning now to credit, the difficulty is to know what statistical tests to apply. There is, of course, the Weekly Return of the Bank of England, and we have also, since the beginning of 1921, a monthly average account of the Joint Stock Banks from which it is possible to follow the changes in their position. Finally, we have the Clearing House figures. What can be made of these statistical materials?

Taking first the Bank of England, Section B of Table V gives their figures for one week in each quarter from 1920 to date, while the crucial figures are shown monthly on Diagram II. The best test of the position of the Bank of England is the 'Proportion', i. e. the percentage which the Reserve bears to the total deposits. Perhaps it would be well to make it perfectly clear at this stage what the Bank of England 'Reserve' is, because there is a good deal of popular confusion on this point. The confusion is natural because as a matter of fact practically all the gold in the Bank of England is kept in one fund and in one place, namely, the vaults of the Issue Department. There is a very simple physical reason for this. Storage accommodation for a matter of millions of gold is a very large undertaking. To have two separate sets of vaults for the Issue Department and the Banking Department respectively, would be sheer waste of money; and since 1844 the practice has been

for the Banking Department to put all its gold into the Issue Department and take out notes for the value. These notes, however, are nothing more than a convenient form of receipt granted by the Issue Department to the Banking Department for that amount of bullion or gold coinage.

As a matter of fact, however, this single fund of gold lying in the Issue Department really belongs to two different sets of people. Part of it is the gold held (along with the securities and silver for the fiduciary issue) against the bank-notes in circulation, i. e. in the hands of the public, which we have called the Note Gold. The rest belongs to the Banking Department, and is the great bulk of the funds they hold against their liabilities to the public and the Government, who make up the depositors in the Banking Department. In addition to this the Banking Department holds a very small quantity, usually less than a million, of gold and silver coin in their own hands, and this and the notes representing their gold in the Issue Department make up the 'Reserve' of the Banking Department. In order, therefore, to avoid confusion between this Reserve of the Banking Department and the gold held in the Issue Department against the bank-notes in circulation, it is desirable to use the name 'Note Gold' for the latter as against the 'Bank Reserve' for the former.

Now this Reserve of the Banking Department is the key to the whole position of the money market at any time. It is shown every week in the Bank's Weekly Return, and is watched like a barometer by the whole money market, not only in London but throughout the world; and the test which they constantly apply to it is the Proportion or percentage which the Reserve bears to the total deposits in the Bank of England. The Bank

itself watches this proportion, which they regard as the test of their position; and if they find that it is sinking lower than they like, they raise the Bank-Rate. The various causes which may lead to a drain on the Reserve, and the effects which are produced by raising the Bank-Rate are described in the *Mechanism of Exchange*.¹

Turning now to Diagram II the position with regard to the Proportion and the bank-rate is shown monthly in the two bottom lines, and the first point to be noticed is that these two lines move in opposite ways; when the Proportion is low the bank-rate is high, and vice versa. To complete the picture it is necessary to recall what was the normal position before the war. That, as well as what happened during the war, will be found in a similar diagram in the *Mechanism of Exchange*, and the facts may be briefly summarized here. Before the war the Reserve was normally about 50 per cent. of the Bank's liabilities, but during the war it fell off very badly, though it was never quite as low as it was in 1920.

Diagram II shows the main tendency of the Proportion throughout the whole period, as well as certain definite seasonal movements; the Reserve is always smallest at the end of each year, but on the whole the Proportion has been rising from the low point at the end of 1920 throughout the whole period. There are, however, certain conspicuous departures from the ordinary movement. Thus, in 1925, there was a sharp upward movement in July, followed by a quick reaction to the normal low point at the end of December. In 1926 there was a considerable upward movement, followed again by another big rise in 1928 and the first part of 1929, which for the first time since the war carried the Proportion above 50 per cent, i.e. back to

¹ See Chapter XII.

pre-war normal. But in July 1929 there was a tremendous fall which dragged it down again to nearly 20 per cent. till the end of the year, when once more there was a sharp rise to the post-war record figure of 60·5 per cent. in March 1930. Though this high level was not maintained throughout the summer of 1930 it was again almost reached in November.

The interpretation of all this is briefly as follows: In 1920, as the result of the war and post-war boom and consequent inflation, the Reserve had been carried down to a dangerously low point, and in April 1920 the Bank was forced to raise the bank-rate to the emergency level of 7 per cent. in order to stop the inflation, which it did with disastrous success. Immediately they had achieved their purpose, however, as witnessed by the upward movement of the Reserve, they began to reduce the bank-rate, and did so steadily until in September 1922 it was down to 3 per cent. From 1921 to 1925 the Bank was slowly accumulating a Reserve which it was hoped would be sufficient to justify the return to the gold standard; and in February 1925 the bank-rate was again raised from 4 per cent. to 5 per cent. for this purpose. The return to the gold standard passed off very quietly and the bank-rate was reduced to 4 per cent. in October 1925, though there was a sharp drop in the Proportion in November which necessitated the raising of the rate again to 5 per cent. in January. From then till 1929 the Reserve made very satisfactory progress; but in June of 1929 a new trouble arose through the heavy withdrawals of money from London for use in the New York Stock Exchange boom; and the Reserve fell to such a low point, in spite of the raising of the rate to 5½ per cent. in February, that it became absolutely necessary to take stringent measures for the

protection of the Reserve and the bank-rate was raised to $6\frac{1}{2}$ per cent. in October. That, however, was immediately followed by the great crash in Wall Street in October 1929, and the return flow of money from New York soon restored the Reserve and made it possible to drop the bank-rate steadily till it again reached 3 per cent. Thus during 1930 we have on the whole had a very low bank-rate and a very high Reserve, which are the invariable signs of easy money in Lombard Street.

In all this there is no sign of any attempt by the Bank to force prices down by restricting credit, except during the inevitable deflation period of 1920. The action of the Bank in 1925 was admittedly due to the desire to return to the gold standard; but if it is to be argued that that was the cause of the fall of prices during 1925 it is difficult to see why during 1927, 1928, and the first part of 1929, the fall of prices was so definitely checked, when as a matter of fact the Reserve was piling up steadily to record figures. As to the action of the Bank in the autumn of 1929, it is clear that this was nothing but self-defence against the withdrawals for America, and that the pressure was relaxed the moment the strain was relieved. The point is that the bank-rate had begun to fall again before the real fall of prices began, and it has been falling practically ever since. The serious fall of prices therefore has taken place during the period when the bank-rate was low and the Reserve was high.

It may, however, be said that the effect of the Bank's action is shown not merely in its own figures but in the far larger figures of the Other Banks, and fortunately it is possible to test this argument also by statistics. The monthly returns of the Joint Stock Banks give a

good deal of detailed information, but the outstanding facts are the amount of their Deposits, the proportion which their Cash and Call money bears to the total deposits, and the percentage of Discounts, Loans, and Advances on deposits. The figures on these points are given quarterly in Section C of Table V, and it will be seen that these two percentages show remarkably little change throughout the whole period.

We are therefore fairly safe in assuming that the deposits themselves are the best test of the position of the Other Banks, especially in view of the theory of which so much has been made since the war that these deposits really represent in large measure loans made by the banks to their clients.¹ On Diagram II there is a line which shows the monthly figures of the deposits of the Big Five since January 1921. Here again it is necessary to indicate the previous history of the deposits. Prior to January 1921 we had only half-yearly figures, which were not made up quite on the same basis as the new monthly average. The process known as window-dressing could be applied more conveniently to a half-yearly balance-sheet than to an account which has to be made up every week for a monthly average, but there is no reason to suppose that this would alter the general trend of the line which is very clear.² From December 1913 to December 1920 the deposits of the five principal Joint Stock Banks, now known as the 'Big Five', rose from £566 millions to £1,628 millions, so that the point at which the monthly line on the diagram begins (January 1921) is practically the peak of the rise which took place during the war and the post-war boom. The line on Diagram II

¹ See *Mechanism of Exchange*, p. 170.

² See Table X and large diagram at end of *Mechanism of Exchange*.

is therefore a complete record of post-war developments; and again its evidence is very clear. It shows first the marked seasonal movement in each year, with a high point at the end of the year and another not so high at the half-year; but apart from this seasonal movement there is also a very definite trend throughout the whole line. From the high point in January 1922 there is a marked decline to 1923, but since then there has been a slow but steady upward movement to which there are only two exceptions. Thus throughout 1924 and 1925 the line as a whole showed no rise; but from 1926 onwards the rise was very steady until again at the end of 1929 there was a marked failure to rise to the usual high point at the turn of the year; but this has now been more than made up by a rapid rise in 1930, and the June and December figures are the highest ever recorded. The slackening of the rise in 1924-5 is obviously connected with the return to the gold standard, while the check at the end of 1929 is as obviously connected with the shipments of gold to America before the Wall Street crash and the consequent stringency of the London Money Market. The marked recovery during the summer of 1930, however, is in striking contrast to the sharp fall of prices during that period, and gives no support at all to the idea that that fall was due to lack of credit facilities.

There is one further section of the London Money Market which ought to be included in any such survey, but which unfortunately cannot be treated in the same way because there are simply no statistics. This is the Outside Money Market composed of the Discount Houses and Accepting Houses and all the other machinery of foreign banking which makes the London Money Market the centre of the financial

world. Some of the big Discount Houses publish their annual balance-sheets, but there is nothing like the monthly return of the Other Banks, and that line of inquiry must therefore be allowed to go by default.

There is, however, another source of information which is perhaps the best indication of all of the turn-over of money, namely the quarterly returns of the Bankers' Clearing House. These figures since 1920 are also included in Table V (Section D) and are shown on Diagram II. As in the case of the Deposits the line shows a distinct seasonal movement and also a general trend throughout the whole period, and it may be added that the pre-war history is also the same, the whole of the war period (except the first six months) and the post-war period to March 1920 showing a steady rise. From the peak in 1920 shown in Diagram II there was a fall through 1921, but since then there has been a steady upward movement again, which was only checked for the first time in the first quarter of 1930, the figure for that quarter being just a little lower than in March 1929. Since then it is true there has been a decline which is definitely more than seasonal; but that was inevitable in view of the general depression which has affected all markets and particularly the Stock Exchange.

All these figures then show no sign of contraction of credit; but it may be argued that, while there has been no contraction, the rate of expansion has been slowed down. A great deal has been made lately of the argument that the world's production of goods is increasing at the rate of 3 per cent. per annum, and that the volume of money must keep pace with that rate of increase.¹ As a matter of fact, however, the rate of increase of the

¹ See Gold Delegations Report.

deposits of all the banks before the war was not so rapid as that, and if the rate of increase of the Big Five since the war is compared with that of all the banks before the war the comparison is not at all unfavourable.

On the whole therefore the writer cannot see in these statistics any evidence that the volume of credit has been unduly restricted. The restriction in 1920 was a necessary evil, for every boom must burst some day; and the only criticism of the official policy with regard to the post-war boom was that it was not checked soon enough, and that when the brake was applied it was put on too hard. As to the 1925-6 period, the check on credit was part of the price we had to pay for the return to the gold standard, and looking back over the facts now it does not seem that the penalty was very severe. The main point is that the period of restriction passed, and a healthy rate of recovery had been established from 1926 to 1929, which was again unfortunately checked by the developments which ended in the Wall Street crash. No one will seriously contend that the Bank could have done other than it did on 26 September 1929, when faced with such a fall of the Reserve. As a matter of fact the Bank delayed action as long as it possibly could, and a great deal longer than it would have done under similar circumstances in former years. In any case, whether by good luck or good guidance, its action was very quickly effective. In some quarters in America it is alleged that the Bank's action was the cause of the Wall Street crash. However that may be, the crash itself very quickly stopped the drain of money to America, rendering the high bank-rate no longer necessary, and it was quickly and continuously lowered, with the result that the credit position has since become extremely easy.

It is not in the least inconsistent with this to say that in another sense of the word there has inevitably been a serious restriction of 'credit'. In a period of falling prices and trade depression confidence gives place to uneasiness and distrust, which in some cases proves to be justified. There have of course been failures, rather numerous in some trades, and these naturally make every one, including the banks, more cautious. Traders may be asked to reduce their commitments, and the banks become more exigent in their requirements as to margins, &c. It is one of the misfortunes of our system of loans on commodities and securities with a margin, that when prices fall the borrower finds his margin gone, leading in many cases to forced sales and a further fall. As prices go lower anxiety increases; rumours get about that certain firms are in difficulties, and sometimes these prove to be true, while in other cases they are shown to have arisen out of the most trifling incidents and to be entirely unfounded. Naturally in such conditions every one tries to restrict credit, and the banks are of course the most prominent in the movement.

Such a development, however, is no evidence of a reduction in the volume of credit available—it only means that the banks, like every one else, are more critical and selective in giving credit. This then is as much the result of falling prices as the cause.

It seems therefore a reasonable conclusion that the fall of prices *since October 1929* has not been due to scarcity of money in any sense of the word, so far as this country is concerned. It may be argued, however, that all this evidence relates only to England, which has admittedly learned a great deal from the history of the war and post-war period as to the possibility of manag-

ing her monetary system on a smaller margin of gold. The worst critics of the Bank seem nowadays to admit that the policy of concentrating the whole of our gold in the Bank instead of having most of it in circulation has been a success. The result is that, with just about the same amount of gold, we have more than twice as much currency in circulation, and twice as much gold in the Bank's Reserve, which is the proper place for it.¹ That means a very substantial economy in the use of gold, and if every other country were doing as well it would more than set off the total decrease in the world's production of gold.

But it is said other countries are not doing the same; and in particular certain countries have, since the war, been accumulating enormously increased reserves of gold, of which two are usually selected as outstanding examples, namely, the United States and France. Here again facts are essential. As will be seen from Table VI in the Appendix, almost every country (except Russia and Austria) has increased its gold reserves since pre-war

¹ Before the war the total issue of Bank of England notes averaged about £60 millions, and the total gold in the Issue Department about £50 millions, of which about £30 millions on both sides belonged to the Banking Department, leaving an average amount of Note Gold of about £10 millions against a Circulation of about £30 millions. In addition to this there was, according to the Cunliffe Committee's first report (1918, Cd. 9182), about £123 millions of gold in circulation. Thus the total circulation of gold and notes was about £153 millions, of which £133 millions or 87 per cent. was gold. To-day we have a total note issue of about £420 millions and a total gold of about £160 millions, of which about £64 millions on both sides belong to the Banking Department. Thus the Note Gold is now about £96 millions or 27 per cent. of the total Circulation (£356 millions), and there is no gold at all in circulation. At the same time the Bank's Reserve, which before the war averaged about £30 millions, has been above £60 millions during the greater part of 1930.

days; but the increases are so large that they obviously require examination. In the first place the total increase from \$4,932 millions at the end of 1913 to \$10,867 millions in 1930 (i.e. £1,220 millions) is not much less than the world's *total* gold production during the whole period (see Table I, 1914 to 1930 inclusive, £1,375 millions). The explanation is obvious: the increased gold reserves have been largely achieved, as in England, by withdrawing gold from circulation.¹

It is complained, however, that the gold reserves have become very unequally distributed throughout the world, and particularly that the United States and France have acquired far more than their pre-war share. It is true that these two countries between them now hold nearly 60 per cent. of the world's total as against 40 per cent. before the war, but taking every country's holding in 1930 as a percentage on 1913 the position is rather different. From this point of view the worst offenders are apparently (in order) Japan, Spain, Great Britain, Switzerland, Belgium, and Australia, while the United States and France come well behind all these. In our own case we know that the apparent increase is almost entirely due to the withdrawal of gold from circulation. As to the others, an examination of the 1920 figures probably gives the key to the position. Neutral countries (and from this point of view Japan was in a similar position) inevitably acquired huge gold holdings during the war; but most of them, like Holland, have not maintained these high figures.

Since the war, the one country that has naturally attracted large quantities of gold is America, and it is difficult to see how that could have been avoided in the

¹ The Gold Delegations Report gives actual figures. See Annex XIII, Appendix II.

circumstances. It has certainly not done her much good. As to France, the position is quite clear. After the war she managed somehow to accumulate large reserves of foreign credit; but as soon as she had at last succeeded, in 1928, in stabilizing her currency (at a level of about one-fifth of pre-war) she began to draw these credits back, and a considerable part of the money has been taken in gold. It is very doubtful whether this has been the result of any deliberate policy on her part, which indeed is officially repudiated. On the contrary, her recent refusal¹ to accept anything but fine gold, thus particularly excluding English standard gold of 11/12ths fine, is explained as a definite attempt to place obstacles in the way of gold imports, especially from England.

Again, there is a curious feature in the comparison of the United States and France on the one hand with the rest of the world on the other—the gain of the former has not been to any large extent at the expense of the latter, and their gain has been so great that it obviously cannot be attributed to new gold. It must therefore be due to the whole world economizing in the use of gold by concentrating it in their Central Banks instead of using it as currency, or leaving it in the hands of commercial banks, as was the case in Australia and the Argentine; but all the world has benefited by this in being able to maintain their gold reserves against the drain to the United States and latterly to France. It is difficult therefore to see why the rest of the world, with far larger gold reserves than they had before the war, should be worse off merely because the United States and France have increased their reserves still further. That is not to say that the whole world might not be better off if the total gold holdings were better distri-

¹ Reversed in January 1931.

buted throughout the world, but it does not support the argument that the rest of the world is suffering from *too little* gold.

Again it is argued that this accumulation of gold in France and the United States is sterilizing gold, because these reserves have not been made the basis of a corresponding volume of increased credit. It is unfortunately impossible to follow this argument into every country by the same statistical methods as have been adopted above for England; but the National City Bank of New York recently published statistics¹ showing the increase of the Net Deposit Liabilities of American banks as compared with the U.S. gold holdings as follows:

	<i>June 30</i>				
	1920	1922	1927	1928	1929
Net deposit liabilities .	36,929	37,044	51,438	53,387	53,441
Total gold in Treasury and Federal Reserve Banks .	2,505	3,368	4,179	3,732	3,956
Per cent.	6.8	9.1	8.1	7.0	7.4

That does not look like 'hiding their light under a bushel'. America no doubt realizes now that the great influx of gold, which, in spite of all her efforts to prevent it, did lead to a great expansion of credit, was a very mixed blessing, because it directly contributed to the great stock-exchange boom which broke in October 1929 with such disastrous consequences.

It may be worth while here to enter an objection against the popular idea that large gold reserves are a good thing in themselves. They may be necessary, but it is well to remember that they are a very expensive luxury, for they are the one form of wealth which yields

¹ *Monthly Review of Economic Conditions*, October 1930.

absolutely no income and costs a great deal to store. In view of this, would it be going too far to suggest an entirely different view of the whole matter? The real truth is that since the war most of the world has learned to economize gold by doing without it in currency; and this has set free a large amount of gold which has found its way into the Central Banks, and, but for the willingness of America to 'hold the baby', might have created a plethora of gold in all the Central Banks. America, however, did not adopt this role intentionally; she had no alternative, because she will not accept payment in goods owing to her tariff policy. The only course open to her therefore was to take gold, or else forgo payment for the time being by lending her debtors each year the amount they owed her (and a great deal more). Now France has unwillingly found herself in the same position, and how long can she afford it? Her gold holding of about £420 millions is costing her in loss of interest about £20 millions per annum. What gain is there to set off against such a loss?

To sum up: Is there any evidence in all this that the recent fall of prices is the direct result of a scarcity of money resulting from reduced supplies of gold? So far as the evidence goes, the writer feels driven to the conclusion that, as far as England is concerned, the verdict, up till now, must be the Scotch verdict of 'Not Proven'. As to other countries, complete evidence is not available; but there is a strong presumption that what is happening there is similar. So far as gold is necessary for banking purposes, there is more gold available today than there has ever been before; and the fact that it is now concentrated in the banks, instead of being adrift in the pockets of the people, greatly increases its efficiency.

There is therefore no proof that our present trouble is due to the scarcity of gold or to there being 'too little money'. The next step therefore must be to look in other directions for any alternative explanation of the fall of prices.

NOTE.

Readers who wish to follow the subject farther should consult the Report of the Gold Delegation of the League of Nations with its Annexes, which contain a mass of facts and many arguments on the whole question. Most important of all is Annex XIII by Mr. A. Loveday, Head of the Economic Intelligence Service of the League of Nations Secretariat, in which he analyses the whole position of both supply and demand, and the relation of gold supplies and reserves to the supply of money of all kinds. One sentence may be quoted from his conclusions: 'Whether the gold situation has had any effect or any substantial effect on prices up to date is therefore a point on which doubt may reasonably be felt. But the surplus gold stocks are not such as to permit the absorption of new gold by one or two countries to continue for any considerable period of time without world-wide repercussions.'

Chapter Four

AN ALTERNATIVE THEORY

The things which have suffered most—Increased supplies—Reduced consumption, especially in U.S.A.—The Wall Street Crash—The remedy, increased consumption or reduced production.

IN discussing the causes of any movement of prices which seems to be fairly general there are always two distinct lines of inquiry to be followed. The one, which we have adopted first in this case, points to monetary causes; the other may best be described as relating to the conditions of supply and demand. The distinction may be put in another way. The latter causes may be described as affecting the *values* of particular commodities, while the former produce changes in the general level of *prices*; and it is only necessary to remind the reader that such changes in the general level of prices do not necessarily involve changes in the values of particular commodities. If prices fell or rose equally all round at the same time there would be no change in the relative value of anything, except money. But such ideal conditions are never attained. Even when a change in the general level of prices is due to monetary causes there are always certain classes of economic producers, mainly those in receipt of more or less fixed incomes, who owing to their position are able to offer greater resistance to a fall in prices, with the result that for a time at least they benefit.

There is danger, however, of confusing this cause of unequal price movements with the other state of affairs where the relative values of particular commodities may be altered because the conditions of supply and demand ruling them have been subject to changes which have not affected other commodities. The purpose of this

chapter is to inquire whether the fall of prices since October 1929 belongs to the second of these categories.

It has already been pointed out that the fall of prices, though fairly widespread, is by no means universal. On the whole it has affected most severely the prices of raw materials, but not even these uniformly. Thus iron and steel as well as coal have been very little affected, but most other metals have suffered very severely. Cereals, especially wheat, have been among the worst sufferers, but other foods have been much less affected. All textile raw materials have had a bad fall, and rubber is perhaps the worst of all.

Such an uneven distribution of the fall obviously suggests an inquiry into the conditions of supply and demand affecting these particular commodities. The worst sufferers are wheat, sugar, cotton, wool, flax, hemp, jute, silk, copper, tin, rubber, and silver; and the inquiry at once brings out two rather striking facts on the side of supply and of demand respectively.

In the first place it appears that the supplies of nearly all of these commodities have in recent years been increasing markedly. A recent publication of the London and Cambridge Economic Service¹ gives statistics of the production of certain staple commodities from 1924 to 1929, and it is remarkable that in the cases of copper, tin, lead, spelter, rubber, and tea the production in 1929 was the highest shown in the table, while sugar was very little below the record of 1928. Again, the same publication gives a record of the stocks of these commodities with some others, and here also the record stocks are in almost every case within the last twelve months. In the case of cotton the position is rather

¹ Royal Economic Society, Memorandum No. 24, *Stocks of Staple Commodities*, by J. M. Keynes and others, October 1930.

complicated. Of American cotton the supply during the last three years has been by no means record breaking, but the Carryover at the end of last season was fairly large and it has since been piling up in a remarkable way. In the case of Egyptian, however, supplies have been increasing steadily in recent years and the Carryover at the end of last season was record breaking.

On the production side, therefore, there is at least a strong presumption that increased supplies had a great deal to do with the fall of prices, and on the consumption side it is not difficult to find evidence pointing in the same direction. It is at least a striking coincidence that of all the commodities mainly affected the *consumption is very largely in America*. Statistics to test this are not readily available, because very few countries take statistics of their consumption as such, and only a very few trades have, like cotton, complete statistics of the world consumption. Statistics of imports alone would not always be a complete index, e. g. in wool, because one would have to take into account not only the local production of wool and the imports of raw wool, but also the imports of finished goods. We must therefore be content with a general statement which should, however, be sufficient in many cases, e. g. the United States are the largest consumers of rubber, taking over 60 per cent. of the world's total production, while they are also very large users of copper, lead, zinc, sugar, wool, silk, and cotton.

Now there is no doubt at all that the direct effect of the Wall Street crash has been a serious restriction of consumption of all kinds of commodities in America. The writer could very easily give a detailed illustration of this from the position in regard to cotton, but the result may perhaps be accepted that the consumption during the summer of 1930 has not been much more

than half what it was a year ago. There is very little doubt that the consumption of other commodities was affected in the same way. That was inevitable because, apart from the effects of the slump in speculative losses and the effects on all her great industrial centres, America herself is a very large producer of these raw materials, and these producers are very hard hit by the fall of prices. This particular effect is unfortunately not confined to America. The producers of raw materials all over the world have suffered equally by the fall of prices of their commodities, with the result that their purchasing power is affected and the thing becomes a vicious circle.

The trouble, however, does not end here. One of the worst effects of a period of falling prices is that it breeds lack of confidence in prices themselves, even when prices have fallen to such a level that commodities are obviously attractive as an investment. Cotton, for example, has for some time been admittedly far too cheap, being well below pre-war prices and definitely below the cost of production, yet there is no sign of a real recovery of consumption such as took place in 1926-7, when prices though much cheaper than they had been were not so low as they are now. The one thing that tends to check buying, and therefore to prevent the recovery of prices, is the fear that they may go lower still. This lack of confidence in prices therefore becomes an argument in a circle. No one will buy because they are afraid that prices will go lower still, and just because no one is buying prices do fall farther. It takes a great deal of courage to buy on a falling market, and in spite of the heavy fall of so many commodities there is still no sign of returning confidence that prices have grounded. The price of wheat is perhaps

the best illustration of this, for it has been making new low records almost every month, and the New York Stock Exchange seems to be marching in step with it.

Is it then going too far to suggest that this latest fall of prices is to a large extent directly attributable to the Wall Street crash with its world-wide repercussions? Is it not arguable that world prices of many of these commodities have been held up for the last two or three years by the artificial prosperity of the United States, due to the speculative boom which became so marked in 1928-9? In the case of American cotton there is no doubt that the huge consumption in the United States up till last year was a big factor in the world position, and the restriction of that consumption in 1930 was largely responsible for the fall. In the motor trade it is well known that America's demand has fallen off very seriously since the crash. It seems reasonable to assume therefore that motors and cotton, which may be taken as representative of luxuries and necessities respectively, are typical of a general restriction of consumption in all sections of the United States and in all commodities.

It may not be advisable to come to any dogmatic conclusions on the whole question until further developments are seen. If the writer's theory about America is correct the turn will come as soon as America begins to recover, and that, if previous experience is any guide, may not be very long, because in other cases, e. g. in 1921, America has shown astonishing power of recuperation. For the present, however, the writer feels strongly inclined to the view that this new fall of prices is merely the last stage of the decline from the giddy heights of the post-war boom, that the slow downward movement should have continued, but was checked by the fictitious prosperity of America in 1928 and 1929.

When that came to an end with characteristic violence in October 1929, the fall was all the more rapid for having been delayed and, as usual, it has in many cases been carried too far. Many commodities, like cotton, have been carried below pre-war prices, and well below the actual cost of production under present conditions. In these cases the reaction is bound to come; but it is impossible to say just where the new point of equilibrium will be struck, for the trouble is that the prices of staple raw materials must bear some relation to their cost of production, and the cost of production of a commodity like cotton consists largely of wages which depend on the cost of living. Now half the trouble in the present crisis is that the prices of manufactured goods and the cost of living generally have not come down to anything like the same extent as the prices of raw materials. This is, of course, largely an argument in a circle. If the prices of raw materials are to remain anything like where they are now, the prices of the finished goods will fall farther in course of time, and so will retail prices, with the result that the cost of living will be reduced. But until that happens wages cannot be materially reduced; and so the vicious circle goes on.

Incidentally, this brings us to the subject of the next chapter—Possible Cures—for one of the first things that will help to solve the present difficulty is a reduction of retail prices, so that increased consumption may be induced and the present surplus of raw materials gradually worked off. There is little doubt that we are still suffering from the habits of the war and post-war period of high prices. In pre-war days the producer had only one standard in fixing the price at which he offered his goods; it must be the lowest possible competitive price. During the war competition for a time was the

other way about, buyers were competing with each other for insufficient supplies of goods, and the retailers have not quite got out of the habit of mind engendered by that period of high prices. They must get back to the idea that their chief business in life is to make their prices as low as possible, so as to tempt their customers to buy as much as possible. If such a policy were generally adopted there is room for a very large increase of consumption in most directions, which would before long restore the balance of supply and demand.

It would, however, be unfair to give the impression that the retailers alone are responsible for the failure of their prices to keep pace with the fall in the price of raw materials. As has been previously pointed out, there is a long gap between the raw materials and the finished goods as delivered to the retailer, which is entirely unbridged by the index numbers of prices. That gap represents roughly the manufacturing costs and the distributing costs of the manufacturer, including the wholesale dealers or middlemen who pass the goods from the manufacturer to the retailer. It is said that high wages are largely responsible for the increased costs, both of manufacture and wholesale distribution. It is also said that high taxation, including the cost of social services, and heavy local rating have greatly increased the cost of production; and there is no doubt a good deal of truth in both these claims. But it is equally true that prices since the war have more and more come under the control of large trade organizations which in pre-war days would have been promptly characterized as monopolies. One of the most curious results of the war has been the complete change of public opinion with regard to such price-fixing organizations. Before the war, to call any such organization

a monopoly was the last word in condemnation; but now such arrangements are called 'rationalization' and are quite generally regarded as the proper way out of our troubles. This again is partly true, but there is danger of overlooking the fact that many of these organizations have resulted in price-fixing arrangements which possess the fundamental disadvantage of any such arrangement, namely that it is very difficult to get agreement in the first place and very difficult to change the prices once they are fixed, especially when prices are falling. It is almost beyond dispute that many of the big kartels have been strong enough to resist the recent downward movement, hoping of course that it was only temporary; but that is very doubtful now and the lead recently given by the German and Italian governments in calling for drastic reduction of prices of manufactured goods wherever possible is one to be followed by every country.

This again raises the question of other artificial restrictions on the free movement of goods throughout the world. It does not require arguing nowadays that monopolies flourish best behind a tariff wall; and the recent tendency to more and higher tariffs everywhere is no doubt one factor in the world position. Perhaps no stronger illustration could be given of this than the recent imposition in America of a tariff of 7 cents per pound on imported staple cotton. That America, the largest producer of cotton in the world, whose exports of that staple have fallen off very seriously in the last few years, should reply by placing an obstacle in the way of other countries exporting their cotton may be human nature, but it is certainly not the way to remedy the present difficulty. Every tariff which adds to the cost of goods to the consumer is inevitably a discouragement-

ment to consumption, which tends to depress the balance of supply and demand in the wrong direction.

In the meantime of course there will inevitably be a tendency to produce that equilibrium of supply and demand by reducing supply. In cases like cotton, which is an annual crop, this can be done fairly quickly, and there will certainly be a reduction of acreage in 1931. In almost every other commodity the question of restriction of supplies is being discussed; but in many cases that will take time, and in the meantime the problem is how to handle the existing huge stocks and prevent their weight depressing prices still farther. It would be inappropriate here to go into the question of all the efforts that have been made by governments and by organizations of various kinds to meet this difficulty and to take stocks off the market. Some of these have met with some success, but in other cases, especially wheat, the final result is very doubtful. But these measures for dealing with stocks can only be palliatives. A new balance must be struck between actual production and genuine consumption; and in the present state of the world it will be a great pity if the balance comes down on the side of restricting production, for the world could do very well with all it can get of these staple raw materials, and any artificial restriction of supply is greatly to be regretted. It is this argument which gives the most serious importance to the whole question of falling prices. If it is true that the world's capacity to produce the goods which the world so badly needs is being strangled by monetary difficulties, then the position is simply intolerable. As long therefore as there is the faintest chance of that charge being true, it is necessary to consider what can be done to remedy such a state of affairs.

Chapter Five

POSSIBLE CURES

Increased gold production—Economies in use of gold, More silver against notes, Cheaper cheques—International gold movements, the Bank of International Settlements.

IN the previous chapter we have indicated what may be called the immediate cure for the present situation, namely, the reduction of retail prices so as to promote increased consumption. If the major cause of the trouble has been large supplies and restricted consumption, that ought to redress the balance in course of time; but the position is too uncertain to say dogmatically that that is the *whole* cause of the trouble and therefore all that is wanted to cure it.

The fact remains that the world's gold supply is showing a tendency to diminish, and the previous experience of history has shown that that is a dangerous tendency. The argument in Chapter III was that *so far* there is no evidence that the diminishing gold supply has been the major cause of the fall in prices, because the world has learned to economize gold, and up till now that has met the difficulty; but it does not follow that the same methods will always be effective. The League of Nations Gold Delegation has pointed out that the supply of gold is likely to diminish still farther in the immediate future, and it is highly probable that the process of economizing gold has already been carried as far as possible under existing conditions. While, therefore, the verdict so far has been 'Not Proven', it may be necessary to follow it up with the caution 'Be more careful in future'. In other words, the danger of a world scarcity of gold is hanging over us, if it has not yet materialized, and it will not do to wait

till it does produce results so clear that they cannot be disputed, and then begin to think about possible remedies; for these remedies are highly controversial, and it is essential that we should be getting on with the controversy now, in case the need to apply the remedies definitely arises.

The most satisfactory feature of the whole business, however, is that such remedies are available. The experience of the war and post-war period has quite definitely shown us what can be done to prevent a scarcity of money by economizing the use of gold, and there are many further developments on the same lines still possible. Before going on to these it must be pointed out that it is not impossible to do something on the other side of the equation, namely, increasing the world's supply of gold. As a matter of fact, a heavy fall in prices is of itself an encouragement to increased gold production, because the price of gold remains fixed and the cost of production must fall to some extent with the reduced cost of all its materials and machinery, and ultimately of labour as the cost of living falls. We saw the reverse action of these prices during the war period of high prices,¹ and there is no doubt that it would work both ways; but this is a slow process, and in the meantime there is always the possibility of the gold mines approaching exhaustion.

Even that, however, does not finally dispose of the question. There is gold in the world still undiscovered, and it must be remembered that the possibility of discovering new gold-fields is not entirely a matter of chance. It is said, for example, that the discovery of the Klondike fields was directly due to the fact that the silver mines in America were no longer paying, and that

¹ See *Mechanism of Exchange*, p. 230.

many of the old prospectors, finding their living gone, deliberately set out to look for gold and found it. There is reason to hope that if the governments of the world were to organize propaganda in favour of the search for further gold-fields it would lead to results, and this is a possible line of action that should not be overlooked.

On the other hand, if the world is to be seriously short of gold, is it necessary that 45 per cent. of the total world's production should be swallowed up every year for non-monetary purposes? It should be possible to find means of discouraging the use of gold in industry and the arts, especially in luxury trades, say by imposing a tax on such uses, most of which are of a kind that would be fairly open to a tax as evidence of ability to pay. A much more material gain would be achieved if anything could be done to reduce the steady drain of gold to India and similar countries, and with the extension of banking habits that should not be impossible.

The one thing to be deprecated is the possibility of any important nation returning to the idea of having gold in circulation. A gold currency is objectionable from every point of view; it is unscientific and expensive, and against the whole modern evolution of money, which has been away from the idea of using means of exchange which possess full intrinsic value. The advantage of bank-notes is that they do not require full gold cover, and the whole tendency, especially since the war, has been to do with less gold against the notes. In practice most nations now use little more than a third, and the hope of the future is to develop that tendency still farther.

The possibilities of further developments in the

economizing of gold are numerous. In the first place the movement already noted in the direction of keeping a smaller percentage of gold against bank-notes should be encouraged. Popular opinion requires to be educated as to the real function of gold held against notes. In the old days when all notes were convertible into gold such a reserve of substantial proportions was really necessary, because the public might take it into their heads at any moment to become uneasy about their notes and so present them for conversion in large numbers; but that situation has been entirely changed by modern developments in two respects. In every case the reason for a run on the notes of a bank was that they had been over-issued, but that is almost impossible now, because the issue of bank-notes is under government control in every country. The second reason is that in many countries the holder of bank-notes is not now entitled to demand gold in exchange. Perhaps the most astonishing thing in our recent monetary history is the absolute indifference with which this revolutionary change in our system, made by the Gold Standard Act of 1925, was received by the public. Before the war the public's faith in the Bank of England notes had become unshakable, and it was founded on the fact that they could always get five golden sovereigns if they wanted them, but by a stroke of the pen this fundamental principle of our note issue was wiped out, and nobody seemed to take any notice. Under these conditions, what need is there for holding even so much gold against notes? It is true that any person who holds £1,700 in Bank of England notes can still present them to the Bank and demand a 400-ounce bar of fine gold; but why should any sane man do such a thing? If he wants a little gold for industrial purposes,

all he has to do is to go to a dealer in Hatton Garden, who will sell him gold in any quantity and of any standard that he requires. If, on the other hand, he wants to send gold abroad, the much easier way of doing it is simply to draw a cheque on his own bank who will arrange the shipment with the Bank of England.

The fact is, that the only thing that the public ever want in place of notes is silver for change, and it would be much more reasonable for the Bank to carry a considerable stock of coined silver to meet any possible desire on the part of the public to convert their notes into coin. As a matter of fact, a small amount of silver is carried by the Issue Department, but they are not allowed to count this as part of the bullion held against the notes; it is treated as part of the securities against the Fiduciary Issue. The history of this question is interesting. In the original Bank Act of 1844 it was provided that the Bank could hold one-fifth of the total bullion in the Issue Department in silver, i.e. they could hold silver to the extent of one-fourth of the gold; but this right had not been exercised for many years before the war, and it was only when silver became redundant after the deflation slump in 1921 that the government decided to put some of it in reserve against the Treasury notes. When these were transferred to the Bank of England under the 1928 Act the right to hold this silver was restricted to £5½ millions, which happened to be just about the amount they had in hand at the time.

It seems to the writer that this showed a lack of vision and courage on the part of the framers of the new Act. They might have foreseen that in future less and less gold would be required against the notes, and that silver would serve the purpose in any possible

demand for change; for it must be remembered that silver is the only kind of coin that the holder of a bank-note may now demand, because if he demands change for a £5 note, all he is entitled to is five £1 notes, and each of these is of course payable in silver, which is legal tender up to £2. Had they then simply let the old provision of the 1844 Act stand, it would have been possible, as the public became used to the idea of never seeing gold, to introduce gradually more silver into the reserve held against the notes. Take, for example, the present position. On 26 November 1930 there was altogether £156 millions of gold in the Issue Department, of which £65 millions belonged to the Banking Department and £91 millions was Note Gold. If one-fifth of the total had been held in silver, the position now would be that only £60 millions of gold and £31 millions of silver would be held against the total note circulation of £351 millions. That would be carrying still farther the process of economizing the use of gold as reserve against currency which we have already carried so far since the war.

There is another way in which a still greater economy of gold could be effected. The total amount of gold required against the bank-notes of course decreases as the total issue decreases because the Fiduciary Issue is fixed at £260 millions. Now the circulation of bank-notes has been falling steadily on the whole since the beginning of 1921, largely of course as the result of the downward movement of prices, for with lower prices we require less currency in our pockets to do our cash business. Even if this fall of prices were checked, there is another way in which the circulation of bank-notes might easily be still further reduced, namely by promoting the further use of cheques through the reduc-

tion of the stamp duty to the pre-war figure of a penny, or even by abolishing it altogether. There can be little doubt that the 2*d.* stamp on cheques since the war has materially reduced the use of small cheques, and a great deal could be done to encourage the use of cheques by the ordinary person if they were made free of duty. The practice of paying salaries into the employee's bank account could then be developed to a much larger extent, and the use of cheques made a great deal more general, as indeed it is in many other countries such as our own colonies.

There is a limit, however, to what can be done in economizing the use of gold in these ways. It would not take much more reduction in the Note Issue to bring the Circulation right down to the figure of the Fiduciary Issue, and it is doubtful whether the public is yet quite educated up to that. As a matter of fact, under the present system they would probably never notice that this was what was happening. There would always be some gold in the Issue Department, and as above pointed out the public pays no attention to the distinction between the total gold and what we have called the Note Gold.

Even if the public were accustomed to the idea that it is not necessary to hold gold against the bank-notes, the world at large is still completely convinced that it is necessary for the Central Banks to hold a substantial fund of gold for the purpose of international payments, but is even that really necessary? The old idea that the normal method of adjusting the balance of trade between nations is to pay the difference in gold dies very hard, though it is of course no longer true. Gold is simply one of many commodities which are the subject of trade between nations. Some countries of course produce

gold like South Africa; others, like ourselves, deal very largely in gold, exporting and importing every year far more than they retain. Others again merely import a little when they require it or can afford it. For any country, however, to attempt to run up a normal excess of imports of actual goods every year and pay the balance in gold is quite impossible. The real equilibrium of indebtedness between nations is maintained not by the passing of gold but by the creation or extinction of debts either temporary or permanent. All the gold for example that has gone to America since the war has not come within probably 10 per cent. of the amount of the indebtedness of Europe to the United States, both public and private.

Gold, however, does still play a very important part in international trade. The need frequently arises for some immediate payment by one nation to another, and there is not time to wait for the debit balance to be slowly wiped out by increased exports. In such cases the possession of a reserve of gold enables that country to meet its obligations, or at least reduce its indebtedness, at once. An examination of the table of gold reserves in the Appendix will furnish some interesting examples of this, e. g. in the sharp reduction of the gold holdings of Australia in 1929 and Brazil in 1930. The popular belief still is, therefore, that a reserve of gold is essential; and in the case of England, which is so largely concerned with the international trade of every country, it is essential that she should be able to stand a considerable drain of gold. London always holds large amounts of foreign money, i. e. balances at the credit of individuals in many different countries, any of whom may at times find it desirable to withdraw that balance or part of it, either because they require it for some

unexpected purpose, or because the relative value of money in the two countries makes it profitable to do so; and such withdrawals may be partly in gold. Both of these movements have recently been witnessed to a material extent between England and France. Many French balances were withdrawn from London in the autumn of 1930, and a good deal of them was taken in gold; and this movement was again accentuated by the bank failures in France which led many monied people in France to strengthen their position by laying in more gold.

As long as this is true there will be need for substantial gold reserves in the Central Banks of the World, but that is no reason why we should not consider the possibility of developing a different system. After all it is not so long since we in this country learned that it was not necessary to make large payments in gold or even bank-notes. Big transactions in the cotton trade were settled in that way until after 1905 when the use of the Clearing House became completely effective. Property transactions in many parts of the country are still settled by large payments in notes. We are gradually learning, however, that the use of cheques and the Clearing House is a much safer and simpler method; and the use of actual gold in internal transactions has of course dropped out altogether since the war. Is there any reason why we should not apply the same principle to settlements between parties in different countries? Why should we not have an International Clearing House to do the same work for foreign trade as the clearing houses do for England?

As a matter of fact, one of the financial consequences of the war is the creation of an organization which may very well develop into just such a clearing house, that

is the Bank of International Settlements at Basle. This Bank was established as part of the Young Plan in 1930 to deal with German reparations. Its primary object is to settle the various payments of Reparations and war debts between the nations of Europe and America without the constant passing and repassing of funds. Thus German reparations are paid periodically into the B.I.S., and are placed to the credit of the various Allies, in proportion to their shares of each payment. Each of the creditor countries can draw on this fund to pay its share of debt charges to other countries, but the ultimate use which most of them make of their balance is to meet periodical payments to the United States. Thus all these payments are made without the passing of any gold at all. When the B.I.S. was founded it was clearly in the minds of its originators that the functions of the Bank might be still further extended on the same lines. Provision is made in the Constitution for any of the Central Banks to place funds with the B.I.S., upon which it can draw to make payments to any country, and there is no reason why this method of meeting international indebtedness should not be extended *ad infinitum*, so that in course of time all international payments would be made in this way

There are of course many practical problems to be faced before this ideal can be realized. For example it would have to be arranged, and this would mean legislation in every country, that the balance held by each Central Bank with the B.I.S. would be regarded by it for balance-sheet purposes as equivalent to gold in its own safes. Behind all these problems, however, lies the dread shadow of War. What would happen to these balances in that case? It may be pointed out that in the case of anything less than another World War, the

existence of the B.I.S. would be of the greatest possible advantage, not only to the belligerents but to neutrals. One of the greatest difficulties with which every nation was faced in the last week of July 1914, and of course throughout the war, was the impossibility of making foreign payments, because the ultimate shipment of gold was impossible. In future wars, as long as there was a postal service left—and there are always aeroplanes—the whole business could be done through the B.I.S. by post, or it could even be done by wireless. Of course the case of another world war would probably strain the system to breaking-point; but that applies to any conceivable system, and it may be well to remind the reader that actually during the great war it was not in gold that the nations did their business. Germany's traditional 'war chest' was of very little use to her. The fact is, wars can only be fought on credit, and in war time that means internal credit; and the way in which England financed her relations with America during the war by the sale of securities is perhaps the best illustration of how we can carry on without gold.

While therefore it may under present conditions be rather remote, there is no doubt that such a development of the work of the B.I.S. is the ideal system for the regulation of international debts in future; but it must not be left as merely an unattainable ideal. It is, like disarmament, an ideal towards which we must steadily strive if we are to escape disaster; for the fact must be faced that there is at present no prospect of a continuously adequate supply of gold in the future. A possible shortage is quite definitely in prospect, and the consequences, both economic and social, of the recent fall of prices have been sufficiently disastrous to emphasize the necessity of preventing anything of the

kind that is preventable. The past history of the world under the gold standard is not creditable to the inventive capacity of financial men. The gold standard has probably been the best that we knew how to provide in the past, but it has been very far from perfect, and the world of to-day is not prepared to pay the price that was paid last century for its inefficiency. Serious fluctuations of world prices must be ruled out, and there is only one way. A gold standard will serve the purpose as well as any other, so long as it is properly managed; but we have learned to work the system with less gold than before and we must go on doing so to a still greater extent. A standard of value is essential, but it must be made to work properly. An unstable standard is a contradiction in terms, and gold has in the past been an unstable standard. There is, however, no reason why it should be so in the future, if the financial world can be educated to understand the real working of a standard; and we may take courage from the fact that it is barely sixty years since Walter Bagehot in his famous book *Lombard Street* set out to teach the banking world the real part which the Bank of England ought to play as the Central Bank of the English system. Why should it take another sixty years to convince the world of the possibilities of an International Central Bank?

Finally, it should be explicitly stated that there is absolutely no justification in the facts of the situation so far as it has yet developed for the proposal that we should abandon the gold standard. The indirect consequences of such a step to England's international position would be so disastrous and so far-reaching that it would indeed be a desperate remedy, but there is nothing in the present situation which calls for such panic measures. The admitted difficulties latent in the

position can be met by improvements of our existing system on the lines of international agreement. To cut ourselves adrift from the rest of the world which now uses a gold standard would not only be suicidal to ourselves but entirely against the whole modern ideal of international co-operation.

TABLE I. INDEX NUMBERS OF WHOLESALE PRICES, and
WORLD'S PRODUCTION OF GOLD, 1782-1930

(For original sources see *Mechanism of Exchange*, Tables I and V.)

Year.	Index Number.	Gold Production.	Year.	Index Number.	Gold Production.	Year.	Index Number.	Gold Production.
	% on 1900.	£'s mlns. Averages.		%	Averages.		%	Annual.
1782	168		1831	137		1881	126.6	22.4
3	168		2	130		2	127.7	21.4
4	156		3	125		3	125.9	20.7
5	151		4	130		4	114.1	21.7
6	143		5	133	2.8	5	107.0	21.7
7	146		6	143		6	101.0	22.4
8	146		7	140		7	98.8	22.0
9	143		8	140		8	101.8	23.0
1790	146	2.5	1840	153		9	103.4	24.6
1	149		1	145		1890	103.3	24.7
2	156		2	142		1	106.9	25.4
3	166		3	125		2	101.1	27.5
4	165		4	118		3	99.4	31.2
5	196		5	115		4	93.5	37.7
6	220		6	123	7.6	5	90.7	40.5
7	185		7	123		6	88.2	41.9
8	198		8	130		7	90.1	48.9
9	218		9	113		8	93.2	59.3
1800	235		1850	107		9	92.2	63.2
1	233		1	107		1900	100.0	52.8
2	183		2	110	18.7	1	96.7	54.3
3	208		3	108	30.6	2	96.4	59.3
4	198		4	123	32.2	3	96.9	65.9
5	220	2.5	5	138	27.9	4	98.2	69.8
6	217		6	133	29.2	5	97.6	75.7
7	215		7	137	30.4	6	100.8	81.1
8	242		8	142	29.2	7	106.0	82.3
9	262		9	127	28.7	8	103.0	88.7
1810	237		1860	128	28.5	9	104.1	92.0
1	227		1	132	26.8	1910	108.8	90.9
2	202		2	131	25.8	1	109.4	91.9
3	192		3	135	25.4	2	114.9	93.2
4	190		4	137	25.4	3	116.5	94.7
5	182	1.6	5	140	25.4	4	117.2	90.4
6	152		6	135	27.2	5	143.9	96.6
7	195		7	136	27.9	6	186.5	93.5
8	220		8	133	27.1	7	243.0	86.3
9	187		9	132	26.8	8	267.4	79.0
1820	172		1870	131	26.5	9	296.5	75.0
1	157		1	128	25.4	1920	365.7	69.0
2	147		2	135.6	26.2	1	229.7	68.0
3	148		3	145.2	24.4	2	185.0	65.5
4	147		4	151.9	24.0	3	185.1	75.5
5	172	2.0	5	146.9	22.5	4	193.6	81.0
6	150		6	140.4	22.3	5	185.4	81.0
7	150		7	137.1	23.1	6	172.5	82.0
8	135		8	140.4	25.0	7	165.0	82.5
9	132		9	131.1	26.0	8	163.4	83.5
1830	135		1880	125.0	23.4	9	158.9	83.5
				129.0	22.8	1930	139.2	83.0

TABLE II. WHOLESALE and RETAIL PRICES, 1920-30

(Board of Trade and Ministry of Labour.)

Date.	Wholesale.	Retail. ¹	Date.	Wholesale.	Retail.	Date.	Wholesale.	Retail.
	% on 1913	% on July 1914						
1920			1924			1928		
Jan.	296.6	230	Jan.	165.4	179	Jan.	141.3	166
Feb.	310.3	230	Feb.	167.0	178	Feb.	140.1	164
Mar.	319.0	232	Mar.	165.4	173	Mar.	140.6	164
Apr.	325.2	241	Apr.	164.7	171	Apr.	143.1	164
May	325.5	250	May	163.7	169	May	143.6	165
June	322.4	252	June	162.6	170	June	142.6	165
July	316.9	255	July	162.6	171	July	141.1	165
Aug.	313.1	261	Aug.	165.2	172	Aug.	139.3	165
Sept.	311.4	264	Sept.	166.9	176	Sept.	137.6	166
Oct.	302.3	276	Oct.	170.0	180	Oct.	138.1	167
Nov.	286.9	269	Nov.	169.8	181	Nov.	137.9	168
Dec.	263.8	265	Dec.	170.1	180	Dec.	138.1	167
1921			1925			1929		
Jan.	245.9	251	Jan.	171.0	179	Jan.	138.3	165
Feb.	225.2	241	Feb.	168.7	179	Feb.	138.4	166
Mar.	210.8	233	Mar.	166.0	175	Mar.	140.1	162
Apr.	204.8	228	Apr.	161.9	173	Apr.	138.8	161
May	201.7	219	May	158.6	172	May	135.8	160
June	197.7	219	June	157.2	173	June	135.6	161
July	194.1	222	July	156.9	173	July	137.4	163
Aug.	190.0	220	Aug.	156.2	174	Aug.	135.8	164
Sept.	187.0	210	Sept.	155.1	176	Sept.	135.8	165
Oct.	180.7	203	Oct.	153.9	176	Oct.	136.1	167
Nov.	172.8	195	Nov.	152.7	177	Nov.	134.0	167
Dec.	167.9	192	Dec.	152.1	175	Dec.	132.5	166
1922			1926			1930		
Jan.	164.0	188	Jan.	150.1	173	Jan.	131.0	164
Feb.	161.8	186	Feb.	147.6	172	Feb.	127.8	161
Mar.	160.0	182	Mar.	144.1	168	Mar.	124.5	157
Apr.	160.3	181	Apr.	143.6	167	Apr.	123.7	155
May	160.6	180	May	144.9	168	May	122.0	154
June	159.9	184	June	146.9	170	June	120.7	155
July	160.3	181	July	149.1	170	July	119.2	157
Aug.	156.3	179	Aug.	149.8	172	Aug.	117.8	157
Sept.	154.3	178	Sept.	150.9	174	Sept.	115.5	156
Oct.	155.2	180	Oct.	152.1	179	Oct.	113.0	157
Nov.	157.6	180	Nov.	152.4	179	Nov.	112.0	155
Dec.	155.8	178	Dec.	146.1	175	Dec.	108.9	153
1923			1927					
Jan.	157.0	177	Jan.	143.8	172			
Feb.	157.5	176	Feb.	142.6	171			
Mar.	160.3	174	Mar.	140.8	165			
Apr.	162.0	170	Apr.	139.9	164			
May	159.8	169	May	141.4	163			
June	159.3	169	June	142.1	166			
July	156.5	171	July	141.4	164			
Aug.	154.5	173	Aug.	141.3	165			
Sept.	157.8	175	Sept.	142.6	167			
Oct.	158.1	175	Oct.	141.8	169			
Nov.	160.8	177	Nov.	141.1	169			
Dec.	163.4	177	Dec.	140.4	168			

¹ 1st of following month

TABLE III. BOARD OF TRADE INDEX NUMBERS of WHOLESALE PRICES.
MONTHLY by GROUPS of COMMODITIES

(Base Year 1924 = 100.)

	I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	X.	
<i>Month.</i>	<i>Cereals.</i>	<i>Meat and Fish.</i>	<i>Other Foods.</i>	<i>Iron and Steel.</i>	<i>Coal.</i>	<i>Other Metals and Minerals.</i>	<i>Cotton.</i>	<i>Wool.</i>	<i>Other Textiles.</i>	<i>Miscellaneous.</i>	<i>All Articles.</i>
No. of Items	17	17	19	24	10	10	16	9	6	22	150
<i>1929</i>											
January	87.6	93.4	86.0	78.7	69.8	92.3	71.2	82.2	82.2	88.2	83.2
February	88.4	93.6	87.0	78.8	71.3	94.6	69.8	80.8	81.9	87.0	83.3
March	87.3	94.6	89.6	79.2	75.1	102.6	71.1	80.1	81.7	86.0	84.4
April	85.6	94.8	85.9	79.7	73.2	102.4	69.8	79.5	80.6	85.6	83.4
May	83.0	94.9	82.5	80.1	69.9	97.8	68.2	78.3	79.0	84.7	81.7
June	82.2	93.4	84.2	80.3	70.2	97.8	67.7	76.1	79.1	84.8	81.6
July	89.5	93.9	85.9	80.3	70.1	97.5	67.1	74.6	79.3	86.5	82.7
August	90.9	94.0	77.8	80.4	70.4	96.9	67.8	73.5	79.6	86.1	81.8
September	87.8	93.0	78.4	80.3	72.9	96.5	67.6	72.3	79.9	87.4	81.7
October	85.8	96.4	81.2	80.7	74.5	95.1	66.6	70.4	78.6	87.0	81.9
November	82.6	97.8	78.7	80.4	74.5	92.5	64.5	71.4	76.6	85.1	80.6
December	82.4	102.8	73.1	80.3	75.5	92.2	63.1	69.3	75.3	83.4	79.7
<i>1930</i>											
January	80.5	100.3	73.2	80.6	75.2	91.7	62.0	66.2	74.0	82.7	78.8
February	75.7	98.7	72.3	80.3	74.6	91.2	58.9	61.8	71.9	82.0	76.9
March	71.2	94.2	70.9	80.4	73.7	89.3	57.3	59.0	69.8	80.6	74.9
April	73.1	91.9	70.5	80.0	70.7	86.7	57.6	58.1	69.6	80.0	74.4
May	71.4	88.5	71.7	79.8	69.0	79.3	57.0	58.8	66.4	80.5	73.3
June	69.4	88.0	74.3	79.4	67.7	77.6	55.2	58.1	62.9	80.0	72.6
July	67.6	88.4	75.0	78.9	67.5	76.1	53.9	56.6	59.0	78.9	71.7
August	67.8	89.8	72.5	78.4	67.5	75.6	52.1	55.8	58.3	77.4	70.8
September	65.4	89.9	70.6	78.1	69.4	74.9	49.4	54.1	54.0	76.6	69.5
October	62.0	88.7	71.1	77.7	70.0	69.9	47.1	50.4	52.8	76.3	68.0
November	59.2	90.8	71.5	76.9	70.0	70.2	46.8	48.6	52.0	75.1	67.4
December	57.4	87.0	68.4	76.2	70.2	70.3	44.1	46.6	52.2	72.9	65.5

TABLE IV. WHOLESALE PRICES OF CERTAIN STAPLE COMMODITIES.

Monthly Averages, October 1928 to October 1930, as Percentages on 1913

(Founded on figures supplied by the Board of Trade.)

Commodity.	No. of Items.	October 1928.	October 1929.	October 1930.	Commodity.	No. of Items.	October 1928.	October 1929.	October 1930.
I. STILL ABOVE PRE-WAR					II. BELOW PRE-WAR				
Sugar*	2	160.1	153.2	128.4	Cocoa*	1	92.8	90.3	82.4
Coffee*	1	184.2	168.8	159.5	Wheat	2	131.6	137.6	89.2
Tea*	1	132.9	97.0	104.7	Wool	3	160.2	126.5	82.2
Tobacco*	2	235.2	235.2	234.3	Cotton	2	168.3	152.2	90.6
Pig Iron	5	100.9	111.5	104.7	Jute	1	105.9	96.7	54.4
Wrought Iron	3	126.8	128.2	127.6	Hemp	2	109.2	116.8	78.2
Steel	16	115.0	115.6	111.6	Silk*	2	149.9	140.6	79.2
Coal	10	121.2	130.0	124.3	Rubber	1	23.1	25.2	10.5
Timber	4	166.6	166.6	162.4	Hides	7	132.4	102.9	89.6
					Copper	1	99.8	116.2	67.6
					Lead	1	123.1	128.4	90.6
					Tin	1	109.5	96.5	60.6
					Zinc	1	105.4	100.2	62.6
					Silver	1	97.0	83.6	60.1

* Including duty, which accounts for much of the increase in Tobacco. In sugar present prices would be below pre-war if the duty were excluded.

TABLE V. THE AMOUNT OF 'MONEY', 1920-30

Date.	A.		B.				C.			D.
	Notes Circulation.		Bank of England.				'Big Five' Banks.			Clearing House.
	Net Total.	% of Gold Cover.	Deposits.	Reserve.	Proportion %	Bank Rate.	Deposits.	Discounts and Advances.	Cash and Call Money	Quarterly Totals.
1920										
Mar. 3	424.5	26.2	157.8	30.9	19.62	6				10,534
June 2	456.1	27.1	148.5	19.1	12.87	7				9,820
Sept. 1	463.1	29.5	129.7	15.0	11.50	7				9,417
Dec. 1	462.9	30.2	164.3	12.9	7.87	7				9,421
1921										
Mar. 2	447.2	31.2	142.7	17.4	12.25	7	1,562.0	67.0	18.8	8,988
June 1	440.7	31.6	149.8	17.7	11.87	6	1,615.5	66.5	19.9	8,521
Sept. 7	426.2	32.0	156.2	20.4	13.12	5½	1,619.3	67.7	19.1	8,389
Dec. 7	421.3	32.0	154.7	21.9	14.12	5	1,659.7	66.4	20.0	9,033
1922										
Mar. 1	402.5	33.1	135.6	24.1	17.75	4½	1,591.7	63.4	19.4	9,939
June 7	401.4	33.0	141.5	24.8	17.50	4	1,605.1	61.6	20.1	9,529
Sept. 6	394.9	33.3	125.0	23.0	18.37	3	1,520.0	61.0	20.0	8,812
Dec. 6	392.6	33.3	137.7	22.8	18.50	3	1,540.3	61.8	20.6	8,882
1923										
Mar. 7	382.3	34.2	123.4	23.8	19.25	3	1,460.7	62.5	21.1	9,584
June 6	389.8	33.8	123.7	22.9	18.50	3	1,497.7	62.9	21.1	9,367
Sept. 5	388.5	34.0	124.1	22.5	18.12	4	1,475.0	62.9	20.5	8,328
Dec. 5	388.1	34.4	147.8	21.5	14.50	4	1,530.2	62.3	21.1	9,349
1924										
Mar. 5	383.5	34.7	123.2	21.8	17.75	4	1,469.6	63.1	19.9	10,050
June 4	394.1	34.0	138.6	21.4	15.37	4	1,509.4	63.4	21.1	9,989
Sept. 3	392.7	33.9	125.3	22.4	17.75	4	1,477.2	63.7	21.0	9,315
Dec. 3	389.5	33.7	143.7	24.4	17.00	4	1,515.3	63.7	22.1	10,179

<i>1925</i>										
Mar. 4	381·9	34·6	128·9	23·5	18·25	5	1,470·7	65·3	21·4	10,540
June 3	390·4	33·1	125·7	27·4	21·75	5	1,489·9	65·5	22·4	9,938
Sept. 2	384·6	32·6	129·4	37·3	28·75	4½	1,482·0	67·0	21·3	9,534
Dec. 2	376·5	32·8	138·4	22·1	16·00	4	1,510·3	66·0	22·4	10,425
<i>1926</i>										
Mar. 3	372·5	32·8	119·6	23·6	19·75	5	1,458·3	67·3	21·8	10,119
June 2	384·0	31·6	130·2	27·5	21·12	5	1,497·2	67·1	22·5	9,773
Sept. 1	376·2	32·3	124·3	34·0	27·31	5	1,498·0	68·0	21·6	9,656
Dec. 1	369·3	32·5	127·0	32·9	25·94	5	1,551·7	66·8	22·5	10,277
<i>1927</i>										
Mar. 2	365·4	32·2	119·2	32·3	27·00	5	1,500·8	67·8	21·8	10,430
June 1	378·1	30·8	126·1	36·0	28·50	4½	1,546·6	67·8	23·1	10,510
Sept. 7	378·7	31·0	115·9	34·6	29·87	4½	1,513·5	68·5	22·2	9,850
Dec. 7	378·4	30·9	107·3	32·7	27·87	4½	1,585·8	67·4	23·6	10,760
<i>1928</i>										
Mar. 7	368·7	31·3	111·3	42·5	38·25	4½	1,514·9	68·2	22·8	11,092
June 6	375·2	30·9	119·1	48·2	40·37	4½	1,580·0	68·2	23·2	11,296
Sept. 5	377·2	30·6	127·8	61·0	47·62	4½	1,579·2	69·0	21·1	10,555
Dec. 5	371·5	30·0	123·6	47·1	38·62	4½	1,641·7	67·8	23·3	11,262
<i>1929</i>										
Mar. 6	355·1	26·8	109·8	56·7	51·59	5½	1,581·2	69·6	21·0	11,559
June 5	361·6	28·1	114·7	62·3	54·22	5½	1,609·6	68·2	22·4	10,752
Sept. 4	366·2	29·0	120·3	31·3	26·00	5½	1,596·6	68·8	20·5	11,154
Dec. 4	361·1	28·2	104·1	33·2	31·94	5½	1,604·7	68·6	22·4	11,431
<i>1930</i>										
Mar. 5	347·3	25·1	107·3	65·0	60·50	4½	1,529·6	69·4	21·5	11,539
June 4	359·8	27·7	116·8	57·1	48·86	3	1,635·1	69·7	21·9	10,979
Sept. 3	363·0	28·4	110·0	52·5	47·72	3	1,611·1	69·2	20·2	10,684
Dec. 5	359·2	27·6	123·9	56·4	45·50	3	1,672·1	68·1	21·1	10,357

TABLE VI. GOLD HOLDINGS OF VARIOUS COUNTRIES. 1913-1930

(In \$ mns.) From the Federal Reserve Bulletins.

	1913	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930 (Oct.)*	Percent. on 1913
WORLD'S TOTAL.	4,932	7,206	7,994	8,381	8,612	8,933	8,926	9,191	9,546	10,010	10,299	10,867	220.3
U.S.A.	1,290	2,451	3,221	3,506	3,834	4,090	3,985	4,083	3,977	3,746	3,900	4,220	327.1
France	679	686	690	708	709	710	711	711	954	1,253	1,633	2,037	300.0
Per cent. of World's Total	1,969	3,137	3,911	4,214	4,543	4,800	4,696	4,794	4,931	4,999	5,533	6,257	317.8
	39.9	43.5	48.9	50.3	52.8	53.7	52.6	52.2	51.7	49.9	53.7	57.6	
<i>All Others</i>	2,963	4,069	4,083	4,167	4,069	4,133	4,230	4,397	4,615	5,011	4,766	4,615	155.8
Great Britain	170	763	764	752	754	757	703	735	742	750	711	767	415.2
Germany	279	260	237	239	111	181	288	436	444	650	544	519	186.0
Spain	93	474	485	487	488	489	490	493	502	494	495	478	514.0
Argentina	256	474	472	473	466	444	451	451	529	607	434	429	167.6
Japan	65	556	611	606	602	586	576	562	542	541	542	414	636.9
Italy	265	204	211	217	216	218	219	221	239	266	273	278	104.9
Russia	872			3	45	73	94	85	97	92	147	249	28.6
Belgium	48	51	51	52	52	53	53	86	100	126	163	180	375.0
Holland	61	256	244	234	234	203	178	166	161	175	180	171	280.3
India	124	116	118	118	109	109	109	109	119	124	128	128	103.2
Switzerland	33	105	106	103	104	98	90	91	100	103	115	128	387.9
Canada	117	113	95	147	127	151	157	158	152	114	78	122	104.3
Australia	22	115	113	116	121	121	128	107	105	108	89	79	359.1
Brazil	90	33	43	46	49	54	54	56	101	149	150	43	47.8

(* The figures for U.S.A., France, and U.K. are for November.)

INDEX

- America, consumption in, 40, 42.
gold reserves, 32, 35, 66.
See also Wall Street crash.
- Armistice slump, 6.
- Australian goldfields, 6.
gold reserves, 33, 66.
- Bank Act, 1844, 18, 21, 52.
- Bank of England, 20, 22, 26, 30.
- Bank of England Reserve, 20, 22, 25,
30, 32.
statistics, 64.
- Bank of International Settlements,
56.
- Bank notes, 18, 20, 32, 50.
statistics, 64.
- Bank Rate, 19, 24.
- Bank Return, 22.
- Banking Department, 20, 22.
- Banks, nationalization of, 3.
- Big Five Banks, 27, 30.
statistics, 64.
- Californian goldfields, 6.
- Central Banks, 34, 36, 53, 55, 58.
- Cheques, use of, 16, 53.
- Circulation, 20, 32.
statistics, 64.
- Clearing House, 17, 29, 55.
statistics, 64.
- Coal, 10, 39, 62, 63.
- Confidence and credit, 31.
in prices, 41.
- Cotton, 10, 39, 62, 63.
- Consumption in America, 40, 42.
- Credit inflation, 1.
meaning of, 15.
restriction, 30.
- Cunliffe Committee Report, 32.
- Currency, 15.
- Currency and Bank Notes Act, 1928,
15, 18, 21, 51.
- Currency notes, 20.
- Deflation slump, 1, 6, 8.
- Deposits, 27, 30.
- Fiduciary issue, 17, 21, 52.
- France, gold reserves, 32, 34, 66.
- Gold and credit, 19.
against bank notes, 20, 23.
as currency, 2, 49.
bottle-neck of credit, 19.
concentration of, 32.
cost of production, 48.
economy in the use of, 32, 50.
in America, 32, 35, 66.
in France, 32, 36, 55, 66.
in India, 49.
industrial uses, 49.
movements, 54.
new supplies, 6, 48.
reserves, 32, 35, 54, 66.
scarcity, 1, 47.
standard, 1, 19, 30, 50, 58.
supply, 1, 6, 47, 60.
world's stock of, 8, 19.
- Gold Delegation's Report, 7, 37, 47.
- Index numbers, 8.
statistics, 60.
- Iron and steel, 10, 39, 62, 63.
- Issue Department, 20, 22, 51.
- Joint Stock Banks, 22, 26.
- Klondike goldfield, 7, 48.
- Money, meaning of, 15.
- Monopolies, 44.
- Napoleonic Wars, 4.
- Nationalization of banking, 3.
- New York Stock Exchange boom,
25, 42.
- Note gold, 20, 23.
statistics, 64.
- Other Banks, 26.
- Outside Money Market, 28.
- Post-war boom, 1, 6.
- Prices during the war, 6.
v. values, 38.
See also Wholesale and Retail.

'Proportion' 22, 25.

Protection, 2, 45.

Raw materials, 9, 39, 41, 43, 46.

Reserve, 20, 22, 25, 30, 32.

Retail prices, 9, 43.
statistics, 61.

Rubber, 12, 39, 63.

Silver, 12, 39, 51, 63.
demonetization of, 7.

Sugar, 12, 39, 63.

Tariffs, 45.

Textiles, 39, 62.

Token currency, 15, 18.

Transvaal goldfields, 7.

Treasury notes, *see* Currency notes.

Wall Street crash, 26, 28, 30, 40.

Weekly return, 22.

Wheat, 12, 39, 41, 63.

Wholesale prices, 4, 8, 10.
statistics, 60, 61, 62.

Wool, 10, 12, 39, 63.