THE BRITISH COUNCIL

TRUTH WILL TRIUMPH

3s 6d net

Towards a Modern Monetary Standard

by

PER JACOBSSON

LL.D. DR. RER. POL.

CHAIRMAN OF THE EXECUTIVE
BOARD AND MANAGING DIRECTOR OF THE
INTERNATIONAL MONETARY FUND

The Stamp Memorial Lecture
delivered before the University of London
on 19 November 1959

UNIVERSITY OF LONDON
THE ATHLONE PRESS
1959

First published 1959 *by*
THE ATHLONE PRESS
UNIVERSITY OF LONDON
at 2 Gower Street, London, WC1

Distributed by Constable & Co. Ltd.
12 Orange Street, London, WC2

Canada
University of Toronto Press
Toronto 5

U.S.A.
Oxford University Press Inc
New York

Printed in Great Britain by
WESTERN PRINTING SERVICES LTD
Bristol

THE STAMP MEMORIAL LECTURE

was founded in December 1942 in honour and to the perpetual memory of Josiah Charles Stamp, first Baron Stamp of Shortlands, who was killed by enemy action in April 1941. The Trust Deed requires that the lectures shall have as their subject the application of Economics and Statistics to a practical problem or problems of general interest and that the subject shall be treated from a scientific and not from a party political standpoint. The lectures are open to the public without charge.

TOWARDS A MODERN MONETARY STANDARD

When in the fatal week-end of the 19th to 20th of September 1931, the New York banker, Paul Warburg, who had been one of the architects of the Federal Reserve System, heard the news of the suspension of gold payments by the Bank of England, he is reported to have burst out: 'This is the end of an era.' Indeed, it was the end of an era, but equally important, it was also the beginning of a new one. The events of 1931 and the long drawn-out depression of the 1930's so influenced the minds of men that this period stands out as the Great Modern Divide in economic thinking, and thus also in the evolution of economic and financial policies.

Before we examine the modern monetary standard which is emerging, and trace, as we must, many of the monetary developments in the period since the end of the First World War, it is worth looking back for a moment to the origins of the gold standard in England during the 19th century. We find that the rules of the gold standard evolved gradually, and were very largely based on practical experience as formulated in the reports of a series of royal and parliamentary commissions appointed to study the monetary problems that arose out of a number of serious economic and financial crises. The principles of the gold standard, as it began to operate in the latter half of the 19th century, were arrived at after much painful experience, and much hard work by many able men. However, once the basic principles had been grasped, they appeared almost self-evident and people even began to talk about 'the automatic gold standard'. The world was fortunate in finding two outstanding men to explain the working of the system, namely, George Goschen (later Viscount Goschen), author of *The Theory of the Foreign Exchanges*, published in 1861, and Walter Bagehot, author of

Lombard Street, published in 1873. Bagehot's work is well worth reading again today for you will find that, far from being merely an exponent of the system as it then worked, he was full of ideas for improvements. He was certainly not a believer in an automatic system—remember his famous saying at the end of the first chapter of *Lombard Street*: 'Money will not manage itself.'

When the First World War was over, it was only natural after the inflationary rise in prices and all his other monetary convulsions, that governments and people should want to restore the international gold standard which had served their economies so well in the years before 1914. At first their attempts met with a fair measure of success, but the convulsions and consequent devaluations of the early 1930's struck a decisive blow at the gold standard as it had been operated up to that time, and the consequent splitting-up of the world into various monetary blocks, with an increasing number of restrictions, was one of the main causes of the stagnation of international trade for nearly a decade.

It was, of course, inevitable that such a break with the past would be disturbing for both monetary theory and practice; but I think that historians of this period and of the years that have followed will record that many constructive ideas and measures emanated from the difficult days of the 1930's. After all, there was the desire to create something new, and although a certain amount has had to be discarded, much has remained.

As far as individual countries are concerned, the changes in the United States deserve special attention. The New Deal ushered in a new age, and many of the measures taken then are still of importance today, in the monetary field as well as in other fields. Some very useful structural changes were made, for instance, in the field of mortgage financing, deposit insurance, etc., and 'built-in stabilisers' became of real significance.

I cannot, however, go into these and other changes in individual countries, and I must turn to the plans that were made during the Second World War. The wartime cooperation between countries gave a fresh impetus to a reconsideration of these various problems, especially in the international field, and there was clearly no wish either to return to the old gold standard or to continue the practices pursued during the 1930's. Those who attacked the task of post-war planning were more ambitious, and rightly so; they wanted to tackle afresh, in an international context, not only the world's monetary arrangements, but also the problems of long-term international investment and of international trade relations. Even if all their ideas were not put into practice, positive results were achieved by the creation of the two Bretton Woods institutions—the International Monetary Fund and the International Bank for Reconstruction and Development—and despite many difficulties, their plans for a new set of rules in the commercial field bore fruit in the acceptance of the General Agreement on Tariffs and Trade—the so-called 'G.A.T.T.'. In many respects the move towards a modern monetary system centres around these international institutions—especially the International Monetary Fund.

Before I consider certain structural changes of importance for the working of the monetary system, I would like to say a few words about some broad changes which have occurred in monetary thinking. First of all, I want to recall an observation of Knut Wicksell at a meeting of the Political Economy Club in Stockholm in the winter of 1919–20. A reference had been made to the writings of Alfred Marshall, and Wicksell remarked how difficult it was to remember precisely what views Marshall had expressed on any particular point, because Marshall wrote so smoothly that what he said did not really stick in one's mind. Wicksell went on to talk about the dominance of Marshall's ideas, especially in England, and added, 'I don't think any real progress in English economic thinking will take place before somebody comes and says that Marshall is all wrong.' Keynes gave the impression that he very nearly did that, at least at one stage in the development of his ideas. These ideas were in a large measure coloured by the circumstances of the times in which they were conceived, and they have not escaped criticism—some quite valid—but they opened up new vistas and contained suggestions for new techniques—to the lasting benefit of the study of economics.

While Keynes' ideas thus gave fresh stimulus to our minds, they created at the same time sharp differences in our thinking, especially in monetary matters; and this uncertainty has affected the formation of policy. After the emphasis on cheap money during the depression, and then during the war, it seemed for a time as if any increase in interest rates would be ruled out, and as if monetary policy—if it were allowed any place at all—would in effect be relegated to a back seat. But this phase, too, came to an end. Some important countries on the Continent of Europe which had suffered from extreme inflation, or witnessed such inflation in a neighbouring country, soon began to employ monetary measures again—and as these measures proved successful, other countries followed their example. There was, in fact, a gradual revival of the use of monetary weapons until now it may be said that monetary policy once again forms part of the general policies pursued by the authorities in most countries. In this process of revival, it has been found that many of the old gold standard rules are still valid, even though, with changed general circumstances and a new set of objectives, they have often to be applied in a modified form. It is not possible to say that a proper synthesis between the old gold standard rules and the new ideas of managed money has as yet been attained; that is one of the important things to which our efforts should be directed.

Before I go further, it may be useful to say a few words about the 'changed general circumstances' in the public sector; within the private sector; and in the role of gold itself.

In the first place, we must note the increased share of *the public sector* in modern economies. Before 1914 the public sector rarely accounted for as much as 10 per cent of the national income—sometimes not more than 6 per cent. Now in most countries it has risen to something like 20 per cent, and if social security payments are included, it is as much as 30 per cent in some countries. No wonder, therefore, that in questions of monetary development more importance must be attached to fiscal policy. By its very size, what happens in the public sector is bound to exert a considerable effect on the whole economy; moreover, adjustments in government receipts and expenditures can be effected only rather slowly; and the public sector is generally less susceptible than the private sector to the ordinary weapons of monetary policy, such as changes in bank rate.

Secondly, there has been a great increase in the public debt of many countries, and difficult problems arise when a sizeable proportion of that debt is due at short term.

Thirdly, when ever important industries have been nationalised, the financing of investment in them presents further problems. It will not generally be easy to find the correct balance between the needs of the nationalised industries and those of other government and private activities. There is the danger that the nationalised industries may sometimes be starved of funds; or, more often, the opposite danger that they absorb too much; or that the funds they require may be financed in the wrong way.

Finally, the foreign commitments and international responsibilities of governments have increased greatly in recent years—this increase having effect, for instance, in budget figures, and in the time and energy which officials have to devote to these problems.

In *the private sector* we should note the increased rigidity of our present-day economies, as evidenced, for instance, by the marked resistance to reductions in costs and prices, even in a recession. This increased rigidity is to some extent connected with the growth of the public sector, but it is also related to other developments, of which perhaps the most important has been the evolution of modern industrial techniques which, to be effective, require large-scale production by big firms. These developments have resulted in a notable rise in the size and power of associations representing special interests—in the fields of finance, labour, agriculture. etc. Increased rigidity has also been encouraged by the widespread belief, arising out of the experiences of the Great Depression, that cost and price adjustments serve little purpose—and may, indeed, even be harmful, a point to which I shall return later.

This rigidity is in several ways dangerous, for our Western economies remain in all essential respects market economies, in which the direction of trade and pattern of production, and the allocation of resources, are determined by the relation between costs and prices under the inter-play of supply and demand. I am not making a plea for *laissez faire*; undoubtedly much government intervention is called for; but if harmful effects are to be avoided, this intervention should conform to the basic requirements of a market economy. Certainly the danger is now less than it was immediately after the war when minds were still dominated by the sad experiences of the depression and the special wartime need of concentrating maximum resources on the military effort. Thanks to the results achieved in many countries, it has, I think, become realised more and more that a market economy can work well, and that there are inherent dangers and difficulties in any measures which run counter to the basic requirements of such an economy.

Turning now to certain changes *in the role of gold itself*, it is perhaps of greater importance than is generally realised that gold coins are no longer used as a means of payment in active circulation. If, at a time when gold coins were still used as a means of payment, prices in a country began to rise, more coins would be required by the public, and there would thus be an internal drain on the reserves, in addition to whatever external drain might arise. Conversely, if prices fell, gold coins would flow from circulation into the reserves. Since in 1913 the total amount of gold in circulation was 90 per cent of the gold held in official reserves—something like £740 million, as compared with £820 million in the reserves—a price change of, say 20 per cent, would have appreciably affected the reserve position, and any price change would have brought certain corrective forces almost automatically into play—forces that now are no longer operating.

Another change in the role of gold was already becoming apparent immediately after the First World War. Whereas, before 1914, an influx of gold 'automatically' increased the liquidity of the economy, in the years 1921–22 the authorities in the United States made the first conscious attempts by means of open-market operations to offset the increased liquidity caused by an inflow of gold. These first attempts to temper the 'automatic' link between external and internal developments were the precursors of the establishment of exchange stabilisation funds in one country after another during the 1930's.

Finally, attention must be drawn to another matter relating to gold, namely, the change in the ratio of the value of newly-mined gold becoming available annually for monetary purposes, and the annual increase in the national incomes of all countries which hold gold in their reserves. In 1913–14 the ratio would seem to have been something like one to ten or twelve; in recent years it has fallen to about one to fifty. The significance of this change will be referred to later.

There have, of course, been other changes in the general circumstances, but I must now turn to the more important question of *the adoption of new objectives of monetary policy.*

Before 1914, and in a large measure up to the devaluations of 1931, the prime objective of monetary policy—in many countries incorporated in national laws—was to maintain a stable relation between the national monetary unit and gold, and thus to achieve exchange stability with old gold standard countries. In the Great Depression, however, adherence to the gold standard came to be regarded as synonymous with continued deflation, and deflation spelled misery. In these circumstances, it was not the safeguarding of the value of the currency in terms of gold, but the revival of business that became the primary objective. This new development was reflected, for example, in the Employment Act of 1946 in the United States, which declares it to be the continuing policy and responsibility of the Federal Government '. . . . to coordinate and utilise all its plans, functions and resources for the purpose of creating and maintaining . . . conditions under which there will be afforded useful employment, for those able, willing and seeking to work, and to promote maximum employment, production and purchasing power.'

In 1946, the International Monetary Fund began operations, and according to the First of its Articles of Agreement, it is the purpose of the Fund (amongst other things):

(ii) to facilitate the expansion and balanced growth of international trade, and to contribute thereby to the promotion and maintenance of high levels of employment and real income and to the development of the productive resources of all members as primary objectives of economic policy.

(iii) To promote exchange stability, to maintain orderly exchange arrangements among members, and to avoid competitive exchange depreciation.

. . .

(v) To give confidence to members by making the Fund's resources available to them under adequate safeguards, thus providing them with opportunity to correct maladjustments in their balance of payments without resorting to measures destructive of national or international prosperity.

If the objectives of the U.S. Employment Act are compared with the purposes of the Fund, the latter are seen to be more in conformity with the rules of the gold standard, because of the stress laid on exchange stability and the reference to the need for corrective measures.

More recently, the Radcliffe Committee, while not including exchange stability in its list of monetary objectives, has discussed this matter very fully in its Report, and has made a strong plea for the maintenance of exchange stability.

The fundamental difficulty, however, in the solution of monetary and economic problems is that the authorities may often find, in any one situation, that the attainment of one particular objective may be incompatible with the attainment of one or more of their other objectives. In other words, a clash of interests may occur. I shall try to give some attention to this question as I deal with some particular problems under the following three headings: (i) exchange stability; (ii) the mitigation of booms and depressions; and (iii) monetary expansion and economic growth. All these questions are, of course, interrelated, but each one has its particular problems and difficulties.

As I have already pointed out, *exchange stability* was—up to 1931—the universal objective of monetary policy, and if today this objective is no longer so important, it is still of very great significance; and as I have said, one of the purposes of the International Monetary Fund is to promote exchange stability, and each member undertakes to collaborate with the Fund to this end.

I shall not deal fully with the arguments in favour of a stable exchange rate. Let me only point out that stable exchange rates allow businessmen to spend their time on their proper business of producing and selling their goods on the markets, without having constantly to consider exchange questions. The maintenance of monetary confidence results in reduced costs—a reduction which in competitive markets will ultimately be passed on to consumers. In this and in other ways it will contribute to the expansion of world trade and, indeed, facilitate foreign investment. I do not think that anybody would seriously dispute that exchange stability ought to be maintained as long as it can be combined with a fair degree of stability of internal prices. If we study the price indexes of the period before 1914, we find certain long waves of twenty to twenty-five years of gradually falling and rising prices, and these movements certainly cause some harm as Sir Josiah Stamp—who later became Lord Stamp—pointed out in December 1929 when he introduced a series of meetings in Chatham House to discuss the International Functions of Gold. But there were for over half a century no very marked deviations from the average; if one compares the index of wholesale prices for Great Britain for the years 1850 and 1910, one finds that they were practically the same at the two dates. The general public had by and large the feeling that money kept its value—and certainly felt so in retrospect, when it had experienced the violent price changes during and immediately after the First World War.

In the 1920's there was a period of relative price stability, which was sadly interrupted by the price fall which began at the end of that decade. It began outside Europe, and as prices continued to decline in the raw material producing countries, and to fall sharply in the United States, the deflationary effects were soon felt in some of the European economies, too. And then after sterling's link with gold—and thus with the dollar—had been severed in the autumn of 1931, there grew up a feeling, especially in England, that a restoration of that link would expose the European countries to a dangerous dependence on what they believed to be the volatile U.S. economy (which as Keynes put it, was run as a 'by-product of a casino'). It seems, however, as if these fears have gradually subsided. People have been impressed by the postwar American record, for not only have the three recessions been of brief duration, but they have caused little or no damage to Europe. The recession of 1949 is thought by some to have caused the widespread devaluations of that year, but I personally think that excessive liquidity in most European economies was the real cause. The successful surmounting of these three recessions in the United States, and the steps taken to resist inflationary tendencies, are felt to have been the result of the structural strengthening of that country's economy, and also of the pursuit of effective policies by the authorities. Moreover, I think Europeans have now begun to feel that their own economies have so grown in strength that they are having an increasingly autonomous influence on world developments.

May I say in passing that I do not believe that better results would be obtained if there were only one currency for the world as a whole, as has sometimes been suggested by monetary theorists. If there were only one currency, managed from one centre, the safeguards against inflationary pressures would in some respects be less strong than under our existing system. In a system involving many currencies, if one country expands credit on a large scale, it can soon expect a decline in its reserves. That is, for instance, what has recently happened in the United States. In the fiscal year 1958–59, there was a deficit in the Federal budget of that country amounting to $13 billion, and in the calendar year 1958 the total liabilities of the banking system on account of currency, demand deposits, and time deposits, increased by about the same amount. As might have been expected, there was an outflow of gold from the United States, which together with an increase in U.S. short-term liabilities to other countries amounted to between $3 and $4 billion. This experience shows that the United States is subject to very much the same influences in its balance of payments as are other countries. As a result, the United States has had to take very much the same steps to arrest a decline in its reserves—balancing the budget and restricting credit, while at the same time paying greater attention to costs—as have other countries in similar situations. A decline in reserves in the United States or elsewhere acts as a warning to the authorities and the public, and is therefore one of the safeguards against too great a creation of credit; conversely, a gain in reserves exerts an influence in the opposite direction.

At the time of the devaluations of 1949, I could detect no hesitation among the European countries about attaching their currencies in effect to the dollar by the adoption of new par rates. At present there is no doubt that a strengthening of the existing exchange structure is in the general interest—and the substantial increase in the resources of the International Monetary Fund over the last year has been aimed to further such a strengthening.

If we therefore have good grounds for assuming that countries intend to maintain exchange stability, there remain two related questions. What kind of stability will be required, and what can be done when difficulties arise that threaten to upset that stability?

After the war, while great shortages of both raw materials and finished goods continued, the great majority of countries thought it necessary to moderate the flow of 'less essential imports' through the control of trade and payments imposed for 'balance of payments reasons'. However, it was soon found that exchange or quantitative restrictions did not really solve the problem, most countries having deficits on the current account of their balance of payments, notwithstanding a high degree of import control. Countries found that to correct these deficits, domestic demand had to be brought into line with available domestic resources through appropriate fiscal and credit policies. It has gradually come to be realised that the external value of a currency is a reflection of its internal value; and it is, indeed, through attention to the internal value that the recent great improvements in many countries have been obtained, as evidenced most conspicuously by the establishment of external convertibility by twelve European countries at the end of 1958, and by a number of other countries associated with specific European currencies.

I now want to consider what will be the next steps. As long as countries could not convert all their exchange receipts into dollars, as for instance under the credit arrangements of the European Payments Union, they were able to give this as a reason for the retention of discrimination against dollar goods. Now that in Europe, as elsewhere, exchange receipts are generaally obtainable wholly in convertible currencies, this particular difficulty has disappeared. The time has clearly come when the practice of discrimination should be abandoned with the least possible delay, and the impression gained at the last Annual Meeting of the Fund in Washington was that this is fully understood by countries all over the world.

A further question to be considered is whether there really are any balance of payments reasons for the retention of quantitative restrictions, as such, even those that are non-discriminatory. In this respect, the Fund has certain duties in relation to the Contracting Parties to the General Agreement on Tariffs and

Trade (the G.A.T.T.), and has already had occasion to conclude that restrictions maintained by a member country were not justified on balance of payments grounds. When that happens, the country in question has to argue its case with the Contracting Parties to the G.A.T.T. without being able to plead justification on balance of payments grounds. The Fund has a role in making findings concerning these matters, whether or not the country concerned remains under the regime of Article XIV or of Article VIII of the Fund Agreement.

Under the transitional arrangements of Article XIV, countries were given time to overcome their balance of payments difficulties before they were required to eliminate their exchange restrictions, and were free from any obligation to obtain the approval of the Fund for the maintenance or adaptation of their existing restrictions on payments and transfers for current international transactions. Over the last few years much progress has been made in the removal of such restrictions. As this has continued, the scope for adapting restrictions under Article XIV has steadily diminished for a number of countries, who have gradually reached a position where legally the reintroduction of restrictions (as distinct from the adaptation of existing restrictions) would require approval under Article VIII, even though the countries themselves remained formally under Article XIV. It is important that this legal position should be fully understood, for it means that the difference between the obligations of countries remaining under Article XIV, and of those assuming the full obligations of Article VIII, is much less sharp than, I think, is often believed.

Over the next year or two it may be expected that a number of countries will make the formal transfer to Article VIII; there are, however, certain legal and other aspects that need to be more fully clarified before any move is made, and the Board of Executive Directors of the Fund is at present pursuing an examination of these matters.

Under Article VIII of the Fund Agreement, countries are bound to allow freedom of payments and transfers for current international transactions, which include payments for trade credits and similar obligations. They are, however, entitled to maintain control of capital movements, provided they do so in a way which does not restrict payments for current transactions or unduly delay transfers in settlement of commitments. Member countries moving from Article XIV to Article VIII have to decide whether they will avail themselves of this right to control capital, or whether they will introduce a system of full freedom both for current and capital transactions—most countries already under Article VIII do not in fact maintain any control over capital, and some Article XIV countries have already freed capital movements completely.

It is difficult to foresee the future action, but I believe that countries must in this, and in other fields, consider whether or not restrictive exchange policies do in fact serve any practical purpose. If an individual country finds that its currency can hold its value without the employment of exchange restrictions, it has reasons to remove even the last vestiges of such control, in the same way as other wartime controls have been eliminated when they have ceased to be of value. As far as I can see, there are several countries on the Continent of Europe which should find themselves in that position, and it is my personal belief that the same may be true for Great Britain before long. Great Britain and these other continental countries may therefore be able to dispense with exchange control to a greater extent even than is required by the Fund Agreement, sooner than many people expect.

Capital movements from Great Britain to the sterling area are, as you know, unrestricted; with the spread of convertibility it will surely be more difficult in practice to enforce controls towards the rest of the world. It is important to remember that at present movements of funds held by non-residents, and all the shifts in timing of commercial payments—which are known as 'leads and lags'—are virtually unaffected by exchange controls. Only the right of residents to convert funds freely into other currencies remains restricted. On past records, the danger of a flight of resident-owned capital can easily be over-rated. There has never been any substantial flight of capital from the British market, as distinct from movements of foreign-held funds and changes in 'leads and lags'. If Great Britain is to hold its position in the world, it must in my opinion—like the rest of Europe—be an extrovert; and that applies both to its commercial and its financial arrangements. My feeling is that sterling will not remain three-fourths free and one-fourth controlled, but will come into line with the freest of the other European currencies.

But what will happen if difficulties occur? I have already quoted from Article I of the Fund's Article of Agreement that one of the purposes of the Fund is 'to give confidence to members by making the Fund's resources available to them under adequate safeguards, thus providing them with opportunity to correct maladjustments in their balance of payments without resorting to measures destructive of national or international prosperity'. Since restrictions tend to hamper the exchange of goods and services in a most undesirable way, it is clearly in conformity with this Article that the Fund's resources should be made available to countries in difficulties to ensure the necessary time for fiscal and credit measures to take effect, and so avoid the need for such restrictions. The Fund provides members with a 'second line of reserves', and does so under adequate safeguards. These safeguards take the form of principles and practices which the Fund applies in allowing the use of its resources. In the Fund each country has a quota which determines the amount of its subscription, its voting power, and the extent to which it may use the Fund's resources. So far as the use of the Fund's resources is concerned, the usual practice is that a member requesting to draw an amount equivalent to its own gold subscription, normally 25 per cent of its quota, is given the overwhelming benefit of the doubt: for the next 25 per cent, the country requesting assistance must show that it is making reasonable efforts to solve its problems. Requests for drawings beyond these limits require substantial justification, namely, that the drawing must be in support of a sound programme likely to ensure enduring stability at realistic rates of exchange.

These principles have stood the test of practical application in periods of considerable financial tension and Fund activity; over the last three years the total amount of drawings and unused stand-by arrangements reached a figure of \$3·1 billion. Notable was the success in the Suez crisis in the autumn of 1956 when the Fund made available \$1,292 million to Great Britain (\$561 million as a drawing and \$731 million as a stand-by). This success may well be contrasted with what happened in 1931, when in

May the largest Austrian bank—the Credit Anstalt—had to close its doors; the nervousness which this created spread to Germany, where in the summer it gave rise to a severe banking crisis; then within a few weeks the pound came under pressure, and the withdrawal of capital from abroad became so heavy that, in September, first the pound, and then a number of other currencies had to be devalued. Thus a crack which had begun in a relatively small country went on spreading; and before the disruption was over the dollar and the gold-bloc currencies—including the Swiss franc—were also devalued.

Through assistance from the Fund, an additional source of credit is available to any member government that can satisfy the Fund of its intention and capacity to restore balance in its monetary affairs. The Fund can therefore in this way play an essential part in maintaining monetary discipline and balance, comparable to the way the gold standard maintained balance before the First World War; but the Fund also supplies a measure of credit by which the harshness of the old rules is somewhat mitigated. As a result of the recent enlargement of quotas, the total resources of the Fund have now been increased from about $9 billion to $15 billion, and the Fund holds about $4 billion in gold and dollars, as well as large amounts of other currencies which are now externally convertible.

Within the measure of its capacity, the Fund therefore attempts to formulate certain principles to guide itself and its members in facilitating the efficient working of the international monetary system, and then to see that these principles are applied in practice. There is much more that could be said on this subject of exchange stability, but I must now turn to the problems of *the mitigation of booms and recessions.*

You must forgive me if first I refer once again briefly to pre-1914 conditions. It was characteristic of depressions before 1914 that costs and prices declined; moreover, interest rates generally fell and money became easier—partly because the newly-mined gold spread amongst a considerable number of countries. Perhaps I should say here that I am a follower of Cairnes and Wicksell, who ascribe to newly-mined gold a considerable *direct* effect on demand; and not only an indirect effect through the operation of the credit system, as Cassel and Keynes assumed. The decline in costs, and the increase in demand and liquidity, brought about recovery. It was in those days taken for granted that wage reductions, if applied drastically enough, could effectively overcome a recession and restore a higher level of employment. Less stress was laid on the influence of increased liquidity—but this influence was inherent in the system itself.

I have made a special study of economic developments in a number of countries in the years 1931–36, and I have found that those countries who then combined cost adjustment with credit expansion fared better than those that did not—certainly as far as recovery in business activity was concerned. The experiences of these countries were, however, largely overlooked, probably because a fairly high level of unemployment continued despite the relative improvement. More and more economists came to believe that wage cuts would cause a decline in aggregate demand, and would therefore intensify rather than relieve the difficulties—and it is generally this aspect of their recommendations that is best remembered.

I have found over the years that Keynes' views on this point are often misinterpreted. It is curious that this should be so since Keynes measured liquidity in wage-units. While strongly recommending an increase in liquidity to overcome a depression, he also laid particular stress on the need to avoid an increase in money wages, and to accept—at least as a temporary measure—somewhat lower real wages. Professor Alvin H. Hansen, in his book *A Guide to Keynes*, has explained Keynes' views of the effects of an increase in costs on unemployment:

> 'Insofar as marginal costs rise as output increases, some part of the increase in demand *must* be dissipated in higher prices. But if, in addition, money wage rates also rise, employment suffers as a result of the higher wages of the already employed workers.'

I think we would do well to remember this part of Keynes' thinking, especially in view of what happened in the recession of 1957–58. In that recession there was no decline in U.S. costs and prices, but there was a considerable credit expansion together with a substantial deficit in the federal budget. In the circumstances this was no doubt the appropriate policy; there had been for some years a decline in the prices of raw materials, and if there had been added a drawn-out recession in the United States, the outlook might have been bleak indeed. But, even so, one has to raise a voice of warning. The credit expansion in the United States was not the only cause, but it was one of the factors leading to the outflow of gold and the rise in the dollar holdings of other countries, which together over eighteen months amounted to $5 billion. The United States could afford this drain on its reserves, since it was in possession of over one half of the world's monetary gold stock, but it is not a process that can continue forever or be repeated again and again. Costs can be reduced in many ways, even without reducing money wages; and in the future greater attention must surely be paid to cost and price adjustments, so that there would be less need to rely on massive credit expansion as a means of mitigating a business recession; for only in that way can a more lasting remedy be found.

This does not mean that I want to minimise the importance of such more modern factors as 'built-in stabilisers', changes in fiscal policy, and open-market operations by central banks. It is even probable that there should be an increased use of open-market operations at appropriate stages in the business cycle, particularly as the effects of newly-mined gold are now less strong. But whatever useful effects these more modern factors may exert, I think it is dangerous to overlook the continued importance of adjusting costs and prices. For a policy which pays attention to rationalisation through cost adjustments should make the economy more efficient, and should thus be the policy most likely to improve real wages over a period of time.

One especially important factor remains, however: *changes in interest rates*; and it is indeed gratifying that in recent years central banks frequently have not hesitated to alter their official discount rates. The seemingly unending discussion about the effects to be expected from changes in interest rates still goes on —to what extent such changes influence the holding of commodity stocks, investment, and the international flow of capital. For my own part, I think that it is impossible to answer these questions in general terms, since the effects vary from one situation to another. For instance, if business is good, an increase in interest rates may not reduce the holdings of commodity stocks, or even the rate of investment. Even if it is difficult to tell what the precise effects of any given change will be, it can be said for certain that it is always dangerous to maintain a wrong rate, and, indeed, doubly dangerous if an attempt is made to support a wrong rate by central bank action, for the maintenance of a wrong rate produces undesirable distortions of many kinds.

Let me begin with the long-term market. Borrowing in that market is usually for investment purposes, i.e., for expenditure on capital goods, and if the amounts borrowed correspond to genuine savings, the effect of the spending by the borrowers is offset by the non-spending of the savers. If the demand for funds increases, as is typically the case in a boom, and if, instead of letting the market find its own level, the central bank intervenes to provide newly-created money, the spending of this money means an addition to demand—without any corresponding freeing of resources. This is inflationary financing in the same way as the financing of a government deficit by the central bank. There are times during a depression when the injection of additional liquid funds, even in the long-term market, may be appropriate, but I am speaking here of a period of increasing demand for funds during a boom, with a tendency to higher interest rates; and it is in just such circumstances that the central bank is often urged to intervene, in order to keep interest rates from rising. But it is precisely in such a situation that the intervention of the central bank would lead to an upward pressure on prices and/or a loss of reserves, with the possibility of even graver results in the form of unemployment if the country's exports become too expensive.

This is elementary, but there is no difficulty in picking out a number of countries which in these postwar years have acted in such a way—with the results indicated. Central banks can help in smoothing out market fluctuations, but they cannot—without inflationary results—resist a fundamental upward trend in the interest rate structure. Personally, I agree with Sir Dennis Robertson that the long-term interest rate is to be regarded as 'the senior partner' in the interest rate complex.

In the short-term market, I have also observed more than once how dangerous it is to try to maintain an artificial rate against the market trend. If the interest rate is too low, it may give rise to short-term borrowing for long-term purposes; it facilitates speculation in capital assets; it tends to attract the financing of trade to the home market at a time when such financing had better be arranged abroad. Moreover, when there is a large volume of short-term government debt, it makes the task of debt management more difficult, since holders of the short-term paper will be liable to demand cash on maturity, and invest the funds elsewhere. Since the great danger in monetary policy is to maintain the wrong rate, it has never perturbed or even astonished me to find that a number of enquiries have shown that an increase in the interest rate had not materially altered business attitudes to the holding of stocks or to investment: the important thing is to avoid the changes in business attitudes that would have occurred if the interest rate had been maintained at the wrong level. To give a simile: a man puts on his overcoat when it turns cold, and feels as warm as before. Does this mean that putting on the coat has had no effect? Of course not—he would have felt uncomfortable, and might even have caught a cold if he had not put it on.

When reflecting on these matters some ten years ago, it suddenly occurred to me that insistence on the danger involved in maintaining a wrong rate by central bank action is the very essence of Knut Wicksell's monetary theory. After all, he took as his starting point the fact that the 'real' rate of interest (corresponding more or less to the rate of profits) will change from time to time; if the central bank is slow in adapting its rate to these changes, a variety of tensions and distortions will result. Since my own observations thus proved to be in conformity with one of the deepest insights into the interdependence of monetary and real factors ever attained by a theoretical economist, I began to feel pretty certain about the correctness of the conclusions I had reached.

Hitherto I have spoken about the more or less regular run of affairs when changes in interest rates are likely to be moderate. There appear, however, from time to time crisis situations when the strain becomes acute and confidence is liable to be impaired. It was part of the experience gained in the middle of the nineteenth century that in such situations an extraordinary increase in the official discount rate is the proper action. We have had some such situations since the last war—when resort was made to the same remedy—a 2 per cent increase in the discount rate of the German Central Bank in the autumn of 1950, and an increase again of 2 per cent here in London in the autumn of 1957. Concerning such extraordinary increases, I limit myself to two observations. Experience has shown that they have had a wholesome effect—whether the effect has been due more to their psychological than to their technical impact is immaterial; the important thing is that the increase has produced the desired results. Secondly, I have found that such large increases are politically much less dangerous than has sometimes been asserted. I have often been told, when such steps have been discussed, that people would not stand for so sharp an increase, but I have found that people are apt to look at the ultimate results, and if success crowns the effort, they seem not to have minded the temporary increase in the interest rate.

Before I finish this part of my exposé, I would like to quote two sentences from my Opening Speech at the most recent Annual Meeting of the Board of Governors of the Fund: 'It is pertinent to recall that increases in interest rates made in response to a strong demand for funds actively employed in business, will not arrest economic progress, but rather have the merit of assuring more balanced growth. They have further the advantage that the subsequent downward adjustment of the rates can be made effective fairly rapidly to provide an active stimulus to recovery, if a change in the business trend requires it.'

Where I have insisted in this lecture on the validity of some of our old experiences regarding the need to pay attention to costs and the influence of interest rates, I have done so not because I do not appreciate the importance of some of the newer means of action, but because I am afraid that the still useful lessons of the old experiences may be overlooked.

In dealing with *monetary expansion and economic growth*, I will take as my starting point some ideas expressed by Keynes in his *General Theory*.

But first I must refer briefly to certain general requirements for economic growth. In general, the rate of growth depends on (i) inventions and the application of new techniques (as Schumpeter, amongst others, so strongly emphasises); (ii) organisation in its widest sense, including the efficiency of the civil service and of the transport and banking systems, the ability of entrepreneurs, an adequate supply of technical personnel, and the efficiency of labour; (iii) the availability of resources from domestic savings, and capital obtained from abroad; and (iv) the management of financial and economic policy—including, of course, monetary policy. I shall here be mainly concerned with the last two conditions.

It is sometimes said that the primary objective of monetary policy is to maintain a sufficient total volume of demand. That statement is, I think, not wrong in itself, although there is more to it than that. (I am reminded of A. N. Whitehead's exhortation and warning: 'Seek simplicity; and distrust it.') When somebody saves part of his income, he withholds that much from current spending; and balance will be assured only if he is willing to lend his savings, and if somebody else is willing to borrow them and to spend them on investment. Ensuring such a balance was one of the main preoccupations of Keynes when he wrote the *General Theory* which, as you know, was published in 1936 in the midst of the depression.

Keynes' basic fear was that the marginal efficiency of capital would fall so low that the corresponding low interest rates would give rise to such a liquidity preference that the urge to invest would be dangerously impaired. In the twenty-first chapter of the *General Theory* he made it clear, however, that in the nineteenth century conditions had been radically different; then, as he says, 'the growth of population and of invention, the opening-up of new lands, the state of confidence and the frequency of war over the average of (say) each decade seem to have been sufficient, taken in conjunction with the propensity to consume, to establish a schedule of the marginal efficiency of capital which allowed a reasonably satisfactory average level of employment to be compatible with a rate of interest high enough to be psychologically acceptable to wealth-owners. There is evidence that for a period of almost one hundred and fifty years the long-run typical rate of interest in the leading financial centres was about 5 per cent, and the gilt-edged rate between 3 and 3½ per cent; and that these rates of interest were modest enough to encourage a rate of investment consistent with an average of employment which was not intolerably low.' He then described briefly what happened to liquidity and wage movements under these conditions, and came to the conclusion that although the level of employment was substantially below full employment, it was not so intolerably below as to provoke revolutionary changes.

I might add in passing that the idea of difficulties arising from a low marginal efficiency of capital, leading to a low level of interest rates, was nothing new to me. As early as the summer of 1914, my teacher of economics, Professor David Davidson in Uppsala, had explained to me how much easier it was to run the monetary system when the level of interest rates was around 5 per cent than when it was only 3 per cent or less.

As to the prospects for the future, Keynes was very pessimistic when he wrote the *General Theory*, expressing the opinion that 'today and presumably for the future the schedule of marginal efficiency of capital is, for a variety of reasons, much lower than it was in the nineteenth century'. He even said to me during the time he was writing the *General Theory* that, now that we had had the great inventions of electricity and the internal combustion engine, he did not think that we could confidently expect any further important inventions requiring great investment of capital.

But what a galaxy of inventions there has been, particularly during the war and the fourteen years since then! Moreover, population is increasing, much capital is needed for hospitals, housing, social services, and the heavy burden of armaments which still continues, underdeveloped countries are clamouring for funds for investment; and the long-term interest rate seems under these influences to be once again about 5 per cent. If this continues, as I think it will, we shall have less reason to worry about the peculiar difficulties that Keynes feared when he wrote his *General Theory*. On the contrary, we can again expect that whatever funds are saved will be promptly invested. In fact, our great difficulty already is how to meet the manifold calls for funds for investment. It will not be difficult technically to maintain sufficient demand; the difficulty will be the opposite: a shortage of savings. As we enter a period which has been called 'the Second Industrial Revolution', I believe that we shall again come to realise the truth of the saying, 'Industry is limited by capital,' i.e., by the flow of savings. There can be little doubt of the extent to which monetary stability and confidence will contribute to an increase in savings.

While the war lasted and during the subsequent period of reconstruction, the public probably regarded it as inescapable that prices should rise, but once more or less normal conditions were restored, they began to be inclined to worry and protest when living costs continued to rise. The public's reaction to a continuance of inflation is, therefore, now more violent than it was only a few years ago. In these circumstances it has become less true than ever to say that a moderate dose of inflation is capable of producing additional savings to speed up the rate of economic expansion. For the 'forced savings' that are sometimes expected from an inflationary credit expansion arise from the fact that wages lag behind the rise in prices, at a time when the public is still willing to hold a more or less normal amount of cash. In these circumstances the newly-issued money may for a time set free resources for industrial and other investment. However, once people wake up to the hurt inflicted upon them by the inflation, they will demand increased wages sooner than before (and often insist on index-tied wages), and they will hasten to buy whatever they can to avoid loss of real earnings. When that happens, not only do the 'forced savings' disappear, but the normal flow of voluntary savings will also be diminished and be increasingly diverted to speculation in real estate and other ventures. Then the game is up, for without a ready flow of savings no economic progress can be sustained.

Experience shows that reliance on inflationary credit expansion will before long result in a monetary crisis. In recent years there have been many instances of such crises in both industrial and non-industrial countries, in some cases aggravated by additional factors such as an excess of liquidity inherited from the war, sometimes involving large claims in foreign hands. Whatever the immediate cause of any particular crisis, there have generally been signs of inflationary tendencies, accompanied by a loss of reserves. Since a repetition of crises is an intolerable state of affairs, steps have before long had to be taken to put a stop to an unbalanced position, and to restore confidence. As a rule these steps have been taken with the immediate purpose of replenishing monetary reserves, a process which requires part of the savings of the country concerned to be invested in additions to reserves —savings which cannot therefore for the time being be invested in bricks and mortar, machinery or commodity stocks at home. Any country pursuing such a policy has to pass through a phase of adjustment, during which economic expansion has, as a rule, to be slowed down.

It has been the experience of several countries in Europe, as elsewhere, that once stabilisation measures have become effective, there has been a revival of activity. I could quote spectacular figures from Finland and other countries, but it is sufficient here to refer to the recent quite remarkable increase in activity here in Great Britain, where industrial production is now running some 6 to 8 per cent higher than in the same period last year. An interval of adjustment when required serves its purpose by providing a firmer and more reliable basis for renewed growth.

Thus I now come to a further problem, namely, how to ensure that the volume of money and credit will expand at a rate commensurate with the increase in production. Before 1914, monetary expansion was brought about by the direct effect of the dispersion of newly-mined gold, and indirectly because the demand for credit was, on average, high enough to overcome any liquidity-preference and to effect the necessary expansion.

Now that we have once again fairly high interest rates, it is easier to expand credit effectively, and this goes a long way towards solving the problem of sustaining monetary demand. On the other hand, since the current gold output is now less of an expansionary force than it was, the ability of central banks to undertake market operations in a way that was not open to them in earlier periods assumes special significance. We are here concerned with the expansionary open-market operations that are likely to be needed in periods of recession.

The proper use of the weapon of open-market operations is not an easy matter. Central banks always have to remember that part of the money created in periods of recession will probably be activated in the subsequent boom, and in practice it is much harder to reduce the money supply than to increase it. Open-market policies are also often complicated by the existence of a large volume of public debt; they must, moreover, be related to the international movement of funds, since domestic liquidity is influenced by surpluses or deficits in the balance of payments.

Although time will not permit me to deal adequately with these problems, I have probably said enough to indicate how intricate some of them are. Because of these intricacies, I believe that each country should have a specialised agency, with full knowledge of all the facts and operating with sufficient freedom, to form its own judgment on the policies that ought to be pursued. That agency is the central bank, whose functions are of increasing importance in modern life, particularly when credit—which depends on confidence—plays so vital a part in the payments system, and when the growth of the public sector has accentuated the division of the economy into two parts.

The public sector must necessarily act in accordance with rules and regulations laid down in advance, for otherwise the private citizen might only too easily be subjected to arbitrary treatment. The private sector, on the other hand, when run as a market economy, is governed essentially by price fluctuations determined by the volume of demand in relation to forthcoming supplies, with constant shifts in these relationships, especially under conditions of economic growth. The central bank has a peculiar rôle to play as a link between these two sectors, through which the government administration, on the one hand, and the market economy, on the other, can gain an increased understanding of the conditions and problems in the other sector. It is therefore vitally important that the central bank, whose operations are conducted in the market, should be in a position to anticipate the reactions of the market in any given circumstances; this function can never be performed by a government department which has no close personal links with the market itself. While the central bank's relations with the government are usually close, there is great need for it also to have its finger on the pulse of the private sector. Its task is not easy, for the central bank will be betwixt and between. A government may often find it useful for another agency to take the steps which, though obviously needed to influence market conditions, the government itself might find it politically undesirable to take on its own responsibility. The private sector, subdivided as it is into many different entities, may not altogether like measures which force it to make certain adjustments. The central bank may have against it strong vested interests, and often be criticised sharply. To be able to fulfil its functions, it must not be under the sway of either sector of the economy.

Under the modern credit system, the central bank is the ultimate source of money. The value of any commodity or service is, as we know, influenced by its supply in relation to demand, and I have never understood how anybody, in the face of all the evidence before us, could think that money is an exception to this general rule. The availability of credit, and the price paid for it, should go together, and it is then as vain to discuss which is the more important factor in a market economy as it is to ask which of the two blades of a pair of scissors does the cutting. The truth is that in monetary policy, as in other fields, a measure is rarely perfect from every conceivable point of view. To find the best possible way in this complex world, central banks must be free to form their own judgment without being influenced by special interests and political pressures.

There is, at the same time, a growing need to take account of what happens abroad. I have already more than once referred to the great developments in our lifetime towards more highly organised international cooperation in the monetary field. The Bank for International Settlements in Basle was a beginning, and the two Bretton Woods institutions have taken this co-operation very much further. The new rules that we are now trying to formulate are partly related to the existence of these organisations, which I believe are likely to grow more and more important in the years to come.

I am fully aware of the many problems which I have not had the time even to hint at in this lecture, but I hope that I have been able to show that in the synthesis between the old and the new there is much that we should remember from the past when we have to grapple with the problems of the present. How best to balance national and international considerations in the monetary field, still remains, of course, a difficult problem, but on its proper solution will very much depend the economic cohesion of the Western World. There seems to me to be no reason for pessimism about the outcome of our efforts. I believe, for instance, that it was the general impression of those attending the recent

Annual Meetings of the Boards of Governors of the Fund and Bank in Washington that a much greater unanimity had been reached upon the validity of certain monetary principles than at any previous meetings of their kind.