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INTERNATIONAL MONETARY ORGANIZATION AND POLICY

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The following memoranda on international monetary organization and policy have been prepared by the members of the Research Department of the Federal Reserve Bank of New York.

These papers, which have been prepared during the course of the past few months, have been assembled without formal editing or attempt to reconcile the views expressed. They do not pretend to comprise an exhaustive or completely integrated analysis of the subject. They simply represent the views of the individuals who prepared them for the officers and directors of the bank and are not the views of the bank.

Research Department.

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The Adequacy of Existing Currency Mechanisms Under Varying Circumstances

I

In discussing the adequacy of different international monetary mechanisms under varying circumstances, it seems desirable to begin with some analysis of the logical extremes, even though, as I shall try to show later, the real problem is to find the best compromise between them.

The extremes are fixed exchanges maintained by transfer of means of payment between the national monetary systems and flexible exchanges without international transfer of money. The gold standard would be an example of the first type of mechanism and the paper standard of the second, provided that both were entirely automatic. In these extreme cases there would be no money management, externally or internally.

The object of both systems is to achieve and maintain equilibrium of external-internal trade. For this purpose both systems provide a balancing or compensatory mechanism by which economic change, whether external or internal, sets in motion forces of correction which restore equilibrium of external-internal trade. But the compensatory mechanisms are different and work out their effects by different processes of change. The gold standard system works through variation of internal prices and incomes relative to export-import prices, and the paper standard system through variation of the prices of exports and imports, and of the other items comprising the balance of international payments, relative to internal prices and incomes.

It is important not to exaggerate this difference between the two mechanisms. It has been described as the difference between stable exchanges and stable prices, or as offering, or even compelling, a choice between external and internal monetary stability. Such statements are unduly simple and may be misleading. It must be recognized, for example, that export-import prices are part of the national price level and also that changes in these prices affect internal

*This paper does not consider systems of exchange control, such as the German, etc.

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prices and incomes, so that flexible exchange cannot, automatically at least, ensure a stable national price level. By whatever mechanism, the process must always be one of interaction of external and internal trade. Nevertheless, the essential difference between the two systems is that fixed exchange requires primarily adjustment of the internal economy to the balance of payments and flexible exchange the reverse.

To the question which system is preferable there can be no general answer. The flexible exchange system provides the more direct process of adjustment. A change in the balance of payments affects at once exchange rates and the price structure of the balance of payments, extending into the internal economy only so far as may be necessary to correct the disturbance. The fixed exchange process is more roundabout; international transfer of money may have effects upon the internal economy incommensurate with, and not directly related to, the initial change in the balance of payments, particularly if, as in a fractional reserve against deposits system, the monetary expansion-contraction is a multiple of the gold movement.

But there is a corresponding apparent disadvantage, in that variation of exchanges tends to correct changes in the balance of payments by preventing them. It does so by introducing an additional price variable. When, for example, a nation has an increased demand for imports or for foreign securities, the demand must press not only against the foreign price but also against the price of the foreign currency. In consequence, the change will occur more in price and less in quantity than if the exchange were fixed. To put the same point differently, under gold standard nations can buy foreign goods and securities by transferring gold at a fixed price but under paper standard importers must bid for balances of foreign currency provided by exporters. Unless there is such flexibility that exports immediately respond, in which case there would be no problem of adjustment under

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either system, the scarcity price of foreign balances will tend to make imports rise in price rather than in quantity.*

Whether the fact that variation of exchanges tends to shut off international change is in reality a disadvantage or an advantage depends upon the circumstances and the objectives. The gold standard puts a high value on freedom of international trade and, in the strict theory, ignores the possibility that internal change resulting therefrom may be disturbing. As developed by the classical economists and in later refinements, it is essentially a static theory, which ignores the business cycle. The flexible exchange system would reverse the emphasis. This does not involve, necessarily, the assumption that international trade is unimportant or that in the longer run it may not be essential for maximum productivity and real income. It is based rather on the view that business cycle instability is too great a price to pay for it; and that without stability at home international trade itself will suffer the harmful effects of alternation of over and under activity within the trading countries.

The practical difficulty is that it is easier to recognize the defects of the gold standard, with which we have had much experience, than it is to be sure that exchange variation would provide the cure for them. With the latter system we have had little experience, and interpretation of recent experience with a view to its future applicability is a far from simple task. That the gold standard has serious defects as a mechanism of adjustment has been made abundantly clear. Stated in terms of prices, what the gold standard assumes is stability of the entire composite of prices of which national price levels are the individual items.

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*There is not space to discuss this point fully. The gold standard transfer of means of payment also sets up a resistance to the initial change, indeed that is the essence of any corrective process, but it works less directly on the prices of exports and imports and permits a correspondingly greater change in quantity.

I believe, also, that there is no intermediate process between international transfer of means of payment, as in the gold standard case, and money transfers wholly within the trading countries, as in the paper case; and that the references in the modern literature to transfers of "purchasing power" as an intermediate case turn either upon faulty analysis or upon variants of the gold standard, such as gold exchange standard, which, for this particular point, is not an essential difference.

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Whenever this condition is seriously violated, the conception of offsetting and counterbalancing price changes in particular countries, mutually correcting each other through gold flow, must be abandoned. These corrective changes become swallowed up in the disequilibrating effects of the common one-directional movement. This is why in major world-wide booms and depressions the gold standard has always collapsed.

The chief problem of international monetary policy is how to prevent the occurrence of world booms and depressions, and of how to enable individual countries to protect themselves from such disturbances arising in the outside world, while at the same time retaining the advantages of international trade and capital movements. The first step toward the solution is as clear an understanding as we can have of how and why the disturbances develop under the gold standard system. The case of war is the most obvious. It is a case of simultaneous two-way pressure. The demand of governments for war goods and services at home and abroad, financed largely with new money, raises prices both at home and abroad and produces such expansion of money at home and such an outflow of gold that gold reserves prove inadequate and the gold standard collapses. But though this collapse leads to a paper system and variable exchanges, no one, so far as I know, contends that the second state is preferable to the first, accompanied as it would be, or at least has in the past invariably been, by internal inflation. That the flexible exchanges are at such a time a disadvantage was shown by the fact that in the last war, though gold standard had collapsed, it was necessary to peg the exchanges artificially in order to maintain the flow of goods to the allies.

Leaving war aside, as an abnormal case, there appear to be two main reasons why the gold standard may not correct disturbance but may even foster, and extend the area of, maladjustments. One is the growing rigidity of internal prices and costs, of which so much has been said in explanation of maldistribution of gold in the twenties and the eventual collapse of the gold standard, the resistance of

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British costs to downward pressure imposed by an adverse balance of payments at the old exchange parity, the insensitivity of French and American prices to gold inflow, and the like. What conclusions to draw from this experience is not clear. In part, the maladjustments were due to the unusual speed and magnitude and uneconomic character of international changes, which we might hope would not be repeated. In part, without question, it was a problem of maladjustments of exchange rates. The war produced such sweeping and unequal changes in international relations that the pre-war exchange rate structure was rendered meaningless, and the countries were unable to find a new, sustainable relationship. It is now thought by many that England would have been better off with a rate not only lower but more variable. On the other hand, it is difficult to believe, even with the aid of hindsight, that exchange stabilization was not necessary for both France and Germany as a means of terminating their post-war inflations; and it has been generally recognized in recent years that the remembrance of the post-war connection between unstable exchange and internal inflation has been a formidable obstacle in many continental countries to devaluation or depreciation of currencies.

Insistence upon rigidity of costs, as a circumstance justifying resistance to external pressure raises the difficulty of determining how necessary or desirable it may be to construct an economic or monetary policy around such a focus. In the view of many economists, we must either find ways of lessening rigidities or find ourselves forced to give up the free price-quantity system of economic adjustment altogether. When the solution is found through currency depreciation, there is always the question whether it is not at the expense of other nations, particularly if there is reason to think that the resistant high costs are due to inefficiency of production. A depreciation policy in such a case would almost certainly invite retaliation.

The second and probably the most serious dilemma for the gold standard, or for any international monetary system, is the control of capital movements.

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International capital movements are a part of the larger problem of the relation of investment to economic change, with productivity as their desirable aspect, and instability as their undesirable aspect. For capital movements, the gold standard, as it has operated in the past, is not a reliable corrective mechanism. Capital movements present two problems, a cycle problem and a crisis problem. The difficulty in both cases is how to prevent, or avoid the disturbing effects of, a cumulative one-way movement. We were brought up to say that if, for example, prices rise in country A, its imports will increase and exports decrease, and gold outflow will correct the price rise. But if the rise of prices (of commodities or securities) causes profits to rise, and capital is attracted more rapidly than goods, gold will flow in and prices will rise further.* If the automatic gold standard is supplemented by discount rate policy, a rise in the rate designed to curb internal expansion may attract short-time funds from abroad. Difficulties of this kind were fairly common in the twenties. With capital the most volatile item of the balance of payments, it is apt to dominate and to nullify any corrective effects which might otherwise result from the gold standard process of adjustment. It may produce an expansion in one country at the expense of others. It may lead to the purely temporizing policy, such as England at times pursued in the twenties, of offsetting long-term capital export by short-term capital import, thereby postponing fundamental readjustment. It may be the vehicle for world-wide boom or depression, capital movements during the boom leading to expansion in the capital importing countries and to highly prosperous export trade in the capital exporting countries,# and the cessation of

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*There is not room to discuss in detail such "vicious circles," or cases of indeterminate equilibrium, which may take various forms and spring from many causes, such as the magnitude and speed of change, the relative restrictions on trade and capital movements, comparative sensitivity to interest rates and prices, the relative response to security price changes and goods price changes, panic fear and uncertainty, elasticities of demand-supply, price rigidities, speculation, etc.

#In this case there may be little or no gold flow: the disequilibrium may not be in the balance of payments but in the internal economies.
Such all-round expansion requires slack in banking systems, which is supplied by changes in velocity, or by central banks' free reserves, or by breakdown of gold reserve requirements.

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capital movements and the effects of the burden of fixed interest charges producing depression in the capital importing countries, which then may spread back through the channels of trade to the capital exporting, interest-receiving countries. It is surely not a coincidence that most booms and depressions, in the nineteenth century as well as the twentieth, had international capital movements as one of their most prominent features. Finally, there is the phenomenon of one-directional short-term capital movements, which have had such disturbing effects since the war. This is mainly a phenomenon of fear and uncertainty. It is the international counterpart of those internal money panics which have played such a large part in our own history.

It is in connection with the problem of capital movements that the case for flexible exchanges appears to be strongest. It may be argued, for example, that exchange variation operates directly and powerfully against capital movements, whether long or short; that, in other words, this is a case in which the effect of flexible exchange, in shutting off international change by enhancing price at the expense of quantity, is clearly desirable. In this way, the internal monetary system can be protected from the deflationary effects of an otherwise uncontrollable capital outflow, or protected from the inflationary effects of an otherwise uncontrollable capital inflow. Moreover, if the system of flexible exchange is combined with internal money management, the possibility of effective internal control is enhanced by exchange variation. If, for example, as has happened in some situations, the internal effects of discount rate changes or open market operations are nullified by their opposite effect on international short-term capital movements, exchange variation would protect internal control from external interference.

Moreover, it might not be necessary to concede that under such a system international capital movements of a desirable kind and amount would be prevented. It could be argued that such movements, as often occurred in the nineteenth century, would be fairly closely related to trade changes, a railroad loan, for example,

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being the counterpart of a demand for railroad equipment, or a demand for capital by a young country being closely related to the exchange of industrial imports for exports of foods and raw materials to the capital exporting country. In so far as the goods movement and the capital movement kept pace with each other, the need for exchange variation as a means of adjustment would be minimized. To the objection that capital will not venture abroad if the future exchange rate is not known, it might be answered that the danger of loss might be no greater than is the case when there are periodic breakdowns of the gold standard.

The case for flexible exchange, or at any rate the case against the gold standard, has appeared to receive further powerful support from the world's experiences in the depression. Looking back, we have to recognize that recovery in every country where it has occurred has been accompanied by monetary expansion, and this expansion occurred after the internal economy had been freed from external pressure, either by currency depreciation or by exchange control. We have to recognize also, that internal recovery has led, in some degree at least, to external trade recovery, and that in the case of the young countries in which it is scarcely possible to distinguish an internal trade separate from their foreign trade, their recovery has been mainly due to the recovery in their export markets, which in turn is mainly traceable to the internal recovery of the industrial nations. Some of the results are paradoxical, and contradictory to what may be called the orthodox theory of paper standard, which quite as much as gold standard theory, has been developed mainly as a static theory. It is found, for example, that the foreign trade of the depreciated currency countries has increased mainly among themselves, and not with the gold standard countries, as would be expected from the "terms of trade" analysis, with its emphasis upon the "bounty on exports" and burden on imports.

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Most paradoxical of all is the fact that England depreciated the pound and then was able to stage a recovery on cheap imports.

What conclusions to draw from this experience of the depression is not an easy question. It is clear, of course, that the gold standard collapsed, as it has usually done in major booms and depressions. It seems probable, also, that capital movements as well as other maladjustments which the gold standard had previously fostered were a cause of the depression, though the causation was probably so complex as to make the singling out of a main cause extremely dangerous. Still harder is it to say what might have happened with some other system. There is considerable evidence to support the view that devaluations of currencies played a part not only in bringing on the depression but in intensifying it at certain stages. The fact that some currencies were devalued and some were not prior to the depression played a large part in the discussions of maldistribution of gold. The fact that the franc was undervalued in 1926-'28 certainly greatly accentuated the difficulties resulting from the overvaluation of the pound. In a subject full of paradoxes, perhaps the chief is that the cycle of depreciations which began with the devaluation of the belga and the franc could not be regarded as closed, if it is closed, until the belga and the franc had again been devalued. Having cited the evidence in favor of currency depreciation during the depression, I must cite also this "vicious circle" effect of currency depreciation as the chief evidence against it. Indeed, one main part of the explanation of the recent "gentlemen's agreement" is that it was hoped that for once, at least, it would be possible by such means to achieve a devaluation of a currency without its being followed by other devaluations or depreciations. Whether this hope will be realized is still a question.*

*Some other devaluations accompanied the devaluation of the franc, and it appears certain that some controlled exchanges will have to follow it, sooner or later. But the question is whether that will end the new series.

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There is one further important piece of evidence from the depression. No nation has shown any desire for a flexible currency. What was wanted in every case, and what was compelled in most cases, was to cut loose from the system of fixed exchanges in order to escape from the intolerable deflationary pressure. The fact that this action intensified deflationary pressure upon others has already been mentioned. It is the essential explanation of the fact that England, after depreciating its currency, was able to enjoy cheap imports. But in most cases there was no choice, and the process continued to the point where, when enough nations had depreciated their currencies, or cut loose by exchange control, the cessation of deflationary pressure in those countries more than counterbalanced, for the world as a whole, the intensified deflationary pressure imposed upon those countries which had not yet depreciated. It therefore seems necessary to conclude both (a) that the succession of currency depreciations prolonged and intensified the depression, and (b) that it played an important role in the recovery.

But such a conclusion throws little light upon how to plan for the future. It does not show how to prevent future depressions, or what is best to do if they occur. It does not prove, for example, that a stronger stand for exchange stability at an earlier stage of depression, based upon international cooperation and accompanied by a common program of internal monetary expansion, might not be feasible and productive of better results. It only shows that in the absence of such a program, nature will eventually find a cure.

After cutting loose from the gold standard, what every country has done - save for the exchange control countries, where it seems obvious that some further action will be necessary - has been, in one degree or another and in one way or another, to tie back on again. As just said, there is no evidence of any desire for a really flexible currency. The United States, after going off gold definitively in April 1933, had returned to a fixed buying and selling price of gold by the end of January 1934. England, which is commonly cited as the country least willing

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or likely to return to the gold standard, has been acting essentially like a managed gold standard country virtually from the day she went off gold. The Equalization Account, as thus far operated, has been a device, not merely for ironing out day-to-day fluctuations, but for preventing a rise, and perhaps at times a fall, in the pound, by means of international gold flow to and from England. Had England really wanted a flexible currency she would have allowed the pound to rise against the franc as capital took flight to London, which might have prevented the second devaluation of the franc. But no one would have seriously advised such a course. The rise in terms of the franc would have been a rise also in terms of other currencies, including the dollar, which would have recreated England's problem; and would in any case have led to a subsequent fall when the capital flowed out again. England has, therefore, though officially off gold, accumulated more gold than ever before in her history.

II

It seems clear from both logic and experience that the solution of the international monetary problem must be conceived in terms of compromise. Pursuing a rough progression from automatic gold standard to automatic paper standard, the possible range of compromises would run somewhat as follows:

1. Automatic gold standard.

2. System one, plus discount rate.

3. System two, plus abolition of central bank gold reserve requirements for notes and deposits.

4. System three, plus open market operations, designed:
   (a) to prevent, at will, gold inflow or outflow from affecting member bank reserves and deposits, and

   (b) to exert, at will, internal monetary control.

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5. System four, plus a "borrowing authority" whereby either the central bank or the Treasury could sell (or buy) bills obtained from the Treasury de novo, either in exchange for gold or by outright gift, as a means of offsetting gold inflow or outflow.

6. System five, supplemented by direct control of specific items of the balance of payments, such as capital movements.

7. System five (or six) plus an option of exchange variation by making the gold sterilization fund also an exchange stabilization fund. This arrangement would require the absence in one or more monetary systems of a fixed buying-selling price of gold, and intervention by one or more countries, through their stabilization funds, in the exchange market, exchange balances being convertible into gold at prices agreed upon.

8. Exchange stabilization wholly detached from gold, plus internal money management.

9. Internal money management, without intervention in the exchange market.

10. Automatic paper standard.

It must again be emphasized that the problem is always one of adjustment of external-internal trade, so that any compromise mechanism must always operate within the limits which each imposes on the other. There can be no such thing as complete freedom of action in either sphere. Perhaps this is not so apparent to some countries today as it will become later. It must also be emphasized that the necessity for adjustment, in most cases, can not be escaped, and that perhaps the chief danger in compromise is that it may permit, for a time, a temporizing policy which may only add to the difficulties of the ultimate adjustment.

A mere inspection of the list of compromises will probably narrow the range of practicable choice by common consent. Gold standard supplemented only by discount rate is clearly inadequate. At the other extreme, internal money management without intervention in the exchange market, and even exchange stabilization

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wholly detached from gold appear to be beyond the range of practical consideration, if only because there is now no hint of such systems.* The real range of choice, at our present stage at least, lies in the middle.

The best guide to selection is found in consideration of circumstances. As already stated, capital movements have been a main, and probably the chief, source of disturbance, presenting both a crisis problem and a cycle problem. The crisis problem is the international counterpart of the domestic run on the bank, and might be met in the same way, by the utilization of large free reserves. In our present stage of monetary development, at least in the larger countries which have strong central banks, there is no reason why internal gold reserve requirements for notes or deposits should be allowed to impair a country's ability to withstand a run against its currency. Its entire gold stock should be put in its front window and specifically labelled as an international reserve. It would follow that there should be no internal convertibility of currency into gold, no possibility of internal gold hoarding. The fact that internal convertibility has now been discarded by the United States, England, and France is a large step forward. It should be possible, also, to prevent international gold hoarding, by confining gold transactions to central banks or treasuries, or for delivery by private banks to central banks or treasuries.#

If the capital movement is of the panic type, there may be no need for fundamental readjustment, or if there is, the problem will be to have it take place more slowly and in a calmer atmosphere, and in the meantime to protect the money market and the internal economy from destructive change. The old device for this

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*See below, however, for comment on sterling area countries.

With provision for legitimate industrial uses.

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purpose was the discount rate. It had a better chance of success in the pre-war world than it now has, because of England's central position in world trade organization, the fact that international short-term balances were smaller and more closely related to trade financing, and most of all perhaps because there was not the ever-present fear of currency devaluation or depreciation. In the post-war world, raising the discount rate to stop a panicky flight of capital has been a failure. It has not stopped the flight but has been taken as a symbol of fear that further flight would break the currency, which has led to further flight. Raising the discount rate under these circumstances has been a means not of protecting the internal economy but of intensifying deflationary pressure through high money rates. From this point of view, raising the discount rate in the United States after England went off gold in 1931 and the more recent high discount rates in France to prevent losses of gold prior to the franc devaluation, when both countries had abundant stocks of gold, must be regarded as mistakes of policy.

To protect the internal economy from the effects of capital flight, outward or inward, it is desirable to impound the gold which, on the fixed exchange system, accompanies the flight, protecting member bank reserves from change. The addition of a "borrowing authority", as in current British practice, to supplement or supplant the use of the central bank's own portfolio for this purpose represents another major forward step. By this device there is removed the danger that in offsetting gold inflow by open market operations the central bank will destroy or impair its ability to control internal monetary expansion through open market operations. This device removes the limitation previously existing in the size of the portfolio, and makes possible one-way operations on bank reserves, which are limited only by the ability of government to sell its securities and its willingness to bear interest charges.*

*There remains the limitation on gold outflow of exhaustion of the gold stock, or even of carrying it down to the fear-creating level.

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One other method of protecting member bank reserves is by changing the reserve requirements. This, however, is a more cumbersome method, much less elastic and more uncertain in its effects. It is a good method of sopping up excess reserves which have been built up gradually and become well distributed among the banks, as in the United States at present; but as a continuous device it has the defects, first, that it permits gold movements to affect bank reserves, temporarily at least, and may thus affect bank assets and deposits, whereas the better method would be to keep them out altogether, leaving it to the central bank to control bank reserves on grounds of policy; second, that it could never be used as a day-to-day or even month-to-month device; third, that by hitting banks very unequally and keeping them in continual suspense it would interfere seriously with their operations.

On the basis of the discussion thus far, the compromise system indicated for controlling short-term capital movements is system five. There remains the question whether it may not be desirable or necessary to take one further step and include an option to vary the exchanges, as in system seven. Should not, in other words, the gold sterilization fund be also an exchange stabilization fund. Should not a country be in a position to raise its currency to stop an undesired capital inflow and to lower it to prevent an undesired capital outflow. This is a much more complex question. One argument often advanced for stabilization funds is that they can circumvent the speculators and remove or lessen this source of short-time movements. But, on the other hand, the fact that exchanges may be varied by the authorities is undoubtedly a prime cause of speculative interest in them. In a fixed exchange system, with fixed parity and gold points, speculation is stabilizing, since there is always a presumption that a currency which is above or below the parity will move toward it, through the effect of gold flow upon the demand-supply

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position in the exchange market. It is the removal of this certainty which augments speculative interest and makes possible cumulative one-direction speculative movements. Official stabilization operations discourage speculation only by comparison with the system of freely flexible exchanges. The best way to discourage unstabilizing speculation is by a demonstration of purpose and capacity to maintain the fixed exchange.*

Another argument for providing an option of varying the exchange rate is that it may prove impossible otherwise to stop the flight of currency or prevent its having destructive effects upon the internal economy, and that if such is the case it is better to provide for an orderly and controlled change rather than to face the alternative of a shock-producing collapse of the fixed exchange system. This is a valid argument. The case for exchange variation by the type of procedure outlined in system seven is further strengthened by consideration of cyclical movements of capital, a capital movement which creates a boom in one country at the expense of depression in another, or capital movements leading to world boom and depression suggest the need of currency variation as a means of obstruction and prevention. The case is further strengthened by the consideration previously mentioned, that if internal monetary policy, through discount rate and open market operations or a spending program or direct stock market control, is in danger of being nullified by international capital movements, exchange variation provides a means of combatting the external change.

But it must be recognized that currency variation is much the most complex type of interference. There is a strong presumption that it should come last, after other types of control have been clearly demonstrated to be inadequate. If there is an undesired flow of capital from country A to country B should it be prevented by a method which affects relations with C, D, E and sixty others? Should

*It may be that fixed parities with wider gold points would increase stabilizing speculative operations within the gold points. On the other hand, they might exaggerate the swings if the gold points were too far apart.

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you stop a flow of capital from France to England by a method which raises the pound in relation to the dollar and all the others? Should you raise the pound to stop capital inflow from France if British industry has needed relief from an over-valued pound? Should we stop capital inflow from England to our stock market by raising the dollar or lowering the pound, if that will weaken American agricultural prices or increase competitive imports and impair exports? Without debating the merits of any particular case (in my own view the dollar has been too low ever since the war, a maladjustment which by our devaluation we missed an opportunity to correct) it seems clear that the question is complex, not only economically but politically. It seems probable that currency variation will tend, as in the past, to be one-way, downward in depression but not upward in a boom. And it seems probable, if it is desired to control capital movements between stock exchanges or capital issues which may have disturbing cyclical effects, that nations will try first some form of direct control, and find themselves much readier to cooperate with each other on that line, before resorting to the device of raising or lowering the currency.

The essential objection to exchange variation as a mechanism of adjustment is that it is at best a limited and constrained sphere of action, limited on the one hand by its possible adverse effects upon the home economy and on the other, by its adverse effects upon other economies. The result is that resort to it is likely to be indicative both of general disorder already existing, which it should be the aim of monetary policy to prevent, and of further general disorder to follow. In speaking of adjusting the balance of payments to the internal economy, rather than the other way round, it must not be forgotten that the balance of payments is an expression of relations between the national economies. Either the adjustment must be mutual, or if one economy is to escape, the burden is shifted to the others. Nothing in the depression experience contradicts this fact. What it does show is that if other means of correction fail, or are not tried, the revival of the home economy, by currency depreciation if necessary, must be the decisive consideration,

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and by increasing the home purchasing power will eventually improve not only home trade but the foreign trade as well.

But the challenging, and as yet unanswered, question is whether this is not a unique case, the case in which there are no other options. It is an interesting fact that the only case in which there was room for a serious debate on the desirability of devaluation was the American case, which was also the only case in which there was a real option of alternatives. One of the factors which for so long delayed the recent devaluation of the franc was the fear of rising cost of living. One of the factors delaying a relaxation of exchange control in Germany and a devaluation of the mark appears to be the fear of higher import costs. It is doubtful if a substantial decline in the pound could occur at any other time than severe depression without raising the cost of imports. The products of young countries are characterized by inelastic demand-supply, which is the major reason why a world trading center by depressing its currency can depress outside prices. But with higher employment and incomes in the world generally, there is more possibility of alternative markets for the young countries, and less to be expected by them from increase of British buying power; and more likelihood of retaliatory measures. With low incomes and employment in the world at large there is more to be gained from recovery of home trade, by currency depreciation or otherwise, than will be lost or gained from effects of currency variation on external trade. But in proportion as incomes and employment increase the reverse becomes true. This may well mean that in depression nations will be more prompt to vary their currencies than previously, even though at the expense of others, while with recovery they will show more interest in exchange stability. But it appears also to mean that at any other stage than depression, including prevention of depression, there will always be a presumption in favor of some compromise system which is built primarily around the principle of exchange stability.

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III

I have presented the view first, that there must be some form of compromise system; second, that this compromise should be one which will give the largest measure of internal monetary protection and control which is consistent with exchange stability; third, that exchange variation, while not excluded, should be resorted to, only when other means of control have been exhausted.

I want to conclude with three points which, I believe, have a special bearing upon the present trends and developments with respect to international monetary organization and policy:

(1) The views expressed are not inconsistent with a keen and sympathetic interest in the new developments which have been growing out of the recent "gentlemen's agreement."

(2) There are grounds for thinking that we do not need or want any single pattern of compromise in all countries, such as the gold standard pattern was before the war. Different kinds of countries require different kinds of monetary systems.

(3) The best prospect for stability in individual countries and in the world as a whole, so far as it can be achieved by monetary means, lies in more efficient monetary control within the major countries, especially the United States and England, coupled with cooperation between them; and on this basis, there is no such dilemma between internal and external monetary stability as has been frequently emphasized in abstract analysis.

1. The "Gentlemen's Agreement."

The "gentlemen's agreement" is a form of de facto stabilization, less definite and binding than any which had been previously proposed, and for that reason more acceptable and feasible. Whatever kind of system is ultimately to emerge, it has been commonly recognized that a trial period would be necessary before any more permanent and formal kind of stabilization could be ventured upon.

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Moreover, the device - as set up under this agreement - for converting stabilization fund holdings of foreign currency into gold at a price that is based from day to day on the exchange rate may provide a new and better kind of exchange stability. Pressure on a currency will lead to its support through purchase by stabilization funds (or through sales of the other currencies) and to conversion of these balances into gold at a known price. If the pressure continues unabated it can be relieved by varying the exchange rate through varying the price of gold. With this instrument of flexibility at the disposal of the respective stabilization fund authorities, the result may be a greater assurance of exchange rates which are both more stable and more under control than has previously been the case. It will certainly make possible a more orderly change to new levels, if that is required; and it provides, moreover, a better possibility than we have previously had of effecting alterations in the exchange rate structure, of varying a currency with relation to some other without that change being communicated to all the others.*

It should be noted that, as it has thus far operated, this mechanism includes a fixed buying and selling price of gold in terms of dollars. Prior to the devaluation of the franc, the British Equalization Account operated against a fixed buying and selling price for gold in terms of francs. There is no evidence thus far that this kind of exchange stabilization can operate without being anchored to a fixed price of gold in one or more markets. In some respects, it would seem to be more feasible with only one, or a few countries, having a variable price of gold and operating against the fixed gold price maintained by the others. There is also the question whether operations cannot be conducted more effectively by one, or a few, stabilization funds rather than by a larger number. The objection to having one country on a variable basis, in this sense, and the others on a fixed basis is, of course, that it implies a large measure of trust in the integrity and the freedom from nationalistic motives of the variable exchange country which would act as the stabilizing agency. But perhaps the knowledge that other countries could retaliate

*It may, for example, be desired to lower currency A relative to B but to raise it relative to C.

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by devaluation, either by new legislation or under an authority previously granted and held in readiness, might be a sufficient deterrent. The possible difficulty in having more than one stabilizing agency is, of course, that they might not be able to agree when any major change in exchange rates is desirable. England might think it desirable to put the pound down, but other countries might not think it desirable to have their currencies go up in consequence. Again it seems clear that nations could cooperate better on some plan of monetary control which leaves exchanges stable than they could upon a plan involving variable exchange rates.

2. Different Currency Mechanisms for Different Countries.

The discussion of the "gentlemen's agreement" indicates that it may be both desirable and feasible to have different currency mechanisms for different countries. Already there are included in (or attached to) the agreement countries with stabilization funds and a variable price of gold, countries with stabilization funds and a fixed price of gold, and countries with a fixed price of gold and without stabilization funds. It may be an open question whether France, which now has the first type (but whose variable price of gold is limited by law within a range) may not, as Belgium did, return eventually to a fixed price of gold with no stabilization fund. And it may be a question whether the American fund will prove eventually to be primarily a gold sterilization fund or equally an exchange stabilization fund.

Some light can be thrown on the question whether the world needs a single, uniform system or a combination of different systems by consideration of the diversity of countries, and in particular the differences in their proportions of home and foreign trade. It would seem that the relatively self-contained countries should, in most circumstances, be less concerned about exchange variation as a means of correction of their business cycle maladjustments, and must rely mainly upon their powers of internal control. On the other hand, countries chiefly dependent upon foreign trade and foreign capital have most both to gain and to lose

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by exchange variation; they most need exchange stability when foreign trade is prosperous, and they most need a currency adjustment when capital inflow is threatening to produce a boom, or when depression in the outside world is threatening their foreign markets. From this point of view, countries like the United States, and probably France, could best afford to have an unchanging currency, once a generally sustainable structure of exchange rates had been attained. Countries like Australia or Argentina would probably want fixed exchanges the larger part of the time, but with some provision for both depreciation and appreciation. Currency appreciation would be indeed a new phenomenon in the history of young countries, which like most others have been less concerned to stop booms than to stop depressions; but currency depreciation in depression would be only repeating what they have always done. The only new suggestion is that it might be worked out in some more orderly and deliberate fashion, as a conscious instrument of policy. For such countries, internal money management must be at best the minor part of policy. Since these countries are a minor part of the world economy, currency variations by them would probably not hurt others so much as it might help them. In these countries, as in all, there would be some conflict of interests. Currency depreciation, which might help export trade, would impair ability to pay interest charges, but this sacrifice is at the expense of the foreign creditor, who may be more able to bear it and should have been better able to calculate the risk in the first place.

Consideration of countries largely dependent on foreign trade suggests consideration of the sterling area. The development of the sterling area when England went off gold represents the emergence, in a more limited sphere, of the same type of international trade organization and hence of the same type of monetary system that existed before the war, when in a very real sense it could be said that England was on gold and much of the rest of the world on sterling. Within such an area, among nations closely tied by trade and financial relations,

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the need for stability of exchange is so compelling that when the center country varies its currency it is apt to carry all the other members of the group with it. In such an area, also, as was largely true before the war, the monetary control exerted at the center is likely to have a powerful influence throughout the area, which suggests that through stable exchanges forces of expansion or contraction can be initiated at the center and be transmitted throughout the area.

To hold such a unit together and to maintain exchange stability within it, it is probably unnecessary that all the countries, or indeed any of them, should be on the gold standard. What the constituents of this area need chiefly are foreign exchange balances in London; and as for the exchange stabilizing agency what is needed is a sterling balance which the foreign country's central bank holds and which this bank can control by decreasing or increasing its purchases and sales of sterling at a price that is stable but which it reserves the right to vary. If there is need of gold, it is as an internal reserve for notes or deposits, as a protection against an unrestricted credit expansion; but this function could be performed also, as it can in other countries, by a central bank control of member bank reserves, without gold.

There is left for consideration those countries whose position is intermediate, whose foreign trade, though less in quantity or value than home trade, is nevertheless essential, in the long run, to a high level of productivity and real income. In this group are such countries as England, pre-eminently, and also Germany. In so far as such countries have trade areas, their concern for stability of exchange in support of their foreign trade has been already dealt with. Exchange stability within the trade area appears to be the less troubling aspect of their problem; and in a sense is self-insured by the closeness of trade ties. But their trade with the rest of the world is on a different footing. It is here that the conflict of objectives as between internal and external monetary stability chiefly arises. In depression, such countries are likely to strike out for freedom of

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internal policy, even though the protective devices which are set up, including currency depreciation, work out their effects at the expense of others. How their freedom of action is limited in other phases of the cycle, particularly by rising cost of imports, has already been discussed. Whether England would appreciate its currency substantially to help ward off an internal boom, we have yet to see. We must remember that she is occupied and perhaps somewhat complacent with her internal recovery, for which the ground was laid not only by cheap imports, but in addition by an easy money policy which is supporting both an extensive housing program (England having had no such construction activity as we had in the twenties) and now also a feverish armament program. The fundamental question at the moment, then, is whether England, in the light of her present situation, may not be less concerned about her foreign trade, which has been noticeably backward in the recovery, than in the longer run she will need to be. In considerable measure, the problem of monetary policy, in so far as there is conflict of internal and external considerations, is a problem of business cycle versus the longer run forces which govern national productivity and income. The question, as stated earlier, is how to control short-time change without doing damage to the basic trade relationships.

3. <u>The Solution Mainly Turns on Internal Stability in the Major Countries, Coupled with Cooperation.</u>

The discussion of the sterling area suggests that for such a group monetary stability mainly depends upon the behavior of the center country. This suggestion has a larger application. The economic activities of the United States and England combined represent more than half of total world activity; and these countries are, in normal times, the main sources of capital. World booms and depressions are more likely to spring from changes originating in them and carried outward, than by the reverse process. As has been indicated repeatedly by the course of events, international capital movements are likely to be

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mainly a phase of expansion or contraction in the major countries. We are likely to export capital at the same time that we expand investment at home. If we also attract capital, as in a major rise of the stock market, it is most apt to come from England or some other major country.

From this point of view, the problem of monetary stability appears to be one which calls in large measure for an over-all control, rather than for a compensatory mechanism operating as between countries, and to require as its main foundation effective internal monetary control in the leading countries. It ought not to be impossible in a matter of such mutual interest and serious importance to achieve, after the experiences which the nations have gone through in pursuing their own narrower ends, some community of action in monetary and general economic policy; but I must add that I am not altogether sanguine. Even without such formal cooperation, I believe that the best prospect for general stability is to be found in internal stability in the leading countries if it is intelligently, which means not too narrowly, conceived.

But it is not to be expected that economic change would or should exactly keep pace in all countries; that is far from true even in the different parts of our own country. There will always be diversity of change and of pace and character of development. There will be business cycle lags and leads as between countries. There will be crises here and there, registering their effects not only in the countries of origin but in others, and perhaps especially in the center countries. What an effective system of compromise must do is to provide slacks and elements of variability which will lessen shocks, permit monetary change to be slowed down to the pace which the economic structure can tolerate, and leave freedom of action in directing the impact and extent of change. For this purpose, it seems preferable to have some compromise, or combination of

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compromise systems, which, while excluding no form of variation which might be serviceable in a constantly changing world, would resort to currency variation only sparingly and when other means had failed.

PRESENT MONETARY MECHANISM AND POSITION OF THE UNITED STATES

1. Brief History

Before the Federal Reserve System

Before 1913 the United States may be said to have been on an automatic gold standard. The system owed this characterization to federal legislation determining the nature and content of the dollar, and to federal and State legislation determining the nature and amount of the reserves which banks were obliged to keep. The volume of basic monetary reserves was dependent principally upon gold movements, although from 1878 to 1893 a stipulated amount of silver was purchased each year, as monetary reserves, and during certain periods domestic gold production provided important accretions to monetary reserves. Aside from reserves, there was no link common to all the banks. There was no central bank. There was no established procedure, outside the makeshift of clearing house certificates,* for facilitating, in a period of distrust, the emergency conversion of bank deposits into currency. There was no way of creating bank reserves, and there was no established mechanism which might, if it seemed wise, ease, sterilize or regulate the impact of inward or outward gold movements.

Fluctuations in the holdings of money in the Treasury's own vaults, characteristically a source of disturbance to the banking system, conceivably could have been employed to regulate, within certain limits, the volume of bank reserves. As a matter of fact the Treasury, early in the present century, and aided by a series of surpluses, actually did undertake certain operations for their effect upon the money market, and at various times the Treasury supported the banks in emergencies. To the Treasury, however, with its own problems of receipts and expenditures, debt flotations and repayments, the matter of the impacts of its operations upon the banking structure was always

* And Aldrich-Vreeland notes, 1908-14.

and necessarily a secondary concern; and the Treasury's powers to influence the volume of bank reserves, arising from its ability to shift balances into or out of the banking system, was ordinarily restricted by the total amount of its balances and by practical considerations of convenience in obtaining receipts and making payments.

Developments under the Federal Reserve System

The Federal Reserve Act was designed primarily to introduce flexibility into the currency supply and to mobilize and make more elastic the banking reserves of the country. With this end in view a new type of currency was created which was expected to expand and contract automatically in response to the changing needs of business, and the Federal reserve banks were authorized to create rediscount facilities for member banks, so that bank reserves could be expanded in times of increasing business requirements for bank credit and could contract through the retirement of bank indebtedness when business needs for credit were diminishing. The principal instrument by which the Federal Reserve System was to facilitate or retard rediscounting by member banks was the rediscount rate. Open market operations were provided for as a means by which the Reserve banks might obtain earning assets, rather than as a means of influencing the reserve position of member banks. In short the Federal Reserve System was apparently designed as a mechanism to produce greater elasticity in the currency and credit supply of the country, functioning more or less automatically in response to the changing requirements of business. It also involved a departure from the automatic gold standard in the direction of a kind of managed gold standard in that the volume of monetary reserves (bank reserves and currency outstanding) could expand or contract through borrowing at the Reserve banks even though gold was not flowing, and in that the immediate impact of gold flows could be relieved by changes in the volume of borrowing.

The Act measurably freed the country's supply of basic reserves from exclusive reliance upon international gold movements.

The development of an active credit policy in the Federal Reserve System dates from the close of the World War. Two conflicting views appeared: first, that the total volume of bank credit should be controlled as a means of preventing further development of inflationary tendencies; and second, that the volume of bank credit employed in specific fields should be curbed. These two viewpoints led to emphasis on a vigorous rediscount policy on one side and on a "direct action" policy on the other side. After an attempt, in 1919, at applying a "direct action" policy the chief reliance was for many years placed on the rediscount rate.

As late as 1922, open market operations by the Reserve banks were still regarded largely as a means of acquiring earning assets. Their effectiveness in influencing the reserve position of member banks, however, came to be recognized in that year and organized efforts to use open market operations as an important instrument of credit policy began in 1923. By that time the old idea of a more or less automatic response by the Reserve System to changing business demands for currency and credit had largely given way to the idea of attempting to regulate the volume of bank credit so as to exercise a stabilizing influence on business and on the general level of prices. The dangers of excessive flexibility had been clearly demonstrated by the post-war boom and collapse.

The efforts of the System to exert a stabilizing influence, however, proved to be subject to a number of limitations and conflicting influences. Immediately after the close of the War, the fiscal requirements of the Government prevented the adoption of the sort of credit policy that appeared to be dictated by developments in business and in the price structure. Following that period and continuing for several years afterward, the System was in a dilemma in that

efforts to meet the responsibilities that went with the dominant position of the United States in the world financial situation tended to conflict at times with the policies that appeared most desirable from a purely domestic viewpoint. The System was criticized for giving undue consideration to the international aspects of the monetary situation during the post-war period, but it should not be overlooked that policies directed exclusively to domestic considerations would frequently have set up repercussions, in the form of additional gold imports, which would have created new domestic problems.

Another sort of dilemma making the determination of credit policy difficult was that policies directed toward the prevention of speculative excesses conflicted with policies designed to promote business expansion. The difficulties in this respect led to the enactment, in 1933 and 1934, of legislation intended to give the Reserve System additional means of controlling speculative use of credit without restricting the supply of credit for ordinary business purposes. These means of control as yet have had no adequate test.

Another conflict, which is especially well illustrated by the developments in the autumn of 1931, was between the so-called "orthodox" policy of fixing rediscount rates with a view to moderating or limiting gold flows, and the policy of adjusted discount rates and open market policies with a view to exerting a stabilizing influence at home.

A further limitation on the effectiveness of the credit policy of the System appeared in the nature and condition of the commercial banking structure of the country. Partly, though certainly not entirely, due to limited authority over even the member banks, the Federal Reserve System was not able to prevent unsound developments in that structure. This limitation appeared especially in the severe depression of the 30's when a Federal reserve policy directed toward an ample credit supply and the checking of deflationary tendencies was nullified by the weakness of many commercial banks and the consequent loss of public confidence in banks generally.

The successes of the Federal Reserve System in the field of money management appear to have fostered the idea that stabilization of prices and of business can be achieved almost entirely by control over the money supply; and the failures in this field have led to a number of pieces of new legislation providing for increased powers of money management, many of which have been lodged with the Treasury or the President rather than with the Federal Reserve System.

Developments of Treasury Monetary Powers

The Government may be said to have played a passive role in the monetary organization of the United States from the end of the period of war financing, until the world depression had well set in - one might say from the passage of the Senate Resolution in 1920 until the Hoover moratorium in 1931.

The concern of the Government over the international financial situation was manifested in the Hoover moratorium in 1931, and its concern over the domestic banking situation was likewise manifested in the encouragement given to the formation of the National Credit Corporation in the fall of that year and in the establishment by Congress of the Reconstruction Finance Corporation in January 1932. At the same time the power of the Federal Reserve System to augment the monetary base was reinforced in February 1932 by the Glass-Steagall Act, permitting the Reserve banks, for a limited period of time, to use direct obligations of the United States as collateral security for Federal reserve notes,* and to make emergency loans to banks against collateral other than eligible paper.

The place of the Government in the monetary organization entered an entirely new phase in March 1933. The Government asserted sweeping powers over

*Expiring March 3, 1937.

banks and over money. It proclaimed a nation-wide bank holiday and determined conditions under which banks might subsequently reopen. The gold standard was suspended and with the end of the banking holiday gold became available for export only under license from the Treasury Department. A few weeks later the issuance of licenses was suspended, and beginning in October bids were entered for gold above the old mint parity and subsequently at higher and higher prices. Moves had already been taken to withdraw gold from circulation. Thus under the authority of a war-time act of October 1917, and emergency legislation of 1933, the Treasury entered upon a forced depreciation of the dollar. This depreciation was stopped in the middle of January 1934 when a price of $34.45 an ounce had been reached. The day after the passage of the Gold Reserve Act of 1934, which set 40 per cent as minimum devaluation, the President established $35 as the price of gold, a devaluation of 41 per cent. The Thomas Amendment, May 12, 1933, had already set 50 per cent as the maximum limit of devaluation.

One effect of the dollar devaluation was to create a windfall profit to the Government of $2.8 billions. This money, constituting a potential increase in bank reserves of the same amount, has been used mainly to create a stabilization fund of $2.0 billions, and to retire national bank notes, formerly circulating to the extent of $0.9 billion. In general it may be said that the Treasury was armed, by the devaluation, with a fund of $2.8 billions of which it has used a part in a way not affecting the volume of bank reserves. The remainder constitutes a one-directional instrument of credit control. If we include the Treasury's power to amass through taxation and borrowings free gold or heavy balances in the Reserve banks, the Treasury has a two-way control over the volume of bank reserves.

In addition a new silver purchase program has been entered upon which has already added roughly $0.7 billion of monetary reserves. Consummation of the program will require, in addition to which use of the silver profits will

permit, further heavy contributions to reserves. The President had previously been granted, May 12, 1933, power to establish bimetallism in the United States.

Finally, the President was given power, expiring on January 30, 1937, to change the gold content of the dollar within the range of 50 to 60 per cent of its former value. The gold content of the currency previous to 1933 had been set by law.

The Treasury has not used the main part of the stabilization fund, and the price of gold has not been changed since the $35 figure was set. Nevertheless significant changes in the relationship of the Treasury to the problem of monetary control have taken place. Since October, under the operation of the "Gentlemen's Agreement," private shipments of gold have been largely displaced and on December 21 the Treasury announced that it would thereafter sterilize newly-mined and imported gold.

Summary

Viewed broadly, the monetary organization of the United States has been changed in the considerable enlargement of authority in the hands of the two monetary agencies, the Treasury and the Federal Reserve System. There is power, in the form of the unused portion of the gold profits, and Treasury balances outside of the commercial banks, to increase bank reserves by over $2 billions. There is also power to change the gold content of the dollar, already exercised and further exercisable, at least up to January 30, 1937, within certain statutory limits. Devaluation to 50 per cent of the former parity would create additional potential reserves of about $2 billions. There is power to increase reserves by $1 billion through use of the silver seigniorage, and the ultimate expansion of reserves on the basis of silver purchases, already at $0.7 billion, may total about $2 billions. Never has the unused capacity to expand bank reserves, recently at $6.7 billions, the largest figure on record,

and $2 billions in excess of requirements, been so great as now. The Treasury has also drawn upon the device of holding balances in excess of bare working requirements in the Reserve banks instead of in member banks, resulting in a corresponding reduction of bank reserves, so that, with the possibility of raising reserve requirements (which has the double effect of wiping out excess reserves and cutting down the ratio of potential deposit expansion on the basis of the remainder), it might be said that there are two new instruments for reducing the limits of deposit expansion.

There has also been a significant change in the balance of monetary authority. Except in times of war, or of great emergency, the Treasury has until recently been a passive factor in the monetary organization. To a large extent the newly-added powers have been placed in the hands of the Treasury, and the Treasury has exercised many of these powers, and others as well not requiring specific action by Congress. The central position of the Federal Reserve System in the monetary organization has thus been shared, if not overshadowed, by the Treasury, and while the return of more normal conditions, and the end of Treasury deficits will probably remove Treasury operations somewhat from the spotlight, a new allocation of powers has been made, the importance of which will rest upon the law as it stands in the future, and upon the disposition of future administrations to use the powers granted by the law.

Within the System there has also been an important reallocation of authority in the shape of a shift of responsibility from the Reserve banks to the Board at Washington. The Board is more in a position to initiate moves, rather than to approve or disapprove steps initiated by the several regional banks or by their open market committee. Relations and transactions with foreign banks are specifically placed under the supervision of the Board.

2. Present Situation and Prospect

Introduction

The present monetary and banking situation in the United States is characterized (1) by the existence of a volume of money (currency and bank deposits) in circulation now approaching a new record in amount, after three years of rise, but changing hands much more slowly than in other periods when the volume of money has been at a relatively high level; (2) by the existence of a tremendous still unutilized capacity for the further expansion of money in circulation; (3) by the possibility, implied in (1), of a large rise in the total volume of money payments based upon a considerable increase in the turnover of the present, or a larger, volume of money in circulation; (4) by the existence also of a more effective machinery than heretofore for checking monetary expansion; and (5) by an unusual dependence upon the Treasury in the application of restraints upon such expansion. The very measures or developments that have tended to set in motion, or to accommodate a needed monetary expansion, have set the stage for a further monetary expansion of almost incredible magnitude, and far transcending any possible requirements. The rate of expansion in bank credit and more particularly in bank deposits has become extremely rapid, and although the price structure thus far has given little evidence of inflationary effects - a result intimately connected with the large amount of unemployed productive resources that have been available - stability of the price level cannot confidently be expected to continue, in view of the present rate of absorption of unemployed resources and the existing basis for excessive credit expansion, unless adequate control over the monetary base can be exercised. At least it seems clear that the chief monetary problem now is no longer one of reversing deflationary tendencies, but is rather one of averting eventual inflationary tendencies.

Member Bank Reserve Position

In order to obtain a grasp of the magnitude of the problem to be dealt with, it may be well to review the present and prospective supply of reserve funds on one hand and the demand for reserve funds on the other. Before the 50 per cent increase in reserve requirements in the middle of August, member banks held three and a quarter billion dollars of excess reserves. The Board's action in increasing reserve requirements eliminated 45 per cent of the excess reserves, but the return flow of currency from circulation will raise excess reserves well above $2 billions, and abandonment of the stabilization fund and its disbursement by the Government for debt retirement or for other purposes would almost double that figure.

On the other hand, although obscured by the extraordinary rise in member bank reserves, there has been an extremely rapid increase in the demand for reserve funds. Within three years, demand deposits of all member banks have risen from the lowest level in more than ten years to new high levels and reserve requirements had increased approximately $1,200,000,000 or about 65 per cent up to August 15, before the 50 per cent increase in required reserve percentages. The amount of currency outstanding has also increased rapidly and is now almost 40 per cent higher than on the comparable date in 1929. The expansion in the past two years has amounted to approximately $900,000,000.

There is reason to expect a continued rapid increase in the demand of member banks for reserve funds to meet reserve requirements, as deposits seem to have gained a strong upward momentum, and, due to the 50 per cent increase in reserve requirements, the rise in member bank reserve requirements will tend to be even more rapid in the future. The demand for reserve funds to meet the flow of currency into circulation has shown no signs of abatement, and although there is some reason for believing that a fairly substantial amount of the currency now outstanding is held inactive in bank vaults, in the treasuries of

local governments, and to some extent in private hoards, it is questionable whether much of such inactive currency will go into active use until there is a marked increase in money rates. It is apparent also that currency, to some extent at least, is being used where checks were formerly employed, reversing the tendency of the decade after the War when banks were more numerous and esteemed and service charges less prevalent.

With any assurance that the present volume of member bank reserves represented the maximum for some time to come, the Reserve System could feel quite confident of its ability to control the reserve position of member banks and still retain sufficient earning assets to cover its expenses when money rates reach levels in keeping with active business conditions. In December the Treasury adopted the practice of sterilizing newly-mined and imported gold. This practice will be helpful in preventing the Reserve System's control from being undermined by continuing gold inflows. On the other hand, there is a further large area of uncertainty involved in the use which is made of the monetary powers in the hands of the Administration in the future.

Bank Deposits and Loans and Investments

The policy followed by the System for several years has been, first to restrict further deflation of bank credit, and then to encourage some expansion of credit to offset the losses during the depression. From a monetary viewpoint the object of credit expansion is the creation of bank deposits which will serve the purpose of money. During the past three years the adjusted demand deposits of all member banks have risen from less than $12.5 billions to over $20 billions, a considerably higher level than in 1928 and 1929 when adjusted demand deposits of member banks ran around $16 billions. It appears that the volume of deposits subject to check in all banks in the country is now higher than in 1929, for at the end of June total deposits of all banks were not far from the 1929 level, and the percentage of demand to total deposits

is markedly higher than it was in 1929. Taking into consideration also the increase in the volume of currency in circulation, it seems clear that the money supply of the country has now been restored to a level which, turning over at anything like its usual rate, would be quite adequate to finance a complete recovery in business.

Bank loans and investments, although on a definite upward trend, are still considerably below levels of 1929. The more rapid increase in deposits reflects largely the proceeds of gold imports and other gold and silver purchases. In view of the great increase in deposits from these sources, however, less credit expansion is required to produce an adequate money supply.

Until recently the chief source of expansion in bank credit, and the chief source of increase in bank deposits resulting from credit expansion, have been increased bank holdings of United States Government and Government guaranteed obligations. Within the past year, however, an expansion in commercial loans has got under way; investments other than Government securities have shown moderate expansion; and there has been a small increase in loans on securities. From June 1935 to June 1936 member banks have expanded credit by $2.2 billions through additions to holdings of Government and Government guaranteed securities, $0.6 billion through "other" loans, $0.6 billion through purchases of other securities, and about $0.1 billion through security loans.

The Government Budgetary Position, General Considerations

The budgetary position of the Government bears a delicate relationship to the question of monetary management. This is apt to be true at any time when the debt is relatively large (unless, perhaps, the Government bond market is being supported by repayment of debt) and the situation is most difficult when the market is being asked to absorb heavy new issues of Government securities to finance a deficit. A tightening money structure, requiring

higher coupon rates on new issues as well as in refunding maturing obligations, increases the cost to the Treasury of carrying its debt. But monetary control operates through variations in the quantity and cost of credit, and if the quantity of available credit cannot be limited and the cost raised there can be no effective monetary control. Monetary control must be a two-way control, and herein lies the great peril in the submission of central banks to Treasury or political domination. Monetary control can be effective only if the Treasury will, when necessary, reconcile itself to paying definitely higher rates in order to attract capital in the competition of the capital market and in order to give additional incentive to the employment of accumulated savings and to further saving.

The Federal deficits beginning in 1930, and continuing up to the present time, have played an important part in the behavior of the volume of bank credit over the period of depression and recovery. The increased supply of Government securities undoubtedly operated to check the decline of bank deposits during 1930-3 and has furnished a major impetus to the expansion of deposits during 1933-6. At the present time it is a matter of greatest concern that the deficits taper off and turn into surpluses. Loans and investments excluding Government securities have apparently established a definitely rising tendency; banks are showing greater inclination to employ their available funds more fully; and under the circumstances, it is important that conditions be created which will permit the use of the machinery for checking of credit expansion without undue embarrassment to the Treasury. It is clear that present-day money rates are to a high degree abnormal, arising from a prolonged period of great scarcity of desirable earning assets and continued heavy accretions to the reserve position. Money rates undoubtedly will have to be much higher to prevent credit expansion beyond that needed for full recovery in business. Unless the supply of Government bonds is not only shut off but materially reduced through debt retirement, it is to be expected that yields will

be considerably higher. The most adequate means of protection to the Treasury against an excessive cost of carrying its debt will be the balancing of the budget (to eliminate new demands for funds) and the creation of a series of surpluses (to reduce the supply of Government securities and the amount on which interest must be paid).

Outlook for Further Credit Expansion

In considering the outlook for further credit expansion it appears that there is reason to look for continued growth in bank loans and investments at a rate at least as rapid as during the past three years, unless definite steps are taken to restrict the expansion. Ordinarily it might be expected that at this stage in business recovery the Federal budget would be balanced, partly by curtailment in emergency expenditures, and partly through increasing receipts, and that a beginning of the retirement of Government securities now held by the banks would soon get under way. Government expenditures have been maintained at such a high rate, however, that despite rapidly increasing revenues and substantial repayments to Government lending agencies, it is not clear that substantial Federal debt reduction is immediately at hand. Under the circumstances it is not expected that Government security holdings of banks will be much reduced during the present fiscal year.

Security loans have shown remarkably little expansion in view of the rapid rise in security prices during the past three or four years, and the powers of the Board of Governors appear to be adequate to prevent any very great expansion of credit for the express purpose of financing security speculation. The rise in security prices appears to have been financed partly by the heavy inflow of foreign investment funds, but it also seems likely that substantial amounts of idle domestic capital, as well as funds resulting from credit created initially for other purposes, have gone into the investment market. This movement may probably be expected to continue.

Commercial loans have been unusually slow in showing an upturn, although some lag after an upturn in business is usual in periods of depression. The corner appears to have been turned about a year ago, however, and there are now indications that expansion in commercial loans is proceeding at an accelerated rate.

Altogether on the basis of developments thus far, there appears to be every reason to expect a continued rapid expansion in bank credit and a resulting expansion in the money supply.

Control of Credit Expansion

The extraordinary expansion of the credit base in this country during the past three years has resulted largely from an inflow of gold and silver from abroad, and in view of this fact the domestic problem of averting excessive credit expansion can hardly be dissociated from the problem of the international value of the dollar. If efforts of other countries to adjust their currencies to the present value of the dollar should be followed by further devaluation of our currency and if continued gold inflows from other countries should find their way into the reserves of our banks, efforts at restraint on credit expansion in this country would be at least partly nullified.

The international value of the dollar is primarily in the hands of the Government, and the problem of domestic control over credit expansion, in light of the legislation of the past few years, has become a joint responsibility of the Government and of the Federal Reserve System.

Aside from the balancing of the budget and a cessation of financing budgetary deficits largely through bank purchases of Government securities, the domestic problem is largely one of control over the reserve position of member banks. As the situation now stands, the Reserve System appears to be in a position to handle the reserve position of member banks, as the present excess of $2 billions in member bank reserves is under the $2.4 billions of earning

assets which the Reserve banks, theoretically at least, could liquidate if the elimination of all excess reserves appeared to be required. The amount of earning assets which would be left in the Reserve banks would be insufficient to cover operating expenses, but it appears probable that further increase in reserve requirements and in currency circulation can be depended upon to absorb a considerable additional amount of reserve funds, and to increase the need for Federal reserve credit during the next two years or so. This apparent ability of the System to control the member bank reserve position, however, is dependent upon acquiescence by the Administration, as any efforts of the System to eliminate excess reserves could readily be nullified by stabilization fund purchases of Government securities, or, to some extent at least, by a further devaluation of the dollar, to 50 per cent of the former parity and to 15 per cent below the present one, or (possibly though not probably) by the issue of United States notes under the Thomas Amendment. For this reason the problem of dealing with legislative provisions that will expire next January assumes particular importance.

3. Present Machinery

Introduction

The description of the existing monetary system of the United States presents considerable difficulty. The period of transition which we entered in 1933 is not completed and the monetary system cannot be said yet to have assumed a definite and relatively enduring form. The place of silver in our monetary scheme, to take a most obvious example, is hardly a settled question, and what part if any is to be played by a stabilization fund in our future monetary system? Certain features of the existing situation will, unless re-enacted, expire by law, and these and other features, simply from their newness, must be considered on trial.

The System in General

The present monetary system of the United States may be said to revolve basicly about gold, but with the price of gold subject, within prescribed statutory limits, to change, and with much more extensive machinery than before in the hands of the monetary authorities (the Federal Reserve System and the Treasury) for neutralizing or "sterilizing" gold movements, and for affecting the volume of monetary reserves independently of the amount of the country's gold resources. It has been said that we have been on a de facto fixed gold standard - a bullion standard - since we have accepted and are accepting gold from mines and from abroad for conversion into dollars at a fixed rate and since we have sold gold at a fixed rate for conversion into certain foreign currencies. These operations, however, are subject to important restrictions. The Government does not deal freely in gold, and there is no domestic gold bullion market. Under regulations announced October 12 the Treasury apparently will itself handle the lion's share of gold movements, at least of exports.

It might be said that if we are on a gold standard it is internationally but not domestically, and internationally only on a temporary or "twenty-four hour" basis. The stage is set in such a way as to accommodate a change in the dollar price of gold as smoothly as possible. From the Government's point of view the potential embarrassment of an internal drain of basic monetary reserves is circumvented, and although the effect may be partly to convert what would have been internal gold drain into external drain, it is undoubtedly true that substantial classes of citizens are effectually debarred from sending funds abroad because of the inconvenience of the operation, through lack of knowledge of foreign exchange, or through lack of confidence in foreign currencies; and a drain abroad, moreover, can be checked by changing the price of gold, or placing all gold transactions under the aegis of the stabilization fund and controlling exchange rates. The average individual is shut off from the possibility of

sharing in the "profit" of currency depreciation; or looking at it in another way, he is shut off from the opportunity of insuring himself against monetary depreciation by the time-worn method of accumulating holdings of actual gold or gold coin.

Not only do we reserve the right to change the price of gold, but we reserve the right, as we have for many years, to offset the effects which gold movements would otherwise have on the volume of our bank reserves, and consequently upon the volume of bank credit, by replacing reserves lost through gold exports and by wiping out reserves gained through gold imports. Thus movements of funds which are unconnected with fundamental trade disequilibria may, at our discretion, be prevented from having the effect which they otherwise would have upon the internal situation; but gold movements arising from those disequilibria may also be sterilized with the result that the rectification of trade maladjustments may be wholly up to countries abroad. Supposing our resources for the internal creation and extinction of monetary reserves to exceed theirs, countries abroad, considering them as an entity, are left the alternative of permitting monetary expansions or contractions and their consequences, or allowing their currencies to fluctuate in terms of gold. There are limits, of course, to our ability to remain impervious to gold movements while maintaining a fixed gold parity; and a limit of <u>disposition</u> to sterilize gold movements doubtless becomes effective before available reserves have been dissipated or before the available means of reserve absorption have been exhausted. But these ultimate limits in the United States at the present time are extraordinarily broad. Our present parity is in an exceptionally strong position, and should continue to be barring possibilities of a warfare of currency depreciation abroad or inflation at home.

The preservation of internal monetary stability, by seeking deliberately to place the full burden of correcting international disequilibria on

countries abroad, appears to be an utterly selfish objective. Yet it is conceivable that this policy might lead to an achievement of the fullest practicable measure of international stability. As the strongest nation, economically speaking, and without the necessity of using anywhere near the full amount of our actual and manufacturable monetary reserves in order to accommodate complete employment, and with the dollar thus in a potentially impregnable position probably for many years to come, we might find ourselves in the center of a world economy where other countries adjust their affairs to ours, our position being a point - a fairly invulnerable point - against which to balance, as the rest of the world, in a different way, may be said to have balanced against England before the War. A country such as England, with great internal rigidities, may choose to operate without a fixed parity, as a way of meeting this situation; other countries might follow that pattern, or adopt fixed parities to be maintained by internal flexibilities or, under great stress, subject to change.

The preservation of internal stability, however, still would run into important obstacles. Throwing the brunt of international maladjustments on countries abroad may also enlarge their impacts upon us. The variability of prices abroad, in terms of dollars, would tend to be greater, and the probability of cumulative inflationary or deflationary movements getting under way in various foreign countries might be increased. We may force rather general resorts to currency devaluation, indirectly undermining our own monetary position. Flows of capital, exaggerated by the existence of currencies free from gold and perhaps by an increased possibility of currency devaluation in countries on a fixed gold standard, presumably might still react in exactly the wrong way to stabilizing operations. There will almost inevitably be times when the ends of monetary stability will run counter to the desire of Treasuries for cheap financing. And there would be a problem, whose difficulty it would be hard to

overstate, of maintaining industry on a steady keel even if we were completely insulated from the outside world. Even though the requirements of our own Treasury should never constitute a source of disturbance to monetary stability, a control over the volume of bank reserves as a control over the volume of bank deposits is subject to important limitations, and a control over the volume of bank deposits, or over the total amount of means of payment, would not be a control over the total volume of money payments.

The Distribution of Monetary Authority

The machinery for monetary control in the United States is vested in two separate authorities, the Treasury and the Federal Reserve System. Both the Secretary of the Treasury and the seven members of the Board of Governors of the Federal Reserve System owe their appointments to the President of the United States, but the Board is a body with long, staggered terms, of non-political composition and with a presumably detached view of the monetary and credit requirements of the country, while the Secretary of the Treasury, though addressing his reports to Congress, is a member of the President's official council and holds office at the pleasure of the President. Thus it seems appropriate, rather than to consider the President the head of the monetary organization of the country (as of the army and the navy), to split the monetary machinery into two parts, those parts operated by the Treasury under the direction of or with the express or tacit approval of the President; and those operated by the Federal Reserve System.

Monetary Powers of the Federal Reserve System

The monetary machinery controlled by the Federal Reserve System may be summarized into five items:

a. Control through terms of lending, including the discount rate, the possibility of "rationing" credit, and the possibility of suspending banks

from access to Federal reserve borrowings. The discount rate is of course the historic keystone of central bank policy, the philosophy being that the central bank should protect its gold resources and also reinforce the direct effect of gold movements in order to hasten the internal adjustment required to restore international equilibrium. The idea of rationing credit was employed in the United States when credit lines of member banks were calculated according to a mathematical formula. The policy of "direct action" introduced in 1919 and again at the height of the speculative boom in 1929, is also relevant as a means of control through terms of lending, together with the specific powers, granted in the Banking Act of 1933, to suspend member banks making undue use of credit for speculative purposes from access to the credit facilities of the Federal Reserve System.

The discount rate may also be used, however, to influence the volume of borrowed reserves without reference to the distribution of the world's gold or the direction of gold flows. For example, high discount rates might be applied to repress an internal expansion even though gold is flowing in instead of out. A tight money situation accompanying the trade expansion may have been a cause, in addition to attractive investment opportunities, of the gold inflow, and higher discount rates, if reflected in higher rates to borrowers or a lesser willingness of domestic banks to lend, may indeed give added impetus to the flow and prove a source of embarrassment to monetary authorities. Nevertheless if we assume that open market operations are employed to wipe up the new monetary reserves arising from the gold inflow, and granted that the curve of demand for credit has some degree of elasticity, less money will be borrowed than would otherwise have been the case. The inflow of gold will also be retarded by tightening money rates abroad, as well as, in the classical way, by the unfavorable reaction of the internal expansion on our balance of trade.

b. Bill buying rate. The bill buying rate provides the Federal Reserve System with a direct line of contact with the money market. The rate establishes an upper limit to the interest rate on prime bankers' acceptances, and thus exercises a direct control over one element in the whole structure of interest rates. The limitedness of the market in bankers' bills in this country, however, greatly restricts the significance of this control.

c. Open market operations. As is well known, the Federal Reserve System first engaged in the purchase of Government bonds in the open market as a means of making investments for earnings, but beginning in the early twenties open market operations assumed a place in the monetary machinery as a way of "making the discount rate effective," i.e., of reinforcing the effects of a discount rate change by altering the volume of discounts to which it applies, or by placing member banks closer to or farther away from the need for borrowing. At about the same time the idea developed of using open market operations to protect the internal economy from gold flows, i. e., to preserve domestic equilibrium, perhaps at the expense of international equilibrium. At present there is a tendency to regard open market operations more as a positive instrument for controlling the size of the effective monetary base. The stronger the aversion to borrowing reserves the more closely will changes in the Reserve System's portfolio of Government securities be followed by corresponding changes in the total volume of Federal reserve credit and in the total volume of bank reserves, so that if discount rates in the future should be maintained at relatively higher levels than in the past, the position of open market operations as a positive instrument would be strengthened.

As at the inception of the System, the maintenance of a certain volume of Government securities still remains the only way in which the Reserve banks can assure themselves of a gross income adequate to cover expenses of operation. Although a limited period of losses might be warranted in order to

gain control over a given situation, with interest rates at prevailing levels the Reserve System cannot reduce the volume of outstanding Federal reserve credit substantially without embarrassment from an earnings' standpoint. However, a gradually tightening money rate situation, which a reduction of the open market portfolio would itself bolster, might make a substantial reduction of Government security holdings feasible from the standpoint of Federal reserve earnings. It would be necessary, of course, for the Treasury to be reconciled to the need for paying higher rates for money in the interest of monetary stability.

d. Reserve requirements. The power to modify the reserve requirements of member banks was introduced only in 1933, by the Act of May 12, 1933 (revised by the Banking Act of 1935) and the place of this mechanism in the Reserve System's machinery of control remains to be determined. The change of reserve requirements on August 15 was undertaken under highly special conditions, $1.5 billions of excess reserves being absorbed almost without visible tremor in the money market. It was said in the statement issued at the time of announcement of the increased requirements that "unless large additional increases in reserves occur through gold imports or otherwise, no occasion for further adjustments in reserve requirements is likely to arise in the near future." At a time when member banks might be substantially loaned up, or loaned up and in debt to the Reserve System, an increase would be likely to run into considerable opposition, and in any event the schedule of reserve requirements at such a time might have a significant bearing on adherence to membership in the System, particularly in outlying areas and in States where reserve requirements of non-member banks are relatively lax. On the other hand, Mr. Aldrich of the Chase Bank a year ago urged that the Board effect a permanent rise in reserve requirements in order to reduce the amplitude of the swings of expansion and contraction of bank credit. It is generally agreed that this instrument should be used only as a means of making major adjustments in the

reserve position of member banks as frequent changes in reserve requirements would keep member banks in a continued state of uncertainty as to their reserve positions.

e. Control over use of credit in security speculation. The Banking Act of 1933 gave the Federal Reserve Board power, not only to discipline member banks making undue use of credit for speculative purposes, as mentioned before, but to determine the percentages of their capital and surplus that member banks might loan on stock or bond collateral; and the Securities Exchange Commission Act of 1934 gave the Board power to set minimum margin requirements on loans extended by brokers, dealers and banks on registered securities. These powers provide a two-point check for dealing with a securities boom. The efficiency of these two checks in controlling the total flow of borrowed money into securities, and the effectiveness of a check on security loans in repressing harmful repercussions of security speculation on the entire monetary apparatus, remain yet to be tested. When tremendous profits seem to be available through the appreciation of stock prices, the stock market sets up a powerful suction, and even these walls may be subject to serious leaks. The greatest hope may lie in the possibility that limited, high-cost credit will measurably restrict the apparent profit potentialities, and hence the lure, of stock operations. Drains of new or old money savings, as well as of credit, into stocks during a period of rising prices would be checked, and, speaking generally, shifts in "liquidity preference" would be somewhat less severe.

Monetary Powers of the Treasury

The most important innovations of recent years in the monetary organization of the United States relate to the powers of the Treasury. Of the following powers of the Treasury, none were used, and only one (the third) was possessed, in the years prior to 1933:

a. The silver program. The Thomas Amendment, May 12, 1933, gave the President power to fix the weight of the silver dollar at such amount as he might determine to be necessary and to provide for the unlimited coinage of silver at this price. By the Gold Reserve Act, January 30, 1934, the unlimited power to reduce the silver content of the silver dollar was made to expire in two years, extensible to three, but additional authority was given to reduce the content at any time by the same percentage that the weight of the gold dollar should be reduced and to issue silver certificates against any silver not then held for the redemption of outstanding silver certificates. The Silver Purchase Act, June 19, 1934, finally, declared it to be the policy of the United States to increase the proportion of silver to gold in its monetary stocks in order to achieve an ultimate objective of holding one dollar in silver for every three dollars of gold.

The Treasury has increased the volume of bank reserves during the past three years by $0.6 billion through its silver purchases. The difference between the cost of the silver bought and its monetary value of $1.29 an ounce is silver profit available for increasing bank reserves by about $0.9 billion more. Finally, the continuance of these purchases until we have one dollar of silver for every three dollars of gold now held will require roughly 0.9 billion ounces more, so that on the basis of present-day gold reserves, up to $1.2 billions of additional reserves could arise through acquisitions of new silver up to the statutory requirement.

It has been the view in many quarters that the silver purchase program, like our silver experimentation from 1878-1893, has been doomed to failure from the start. Developments since 1933 and 1934, at any rate, do not lend encouragement to hopes that other countries will join us in making use of silver as a monetary base in some way coordinate with gold, and under such circumstances our own silver accumulation cannot serve as an effective monetary base to us.

As the world's largest operator in the silver market, we will tend to maintain silver prices when making purchases and to greatly depress them when making sales. Indeed, supposing that silver purchases have reached the statutory mark, and that gold reserves then are lost, the plan logically would require sales of silver and it would become positively disadvantageous to the silver interests. The latter, if they could not gain a modification of the plan in their favor, might then seek its abandonment leaving a fixed silver circulation, possibly in the neighborhood of $3.0 billions. The silver certificates outstanding would be supported nominally by a hoard of silver of fluctuating value, but as a practical matter the silver would not be available for sale and hence the silver circulation would be somewhat in the nature of a pure fiduciary issue.

b. The stabilization fund.* The stabilization fund was established by the Gold Reserve Act (section 10) for a maximum period of three years "for the purpose of stabilizing the exchange value of the dollar," and with authority "to deal in gold and foreign exchange and such other instruments of credit and securities" as the Secretary of the Treasury may deem necessary to carry out this purpose. The sum of $2,000,000,000 was appropriated for the stabilization fund out of the gold profits.

The "stabilization of the exchange value of the dollar" can be accomplished in a number of ways: (1) through the Treasury budgetary position and borrowing operations, with the cooperation of the banking system; (2) by Treasury sales of gold for dollars and dollars for gold; (3) by central bank dealings in gold and/or foreign exchanges; (4) by stabilization fund dealings in gold and/or foreign exchanges. The first of these methods was used during the period 1861-1878; and it was successful in engineering "resumption" at the former parity on January 1, 1879. A free gold market of considerable size was also in operation over this period. The second method, with a fixed buying and selling price for gold, was used to maintain the exchange value of the

*See also below, "The United States Exchange Stabilization Fund"; also "Exchange Stabilization Funds, General Comments."

dollar before 1861, and also from 1879-1933. From March 1933 to January 30, 1934, the second method was also used, the predominant feature being Treasury purchases of gold through the agency of the Reconstruction Finance Corporation at rising prices to force the exchange value of the dollar downward. During this period a domestic gold market probably would have arisen if the Government, to avoid embarrassment to its program from domestic gold hoarding, had not undertaken to suppress private holdings of and dealings in gold.

Following January 30, 1934, the stabilization fund was made available to regulate the value of the dollar in relationship to gold and foreign currencies. At the same time the Treasury itself undertook to establish definite gold buying and selling prices so that the need for stabilization fund operations to this extent was superseded. The stabilization fund did enter upon limited operations but it deserves emphasis that the "stabilization of the exchange value of the dollar" since establishment of the fund has not been dependent upon the fund but upon the prices at which the Treasury itself has bought and sold gold. The fund's operations have been supplemental, like those of the Reserve banks in extending loans on gold.

The operations actually undertaken are interesting particularly for their possible implications of a fundamental change in the machinery of balancing international accounts and in the balance of responsibility for monetary control. The purchase of foreign currencies by a stabilization fund provides a means (1) of making actual reserve balances available sooner, when dollars are in demand, than would otherwise be the case, (2) of delaying and perhaps avoiding some gold shipments, and (3) of permitting some concealment of gold reserve positions.

In respect to the first, the fund has operated to hold down the value of the dollar during sharp runs on foreign currencies (when otherwise the dollar might have risen temporarily pending privately-arranged gold shipments).

Speaking generally, strength of the dollar abroad can be curbed sooner than would be the case if reliance were placed on private interests, even by offerings of dollars below the gold export point; and the tying up of private money balances during gold movements is eliminated. In respect to the second point, the stabilization fund is less impelled immediately to ship gold as a result of sales of dollar exchange. The fund can afford to hold gold under earmark, which can be drawn upon in case of a reverse movement in the exchanges, whereas private interests would be impelled to convert foreign currencies acquired into gold and ship them to replenish dollar balances. In respect to the third point, the operations of the fund may make available dollar balances, probably with suitable protection to the fund against exchange fluctuations, but without an actual physical outflow of gold and even without the revelation of the loss, through the earmarking, of gold stocks. This consideration may appear important abroad.

Since the accord with England and France, or rather since October 12, the Treasury, although leaving its gold buying and selling prices unchanged, has undertaken a positive policy of displacing private channels in arranging gold movements to or from this country by dealing only with the fund. The ultimate implications of this step are not yet clear. When the dollar is maintained at a fixed gold value, the chief advantage of a displacement of privately-arranged gold movements apparently lies in possibilities for reducing actual gold movements through earmarkings and for reducing somewhat the amplitude of fluctuations in exchange rates particularly on gold standard countries. The move practically carries to its limit the policy of suppressing private interest in and handling of gold as a commodity.

The participation of the Federal reserve banks in exchange stabilization operations has taken the form of loans on gold held abroad.* The Federal

*It may be pointed out that the Federal reserve banks, in earlier years, had exercised their power to purchase and hold gold abroad.

reserve banks have always had power (section 14) to "deal in gold coin and bullion" abroad, to "make loans thereon," and to "maintain banking accounts in foreign countries." Except for silver purchases, they presumably could have accomplished alone approximately what they and the stabilization fund have accomplished together.

It is probably correct to say that the stabilization fund was set up on a temporary and/or experimental basis. Interpreted as a temporary device the fund was made available to implement any further change in our gold parity pending international currency stabilization and the time when a definite dollar parity might be feasible. The fund was established for a period of not more than three years, statements have been made concerning the ultimate disposition of the fund's resources, and it was implied by the Gold Reserve Act that the parity prevailing at the expiration of the President's powers to fix it (the parity), would remain the permanent parity. At the same time, viewed as an experimental venture, the fund might lead to a permanent new instrument of monetary control, particularly for the prevention of disturbance to the domestic credit structure arising from "abnormal" capital movements, such as currency "flights." In order to operate effectively to this end, the fund would have to be equipped to absorb bank reserves as well as to create them.*

To gain this two-way control, Murray Shields, for example, has suggested that the stabilization fund should be constituted under joint Treasury and Federal reserve control, the silver seigniorage being added to its gold resources, and the fund bolstered by ability to draw cash from the Treasury. The

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*Like the Federal Reserve System in its original open market operations, the stabilization fund at first could have only an expansionary influence upon the volume of bank reserves and, outside of accretions to its resources from profits, it can not have a net contracting effect over the whole period of its operations.
Inasmuch as the prevailing direction of gold movements has been inward, and inasmuch as the stabilization fund has had no power to offset movements in this direction (as it would have had if resources were obtainable for it through taxation or borrowing) the actual impacts of international monetary movements on the volume of bank reserves has not, up to the present, been very different from what it would have been if the fund had not been operating at all. To the extent that the fund has had any effect of this kind, it has had a tendency to increase the volume of bank reserves.

objectives would be to hold the gold and silver profits out of bank reserves, and to create a mechanism specifically to offset gold movements arising from flows of "fugitive capital," possibly beyond the power of the Reserve System to neutralize. Dr. Hardy would establish a new permanent emergency fund, independent of the Reserve System and also preferably independent of the Treasury, which could make gold available for export "in the event of a wholesale exodus of credit balances," and on appeal from the central banking authorities, through purchasing Treasury bills or accumulating bank deposits. Likewise, incoming gold which had been released from the emergency funds of other countries, would be taken into the fund in exchange for earnings assets or bank deposits. Dr. Hardy would even go so far as to purchase $2.0 billions of the Reserve banks' gold for inclusion in the proposed fund.

There are many interesting possibilities in the development of an additional implement, in the shape of the stabilization fund, for a new system of monetary control. Nevertheless, in so far as these proposals involve only a sharing of powers already possessed by existing agencies there may be only a division of responsibility with positive disadvantages. There is no easy line of cleavage between "normal" and "abnormal" gold movements, or between international and domestic monetary developments, and the Reserve System is probably in the best position to judge the adequacy of the reserve position of the nation's banks and to judge to what degree international money movements ought to be permitted to affect that position. The divorce of the Treasury from the problem of credit control, theoretically perfected by the Banking Act of 1935, is of course abandoned if the Reserve System operates coordinate with a new monetary agency directly responsible to the Treasury.

The most important occasion for stabilization funds or exchange equalization accounts as so far developed undoubtedly arises when a currency is freed from a gold parity: it is in connection with a departure from a legal gold

standard that all the existing funds have been set up, but even then a stabilization fund is by no means necessary if the Treasury (or central bank) itself deals in gold.

Furthermore, it would not seem appropriate, in view of our predominating size and gold resources, for our stabilization fund to operate except to regulate the dollar in terms of gold; and it would seem neither safe nor appropriate for us, with a fixed gold price, to attempt to regulate other currencies in terms of gold except with their knowledge, consent and assurances against loss. Our need for a stabilization fund in January 1934, suggested by the British procedure, rested upon the fact that the gold content of the dollar was not fixed but was by law made adjustable, and upon the contingency that the content would be adjusted or, as a matter of fact, that gold transactions of the Treasury itself might at any time be suspended. In the last-mentioned contingency a stabilization fund, though not indispensable, would have an important scope for action. This situation has not changed, although the fact that the Treasury itself has bought and sold gold has eliminated the chief occasion for stabilization fund operations. It remains to be seen whether further changes in the price of gold will be engineered, whether we shall hold a fund permanently in readiness as part of the stage setting for periodic or emergency gold revaluations, and to what extent in the meantime the fund will engage in or experiment with types of operation under a fixed dollar.

Although it has been announced that the Treasury will ask Congress to extend the life of the fund beyond its expiration date on January 30, there is no assurance yet that a stabilization fund is to be a permanent item in our monetary machinery. Barring the establishment of a permanent fund, the question as to what should be done with the fund's gold resources will pose itself at some point of time. It may be that legislation in January will make some definite stipulation in this regard.

In his radio address of July 1 Secretary Morgenthau indicated that the stabilization fund "will ultimately be used to retire a corresponding amount of public debt." As long as the main fund is retained substantially intact its holding involves an apparent cost, but at the same time it is vital that the fund be used only in a way which will avoid undue disturbance to the reserve position of the nation's banks. If the fund should be used to retire Government securities held by the Reserve banks, the Reserve System would be largely denuded of earning assets. The retirement of debt held outside the Reserve System would of course swell bank reserves correspondingly, although this action to a limited extent could be offset by a further rise in reserve requirements.* The gold could be earmarked specially, or deposited with the Reserve banks as some kind of special deposit, to make additional reserves available in a time of gold outflow, or special emergency.

c. The question of Treasury policy with respect to its available cash assets outside of the banking system. The Treasury has the power to reduce bank reserves by increasing balances held in the Federal reserve banks or within its own vaults. Over the past year the Treasury has carried balances running up to $1.4 billions in the Reserve banks but this probably should be considered in the nature of a special operation. The Treasury had the money and the opportunity of holding these balances in the Reserve banks rather than in member banks and thus helping to hold down the volume of excess reserves. It is questionable whether the Treasury will adopt the policy of building up unnecessarily large balances to be held in the Reserve banks for the sole purpose of controlling the volume of excess reserves, and also whether it is desirable to have large fluctuations in bank reserves due to the accumulation and disbursement

*The limitation on the Federal Reserve Board's power to increase reserve requirements could, of course, be removed or modified by Congress.

of large Treasury balances in the Reserve banks. To the Treasury with its central task of raising and disbursing funds, the effect of its operations on the money market must ordinarily be a secondary concern. If the proceeds of new security sales were to be transferred promptly to the Reserve banks, the incentive to banks to subscribe for new securities to be paid for with book credits would be eliminated. In the present situation the President indicated, in his budget statement of September, that the Treasury would make drafts of $1.1 billion on its cash resources sometime during the current fiscal year, and this step, if taken, would in itself restrict the Treasury's power of holding down member bank reserves by maintaining heavy balances in the Reserve banks. Furthermore, it may be questioned whether it would be desirable to expect the Treasury, as a regular practice, to participate in the Reserve System function of controlling the reserve position of member banks.

In addition to its balance held by the Treasury in the Federal reserve banks, the Treasury also holds $0.3 billion of gold among its general fund cash assets. It now seems likely that these funds will be used to retire national bank notes, and for other purposes that will not affect the volume of member bank reserves. On December 21 the Treasury announced that it would buy newly-mined and imported gold and hold it in an inactive "free" gold account in order to prevent the increase in bank reserves that would normally result therefrom. As long as this policy is continued, and as long as the Treasury avoids steps of its own influencing bank reserves, the member bank reserve position will be substantially under the control of the Federal Reserve System.*

d. Greenbacks. The President is authorized to direct the Treasury to issue $3 billions of greenbacks to bring about credit expansion. At the present time we have $346,000,000 of Civil War greenbacks outstanding, backed by

*However, the silver purchase program will still be adding to member bank reserves.

$156,000,000 of gold.

e. Open market operations by the Federal reserve banks. The Treasury may request the Federal reserve banks to acquire $3 billions of Government securities, in addition to those held on May 12, 1933, through open market operations, and without regard to Federal Reserve System reserve requirements. Government security holdings on May 12, 1933 amounted to $1.8 billion so that operation of this provision would bring about an expansion in excess reserves to $4.4 billions, $2.4 billions above the current figure.

f. Power to revalue the dollar within the limits of 50 to 60 per cent of its former parity. This power, expiring on January 30, 1937, gives legislative sanction to a free-exchange standard within the prescribed limits. Further devaluation to a gold price of $41.34 would yield an additional gold profit of around $2.0 billions. The official interpretation might be that the monetary standard which we have had since January 30, 1934, has been a free-exchange standard under which the price of gold happens not to have been changed. The Treasury has repeatedly emphasized that its monetary operations have been "on a twenty-four hour basis," and it has denied any intent to return to "the old gold standard." On the other hand, while many of the leading characteristics, such as an internal gold circulation, of the "traditional" gold standard are strikingly absent, a number of observers have construed the fixity of the price of gold as prima facie evidence of a de facto gold standard; they point out that there was a clear implication in the Gold Reserve Act that the price of gold, at the expiration of the President's discretionary power, would remain at a figure set by him.

Incidentally, it is possible within the framework of existing law for the stabilization fund, or the Treasury itself (sections 8 and 9, Gold Reserve Act), without revaluation of the gold stock outside of the limits of 50 to 60 per cent of the former gold parity, to purchase and sell gold at any priceswhatever.

The Future Monetary Standard

The question of the type of standard that we shall have is fundamental. Several things seem fairly assured (1) that silver will not play more than a subsidiary part in our future standard, (2) that gold will remain the basic international money, and (3) accordingly, that gold will continue to constitute our basic money reserve and that we will continue to buy and sell it. Judging from the experience of the last twenty-three months, it also appears that our price of gold, although subject to modification over the life of the President's discretionary powers, will be fairly well fixed and not subject to continuous variation from day to day or week to week. It remains to be seen under what circumstances over the life of these discretionary powers (e.g., in connection with fluctuations in other currencies in terms of gold or in connection with the establishment of new parities abroad) the Government will see fit to change the price of gold and whether any circumstances, or change of policy, will arise under which the price is varied frequently.

If it be assumed that we shall have a fixed parity, it remains to be seen whether the parity will be fixed by Congress or by executive order of the President, exercising power delegated to him by Congress. The President's authority to fix the price of gold, within limits, expires on January 30. This authority would not necessarily have to be extended corollary with an extension or reconstitution of the stabilization fund, although it would be a valuable adjunct, and without this authority or rather without the intent to buy and sell gold at varying prices, the need for a stabilization fund would be very much less.

There is also a question as to where the monetary reserves ought to be held, under a new standard. Is the present legal situation, where the Treasury holds title to the gold securing Federal reserve notes and backing the structure of bank deposits a logical or desirable one? Should the Reserve banks not have a grip on gold itself rather than upon "gold certificates" which by law represent no more than bookkeeping credits with the Treasury and which can be converted into gold only at the option of the Treasury?

OPERATIONS OF THE EXCHANGE STABILIZATION FUND AND GOLD TRANSACTIONS OF THE TREASURY

This study is devoted to an enumeration of proposals for the sterilization of gold imports and exports and an exposition of what is feasible and desirable in connection with operations of the Stabilization Fund and the Treasury.

Under the usual procedure, an import of gold or a release of gold from earmark results in an increase in the monetary gold stock of the country and an increase in member bank reserve balances or, in other words, the credit base is enlarged to the extent of such transactions. Conversely, the usual course of events is that a gold export or an earmarking of gold results in a reduction of the monetary gold stock and a decline in member bank reserve balances, or a contraction of the credit base. Of late there has been considerable comment in the press, in various periodicals and statistical services, and in speeches of bankers and economists, concerning the sterilization of gold imports and exports. Many of these statements, such as, "Will the Treasury supply the gold for eventual gold exports from the sterilized holdings of the Stabilization Fund and from the free gold in the Treasury's General Fund? " . . . "If it chooses the former course gold exports can be effected without reducing excess reserves," and "it (Stabilization Fund) can supply gold for export and prevent an outflow of gold from reducing reserves," have been made, it is believed, without any clear conception of what is involved in the operation.

Perhaps the simplest form of sterilizing operation, from the viewpoint of gold imports, is the purchase of imported gold by the Treasury, where the Treasury does not, in effect, reimburse itself for the payment for the gold, but allows gold to accumulate in Treasury cash and consequently has its balance in the Reserve banks depleted, following which it is necessary for the Treasury to withdraw funds from special depositaries and subsequently to borrow additional amounts of money.

Assuming that the Treasury had accumulated such a supply of sterilized gold, an export demand for gold which might develop could be supplied by using the sterilized gold, if it were deemed advisable to offset the effect of the export on the money market. This would mean that the Treasury would disburse its holdings of free cash to the same extent as the gold export movement, thereby reducing the amount which the Treasury would have to withdraw from depositaries to meet ordinary disbursements and in the long run cutting down on the amount of its borrowings.

The sterilization of gold imports and exports from these "sterilized" holdings by the means described above could be adopted so that the Stabilization Fund would act as the intermediary. The Fund would place itself in a position to buy imported gold by selling some of its present holdings of gold to the Treasury and then proceed to make payment for gold imports, subsequently transferring the imported gold to the Treasury. The Treasury in this case also would refrain from using the surplus free gold accumulated, and this would hasten the time when funds had to be withdrawn from special depositaries, thereby offsetting the gain to member bank reserves arising from the gold import. On an export movement, the Fund would obtain gold held with the Treasury and sell it for export, subsequently using the funds to reacquire gold from the Treasury. The Treasury then could use the funds to make ordinary disbursements and offset the loss to member bank reserves occasioned by the gold export. This method of treating gold movements is indicated because if the Stabilization Fund were placed in the joint control of the Treasury and the Board of Governors of the Federal Reserve System, there might be some advantage in having the operations go through the Fund although the ultimate net effect on the money market would still depend on Treasury action.

When financial writers state that "gold can be supplied for export by the Stabilization Fund, and a reduction in reserve balances prevented," probably what

they have in mind is that the Stabilization Fund will coincidently return the funds to the market by purchasing Government securities. In some instances, however, the series of actual transactions probably has not been thought out but it has simply been assumed that because the Stabilization Fund exports the gold there is no loss to member bank reserves. Such is not the case. Actually some transaction returning the funds to the money market is necessary. The case of the Stabilization Fund buying Government securities is clear in its effect on the money market, namely, of increasing reserve balances in an amount to offset the payment for gold exported. The objection, however, to this procedure is that unless the Stabilization Fund were under the joint management of the Treasury and the Reserve System the Fund might well engage in an offsetting operation, although the normal effects of a gold export might be the desirable ones at the time.

Especial examination has been made of a type of offsetting transaction which conceivably could be included in the term "preventing an outflow of gold from reducing reserves," which people writing on the subject frequently use, although it is believed that most writers have not contemplated such a transaction. The basic idea is to return to the market through the medium of ordinary Treasury disbursements funds withdrawn in payment for gold to be exported, rather than by having the Stabilization Fund buy Government securities in the market. The method has certain limitations as to amount and also as to the kind of payment received for the Treasury financing entailed, and the transaction is set down in considerable detail so that the reasoning may be quite clear, and consequently may have its proper weight in the determination of the feasibility of offsetting the effect of gold exports other than by security purchases by the Stabilization Fund.

Gold Exported from Stabilization Fund Holdings with the Treasury Assuming That it is Desired Not to Permit Gold Exports to Result in a Net Reduction in Member Bank Reserves--the Instrument Being Ordinary Treasury Disbursements

Federal Reserve Bank Statement

	Step 1	Step 2	Step 3	Net
Member Bank Reserve Account	- 1		+ 1	0
U.S. Treasury General Account		+ 1	- 1	0
Other Deposits (includes Stabilization Fund)	+ 1	- 1		0

Treasury Statement

Gold (asset)	- 1			- 1
Gold Certificate Fund				
Exchange Stabilization Fund	- 1			- 1
Gold in General Fund	0			0
Deposits in Federal Reserve Bks.		+ 1	- 1	0
Deposits in Special Depositaries				
Working Balance*	0	+ 1	- 1	0

*Includes amounts due to Stabilization Fund and other Treasury agencies.

Explanation

As pointed out above the purpose of this procedure is to restore to the market the funds which have been taken out in payment for gold exports, and the medium which has been selected is ordinary Treasury disbursements. The funds which are paid into the Stabilization Fund account at the Reserve Bank from member bank reserve accounts are transferred to the General Account of the Treasury on the books of the Federal Reserve Bank and in return for these funds the Treasury gives the Stabilization Fund a deposit on its own books, which under the present practice the Treasury simply would show as an increase in its working balance.#

We now have the Treasury in possession of the funds in the Federal Reserve Banks, and it accordingly has increased its assets and increased its working balance, a larger amount of which, however, is owed to the Stabilization Fund than before this transaction. To the extent that the Treasury has free funds in its working balance it could, of course, pay these funds out to offset a gold movement and if the gold movement were not extensive it might be a satisfactory way of accomplishing the offset to the gold exports. At the point that the total working balance of the Treasury declines to the amount which the Treasury owes to the various agencies, which amount is included in the working balance, then it becomes necessary for the Treasury to borrow additional amounts in order to be in a position to meet further expenditures.

#The working balance item in the Daily Statement of the Treasury includes a large amount which the Treasury owes to various agencies, among which is the Stabilization Fund, so that its free working balance is considerably less than the amount shown in the statement. This change was effected beginning May 11, 1935, and had the effect of reducing certain deposit liabilities previously shown separately in the Treasury Statement, or automatically increasing the working balance. However, this is not, strictly speaking, a working balance as a large part of it is owed to Treasury agencies.

The offsetting of further gold exports beyond this point can be accomplished only by the Treasury selling new security issues against payment by credits set up on the books of the subscribing banks. These book credits can be used by the Treasury as an asset to provide the required amount of working balance which, in effect, is owed to the Stabilization Fund or other agencies; this tends to release cash deposits of the Treasury in the Reserve Banks which are paid out to the money market to offset the effect of the gold export. The following sequence shows by the use of arbitrary amounts what happens after the working balance of the Treasury has declined to a point where, in reality, all of it is owing to Treasury agencies.

Federal Reserve Statement		Treasury Statement (cumulative figures)	
		Gold Export of 1	
Treasury deposits	+ 1	Asset - Deposits in Reserve Bks.	+ 1
		Liability - to Stabilization Fund	+ 1
Member bank reserves	- 1	"Free" working balance	0
		Treasury Sells for Cash Securities of 1	
Treasury deposits	+ 2	Asset - Deposits in Reserve Bks.	+ 2
		Liability - to Stabilization Fund	+ 1
Member bank reserves	- 2	"Free" working balance	+ 1
		Treasury Spends 1	
Treasury deposits	+ 1	Asset - Deposits in Reserve Bks.	+ 1
		Liability - to Stabilization Fund	+ 1
Member bank reserves	- 1	"Free" working balance	0
		Treasury Sells Securities of 1 (paid by book credit)	
Treasury deposits	+ 1	Assets - Deposits in Reserve Bks.	+ 1
		- Deposits in special depositaries	+ 1
Member bank reserves	- 1	Liability - to Stabilization Fund	+ 1
		"Free" working balance	+ 1
		Treasury Spends 1	
Treasury deposits	0	Assets - Deposits in Reserve Bks.	0
		- Deposits in special depositaries	+ 1
Member bank reserves	0	Liability - to Stabilization Fund	+ 1
		"Free" working balance	0

Obviously, the disadvantage of this plan is that in the long run the Treasury is forced to borrow and to pay interest on its outstanding obligations, in order to offset the effect of a continued gold outflow, whereas if the Stabilization Fund bought securities it would not cost the Treasury anything.

There is another type of gold sterilization operation which has as its central feature a power which would have to be legislated to the Stabilization Fund to issue or retire Government securities. This type of operation really is an adaptation of the English Equalization Account which is a credit fund rather than a gold fund. The idea was touched upon in papers by Mr. S. Sloan Colt and Mr. Murray Shields before banking association meetings, and in the New York Herald-Tribune of November 17 there appeared a statement, "It is believed that out of the studies now being made in Washington there will come a bill giving the Stabilization Fund the power to issue up to, say, $1,000,000,000 of Treasury securities for gold sterilization purposes, thereby giving to the American fund a power the British fund has always had."

Under such a procedure gold coming into the United States would be purchased by the Stabilization Fund which would raise the necessary funds by selling, for example, unissued Treasury bills in the market. The net result of this would be that the payment by the Fund for gold imports would be offset by a market payment to the Fund for Treasury bills sold and there would be no net change in member bank reserve balances. To the extent that Treasury bills were sold the public debt of the country would, of course, rise. On an outflow of gold the reverse of these transactions would occur. Funds paid into the Stabilization Fund from the money market would be used by the Fund to retire Government securities outstanding and no net effect on the market would result. Interest charges on the public debt would be increased as the debt rose by virtue of this offsetting transaction, but with the prevailing low rates on short-term Government securities this is not a material objection.

If, instead of giving the Stabilization Fund the power to issue Treasury bills as and when it became advisable to do so, the Treasury created a new issue of Government securities and immediately sold them to the Fund, obtaining payment by taking over some of the gold now held for the Fund on the Treasury's books, it would

mean that the Treasury would be in possession of an increased amount of free cash which it should not spend, for the purpose of the operation would be defeated if those funds were put in the market. The Fund would sell the Government securities which it held only to the extent that it had to pay for gold imports, and would buy securities to the amount of gold exports.

The sale or purchase of Treasury securities to offset the effect of gold movements might be adapted so that, instead of the Stabilization Fund conducting the operations, the Federal Reserve Banks would be the agency. This proposal would entail the Reserve Banks' surrendering a round amount of their gold certificates to the Treasury, in exchange for a special issue of Treasury bills (with appropriate changes in the Federal Reserve Act to permit the Reserve Banks to acquire Government securities directly from the Treasury). Subsequently, as gold flowed into the country, the Reserve Banks would sell to the market an equivalent amount of these special Treasury bills, or on an outflow of gold would buy an equivalent amount of Government securities. The success of this method would rest upon the Treasury's refraining from spending the gold freed in the General Fund by the reduction in the gold certificate fund of the Reserve Banks at the time the Treasury bills were acquired by the Reserve Banks from the Treasury. This method is subject to the same criticism as the direct sterilization of gold imports by the Treasury, described earlier in this study, which depends upon the Treasury's accumulating and holding free gold.

Sales of securities by the Reserve Banks from the portfolio existing at the present time to offset a further inflow of gold, and purchases of securities by the Reserve Banks on an outflow of gold, are also at least theoretical methods of controlling the effect of gold movements on bank reserves, but it would seem that this method of credit control should not be used in connection with the offsetting of international forces, but should be reserved to control domestic credit and business developments.

Another method of handling the continued inflow of gold to the United States is to allow this gold to have its usual effect, namely, of increasing member bank reserves, and when member bank reserves again become very redundant, as prior to the increase in reserve requirements of August 15, to increase reserve requirements by the maximum permitted under the Banking Act of 1935. Subsequently if a large gold export movement should develop, the terms of the section of the Banking Act of 1935 having to do with increasing or reducing reserve requirements are broad enough to permit of a reduction in reserve requirements which would free a large volume of funds for export or earmarking in the form of gold, without adversely affecting the reserve position of the member banks. While such changes, or even a change in the law governing the maximum increase in requirements permitted, are theoretically possible, they would be very disturbing to the commercial banks.

The decision to offset the effects on member bank reserves of gold imports and gold exports would be governed, in so far as possible, by the nature of the inflow and outflow of gold, that is, whether they represent transfers of "bad money" or are in fact manifestations of more basic balance of payments influences. Because heavy movements of gold and their treatment with respect to effect on bank reserves have such large influence in matters of credit control, it does seem that the Federal Reserve System should be in a position to make its judgment felt. For this reason it would appear that the Board of Governors of the Federal Reserve System should by legislation have joint control with the Treasury of the Stabilization Fund through the medium of which some of the decisions concerning treatment of gold movements might be made effective.

Summary and Conclusion

(1) Under ordinary circumstances, a purchase of gold by the Treasury or the Stabilization Fund, and for that matter a purchase of foreign exchange, result in an increase in member bank reserve balances. Conversely, a sale of gold or a sale of exchange results in a decrease in member bank reserve balances. (There are some minor

exceptions when foreign central banks are involved in the operation.)

(2) Acquisitions of gold by the Treasury may be "sterilized" by the Treasury's pursuing a policy of not reimbursing itself for the payment for the gold, i.e., allowing free gold to accumulate and hastening the time when withdrawals of funds from special depositaries and additional borrowings become necessary. Conversely, the effect of gold exports on the money market may be offset by the disbursement of free gold previously accumulated in the Treasury.

(3) The sterilization of gold imports and gold exports by the use of free gold in the Treasury may be conducted through the medium of the Stabilization Fund.

(4) The Stabilization Fund may offset the effects on the money market of a loss of gold by purchasing Government securities in the market.

(5) The Stabilization Fund and the Treasury may, within limits, offset the effects of a loss of gold by having funds returned to the market through the medium of ordinary Treasury disbursements.

(6) If the power to issue and retire Government securities were legislated to the Stabilization Fund, making it a credit fund as well as a gold fund, the effects of gold movements could be offset as is done by the British Equalization Fund.

(7) The effects of gold movements could be offset by Federal Reserve sales or purchases in the market of a special issue of Government securities obtained from the Treasury in exchange for gold certificates. The success of this method would depend upon the Treasury's not spending the free gold created in the General Fund. Control over gold movements by changes in the existing security portfolio of the Reserve Banks is also theoretically possible, but the use of this portfolio should be reserved for dealing with domestic developments in business and credit.

(8) The effects of gold movements can be offset by increases or decreases in reserve requirements of member banks.

All of these mechanisms may prove to be useful to some degree in the future in connection with controlling the effects of gold movements on the domestic credit situation. The major conclusion is that the Stabilization Fund should be brought under the joint management of the Treasury and the Board of Governors of the Federal Reserve System, in view of the wide powers of the Fund in the direction of credit control.

THE BRITISH EXCHANGE EQUALIZATION ACCOUNT

Genesis

The Account was projected in the budget speech of the Chancellor of the Exchequer, Mr. Neville Chamberlain, delivered on April 19, 1932, in what remains perhaps the most revealing official statement regarding the objectives of the Account and the general official attitude towards it (our underlines):

> "Since we were so successful in repaying the credits which were raised abroad last year and in balancing the national accounts, the tide of liquid capital has been setting very strongly in towards these shores. That is flattering to our vanity, but at the same time it is sometimes a serious embarrassment to our trade, and moreover, in so far as it does not represent a genuine and permanent improvement in the balance of trade, is apt to give rise to dangerous development. In such circumstances nobody can say with certainty that the ebb may not set in presently, and therefore I have been driven by the force of events to this conclusion: that if we are to avoid violent and perilous fluctuations in our currency, especially those which are due to these speculative operations: if we are to enable this country to function effectively as the main international centre of the world, then it is essential for us to hold adequate reserves of gold and foreign exchange, in order that we may meet a sudden withdrawal of short-dated capital and that we may check and repel these speculative movements. . . .
>
> .."I propose to wind up the old Exchange Account and to use the assets as the nucleus of a new account to be called the Exchange Equalization Account. I propose to ask the Committee to give me powers to borrow up to £150,000,000 for this account. The details of assets in the account will not be published, but they may take various forms, either gold or - (An Hon. Member. - Silver) - sterling securities or foreign exchange. That will give us a very large, extended power of purchasing exchange. The new powers, combined with the powers already possessed by the Bank - on which, of course, the main responsibility for the management must continue to rest - will enable us to deal far more effectively than we have done hitherto either with an unwanted inflow of capital or, if the alternative should again arise, with an outflow of capital from this country. . . .
>
> .."I consider that at all times and in all conditions the assets of the issue department, that is to say, the backing of the currency, should be consistently and conservatively valued, that gold should continue in each return to be valued at the old par, and the foreign exchange assets ought to be valued at the current rate of exchange irrespective of their purchase price. In order that the accounts may at all times precisely balance on this basis, my proposals provide that, at any time when the valuation on this basis shows a deficiency, resources to the corresponding amount shall be passed from the Exchange

> Equalization Account to the issue department of the Bank, and when a surplus is shown the converse operation shall take place. I ask the Committee to observe that both of these accounts are worked for the credit of the Exchequer, for the use of the Exchequer, and for the account of the Exchequer. Therefore, it does not very much matter whether any particular assets are for the moment in one account or the other, both are for the account of the Exchequer. . . .
>
> "There is another question. 'Will these transactions involve the Exchequer in any loss, or in any considerable loss?' I think the answer to that must be that that is a very conceivable possibility. We do not know what is going to be the future of gold prices. We do not know what settlement will be reached as regards reparations and War debts and other matters which are now disturbing the world, These uncertainties rule out any possibility of our being able to return to gold immediately. We do not know when and in what circumstances we may return to gold or at what level. If, in the long run, we were to return to gold in such a way that the £ stood at a higher gold value than the average level at which purchases of exchange had been made the transaction would inevitably show a loss. This is a possibility, but it is not one that should deter us."

Debate on the resolution, April 26, 1932, was not attended by Mr. Chamberlain, who was indisposed. Opposition attack was lukewarm, and centered on the fear that the Bank of England might exercise some control over policy, besides conducting the day-to-day operations of the Account. Some of the Government's supporters underlined this point and Major Elliot, for the Government, accepted a Labor amendment making it clear that the Exchange Equalization Account should be under the control of the Treasury. As to the objectives of the Fund, Major Elliott only emphasized the earlier statement of Mr. Chamberlain:

> "It had been urged by Sir R. Horne that the Chancellor of the Exchequer should go to the utmost limits of discretion in declaring the policy which the Government desired to adopt. The Government viewed with sympathy the arguments put forward by Sir R. Horne, but it would be impossible for the Chancellor of the Exchequer to go beyond the most definite statement he made in the House, that he had no wish to see the pound forced to a level at which it would be injurious to our traders. The interests of the trade and industry of this country and the management of this Fund would be in accordance with that express statement."*

*Report of Parliamentary Debates, London Times, April 26, 1932.

The resolutions setting up the Account, as approved by the House of Commons,* empowered the Treasury to borrow £150 million for the Account from the Bank of England or from the market, and provided that all losses or profits on gold or foreign exchange accruing to the Issue Department of the Bank of England subsequent to September 21, 1931 should be absorbed by the Account. The Account was formally established on June 24, 1932, and took over at that date £150 millions of Treasury securities, plus £25 millions of assets held by the old Dollar Exchange Fund. This latter Fund had originally been established during the World War, and had been utilized thereafter to purchase dollars for the annual War Debt payments, at favorable periods of the year.

On May 5, 1933, the Chancellor of the Exchequer moved that the borrowing power of the Account be increased from £150 million to £350 million, stressing that "the amount of the increase and the fact that he was asking for an increase at all had nothing whatever to do with the circumstance that America had gone off gold." He added, as reported in the London Times# (our underlines):

> ". . . the purpose of the account was not at all directed against a permanent alteration in the relative exchange value of the pound . . . the object of the Account was the leveling up of minor fluctuations of the exchange." . . .
>
> "He repeated that we wanted the Exchange Account for smoothing out the variations in exchange caused by the seasonal fluctuations, the operations of speculators which increased those seasonal fluctuations, and other fluctuations too; and by this special flight of capital from other countries for the sake of finding a safer place to stop in for a time. The Committee would probably agree that our objects in trying to counteract those movements were praiseworthy, and that, so far as we had gone, the work of the Exchange Account had been beneficial to the traders of this country in preserving a reasonable stability in the exchange."

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*Part IV, Finance Act, 1932 (pp. 17-20).
#Report of Parliamentary Debates, May 5, 1933.

Finally, in more concrete terms, Mr. Chamberlain intervened in the ensuing debate to insist that:

> "The honorable member (Sir A. M. Samuel) was quite wrong in saying that the Fund had any intention of supporting the dollar. He hoped that his and not the honorable member's remarks would cross the Atlantic."

These extracts complete official pronouncements directly concerning the Account, except for occasional references to the profit on its operations. It is now possible to proceed to a brief review of the operations of the Account, with reference to its objectives, as inferred, and its achievements.

Organization and Operating Methods

Dr. N. F. Hall of University College, London, who has published a book on the Account*, believes that it was originally established in order to prevent a rise in sterling exchange as a result of an expected capital inflow, and thus to allow British industry time to complete its adjustment to the lower external value of the pound, relative to the United States dollar, the reichsmark, and the gold-bloc currencies.

The device of a separate administrative organ to manage the exchanges, rather than either the Issue or Banking Departments of the Bank of England, was, he says, adopted because fluctuations in the reserve proportion# of the Bank of England arising out of foreign exchange operations might have been erroneously interpreted by the money market as foreshadowing changes in internal credit conditions. The weekly statement of the Bank would also have become confused and difficult to interpret, whether new accretions of gold were valued at the pre-suspension buying price, or at their purchase price. The Treasury could perhaps have begun to operate the Account without the publicity associated with a large grant of borrowing power, but one of the primary objects of the authorities was to make a public announcement that short-term speculative movements in sterling

*N. F. Hall, The Exchange Equalization Account, 1935.

#In effect, free gold to deposit liabilities. More technically, the "proportion" is the ratio of notes held by the Banking Department to deposit liabilities of the Bank.

exchange were to be combated by a large fund specifically devoted to that purpose. An announcement that the Bank of England was prepared to sell £150 millions of Government securities and to purchase exchange up to that amount might have disturbed the confidence of investors at home, and been less effective as a warning to exchange operators. No argument appears to have been advanced against the creation of a specific agency, which in point of practice is a small department of the Treasury.

Detailed operations of the Account are believed to be carried out by the Bank of England, upon instructions from this department at the Treasury. When it is desired to prevent a rise in sterling, the Account gives instructions to its agents to purchase French francs (or U. S. dollars, since October 13), paying for them with a sterling check on the Bank of England. As sterling resources are depleted, they are replenished by sale to the money market of some of the Account's holdings of Treasury bills (or perhaps of other Government securities), or more likely by allowing Treasury bills to mature without replacing them. It is not the practice of the Account to maintain large sterling balances at the Bank. The French francs (or dollars) so obtained are immediately converted into gold and earmarked at the Bank of France (or the Federal Reserve Bank of New York). Since October 13, daily prices for sale of gold to the Account have been established by the stabilization funds of France and the United States. Previous to September 25, 1936, the fixed selling price of the Bank of France was used.

Before September 25, 1936, when it was desired to prevent a fall in sterling, gold under earmark was sold to the Bank of France and the francs so obtained were sold to persons offering sterling in the market. Presumably similar transactions may now be carried out with the French stabilization fund, although the initiative would normally rest with the latter, rather than with the Account. The Account's sterling balance at the Bank of England would thereupon

expand, and would have to be reduced by buying Treasury bills.*

Alternatively, the Account may purchase gold coming on the London market in order to prevent a rise of sterling, and this year has on occasion sold gold in the market, in order to prevent a fall. The movement of the Account's balance at the Bank of England and its holdings of Treasury bills are the same as when French francs (or U. S. dollars) are bought or sold.

Operations in dollars took place from June, 1932, until the banking holiday of March, 1933, and have been resumed since October 13. At the time of the banking holiday most of the Account's dollar balances had been converted into gold. The remainder were liquidated during the later months of 1933.

A Rough Balance Sheet of the Account, December 14, 1936

It is possible to arrive at a rough estimate of the gold and sterling assets held by the Account by cumulating the weekly changes in the total of Treasury bills outstanding which have been issued through the "tap" to the Public Departments, and not offered by tender to the public.# It is assumed that the change from one week to the next in these "tap" bills represents the change in the sterling assets of the Exchange Equalization Account. The same figure, with the algebraic sign reversed, naturally represents the change in gold (or foreign assets). The major assumptions involved are:

(1) that variations in the Account's sterling assets occur only in its holdings of Treasury bills;

(2) that Public Departments buy Treasury bills only through the "tap" and not from the market or at the Friday tenders, and do not sell bills to the market;

(3) that Public Deposits other than the Account hold a constant total of Treasury bills over the period under consideration;

(4) that the average market rate of exchange in each week also represents the average rate at which the Account bought and sold francs or dollars during that week.

*Treasury bills are always on "tap" to the Public Departments at the Exchequer offices; and bills or other Government securities may be purchased from another Public Department.

#See article by F. W. Paish in Economica, February, 1935.

Perhaps the principal disturbing element to calculations made on this basis is the variation in long-term Government securities held by the Public Departments, which has been quite large in 1935 and 1936.

However, the Statist of December 19 (p. 835) presents an estimated balance sheet of the Account as of December 15, 1936. An attempt has been made to give effect to the £65 millions gold (at pre-1931 parity) which was transferred to the Bank of England, presumably by the Account, on December 15, when the fiduciary issue was, "as a temporary measure",* simultaneously reduced £60 millions. It is assumed, of course, that the £60 millions of securities were transferred to the Exchange Equalization Account from the Issue Department of the Bank of England.

The Statist's balance sheet, reproduced below, has been built up on the assumption, made on general grounds, that the Account had £50 millions only available in sterling funds just before the transfer discussed above.

Finally, an examination of Exchequer accounts in 1931 and 1932 leaves doubt as to whether the loss on repayment of dollar and franc credits in those years was actually borne by the Account. If not, the gold balance shown below should be increased from £155 millions ($762 millions) to £190 millions ($935 millions). With these qualifications, the balance sheet is reproduced

*So termed by the Chancellor of the Exchequer on December 15, 1936, in answer to a question from the floor of the House of Commons. The Statist suggests, however, that there will be "the greatest diffidence" in raising the fiduciary issue from the new level, on psychological grounds. This method of replenishing the Account's sterling assets, rather than an addition to its borrowing power, may have been chosen in deference to American emphasis on the tripartite currency agreement, the Statist observes, while a cash sale to the Bank would have increased the credit base £65 millions, unless the Bank had sold securities from its portfolio, thereby seriously reducing its earning capacity.

hereunder:

Exchange Equalization Fund

Debit Items (£ millions)		Credit Items (£ millions)	
Loss on repayment of Dollar and Franc credits (1931-32)	35	Treasury bills placed at disposal of fund	350
Nominal loss on sale of £118 millions gold to Bank of England (Sept., 1931, to 14/12/1936)	70	Balance of Dollar Exchange Fund	33
Nominal loss on sale of £65 millions gold to Bank of England (15/12/1936)	43	Jobbing Profits (estimated)	35
Balance available	270		
	418		418

Available resources of fund		270
Sterling resources remaining on December 14, 1936 (assumed)	50	
Proceeds of sale of gold to Bank of England	65	
		115
Leaving balance in gold of		155

Major Achievements and Evolutionary Trends Suggested Thereby

The British Exchange Equalization Account, as an institution, may be examined in relationship to underlying trends in the evolution of British monetary policy and in the development of external variants which have provided the problems faced by the British monetary authorities. Without considering at the moment the advantages or disadvantages of alternative methods of achieving the same ends, either individually or collectively, the Account seems to have contributed to the accomplishment of the following results, listed in order of decreasing importance:

(1) Neutralization in part of a large net influx of capital from abroad, so that excess reserves have not been provided to the banking system. That is, the short-loan market may be insulated, if desired, from the multiple

expansion which would occur if the incoming gold were sold to the Bank of England and not offset by sales of other assets held by the Bank, and it may likewise be insulated from the multiple contraction consequent to a gold outflow. This insulation is no longer possible when the Account has exhausted its sterling assets (unless Parliament grants additional borrowing authority to the Account or unless the latter sells gold to the Issue Department of the Bank of England in return for securities held by the Issue Department as fiduciary cover for the note circulation).

(2) Deferment of any commitment to an eventual gold value of the pound sterling, without loss of official gold and exchange reserves, which have in fact been largely increased.

(3) Limitation of the amplitude of fluctuations in the gold value of sterling,* with a net bias toward depreciation of the pound in terms of the dollar and the franc, which is approximately measured, at any moment, by the Account's holding of foreign assets. That is, by making sterling assets available to foreigners, the Account has in effect increased the supply of sterling above that which would have been offered, at going prices, by private individuals.

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*In this connection, Mr. Despres has pointed out that the market for sterling exchange was almost never free from official intervention during the period between the suspension of gold payments on September 21, 1931, and the establishment of the Account in June, and has expressed doubt as to whether the monetary authorities of a financially important country will ever permit the large day-to-day fluctuations which would occur in the absence of official intervention. Both the Treasury and the Bank of England operated in the market during the interim just mentioned, in connection with the accumulation of funds for repayment of pre-suspension foreign credits.

(4) A method of exerting pressure upon the Bank of England to enlarge the cash reserves of the commercial banks. That is, the Bank is still under legal obligation to buy gold from the Account at the old statutory price. If it is not willing to sell off earning assets to a corresponding amount, the reserves of the commercial banks are increased, although not to the full extent of the current market price of the gold which the Bank buys. In a sense, the Account represents the British method of extending public control over the central bank, as a result of the depression (cf. developments in the United States, France, Canada, Germany, etc).

(5) Insulation of the central bank from the increased flow of new gold production and from dishoarded gold, and also temporary immobilization of the appreciation in the value of the gold held by the Bank of England before the suspension of gold payments.

(6) Contribution, to a small extent, to the incentives which have perpetuated the sterling area.

(7) Variation in the floating debt outstanding is related to the movement of funds into or out of sterling. To some extent, this provides an investment for incoming funds and takes off the market Treasury bills which may have been sold by foreigners who are exporting capital, or by the banks with which these foreigners have maintained deposit accounts.

These accomplishments give some clue to the fundamental economic trends which have brought about the establishment of the Account. Again in a preliminary

fashion, the more obvious trends may be mentioned, in the form of tentative forecasts:

(1) Because of the magnitude and celerity of short-term capital movements, Great Britain, whether the pound is stabilized or not, will probably retain some flexible method of offsetting gold movements. This system will probably be operated with a presumption that all gold movements are to be offset, rather than the opposite presumption of the gold standard.

(2) Internal monetary policy will be determined by the Cabinet to a much greater extent than before 1931, with continuous pressure for low interest rates, especially on the public debt. The Account is one manifestation of a trend toward the extension of political power in England over the economic system in general, and particularly over the direction, amount and timing of investment.

(3) The external value of the pound, while the Account and the Bank have gold enough to control it, will be consciously determined with respect to the competitive power of British exports, as against the cost of imports into Britain, regard being given to protective reactions abroad. This latter condition includes the probability of retaliatory dollar depreciation, the possibility of further depreciation on the part of competitors like Japan or the former gold-bloc, and the prospect of new protective measures in foreign markets for British goods. That is, the difficulty of reducing costs in the British export industries is now recognized, and the value of the pound,

under any monetary system which may be adopted, will not depart far from that value which will most nearly equate the balance of payments on current account, without requiring excessive reductions in the costs of British export industries. If, at a given time, the authorities believe that depreciation of sterling would be followed by rising costs in the export industries, so that this method of adjusting the balance of payments would be ineffective, sterling would perhaps be supported for a time (if the necessary reserves exist), and further selective restrictions upon imports might be introduced, in the form of tariffs or quotas.

Effect upon the Domestic Supply of Investment Funds

Mechanistically, the Account expands bankers' deposits, which are approximately equivalent to member bank reserves* here, when it (1) sells gold to the Bank of England, (2) sells Treasury bills or other Government securities to the Bank of England, or (3) draws down the balance of its deposit account at the Bank of England. Purchases of gold or Treasury bills from the Bank, or accumulation of sterling deposits at the Bank, contract bankers' deposits by an equivalent amount, unless, of course, notes happen to return from circulation at the same time, or the Bank of England itself purchases gold or Government securities on its own account. The movement of funds resulting from the Account's transactions with the Bank in gold or Treasury bills naturally goes through the Account's deposit at the Bank of England, but variations in the balance of that

*The British banks for some years have kept about half of their reserves in the form of notes and coin, and about half on deposit at the Bank of England. However, the aggregate of notes and coin changes only slowly, and the flexible part of the banks' reserves consists of deposits at the Bank of England.

Account have been reserved for special treatment under the third point made above, and it is provisionally assumed, when discussing the first two operations mentioned above, that these transactions in gold and Government securities involve no change in the sum held on deposit at the Bank by the Account.

There is no direct evidence that the Account does actually buy Treasury bills from the Bank, or make sales of these bills to it. However, there seems to be no reason why it could not do so, and the net effect of less direct methods of adjusting the Account's portfolio, after a time lag, which will be discussed subsequently, would not be different from this direct procedure. The direct procedure for gold purchases by the Account from the Bank, which are possible but have not taken place, is illustrated below, as the movement in the Bank's accounts is less obvious than in the reverse case, which has occurred frequently, of gold sales by the Account to the Bank. The latter, of course, swell bankers' deposits as the sterling proceeds are disbursed by the Account from public deposits, the sole point to be remembered being the fact that the Account receives only the pre-1931 buying price for the gold which it sells to the Bank, and thus receives in sterling only about 60 per cent of the market value of this gold.

A purchase of gold by the Account from the Bank might be necessary, for instance, if it were desired to continue to support sterling after all the gold held by the Account had been exhausted. Although the British financial press is very doubtful that this would be done, the method by which, in that case, bankers' deposits would be contracted, barring offsetting operations on the part of the Bank of England, is illustrated below:

	Gold Held by Bank of England (valued at old parity)	Public Deposits, including EEA Deposits (£ million)	Bankers' Deposits
Situation before gold purchases by EEA	250	40	100
EEA buys £10 million gold from Bank of England	240	30	100
EEA sells Treasury bills in market to bring sterling balances up to previous level	240	40	90

What has been said above serves as a partial explanation of the usually transitory influence upon the amount of bankers' deposits which may occur when the EEA increases or reduces its balance on deposit with the Bank. As a practical matter, with present low interest rates and large demand for Treasury bills, it requires more time for the Account to reduce its balance at the Bank by securing more Treasury bills than does the reverse process of building up a balance at the Bank through sales of Treasury bills. Since the Account apparently prefers not to buy bills from the market, and when it does will pay no more than the buying rate of the clearing banks (at present 1/2 per cent), it must usually reduce excessive liquid funds by taking up new bills which are issued in replacement of matured bills. This waiting for maturities may take a week or so. When the Account is consistently selling gold for some weeks, continuous downward pressure on bankers' deposits results from this time lag. There is also a suggestion that the authorities are sometimes in no especial hurry to readjust the position, when they wish to make money a little dearer for the Stock Exchange, temporarily. The apparent maintenance of a high level of EEA deposits in October, 1936, may perhaps have been determined with that object in view, as well as the advisability of larger working balances in view of the large turnover in foreign exchange during the month following gold-bloc devaluation.

The Account has, then, mechanistically speaking, three channels through which it may influence the size of bankers' deposits, unless the Bank of England makes offsetting changes in its holdings of securities. In practice the Account, so far as reported, has influenced the basis of bank cash primarily by means of the gold sold to the Bank in January-June, 1933 (£70 millions) and in the period from August, 1935 to September, 1936 (£56 millions). Bankers' deposits actually decreased £4 millions from the end of December, 1932 to November 11, 1936, indicating that sales of securities by the Bank of England and the increase in the note circulation offset the expansionary effect of these gold purchases. As

indicated above, on some occasions a temporary immobilization of funds has occurred while the EEA has held liquid balances at the Bank larger than its average working requirements.

The Economist at one time suggested that the rather accidental and uneven incidences of these gold purchases in the past (both of which have occurred when the Account apparently had left a comparatively small amount of sterling resources) be modified so as to sell to the Bank of England £1 million of every £10 millions in gold added to the holdings of the EEA. This assumes that every £10 millions of capital imported will add a similar amount to the deposits of the commercial banks, and that the banks should be provided with £1 million of reserves to support that expansion of deposits. A reverse procedure could be established for an outflow of capital, of course.

Besides the influence which it exerts on the reserves of the British commercial banks when it sells gold to the Bank of England, the Account may exert an indirect influence if the banks prefer to hold surplus reserves unless Treasury bills are available for investment. When gold is sold to support sterling, and the Account acquires Treasury bills with the proceeds, bank deposits may be reduced even though there is no change in the reserve balances of the banks (except temporarily, as indicated above). The banks may simply hold as surplus reserves the sums they had formerly invested in Treasury bills. In this sense the Account functions in the direction of contraction on loss of gold, and expansion on an influx of gold, just as does the gold standard.

Probable Future of the Account

It is not yet possible to answer the questions as to whether the Account is a useful new instrument of monetary policy for the world in general or for Great Britain in particular. Some observations may be made, however, regarding the British appraisal of the usefulness of the Account to them.

In the first place, it is reasonably clear that the Account will persist until the British are prepared to accept a legally fixed parity of the pound sterling, in terms of gold. Modifications and improvements in operating technique and methods are of course possible. On the whole, there is a presumption that the operations of the Account have been sufficiently successful so that the British can afford to wait, and probably will wait, until the Account is no longer required to operate actively, before liquidating it. That is, it will probably expire when the movements of capital which now produce the wide movements in its foreign assets become narrowed to fairly regular fluctuations, with an amplitude not large in relation to the gold stock of the Bank of England (when revalued).

In the second place, it is improbable that the British will agree to legalize a gold value of sterling previous to the establishment of values for the dollar, franc, and reichsmark which may be expected to be reasonably permanent, although simultaneous agreement is a bare possibility.

Finally, it is possible that the mechanism of the Account would be incorporated bodily into the Issue Department of the Bank of England, in case of de jure stabilization, and that the Issue Department would thereafter undertake to offset short-term capital movements by variation of the composition of its assets (which are held solely as backing for the note circulation) as between gold and Government securities.

The creation of stabilization funds by France, Switzerland, and the Netherlands, and the announcement that gold sales on the part of the United States will be made by the American stabilization fund to other funds satisfactory to the Secretary of the Treasury may be regarded as extending the life of the Exchange Equalization Account by an indeterminate period. It appears highly unlikely that the mechanism of the Account will be sacrificed while any other nation retains a similar institution. However, as pointed out above, the creation of three other funds and the new emphasis upon the United States stabilization fund tend, to an

unknown degree, to narrow the range of values for the pound sterling within which the Account may feel it practicable, at any given period, to conduct its operations.

Determinants of the Future Value of the Pound Sterling

In the section above on "Major Achievements and Evolutionary Trends Suggested Thereby," it was indicated that the external value of the pound would tend to depreciate if the balance of payments on current account should show a significant deficit, in default of obvious reasons for supposing that the depreciation would be ineffective in improving the situation. The Economist of October 24, in the second of two leading articles on "British Monetary Policy," offers a series of recommendations for the evolution of the stabilization-fund system of international payments, which may provide some suggestions as to international desiderata which the British authorities, within the limits imposed by the policy just outlined, might be willing to recognize. As already pointed out, the prophetic value of the Economist may be regarded as somewhat enhanced by the comparatively close agreement between its recommendations of May and June, 1936 and the tripartite currency agreement.

According to the writer of this article, agreement is assumed on the points that (1) short-term exchange fluctuations ought to be "ironed out" by exchange fund operations, (2) ephemeral capital movements should be offset by the funds, and (3) deliberate undervaluation of the currency is not justifiable. With the range of discussion thus narrowed, it is necessary to point toward that international regime which will "achieve the greatest volume both of production and trade." It is necessary to reject exchange stability, for it has been demonstrated that "the attempt to reduce money costs is almost bound to fail unless the adjustment is very small."

International monetary evolution, accordingly, might then proceed with profit somewhat as follows:

(1) During the "next few months" policy will presumably be guided by the "gentlemen's agreement" not to vary exchange rates more sharply than can be helped.

(2) "If and when agreement on rates could be reached, a pair of gold points (with, perhaps, a 10 per cent margin) might be assigned to each currency."

(3) In a third phase, which the Economist regards as a "possibility rather than a probability," a general convention might be arranged providing for definite limits (with a margin of, perhaps, 5 per cent) in the case of each individual currency. These would be gold points for Great Britain, the United States, the dollar area, France and Switzerland, and "sterling" points for other countries where there is any appreciable freedom of currency trading. Each country might guarantee not to alter the limits "more than, say, once a year, or by, say, two or three per cent, and then only if a marked gold movement justified it." Even with this degree of latitude, however, it is not certain that the agreement might not have to be denounced, particularly if there should occur a fall in the price of commodities which make up a large portion of the exports of a particular country. There being no "automatic" system to replace the outworn gold standard, the evolution outlined above seems to provide the best compromise between the needs of foreign lending and the necessary maintenance of internal prices.

To continue the progression of British exchange policy to the stage of a definite parity for sterling, it is important to bear in mind certain practical considerations which may bolster the $4.867 level. The market believes that this figure was implied in the tripartite currency undertaking. In the first place, a failure to support sterling at that level would be taken by the market as a signal that sterling might depreciate to a much lower level ($4.40 or so) and, unless the Account withdrew its support and allowed the pound to fall very rapidly, would probably stimulate a very large exodus of British, French, and other continental capital to the United States and to Switzerland. In this connection, the financing of rearmament may be carried on better if the Exchange Equalization Account has the backing of a large rather than a small reserve of gold against a possible outflow of capital. Secondly, with the cost of raw materials rising and home industry occupied with rearmament and other domestic needs, it is at present

advantageous to have a high external purchasing power for sterling.

Responsibility for Monetary Policy in the Future

Determination of the administrative organization which would best carry out any program of offsetting gold imports into the United States is a question of immediate practical interest. The attempt is made below to indicate the division of responsibility for credit control in England, between the Treasury and the Bank of England.

Although there is as yet nothing definite on this question, close attention to the financial press over a period of some months suggests the following points:

(1) The gold reserve of the Bank of England may not be utilized to purchase foreign exchange, but may be regarded as a purely domestic credit base. Emergency use of this reserve, as in war times, is of course probable.

(2) The Treasury seems likely to exert its influence on internal credit conditions by sales of gold from the Exchange Equalization Account to the Bank of England. In spite of the general tendency to favor lower interest rates until the funds necessary for armament have been borrowed, there is doubt as to whether pressure will be brought to bear upon the Bank of England to expand credit through the purchase of securities. Again, of course, greater emergencies would throw out this forecast.

(3) There is some reason to believe that the British Treasury will not yet permit a rise in the discount rate, but a certain freedom as to open market operations seems to remain with the Bank.

(4) With the conclusion of borrowing for armament and funding of the national debt to low interest rates, which latter is almost completed, the Treasury's influence upon domestic credit conditions will, it is suggested, be limited to occasional sales of gold by the Account to the Bank, when a general downward pressure upon interest rates over a comparatively long period (say three years) appears desirable. The Bank of England will, it is presumed, be expected to regard these gold sales (or purchases, from its point of view) as permanent additions to the credit base, although it may be permitted to smooth out their incidence.

The principal alternative to such a division of authority, which gives the Treasury control over exchange rates and a determining influence on the amount of bank deposits, as regards comparatively long periods (three years or so), is some mechanistic association of the Account's internal and external operations. As mentioned, the Economist has suggested that the Account sell to the Bank of England a fixed proportion of all gold which it purchases when buying foreign currencies - say 1/10, if the cash reserves of the member banks are 10 per cent of deposits. Likewise, it would purchase from the Bank of England the same fixed proportion (say 1/10) of all gold which it sold in support of sterling exchange. It is claimed that in this way the impact of foreign funds would be entirely neutralized, so as to have no effect on interest rates. When gold is coming in, new bank deposits are being created in equivalent amounts, which may come into possession of the foreigners responsible for bringing in the capital which causes the gold influx. These deposits are created, according to the theory, to an amount exactly equal to the influx of funds, or 10 times the amount of the gold sold to the Bank. The sale of Treasury bills by the Account in order to find the remaining 9/10 of the sterling necessary for sale in the exchange market will also provide exactly the right quantity of Treasury bills to serve as the offsetting asset, on the balance sheets of the banks, for the newly-created deposits. On the other hand, when the movement of gold is outward, the credit base is lowered just sufficiently to destroy a quantity of deposits equivalent to the amount of money withdrawn, and the retirement of Treasury bills from the market when the Account sells gold would retire exactly the proper quantity of offsetting assets as member-bank deposits were contracted.

By raising from 1/10 the proportion of gold sold to the Bank of England or purchased from the Bank of England, in consequence of gold movements, these movements could be given a consistently greater weight in the determination of

internal monetary conditions. Lowering of this fraction would, of course, reduce the influence of gold movements. Theoretically, if the fraction became unity, the old gold standard would have been restored. The percentage might also, of course, be varied at intervals, rather than held fixed at some determined figure.

The above suggestion is outlined primarily as a convenient illustration of the mechanical possibilities of the exchange-fund system. At present it does not seem probable that such a procedure will be adopted in England. That does not necessarily constitute proof, however, that a mechanistic determination of the Treasury's function would not be the most satisfactory administrative program for the United States.

Finally, there are two suggestions as to the more complete coordination of internal and external credit control which may eventually take place in England. It has been suggested that a closer association of policies might result from the incorporation of the Exchange Equalization Account into the Issue Department of the Bank of England, so that the note circulation would be backed by a reserve consisting of varying proportions of gold and Government securities. This would presumably be associated with a larger sphere of influence for the Bank of England in determining the influence of gold movements upon internal conditions, as gold movements, in the first instance, would be automatically neutralized (or nearly so) at all times.

A second possibility, which might also give more authority over internal monetary conditions to the Bank of England, would be the requirement that the Exchange Equalization Account buy and sell Treasury bills only from and to the Bank of England. Under this plan the Bank would then be able to determine at all times to what extent securities sold to the Bank should be passed on to the public, and to what extent sales of securities to the Account should be offset by the purchase of other securities from the market. Again there is no evidence that the British system will evolve in this direction; but again, this possible development of

the exchange-fund system might perhaps be applicable to the United States. It is possible that a system such as this would have an appeal as a sound basis for drawing the line between the spheres of internal and external credit control, respectively.

STABILIZATION FUNDS, GENERAL COMMENTS*

Gold Movements under Present Monetary Mechanisms

Under present world currency arrangements, private operations in gold are confined largely to dealings in newly produced and dishoarded gold. Most of these dealings take place in London. During October and November we imported $115,000,000 of gold from England, a movement which reflected private arbitrage transactions in gold undertaken by banks dealing in foreign exchange. These transactions would not have been undertaken if it were believed that a downward revision of the Treasury's gold buying price was at all likely during the period of transit. Under a regime of flexible gold prices private gold shipments could not be relied upon to settle international balances, unless central banks or other monetary authorities established a forward price at which gold would be bought as well as a spot price at which gold would be sold. (Mr. Keynes, in his managed currency proposals, has suggested the establishment of an official forward price for gold.)

Since the suspension of the gold standard in the former gold-bloc countries, international transactions have been balanced only in part by private movements of gold and more largely by stabilization fund operations. Under the terms of the Treasury's announcements of October 13 and November 24 these operations are settled through transactions in gold between the various funds or other monetary authorities. So long as exchange rates are maintained approximately stable, however, gold movements lie largely outside the discretion of the funds, and are as closely governed by market factors as under the more familiar gold standard. Discretionary gold purchases greater or less than the amounts thus determined would lead to fluctuating exchange rates.

*The first two sections of this study are based largely upon a memorandum prepared by Mr. Walter Gardner of the Division of Research and Statistics, Board of Governors of the Federal Reserve System.

Effect of Stabilization Fund Operations on Bank Reserves

Whether gold movements under a regime of stabilization funds have the same effect on bank reserves as formerly depends upon the original assets and the manner of operating these funds. Existing stabilization funds may be divided into three classes from the standpoint of the effect of their operations on bank reserves:

a. Credit funds originally created by the allotment of Treasury bills.

b. Gold funds originally created by the segregation of a portion of the increment resulting from the revaluation of gold reserves.

c. Mixed funds.

The first type of fund includes those of England and Holland. Movements of gold into and out of these funds have practically no effect on the cash reserves of commercial banks. The British fund, for example, sells Treasury bills in order to buy gold. The cash disbursed to the market through the purchase of gold is drawn from the market through the sale of Treasury bills, and the market gains nothing. Conversely, when the fund sells gold, it buys bills, and the market loses nothing.

The foregoing discussion is based on the assumption that the assets of credit funds consist wholly of Treasury bills and gold (or foreign exchange), and that these funds do not engage in transactions with their central banks. The conclusion reached must be qualified to the extent that these assumptions are not realized in practice:

a. Stabilization funds customarily carry a working balance with their central banks. Variations in such balances affect the cash reserves of commercial banks.

b. Gold may be sold by the stabilization funds to their central banks, the proceeds being put into the market through the purchase of Treasury bills or additional gold. Conversely, gold may be purchased from the central bank, the necessary funds being drawn from the market through the sale of Treasury bills or gold.

c. Treasury bills may be sold by stabilization funds to their central banks, the proceeds being put into the market through the purchase of additional Treasury bills or gold. The effect of this operation may be offset, however, if the central bank sells an equal amount of Treasury bills (or other assets) in the market. Conversely, the stabilization fund may make arrangements to purchase Treasury bills from the central bank, drawing the necessary funds from the market through the sale of Treasury bills or gold. Similarly, however, the effect of this transaction on bank reserves may be offset by replacement purchases of Treasury bills (or other assets) by the central bank.

The extent to which a stabilization fund of the credit type can prevent an inward movement of gold from causing an expansion of bank reserves is limited to the amount of its allotment of Treasury bills. Moreover, the extent to which a stabilization fund of the credit type can prevent an outward movement of gold from decreasing bank reserves is limited to the amount of the fund's gold holdings. It follows that, since the original assets of stabilization funds of the credit type consist wholly of Treasury bills, such funds cannot prevent a net outward movement of gold from reducing bank reserves.

The second type of fund includes those of the United States, France, Switzerland, and Czechoslovakia. The original assets of the American and French funds consisted wholly of gold, while those of the Swiss and Czechoslovakian funds consisted of balances with their respective central banks. The American fund subsequently established an account with the Federal Reserve Bank of New York by depositing the proceeds of gold sold to the Treasury. Similarly, the French fund established an account with the Bank of France through a deposit of gold. In both cases, there was no effect on the market.

When a stabilization fund of the gold increment type finds it necessary to buy gold to prevent an undue appreciation of the exchange, it must draw on its balances with the central bank, thereby disbursing cash to the market. When a fund of this type finds it necessary to sell gold to prevent an undue depreciation

of the exchange, the proceeds are deposited in its account with the central bank, thereby drawing cash from the market. Thus, the effect of gold movements is the same as under the familiar gold standard, whether or not the gold appears in reported monetary holdings.

The foregoing discussion is based on the assumption that the assets of gold increment funds consist wholly of central bank balances and gold, and that their transactions are confined to dealings in gold with their central banks and dealings in gold and foreign exchange with the market (including foreign central banks and stabilization funds). The general conclusion reached must be qualified to the extent that these assumptions are not realized in practice.

The American fund, which is authorized to purchase Government securities, may draw on its balance with the Reserve bank to make such purchases, thereby disbursing cash to the market. Alternatively, the fund may transfer its idle cash from the Reserve bank to the Treasury, which cash the Treasury presumably may use to meet its regular outlays, in which case cash would be disbursed to the market, and bank reserves increased. Thus, if such a policy were deemed desirable, the operations of the American fund could be so conducted as to prevent an outward movement of gold from reducing bank reserves. A subsequent gold inflow of smaller amount could then be prevented from increasing commercial bank reserves, but a <u>net</u> gold inflow could not be offset.

The initial effect of the establishment of a stabilization fund of the gold increment type is to keep the portion of the gold increment so segregated from entering into the reserves of commercial banks. Provided the assets of such funds are kept wholly in gold (and, in our case, silver), or balances with the central bank, the amount of cash withheld from bank reserves remains fixed, and, as stated above, the effect of inward or outward movements of gold is the same as under the more familiar gold standard. Similarly, the effect of our

silver purchases on member bank reserve balances is the same, whether the silver is purchased by the fund or by the Treasury. When purchases are made by the fund, its balance with the Reserve bank is drawn down, which results in an increase in member bank reserve balances. When the Treasury buys silver, it monetizes an amount sufficient to equal the cost of its purchases, resulting in an increase in member bank reserve balances to the same extent.

Tentative Appraisal of Stabilization Funds

In appraising the significance and usefulness of stabilization funds, it will again be convenient to consider separately credit funds of the British type and gold increment funds of the American type.

Great Britain departed from gold by suspending the Bank of England's obligation to sell gold at the statutory price. If no further action had been taken, the pound would have been free to fluctuate entirely in response to market influences with the minor qualification that its gold value could not rise above the upper limit imposed by the Bank of England's gold buying price, which still remained in effect. Subject to this theoretical qualification the balancing of the flow of international payments would have been brought about entirely through rate movements, and it was practically essential, in order to avoid erratic and disturbing fluctuations, that some official agency undertake to deal in gold and foreign exchange with a view to offsetting the effects of temporary changes in exchange market conditions. It was also desirable, particularly in view of the volatile character of international capital movements, that official purchases or sales of gold and foreign exchange be prevented from causing temporary increases or decreases in the domestic credit base. Given the existing British monetary standard, it is clear that the functions performed by the Exchange Equalization Account needed to be performed by some official agency. Moreover, if the Government itself assumes the task, it is clearly desirable, for bookkeeping reasons, that a separate account be created for the purpose. Apart from

the question of the standard itself, the only question which seems debatable is whether the task of exchange rate management is one for the Government or for the central bank to perform. This question will be considered from two aspects - convenience and principle.

From the standpoint of convenience, the present system seems preferable to exchange rate management by the Bank of England. In the first place, the Bank must still value its gold at the statutory price, so that purchases of gold by the Bank of England at prevailing market levels would involve bookkeeping losses pending a revaluation of gold reserves. Second, in order to prevent fluctuations in the domestic credit base, the Bank would have to offset purchases or sales of gold and foreign exchange by equal sales or purchases of other assets, whereas under the present mechanism this offset occurs automatically. Finally, the cost of sterilizing gold is now borne by the Treasury through the Equalization Account, being represented by the discount at which the Account sells Treasury bills to the market. If this gold formed part of the Bank's holdings, the Bank would bear the cost of sterilizing it by selling earning assets. (This cost might still be transferred to the Treasury, however, by reducing the fiduciary issue of banknotes. In this case, the reduction in earning assets would take place in the issue department of the Bank, whose profits go to the Treasury.)

It is difficult to see how any important problem of principle is involved in the question whether the Government or the central bank should assume the function of exchange rate management. If the Bank of England were operating for its own account rather than for account of the Equalization Fund, the British Treasury doubtless would still insist on having as large a voice in the determination of policy as at present. It may be argued that exchange rate policy and domestic credit policy cannot be divided with the Treasury taking charge of the first, and the Bank of England being responsible for the second. What appears to be happening, however, in England as in other countries, is that control of both

is passing to the Government.

The operations of stabilization funds of the gold increment type are designed to maintain approximate exchange stability while avoiding a commitment regarding any precise level of permanent stabilization. Approximate stability is maintained through purchases or sales of exchange in the market by the various funds. These exchange operations are liquidated by transfers of gold between the funds. As noted in an earlier section of this memorandum, the magnitude and direction of gold movements, so long as approximate exchange stability is maintained, lie largely outside the discretion of the funds, and are as closely governed by market factors as under the more familiar gold standard. Moreover, gold movements have the same effect on banking reserves as under the more familiar gold standard. The advantages of stabilization funds of the gold increment type are deemed to be that they provide a mechanism for maintaining approximate exchange stability while avoiding a commitment regarding any precise level of permanent stabilization, and that they permit a large measure of secrecy concerning gold movements, since such movements need not involve physical shipments and the size of stabilization fund holdings is not revealed.

With respect to stabilization funds of the gold increment type, the function which they perform by merely existing, that of sterilizing a portion of the gold increment, is clearly desirable in the case of the United States, and, perhaps, of Switzerland. The desirability of sterilizing gold is much more doubtful for France, in view of the Government's easy money objective and its difficult budgetary position.

It will be assumed in this memorandum that it is desirable, at least for the present, for the countries which have devalued to avoid commitments regarding any precise level of permanent stabilization. It is the view of this writer that, even granting this assumption, the method of securing substantial stability of the exchanges by means of continuous official intervention in the market is not

the best method for achieving this purpose. It was mentioned earlier that the private arbitrage mechanism could continue to function effectively under a flexible exchange system if the various monetary authorities established a forward buying price as well as a spot selling price for gold. These prices could be changed as frequently as was deemed desirable, and the establishment of a forward price would permit private arbitrage to take place without risk of loss.

Such an arrangement would be superior to the present mechanism for several reasons. First, while permitting complete flexibility, it would increase public understanding regarding the objectives of the various countries. The authorities would be able to discontinue their direct intervention in the exchange market, and the mechanism of gold movements would become automatic. The danger of direct intervention was recently illustrated in France, when the temptation of the authorities to punish speculators proved overpowering, and the brief unsettlement which resulted tended to intensify doubts concerning the de facto stability of the franc.

Moreover, the secrecy and aura of mystery which surround stabilization fund operations could be largely eliminated. In some quarters the view is held that this secrecy is necessary in order to outwit the international exchange speculator, whose immoral actions have been largely responsible for the monetary difficulties of recent years. Without going fully into this subject, it may be asserted that this viewpoint, which lies at the basis of the plea for secrecy, represents a superficial interpretation of the causes of recent monetary instability. The large movements of nervous capital which have occurred in recent years have reflected widespread and deep-seated uneasiness, and have not been primarily attributable to the operations of a small group of professional exchange speculators. Secrecy is not only unnecessary but involves definite dangers, in that official actions are unrestrained by the fear of public criticism.

TRADE AREAS

Definition and Development of Trade Areas

Broadly speaking, the words "trade area" imply an area in which there are no barriers to commerce between the political components of a given geographic surface. It is not necessary that a trade area have a center, but it is inevitable that it have a periphery: the trade area stops where the barriers begin. We may perhaps say that in the absence of barriers there is no such thing as a "natural" trade area; there is only the "natural" division of labor, with all that that phrase connotes in the way of resources, skill, marketing facilities, and the other factors that make for specialization. In an ideal world, the trade area would be the whole surface of the globe.

Obviously, we do not live in an ideal world. Barriers to trade seem always to have existed, for there have apparently always been vested interests - the Crown, the Nation, the agriculturists, the manufacturers, labor* - in whose favor the barriers are erected. Some types of barrier are almost purely political, as for example the "Zollverein," born of an aim to concentrate political and economic power. Some are candidly selfish, as was the case of the monopoly of trading with the American colonies exercised by Great Britain in the XVII and XVIII centuries. Some are the sentimental results of consanguinity, as when a generation or two of colonial settlers want only those goods to which they were accustomed in the mother country. Some, again, arise out of the financing which accompanies exploitation of distant natural resources, whether or not under the same flag as that of the lending country (Britain and Egypt, or Portugal, or Argentina; the United States and some Central American countries; Japan and Manchuria). Some, finally, reflect the relationship between the producing

*e.g. The United States has never been a party to international copyright because the printing unions have successfully carried their contention that, to be eligible for copyright in the United States, a book must be set up and printed in the United States.

country and the marketing country (Bolivian tin quoted in sterling and marketed in London; Brazilian coffee quoted in United States cents and marketed in New York). In the case of only two countries, circumstances may direct that trade flow broadly only in one direction. Thus, for example, 84 per cent of New Zealand's exports are sold in the United Kingdom, while only 51 per cent of her imports come from that source (1935 figures); British Malaya sells 37 per cent of her exports to the United States, but buys only 2 per cent of her imports from this country. The simplest statement to make about a trade area is, perhaps, that it denotes a group of nations within which the movement of goods, services, and capital takes place more freely than between "member"-nations of the group and other nations outside the group.

Lately, the term, "trade area," has been used to signify primarily currency arrangements existing among two or more countries. The sterling area, the erstwhile gold bloc, and the exchange-control countries of Central and Southeastern Europe are generally considered in these terms. Yet it must be said that, even economically, many other factors than exchange relationships enter into the determination of a trade area, and that the term cannot be applied precisely to individual groups of countries. A trade area for a commodity produced in any country may be said to be the geographic territory over which it is sold. This will depend on transportation costs, other costs of transfer, including tariff duties, insurance, import licenses, etc., and, for manufactured goods, the costs of selling, or the cost of overcoming imperfections of the market due to lack of knowledge, differences in taste, etc. The trade area for British coal is not at all the same as that for British finished woolen goods, or British cutlery. To speak of trade areas in general, then, and particularly to speak of them with reference to the single criterion of exchange relationship (plus possibly trade agreements) is to oversimplify the complexities of international trade.

It may also be mentioned that the trade area for a given product is liable to change for various and numerous reasons. Conditions in supply, in costs of transfer, and in demand may be subject to change without notice, and alter the dimensions and locality of the area within which a product is sold. Along with exchange pegging and tariff manipulation, they affect trade areas in the loose sense of that term. One factor long neglected may receive passing attention, viz., flexibility of demand (income elasticity). As the national (real) income changes in a country, the percentage of income spent in international trade goods is liable to shift, and the distribution of the income so spent is normally altered as among various types of goods. Thus, with a rising national income in 1935, the United Kingdom bought less in percentage terms (although slightly more absolutely) of food products from Denmark, Ireland, Argentina, and Brazil within the "sterling area," more raw materials from Australia, New Zealand, and the United States, and more finished goods from the United States, Germany, Czechoslovakia, and Austria.

The development of trade areas is thus conditioned by the existence of obstacles to international trade - of imperfections of the market. We can classify these imperfections in two main groups - natural and artificial. The former includes barriers of historic origin which themselves may originally have been artificial. The term artificial we reserve for the more recent obstacles to trade, such as exchange and trade restrictions imposed by various governments, with which we are, in this memorandum, exclusively concerned.

Composition of Trade Areas

In our study of the composition of existing trade areas, the following factors have been considered:

a. Currency alignments

b. International debtor-creditor relationships - both as regards capital movements and interest payments, and as regards banking, insurance, etc.

c. Trade relationships - imports, exports, principal products and their markets.

A survey of the information available on these subjects indicates that a great number of the countries of the world can be broadly allocated to a particular trade area on all the counts listed above. These are shown in Table I attached as (a) dollar area, (b) sterling area, (c) German area, and (d) others. Table I includes a note explaining the position with regard to certain countries having multiple trade and financial relationships.

Currently Recognized "Trade Areas"

A series of charts has been prepared (and is presented at the end of this memorandum) to indicate the world trade currents as they existed in 1929, 1932, and 1935. These charts have been prepared on the basis of the country divisions noted in Table I. The data presented therein may be discussed, along with necessary supplementary information under the separate headings of four currently recognized trade areas, viz., the dollar area, the sterling area, German area, and the former gold bloc.

The Dollar Area

The United States holds the titular headship of a number of American countries, grouped together under the designation of the "dollar area." The basis for this area is largely geographic proximity and the fact that the United States and Central America produce different types of agricultural products. Added to this is the fact that most of the countries concerned have pegged their currencies to the dollar and extend and receive "most-favored-nation" treatment from the United States.

Despite geographic proximity and artificial ties, the United States currently buys only 25 per cent of its total imports from the dollar area and sells but 14 per cent of its exports to it. These percentages would be considerably increased if Canada were included in the dollar area. Canada, however, lies midway between the dollar and sterling groups.

By way of comparison with our trade with the dollar area, it is interesting to notice that 36 per cent of United States exports were sold to the sterling area (including the United Kingdom but excluding Canada) in 1935, while imports from the sterling area were 30 per cent of the total. A further calculation will serve to indicate that so far as exports are concerned, the United States is much more interested in the large industrial nations of the world than in any area of satellite nations, 37 per cent of our exports in 1935 (34.0 per cent in 1929) going to the United Kingdom, France, Germany, and Japan. On the basis of these data, it might seem that a legitimate question could be raised concerning whether or not a dollar area actually existed. The fact is that, viewed in the light of United States statistics, a dollar area is not clearly visible; but viewed in the light of certain Latin American statistics, i.e., the trade figures of these countries rather than figures of United States trade, there is no question of the existence of such an area; in 1935, thirteen countries in the dollar area for which data are available sold 44 per cent of their exports to the United States, and bought 43 per cent of their imports in this market (on a weighted average basis). The point thus emerges that whereas the United States itself "belongs" to no single area, these particular Latin American countries "belong" to the dollar area; whereas they contribute to our well-being, we are vital to their well-being. This conclusion would be reinforced by an examination of data on international lending, a phase of international relationships which does not, however, come within the purview of the present memorandum.

In the period between 1929 and 1935, the direction of American trade has undergone no revolutionary changes, as the appended flow charts reveal. This is as much as to say that the dollar area was not a creation of the depression. The two important changes have taken place in trade with "sterling Latin America" and with China and Japan. The overturn of the trade balance with

"sterling Latin America" was the result of two factors: the tendency towards bilateralism in Argentina and the other nations, and the effect of the droughts in 1934 and 1935 in necessitating unusual imports of grain. The overturn in the balance in China and Japan can be attributed largely to the decrease in the value of imports of raw silk from Japan and the increase in her raw cotton imports from the United States.

So far as the remainder of the trade of the United States is concerned, it may simply be noticed that it had declined in larger proportion than that of the rest of the world up to 1933. Thereafter, it increased in approximately similar proportions to that of, say, the sterling area. This may be largely attributed to exchange policy and the trade agreements, and has little bearing upon a conscious development of a sphere of influence.

United Kingdom

The trade of the United Kingdom has retained its 1929 structure with only one notable change. Trade with the sterling area has increased considerably as a percentage of the total trade of the United Kingdom, as is shown by the following table:

	1929	1932	1935
Exports	47.3	51.0	55.7
Imports	44.9	52.0	51.0

This increase is probably to be attributed to a relative decrease in British trade with the gold countries coincident with the steady fall in their total trade, rather than to increased trade with the sterling area.

It may be noticed further that the trade of the United Kingdom with the sterling area, although rising as between 1932 and 1935, has remained almost entirely stationary from 1934 on. This has been due to the change in the type of imports sought in world markets, noted above under "Definition and Development of Trade Areas." From all raw material countries, including those within the

sterling area, England has continued to expand imports. From those countries which produce largely foodstuffs, however, the proportion of total imports taken has fallen somewhat from 1934 on.

At the present time there is considerable doubt as to the final arrangements which are to be made for the sterling area. Currently a new Argentine trade agreement is being negotiated, the old one having run out and Argentina being somewhat dissatisfied with its arrangements. Australia and New Zealand similarly are looking forward to the Second Ottawa Conference next year, with a view to loosening the Empire preferences which they are required to grant. So far as the Baltic nations are concerned, they are anxious to increase the share of their exports which go to the United Kingdom. It cannot be doubted that the sterling area will be maintained if only principally as a financial area. The facilities which London offers as a clearing and compensation center and a market for financing world trade make it necessary that close trade relationships be maintained so far as possible. Yet it is doubtful that the ties of the sterling area will be tightened when, and if, Continental Europe enjoys recovery. The increase in the proportion of trade in the sterling area has been largely due to a fall in trade with Europe. Inasmuch as the Empire as a whole is an exporter of raw materials and of food products, its interests will be more happily served by a turn towards world rather than sterling trade. For this reason, it may be suggested that the importance of the sterling area will not increase in the future, although very likely it will not diminish greatly.

The German Area

The trade of Germany and Eastern European nations provides the best example of trade within a trade area. More than two-thirds of the trade of these countries is with one another or with Germany. Trade with this group, however, is only about 12 per cent of German trade. Germany has important customers in the Scandinavian countries, which themselves sell largely to the United Kingdom,

and is making strenuous attempts to improve its trade relationships with Latin America, and recently with Canada.

Over the 1929 to 1935 period the vicissitudes of her chaotic financial experience have brought about considerable changes in the direction of German trade. Compensation and barter agreements have resulted in a re-orientation of trade relationships, tending to canalize trade between countries with which Germany has been able to make agreements. Thus imports and exports with the United States, Canada, England, and France have fallen as a percentage of their respective totals. Trade with Latin America has increased, and similarly trade with Eastern Europe. Germany's particular interest in this trade has been to enable her to secure necessary raw materials on the basis of barter for her manufactured products.

Of late, however, Southeastern European countries have been growing restive under the trade agreements they made with Dr. Schacht. As world prices have risen, these countries have become more and more interested in the possibilities of selling on world markets, which would enable them to buy at cheaper prices than they pay in Germany. It appears likely that Germany's trade balance of the next year or so will be affected by its inability to buy raw materials at bargain prices and to sell its munitions and other goods at high reichsmark prices to the Balkan states.

It can thus be seen that the German trade area, which (although small in importance) has most nearly represented a trade area consciously developed, is likely to be modified in the near future. Particularly will this be the case if recovery in the gold bloc provides a better market for both Balkan exports of foodstuffs and raw materials and German manufactures, thus tending to restore Germany's pre-depression position in Europe.

The Gold Bloc

In the gold bloc countries no particular tendency towards the development of trade areas as such has been in evidence in recent years, with the possible exception of France's attempts to foster trade with her colonies. During the depression, severe deflation in France and elsewhere started to bring a flood of food imports into France, with the result that that country established rigorous quotas, principally on food products, to protect French agriculture and to slow down the rate of deflation in prices. These quotas almost invariably did not apply to Algiers or French Indo-China, with the result that the proportion of French trade transacted with these areas increased unprecedentedly. So far as the other gold bloc countries are concerned, deflation accompanied by attempts to protect agricultural interests have accounted for the principal changes in trade. To some extent recovery in the United States and in the sterling area from 1933 and 1931, respectively, has brought about between 1932 and 1935 a recovery in gold bloc exports. Following the devaluations of September and the partial modification of the quota system, there may be expected to occur a further increase in gold bloc trade with the world. Whether this will result, in the case of France, in a reduction of the proportion of trade carried on with the colonies is still open to question. The per cent changes in France's trade with her colonies between 1929 and 1935 are indicated by the following figures of colonial participation in total French trade:

	1929	1932	1935
Exports	18.8	31.5	31.6
Imports	12.1	20.9	25.7

Future Importance of Trade Areas

The present memorandum has inclined to the view that the role of trade areas in international trade is considerably overemphasized in popular discussion. To the extent that planned action has been employed to redirect the international flow of goods and services, the foreign exchange mess inherited from the war, and

the depression have been more responsible than any basic theories of international trade. The prospects for some alleviation in the not-too-distant future suggest that trade areas will be of even less significance in the future.

The trade area is built upon the economic relationship involved in a mature industrial country exchanging finished goods for the raw materials and foodstuffs of younger agricultural nations. In the depression, the trade in foodstuffs was sustained at a higher level than that of industrial materials, and the latter at higher levels than trade in finished products. The reason for this lies, of course, in the greater inflexibility of demand for foodstuffs, on the one hand, and the fact that the supplies are less amenable to limitation on the other. European nations generally, therefore, felt themselves obliged to enact foreign exchange control and to invent quotas and trade and clearing-agreement devices to enable them to protect local agriculture and to prevent their foreign exchange positions from being undermined by an inflow of foreign foodstuffs.

With the recovery of incomes and employment throughout the world, demand is turning first to industrial materials and then to finished goods. The majority of industrial countries (Germany being a possible exception because of her straitened foreign exchange position), will deem it wise to buy raw materials in the cheapest markets and to sell finished goods in the most profitable areas. Since in times past the best markets for finished goods for industrial countries have been other industrial nations in the main, any nation attempting to equalize its trade into "area" lines subsequent to the recovery of world money income and employment, is likely to find itself the loser.

The analysis of the foregoing paragraphs finds some substantiation in the data for the volume of world trade prepared by the League of Nations (Review of World Trade, 1935, page 15):-

VOLUME OF WORLD TRADE
(1929 = 100)

	1929	1932	1933	1934	1935
Foodstuffs	100	90.5	84.5	84.0	86.0
Materials - Raw and partly manufactured	100	82.0	87.5	89.5	93.5
Manufactured Articles	100	58.0	59.5	65.5	68.5
ALL ARTICLES	100	74.5	75.5	78.5	82.0

Evidence of the trend indicated may be sought in the fact that a number of South American countries have relaxed their foreign exchange controls by increasing the number of export products against which it is permitted to sell foreign exchange in the free market. It has even been predicted by Mr. Hueyo, ex-Minister of Finance in Argentina, that that country would soon abandon all foreign exchange control (in spite of the unfortunate experience of Ecuador in this respect, which abandoned foreign exchange control in 1935, only to resume it the following year). On the continent of Europe, Austria has progressively moved towards free foreign exchange dealings.

Further indications of the trend away from trade-area promotion is to be found in the sentiment reported, both from the several Dominions and from the United Kingdom itself, to renew the Ottawa agreement in 1937, if at all, only in terms of a milder form of Empire preference.

Summary

We may summarize our findings as follows:

a. A trade area is not capable of precise definition, because of the many varied factors which enter into the determination of trade. So far as purposeful steps seeking to knit trade

relations among groups of countries are concerned, they have not been strenuous except in the case of Germany's trade with the Balkan States and Latin America, and Japanese trade with the Far East and Latin America. In both instances, the quantitative results have been thus far small. The methods used have been: in the case of Germany, barter and clearing agreements, combined with rigid foreign exchange and foreign trade control; in the case of Japan, low C. I. F. costs plus intensive selling campaigns.

b. Quantitatively the only important trade area is the sterling area. Here, however, the ties of stable currency relationships, quota and tariff preferences, etc., do not necessarily canalize trade rigidly. The price mechanism of the market, that is, has been somewhat affected, but not in a sufficiently thorough-going fashion to shift the direction of trade significantly as between "sterling" and other countries.

c. The trade area concept has significance principally for large, industrial creditor nations dealing with a group of small, raw-material and foodstuff-producing nations. "Spheres of influence" in the pre-war imperialistic sense have lost a good deal of significance today. The trade area is specially important during depression, when international trade takes place largely in foodstuffs and raw materials, and will likely lose significance in recovery, when first industrial materials and then manufactured goods form rising proportions of the quantity of merchandise traded.

d. Large numbers of countries have triangular or multiple trade relationships, cutting across trade area lines in approximately equal

fashion. It may safely be said that no country, with the possible exceptions of the Irish Free State, Algeria, and "Manchukuo", trades so exclusively in one trade area that its exports to others could be abandoned without serious loss.

e. Changes in the direction of world trade from 1929 to 1935 have been of minor importance with the exception of temporary changes in the trade of Germany and the potential changes to follow from Japanese infiltration of South America.

f. The development of the "trade area" in the present-day sense being a depression phenomenon and one, moreover, of limited importance in affecting the major currents of world trade, it would be unsafe to attribute any great importance to it, as a phenomenon to be dealt with in the future. In the majority of cases, present trade areas exist largely in name only, since few new trade channels have been opened up, or old ones cut off; and it may be expected that prospective changes in the fundamental conditions of trade, in the demand for and the supply of goods in international markets, will, for the most part, cut across trade area lines.

ADDENDUM

1. Table I - Countries included in trade areas shown in world-trade charts (with comments)

2. Charts - Flow of World Trade - 1929
" " " " - 1932
" " " " - 1935

Gold Bloc Trade - 1929
" " " - 1932
" " " - 1935

- - TABLE I - -

COUNTRIES INCLUDED IN GROUPS
SHOWN IN WORLD TRADE CHARTS

DOLLAR

Dollar Latin America
- Brazil
- Chile
- Colombia
- Costa Rica
- Cuba
- Dominican Republic
- Ecuador
- French West Indies
- Guatemala
- Haiti
- Honduras
- Mexico
- Netherlands West Indies
- Nicaragua
- Panama
- El Salvador
- Venezuela
- Virgin Islands

Philippine Islands

STERLING

British Empire (except Canada, but including among others)
- Australia
- British India
- British Malaya
- Ceylon
- Hongkong
- Irish Free State
- New Zealand
- Palestine
- Union of South Africa

Arabia
Egypt
Iran
Iraq
Siam

Sterling Europe
- Denmark
- Estonia
- Finland
- Greece
- Latvia
- Norway
- Portugal
- Sweden

Sterling Latin America
- Argentina
- Bolivia
- Paraguay
- Peru
- Uruguay

GERMAN AREA

German Area
- Austria
- Bulgaria
- Czechoslovakia
- Hungary
- Lithuania
- Rumania
- Turkey
- Yugoslavia

OTHERS

Canada

China and Japanese Empire
- China
- Japanese Empire
- Kwantung
- Manchukuo

Other Europe and Colonies
- Albania
- Algeria
- Belgium
- Belgian Congo
- Canary Islands
- France
- French Indo-China
- French West and Equatorial Africa
- Iceland
- Italy
- Morocco
- Netherlands
- Netherlands India
- Poland
- Spain
- Switzerland
- Syria
- Tunis
- U. S. S. R.

REMARKS ON TABLE I

Countries with Multiple Commercial and Financial Relationships

BOLIVIA - in sterling group on all counts except imports are greatest from United States.

BRAZIL - trades chiefly with United States, German trade second and increasing in importance; principal foreign creditor, the United States; banker, England; currency, sterling and the dollar more or less independently.

BRITISH MALAYA - in sterling group except for trade. Exports, largely of rubber, go more to the United States than to any other single country. Imports are greatest from Netherlands India.

CANADA - a good example of triangular relations with Great Britain and the United States. (Newfoundland is largely attached to Canada.)

CHILE - trades chiefly with the United States; financial connections with both Great Britain and the United States.

CHINA - currency apparently tied to sterling, although this is officially denied, trade and financial relations with Great Britain, United States, and Japan.

COSTA RICA - in dollar group except exports mostly to Great Britain.

DOMINICAN REPUBLIC - in dollar group except exports to Great Britain are greatest.

ESTONIA - exports chiefly to Great Britain, but imports from Germany.

FINLAND - exports chiefly to Great Britain, but imports from Germany.

GREECE - trades with United States, Great Britain and Germany.

HAITI - in dollar group except exports (coffee) to France are greatest.

LATVIA - exports chiefly to Great Britain and Germany, imports from Germany.

PARAGUAY - currency attached to Argentine peso. Trades with Great Britain via Argentina.

PERU - exports to Great Britain and some to United States, imports from United States, financial contacts largely with Great Britain, some with United States.

EL SALVADOR - in dollar group except that exports (coffee) are greatest to Germany.

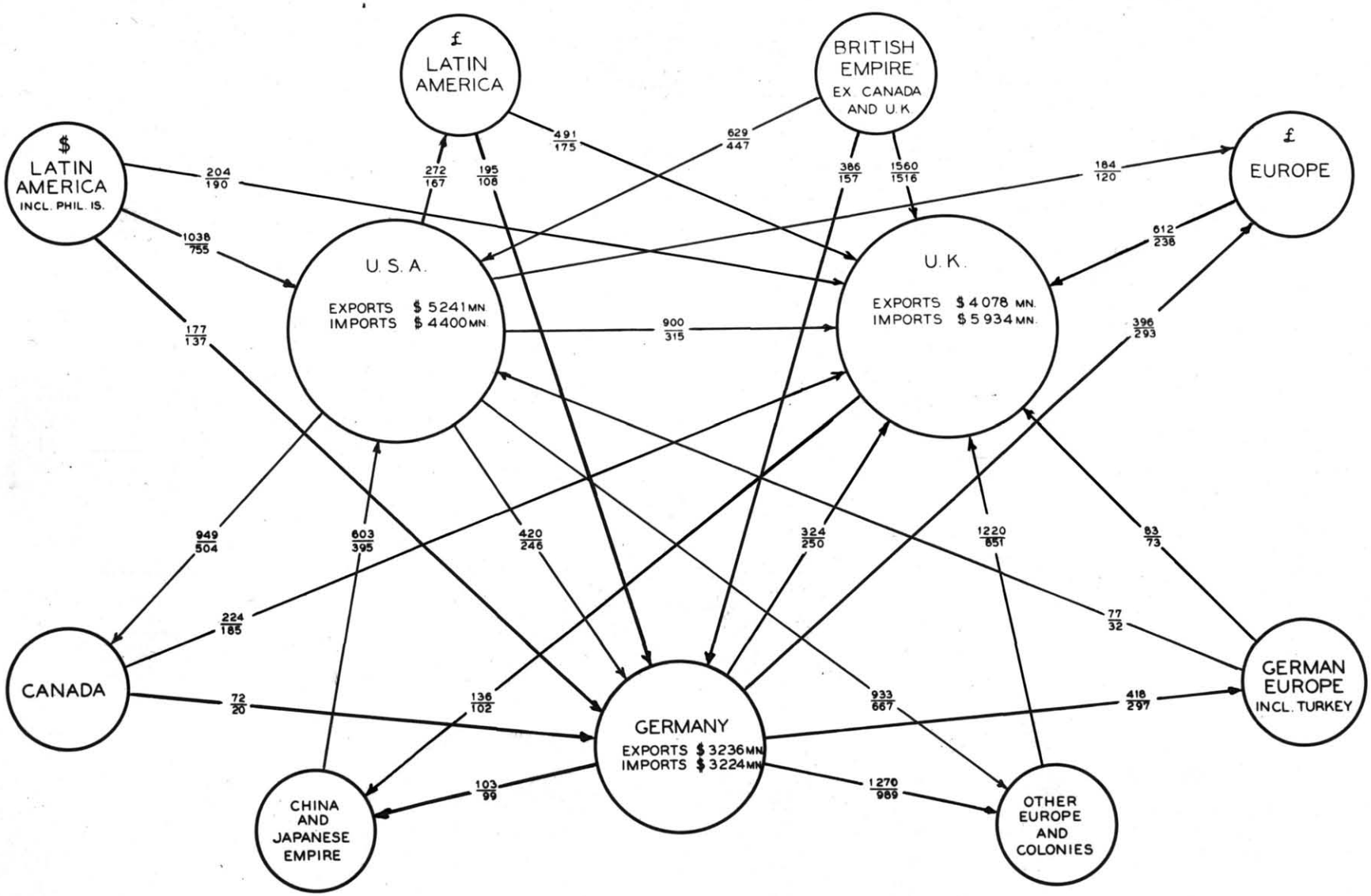
TURKEY - trades with Germany, currency formerly attached to franc, now to sterling.

VENEZUELA - tends toward dollar group, but currency situation is exceptional, and exports, of petroleum, are scattered everywhere but to the United States.

FLOW OF WORLD TRADE – 1929

(MILLIONS OF 1929 DOLLARS)

LEGEND
Ⓐ — 000 = B's IMPORTS FROM A / 000 = B's EXPORTS TO A → Ⓑ

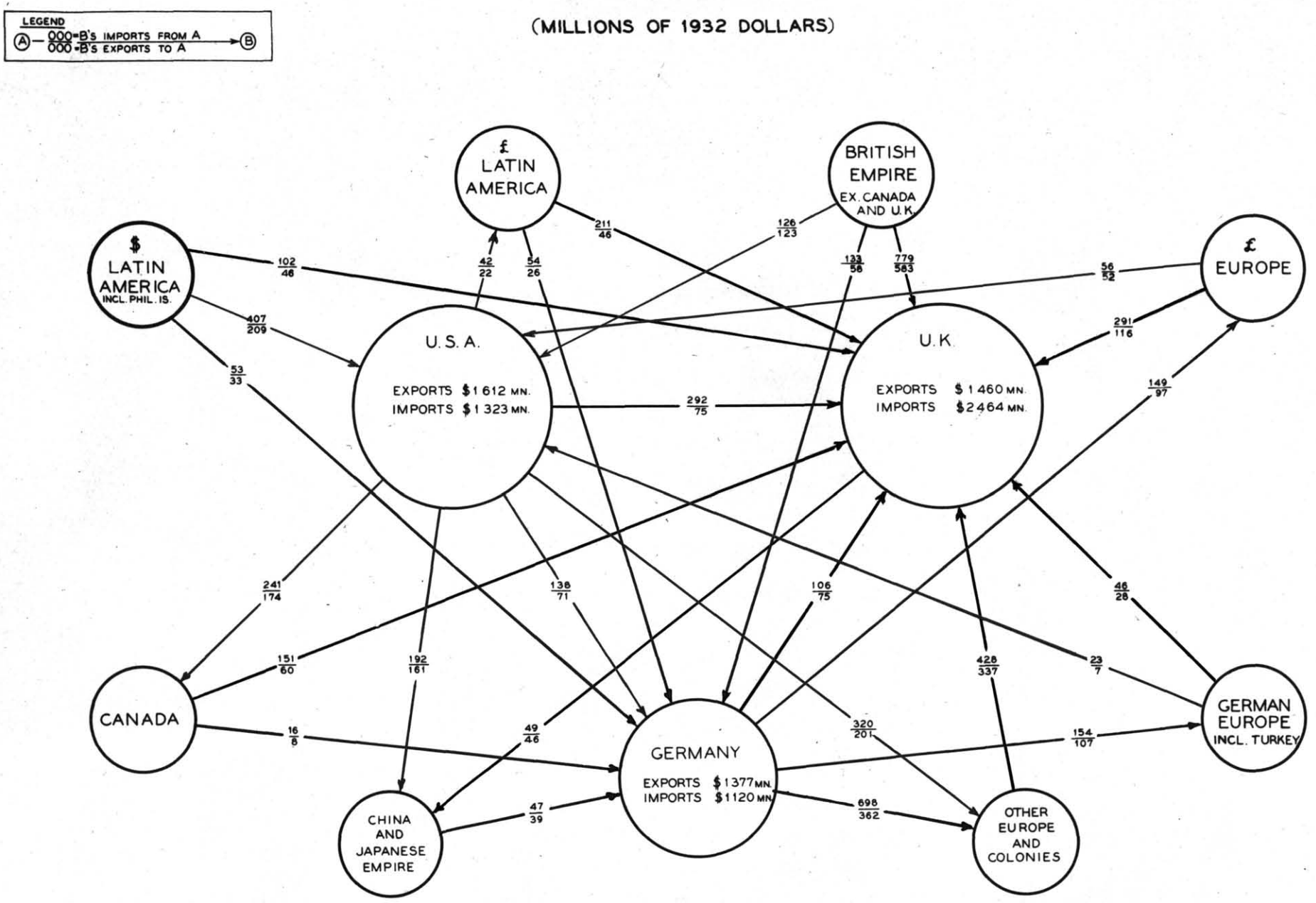


FLOW OF WORLD TRADE - 1929

FOREIGN INFORMATION DIVISION
SEPTEMBER, 1936

FLOW OF WORLD TRADE - 1932

(MILLIONS OF 1932 DOLLARS)



FLOW OF WORLD TRADE - 1932

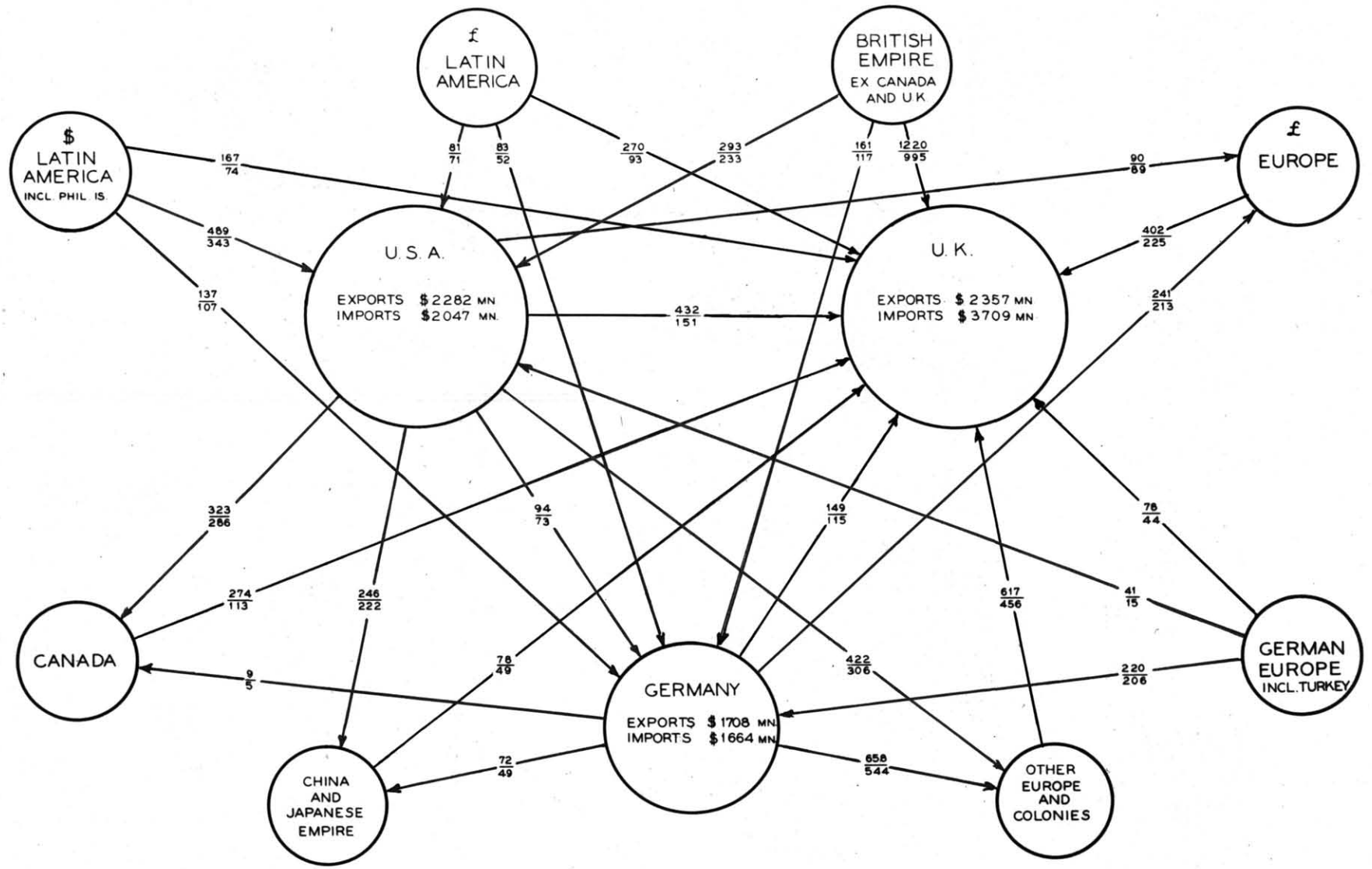
FOREIGN INFORMATION DIVISION
SEPTEMBER, 1936

FLOW OF WORLD TRADE - 1935

(MILLIONS OF 1935 DOLLARS)

LEGEND

Ⓐ — 000 = B's IMPORTS FROM A / 000 = B's EXPORTS TO A → Ⓑ



FLOW OF WORLD TRADE - 1935

FOREIGN INFORMATION DIVISION
SEPTEMBER, 1936

GOLD BLOC TRADE

(MILLIONS OF 1929 DOLLARS)

LEGEND
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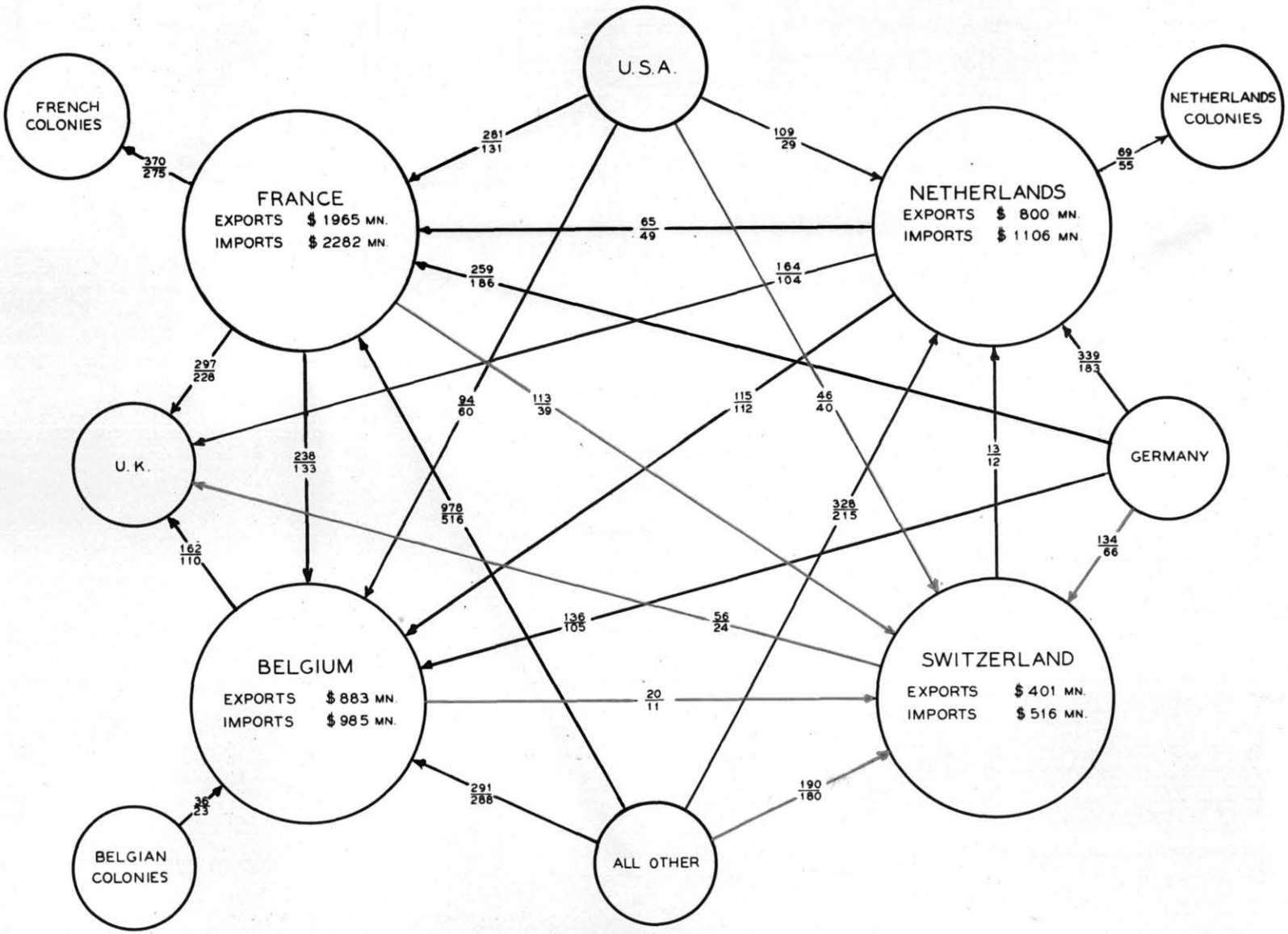

GOLD BLOC TRADE - 1929

FOREIGN INFORMATION DIVISION
OCTOBER, 1936

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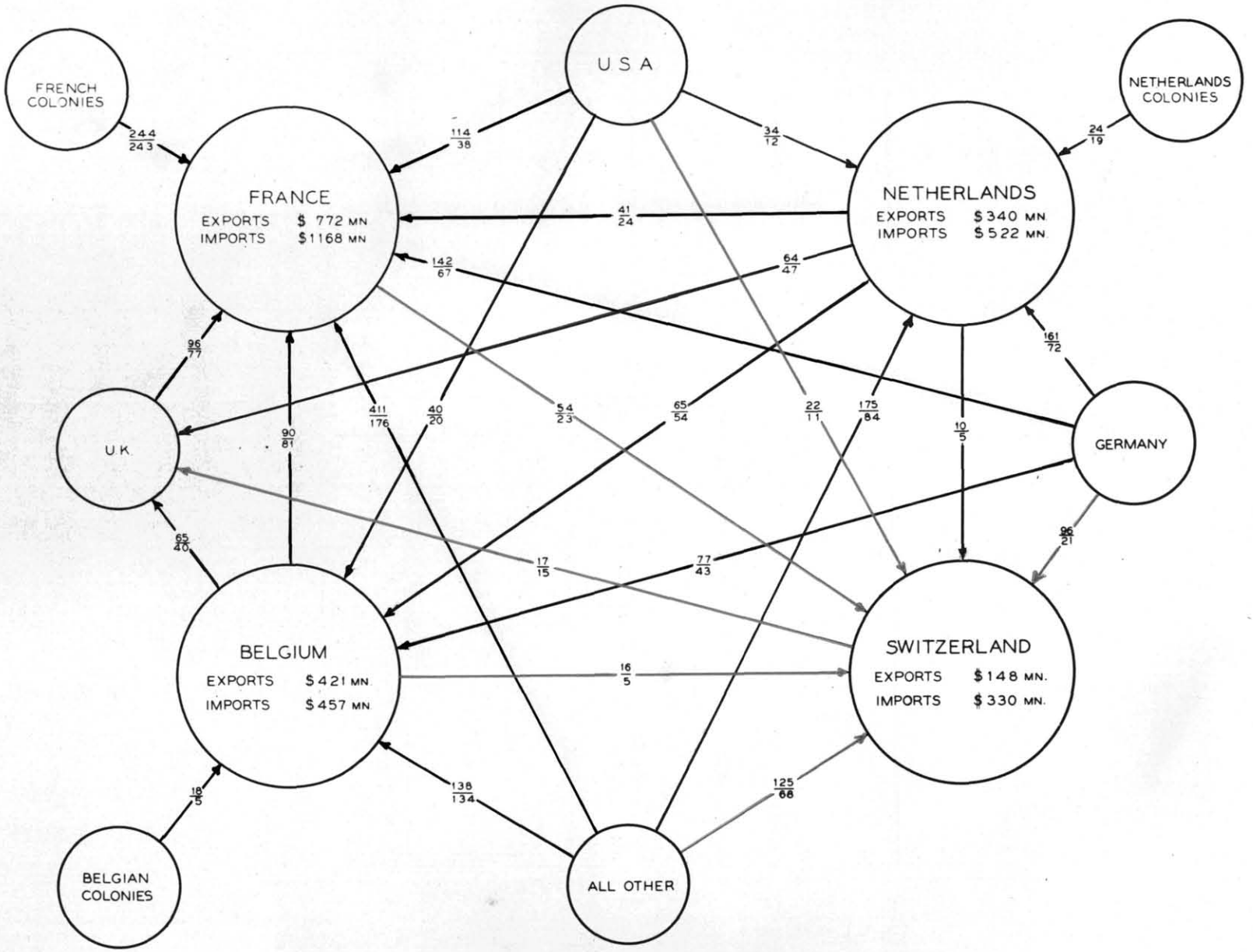
GOLD BLOC TRADE

(MILLIONS OF 1932 DOLLARS)

LEGEND
Ⓐ —— 000 = B'S IMPORTS FROM A / 000 = B'S EXPORTS TO A —— Ⓑ



GOLD BLOC TRADE - 1932

FOREIGN INFORMATION DIVISION
OCTOBER, 1936

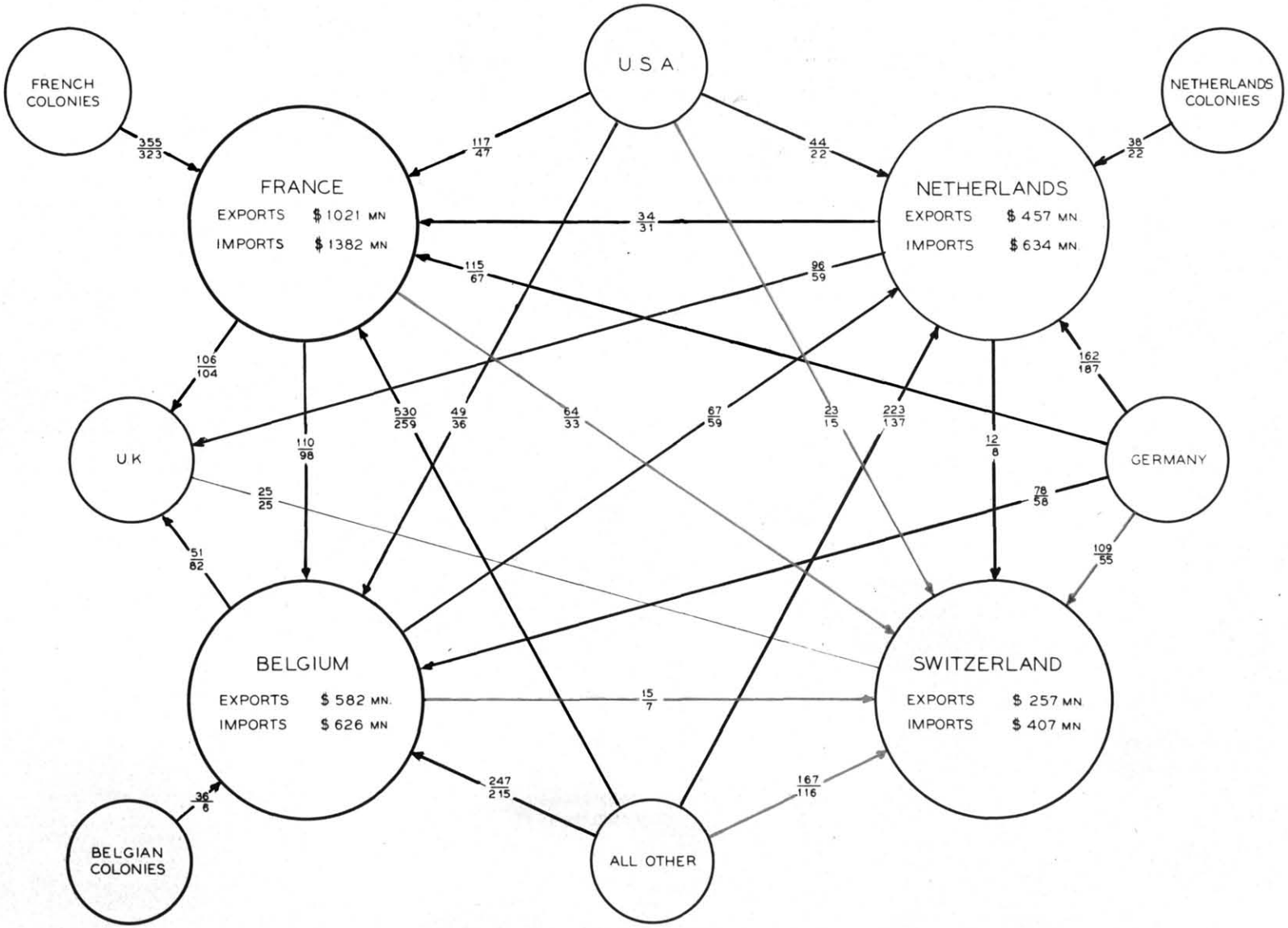
GOLD BLOC TRADE

(MILLIONS OF 1935 DOLLARS)

LEGEND

Ⓐ —— 000 = B's IMPORTS FROM A ——→ Ⓑ

000 = B's EXPORTS TO A



GOLD BLOC TRADE - 1935

FOREIGN INFORMATION DIVISION
OCTOBER, 1936

MONETARY STANDARDS FOR YOUNG COUNTRIES

Monetary Problems of Young Countries

The determination of suitable monetary standards for young countries presents special problems arising out of the general economic characteristics of these nations. These may be summarized as follows:

1. Young countries are usually well supplied with land and natural resources, have relatively small populations, and little accumulated capital.

2. They produce and export foodstuffs and raw materials.

3. Foreign trade plays a very important role in the economy.

4. They are normally debtor countries and generally continue to import capital during upward phases of the business cycle.

5. Their exports of foodstuffs are subject to inelastic demand (as well as inelastic supply - except variations resulting from climatic conditions), and consequently maintain their volume while their value changes radically due to wide price fluctuations. Exports of raw materials are subject to demand varying with the phase of the cycle in industrial nations, and thus are subject to wide variations both in value and volume.

6. Imports are generally of capital and other manufactured goods, the demand for which is relatively flexible, and the prices of which are relatively inflexible.

7. The balance of payments of a young country during normal years consists of an excess of merchandise exports and generally an inflow of capital, offset by an outflow of payments for debt service.

8. Both portfolio and, to a lesser extent, equity investments in young countries are usually denominated in terms of gold, dollars, sterling, or some other international currency not their own.

As a result of these economic characteristics, young countries are especially vulnerable to two types of external or balance of payments difficulties. The first, a crop failure, is the less serious, for the resulting deficiency in exports can usually be overcome by recourse to the international capital market, or, at worst, sets up only a temporary strain.

The second situation, the world-wide depression, finds the young countries the worst victims. It may be argued that it is excessive investment in young countries which is the root of the world disequilibrium, and that the young countries, therefore, cause the depression rather than are its innocent victims. Even, however, if a young country were not an international borrower with debt obligations to service, it would still be helpless in the face of a world-wide deflation of prices which, even if the value of imports fell as rapidly as the value of exports and thus no exchange problem arose, would result in an adverse shift in the terms of trade due to the relative inflexibility of the prices of industrial goods as compared with those of foodstuffs and raw materials, and which would force an internal deflation in the export industries at least.

The typical depression history of a young country may be summarized very briefly:

1. A world-wide depression results in greatly reduced prices for staple commodities and a reduction in the volume of raw material exports. Export values thus drop off, and at the same time international lending ceases.

2. The export excess diminishes (even if imports decline proportionately) or is overturned, and capital imports cease. Debt service obligations, mainly in foreign currencies, continue. Gold tends to flow out and foreign balances to be drawn against.

3. If no relief appears to be forthcoming, the young country, if on the gold standard, usually suspends note conversion and limits gold exports. Once gold exports are restricted, the excessive supply of its currency relative to the demand for it in the exchange market, will cause the exchange value of its currency to fall in terms of foreign currencies and of gold.

4. This may help externally by stimulating exports and tending to restrict imports. Internally, with good currency management, the young country may partially avoid the deflationary effects of the fall in the foreign currency proceeds of exports. Imports now cost much more, however. If the policy of internal stability (due to government spending, for example) is fairly successful, the demand for imports may be maintained at a level too high in relation to the external position of the currency. Furthermore, there remains the debt service problem. Depreciation only makes the problem of remitting a fixed amount of foreign currency more difficult since it is likely to turn the terms of trade further against the borrower.

5. The country may establish exchange restrictions, limit imports, and/or default on its foreign obligations. Blocking commercial balances and defaulting on interest, sinking fund, and principal payments result in a sort of forced loan which temporarily improves the balance of payments position in much the same way as a true capital loan does. Instead of increasing the supply of exchange and foreign balances, however, this method works out by limiting the demand for exchange. The foreign creditor may convert these blocked balances into a more conventional but also basically involuntary form of capital loan by accepting long-term funding bonds in their place.

6. By these methods, by genuine readjustments of debt obligations, and by increased exports due to cost adjustments such as were put through in Australia, the exchange position is improved. Real recovery, however, necessitates an upturn in the prices of the great export staples and an increased volume of raw material exports resulting from revival of production in the industrial nations. In this connection, it is interesting to note that recovery has proceeded much more rapidly in the foodstuff-producing nations such as Argentina, than in raw material (metals, etc.) producing countries such as Bolivia and Chile.

Of course, the situation will vary in each country with particular circumstances. Argentina has been fortunate in that a relatively great proportion of her capital liabilities has been in equities. Even in this situation, however, it is possible for the transfer problem to arise, since the most efficient producers, at least, may earn a return even during the depression. Excessive exchange depreciation of itself may create a transfer problem which would not otherwise arise, because it may enable foreign-owned enterprises to earn a profit expressed in terms of local currency, whereas otherwise they might have incurred losses.

A more extreme case is that of British Malaya where the Government's fixed debt is only £20 million, while British investment in rubber and tin production is £100 million and United States investment $30 million, almost entirely in equities. Regarding this case the Midland Bank states:

> "Here lies the second important element of elasticity in Malaya's economic structure, which is of evident importance in relation to the balance of external payments and receipts. When the operations of tin and rubber companies became unremunerative, dividends were naturally suspended and practically nothing was remitted beyond the borders of Malaya on this account."*

* "The Economics of British Malaya," Midland Bank Monthly Review, Sept. - Oct. 1936, page 4

Appropriate Monetary Standards

With these problems of young countries in mind, we must examine the possible alternative monetary standards. The principal alternatives are:

1. Gold standard
2. The Keynesian gold standard with wide gold points
3. Gold exchange standard
4. Dollar or sterling standard
5. Use of a foreign currency or a conversion office based on the issue of notes backed by a fixed proportion of quick foreign assets and currency.
6. Inconvertible currency pegged to the dollar, sterling, etc.
7. Flexible currency

Other papers* discuss the general problems of fixed and free exchanges under varying economic conditions, so we will here restrict the discussion to those aspects of the alternative monetary standard which bear most directly on the problems of young countries.

For our purposes we may class the first five types of standard together. The principal function of the Keynesian gold standard with wide gold points is to discourage temporary disturbances, such as the flight of capital due to fear. Since these problems are more likely to arise in large industrial countries than in the young countries, this type of standard is not discussed separately from the ordinary gold standard.

The gold exchange standard, of course, is identical with a dollar or sterling standard, if the dollar or sterling is on gold, and cannot exist unless one of the major currencies is on gold. The chief difference between the gold and the gold exchange standards is that in order to earn a return on the foreign assets held under the latter, they are usually invested in Treasury bills or other first class paper. The result is that, in case of a capital loan from the basic country to the young country, the young country must bear the brunt of the adjustment to the capital movement, whereas under the automatic gold standard,

*See "International Monetary Organization and Policy," above; also Appendix, "A Theoretical Approach to International Monetary Policy."

both are likely to share more equally in the adjustment. A further point to be made is that under the gold standard, a young country owns the gold and receives the book profit from a devaluation of its currency, while under the gold exchange standard the basic country owns the gold and takes all the profit resulting from devaluation of its currency, and the young country, upon undertaking an equal devaluation receives no profit, the young country's deposits being in terms of a currency rather than of gold.

The fifth type of standard, the use of foreign currency or a conversion office based on the issue of notes backed by a fixed proportion of quick foreign assets and currency, is subject to the same general criticisms as the automatic gold standard. In the case of Cuba, however, the use of American currency coupled with the supply of banking facilities by branches of American and Canadian banks, has resulted at the same time in considerable benefits. In the first place, the branches of foreign banks have not failed as have many domestic banks. Furthermore, they are in a position to draw on the great resources of their parent organizations in order to supply currency when it is demanded. On the other hand, the branch banks have not considered themselves the monetary authorities, and have, of course, not sought to maintain the monetary circulation during a depression by making credit very easy or by conducting anything like open market operations. As a result the currency in circulation in Cuba is estimated to have decreased from $350 millions in 1926 to $41 millions at December 31, 1933 and to have increased again to $97 millions by June 30, 1936. (These estimates probably overstate the figure for 1926).

Objection has been raised against the gold standard in that the young countries do not now have any gold. The same objection, however, holds against all the other standards except a purely flexible currency, since they all require foreign balances of some sort, which could easily be turned into gold since the world supply of gold is ample.

Another point to consider is that the choice, at least among the first four possible types of standard, depends to a considerable extent on the world picture. With sterling a managed currency, countries like Australia and Argentina would hardly adopt gold or the dollar as the basis of their monetary systems.

In general, we may class the first five systems together. The prices of foodstuffs and of raw materials are relatively more flexible and their supply less flexible than those of industrial goods.* A world-wide fall in prices will mean a greater fall in the prices of foodstuffs and of raw materials, so the terms of trade of the young countries will be adversely affected. Since costs will almost certainly lag behind the fall in prices, the profit margins of exporters will be diminished. In order for the value of imports (whose prices are relatively inflexible) to fall in proportion to the fall in the value of exports, it is necessary for the volume of imports to shrink drastically. Gold and/or foreign balances will probably be lost, and the currency circulation automatically contract. Thus external deflation is closely followed by internal deflation and a downward spiral of activity ensues. The result is strain and probably monetary breakdown. Only if costs and prices of both exports and imports are equally flexible can the young country ride through the depression unscathed. If the young country must continue to meet debt service obligations - especially if they are payable in a foreign currency - even this situation is not enough to save it from strain.

One attribute of the fixed exchange standards is that they are almost essential in order for the young country to attract foreign investment (at least any but equity investments). Foreign investment, however, may not be the great boon that it was formerly considered to be. We cannot discuss this problem here. It must suffice to point out that foreign investment results in one of the great problems of the young country we have mentioned above - the debt problem.

*Cf. Gardiner C. Means, "Industrial Prices and Their Relative Inflexibility," Senate Document No. 13, 74th Congress, 1st Session, Washington, 1935.

For foreign investment is timed in exactly the wrong way. In domestic monetary policy it is deemed wise in time of depression to bail out bad investments by such means as the R. F. C. In foreign investment quite the contrary is done: all international lending ceases at the time when it would do most good. On the other hand, when a young country is prosperous, in the upward phase of the cycle, it is deemed a good credit risk, and international bankers are more than willing to lend it money. The result, all too often, is borrowing for unproductive and in many cases wasteful purposes which cannot hope to result in the export excess required to pay service charges on the debt. International investment probably causes much more rapid economic development of young countries than would otherwise occur, but at the cost of greater instability.

Some of the objections to automatic fixed exchange standards may be overcome by managed fixed exchange standards. The latter are, however, practical only for the large nations which have so much gold or foreign balances that they can afford to manage a portion of them and prevent them from entering into the domestic monetary situation. None of the young countries, with the barely possible exceptions of Argentina and Canada, are in a position to do this.

In order for a young country to maintain an inconvertible currency pegged to the dollar or sterling, it would be necessary in circumstances of worldwide deflation to impose exchange and other restrictions in order to control imports and exports and foreign remittances. Consequently, this type of standard can hardly be recommended. The logical conclusion of such a policy is complete commercial and financial isolation from the rest of the world.

This brings us to the last type - the flexible currency. This is discussed elsewhere in connection with the proposed reorganization of the monetary and banking system of Costa Rica. Here again we conclude that this type of standard cannot overcome the external difficulties imposed on young countries by a worldwide price deflation.

Summary

To summarize: under either fixed or flexible exchanges, a world-wide price deflation will result in an adverse shift in the terms of trade of the young countries (while those of the industrial nations will probably improve), and in strain and probable breakdown in their international commercial, and financial relations, even if they do not have external debt service obligations to meet. Thus we are again forced to the conclusion that the young countries are the helpless victims of depressions. Effective monetary control must come from the large industrial countries. If the latter are able to moderate or eliminate the fluctuations which are of so serious consequence to the young countries, the choice of standard for the young countries becomes a much less acute problem. In this case, the young countries can help the world situation best by refraining from monetary policies which will disturb the rest of the world.

The problem from the point of view of the young countries thus resolves itself into a choice of the lesser of two evils. On the one hand, any system of fixed exchanges involves certain strain and probable breakdown in a situation of world price deflation. (If breakdown occurs, any currency system is in effect a flexible system). With flexible exchanges, on the other hand, inspired internal management may alleviate some of the difficulties even though it is helpless to avoid them. History has not provided many notable examples of such management, but we continue to hope for improvement in the future with increased attention being paid to the subject. On the other hand, the maintenance of fixed exchanges is no longer regarded as a sacred and inviolable trust. Perhaps the advantages of a flexible currency may be attained for the young countries without running the dangers of poor internal management, by relying on the large central nations for monetary control, maintaining for considerable periods of time fixed exchanges in relation to the large central nations, and lowering the exchange ratios infrequently when and if this is made necessary by the occurrence of world-wide price deflation in spite of the monetary management of the large nations.

Addendum: Plan for Costa Rica

A plan for the reorganization of the monetary and banking system of Costa Rica is now being considered by the Costa Rican Government. It was drafted by Dr. Hermann Max, Chief of the Division of Economic Research of the Banco Central de Chile, at the request of the official Banco Internacional de Costa Rica and with the approval of the Costa Rican Finance Minister. Dr. Max is the economist of a central bank, the President of the Board of Directors of which is the distinguished Chilean economist, Dr. Guillermo Subercaseaux. Dr. Max' plan is based on Subercaseaux' theories of a flexible currency standard, and thus marks a new departure in the monetary proposals of responsible authorities. A note published by the Banco Central de Chile in connection with a summary of the plan, points out that changes similar to those proposed for Costa Rica are necessary in the Chilean banking structure (which at present is based on a Kemmerer plan). Thus we find the banking authorities of two nations (for the Banco Internacional de Costa Rica has approved Dr. Max' plan and it is now being considered by the Government) advocating a monetary system unconventional in the eyes of most bankers and economists.

The central feature of Dr. Max' plan is the creation of an Issue Department of the reorganized bank, which will have complete control over the internal and external levels of the colon. All gold and silver coins are to be withdrawn, and only copper and nickel subsidiary coins will circulate. The issuance of notes will be limited to the discounting and rediscounting of commercial and agricultural bills of exchange and promissory notes presented to the Issue Department by commercial banks, including the Commercial Department of the central bank which carries on more than one-half of the commercial banking business of the nation. Thus the note circulation will be directly based on the volume of bank credit, which, in turn, is to be based on "the legitimate needs of business." According to the plan, the Issue Department will control the volume of bank credit, and thus the note circulation, through its power of determining the

discount rates and policy of the Commercial Department, which, by its dominant position, sets the credit policy of all the banks. It is believed that the Issue Department can, in this manner, maintain "internal stability" and remove domestic monetary influences as a factor in the business cycle in Costa Rica. The plan does not define the "internal stability" which is its aim, but Subercaseaux has consistently advocated a "stable money" designed to eliminate fluctuations in the price level and changes in the "purchasing power of money."

Externally, the colon is to be an almost completely flexible currency. The plan proposes to define the monetary unit as follows: "The monetary unit of Costa Rica shall be the colon whose value shall be determined by its purchasing power in the market." The Issue Department shall have complete control over foreign transactions. Each day the banks shall transfer to the Issue Department the excess of their purchases of exchange over their sales, buying any necessary balances from the Department. The banks shall also submit all information pertaining to the exchanges. Every day the Issue Department will fix exchange rates which will enable the supply of exchange to match the demand for exchange, the only control exercised being the elimination of seasonal swings resulting from the crop season of coffee, Costa Rica's principal export.

The plan also provides that the Issue Department shall have complete control over the gold market, buying the entire domestic production. The gold thus acquired shall in no sense be regarded as a reserve against the note circulation, but rather as a sort of additional asset to be used in times of great scarcity in the supply of foreign exchange.

Three drawbacks to this plan appear at once. The first and least important is the difficulty of controlling the foreign exchanges to eliminate the seasonal swings resulting from the coffee crop season, and to eliminate nothing else. Since coffee makes up two-thirds of Costa Rica's exports, and its price is subject to wide movements, predicting the exchange arising from coffee exports will be no easy task.

A more important problem arises out of the provision limiting the issuance of notes to the discounting and rediscounting of commercial and agricultural bills of exchange and promissory notes. There are to be no gold or other reserves except commercial paper. Thus the difficulty arises that the note circulation will decline when the volume of such paper declines, and a fall in the price of coffee will set up a spiral of deflation. Unless care is exercised by the authorities, an inflationary movement can also be established. The deflationary problem is the worse since probably nothing short of a negative rate of interest could maintain the volume of commercial paper, and thus the note circulation, under certain circumstances.

This problem, though serious, may not necessarily be technically overwhelming. The bank could, if necessary, be authorized to issue notes against advances to the Treasury (which might be made in connection with a program of Government spending) or against longer term commercial and agricultural loans. In fact, examination of the statements of the present Banco Internacional de Costa Rica indicates that the portfolio of short-term paper (included in "Other Loans to Individuals") has never been equal to the note circulation. This is shown in the following table:

	October 31			
	1926	1929	1932	1935
	(millions of colones)			
Portfolio:	22.1	27.2	36.6	49.9
Bonds	4.5	-	1.6	4.7
Loans to Government	8.1	6.0	12.1	14.5
Long-term Mortgages	6.7	17.9	19.5	26.0
Other Loans to Individuals	2.8	3.4	3.3	4.7
Note circulation	15.1	13.9	19.4	29.6*

*Includes cedulas of 1933 (6.7 millions) which circulate.

More fundamental problems of the note circulation will be discussed in connection with the third great difficulty. This is the impossibility of a young country's maintaining any type of standard in the face of a great fall in the value of the export staples (coffee in the case of Costa Rica). A fall in the

external value of the currency, in an extreme case, might maintain the domestic value of exports, but it will increase the price of imports, thus causing an adverse shift in the terms of trade, and will intensify the difficulty of meeting debt service obligations payable in foreign currencies. Even if the country defaults entirely on the external debt, the import problem remains. In order to maintain any sort of equilibrium in the balance of payments, the volume of imports must decline markedly. This will occur only in the unlikely instance where the demand for imports is extremely flexible. In such a case the national money income may be kept constant with no necessity of government spending, but the national real income will fall as the terms of trade become less favorable.

Of course, any other standard will also result in a breakdown of the international monetary mechanism under these circumstances. There is nothing the young country can do. It must depend on the large industrial nations to impose the necessary stability in the markets for its export staples.

SOME GENERAL IMPLICATIONS OF RECENT CURRENCY DEVELOPMENTS

The recent devaluation of the gold bloc currencies may at the same time be viewed as the last in a series of events in the readjustment of currencies since the World War, and the first in what may prove to be a series of cooperative attempts of the world to evolve an improved mechanism of international exchange. In the present memorandum, an attempt will be made to weigh the importance of the devaluation, the tripartite currency agreement that attended it, and the supplementary arrangements pertaining to gold that followed it, in fairly broad terms: considering briefly (1) the background from which the new alignment of currencies has sprung; (2) the present stage of international currency development; (3) the prospects for the immediate future; and (4) the range of possibilities for long run development.

The Background

The devaluation of the French franc has partially restored the currency alignment prevailing prior to the depreciation of the pound sterling in September 1931(but at a new ratio to gold). If it be recalled, however, that the franc was undervalued by the 1926-28 stabilization, a fact which is attested by the gains made by the Bank of France in its holdings of gold and foreign exchange from the end of 1926 to 1930, it may be suggested that the present exchange value of the franc is more appropriate than any which has previously prevailed since the close of the war.

The September devaluation was not unexpected. Indeed, economists have been freely predicting this result ever since the American abandonment of gold in April 1933, and the program, begun in October 1933, of actively inducing dollar depreciation. The French policy of deflation to lower costs for the preservation of the gold standard had been only half-hearted - despite the widely-publicized Laval decrees of July 1935; very painful - in that industrial production progressively decreased and unemployment mounted; and unsuccessful - as domestic capital continued to flow abroad to sabotage the domestic experiment.

The attempt of Blum to restore purchasing power through Government spending while the franc's gold value was maintained met a similar fate with the outflow of domestic funds this summer. Increasing numbers of French voices joined in the chorus for devaluation. Finally, after negotiating the tripartite agreement, the Blum Government acceded, giving the franc a de facto rate of approximately 4.65 cents and 105 to the pound. These rates may be compared with 19.2 cents and 25 francs before the war, 3.92 cents and 124 francs in 1928, and 6.63 cents and 75 francs in 1934. The pound-dollar relationship, except for the period between September 1931 and January 1934, had been approximately $4.86 per pound after 1925.

The Present Stage of Currency Developments

At the present stage of currency developments, progress has been made in that England and the United States cannot continue to postpone consideration of the future "until after the franc is devalued." While the technical aspects of the agreements are being discussed elsewhere,* certain features of the present mechanism of international monetary adjustment merit attention here.

In the first place, in announcing the supplementary gold agreements, Secretary Morgenthau laid considerable stress on the point that they might be abandoned following a unilateral decision by the United States "on twenty-four hours' notice." The tentative nature of the pacts, thus emphasized, might lead one to believe the present step to be a highly experimental one. It cannot be doubted that the machinery has an experimental character. But as time goes on, the probability that the United States will act alone to nullify the steps that have been taken, even if it were to her advantage to do so, becomes each day less and less. It may be expected that when the agreements have been in operation for several months, they will be altered only by international agreement.

*See especially "The Present Monetary Mechanism and Position of the United States," above.

In the second place, it may be noted that although the agreements make no specifications concerning exchange rates - and it has been announced that no recent understandings exist with relation to them - yet practically the dollar-pound-franc rate appears to be settled upon for the present within comparatively narrow limits. While the French permissive range of devaluation would allow a franc of from 4.35 to 4.96 cents (at $35 an ounce for gold in the United States); while the Treasury of the United States may buy and sell gold "at any price deemed in the public interest" without another formal devaluation; and while the Exchange Equalization Account may buy or sell gold with no limitations as to price, yet a certain tentative range of rates appears to be tacitly accepted. In the case of the French franc, public opinion as reflected in the wide forward discount that has been in evidence since mid-October, does not believe that the present range of rates 4.65 - 4.67 can be maintained. The French authorities, however, appear to be determined to keep the franc in the vicinity of 105.15 per pound sterling. In the case of the pound sterling, the authorities supported the market in the gradual decline that was permitted down to $4.87. Yet at this level, the lowest since September 30, the foreign exchange market appeared to believe that $4.86 represented a level below which the pound would not go, inasmuch as the slight forward discount obtaining on three months sterling with spot at $4.87 to $4.90 was scarcely sufficient to counterbalance the higher level of money rates in London than in New York, with the result that balances were for a time, being transferred from New York to London.

Thirdly, it may be expected that the present arrangements may be held in effect without extensive modification during the immediate future; that eventually international agreement covering a more extensive field will be required. Despite Secretary Morgenthau's pronouncement that the technique whereby the stabilization funds were to exchange gold with one another constituted "a

new gold standard," most quarters regard the immediate period as one of gradual transition to such a standard.

The agreements so far concluded among monetary authorities are not so much a "new gold standard" as a tentative device for the achievement of approximate exchange stability, pending the solution of several important questions.

Immediate Future Prospects

The questions which must be settled before any signal advances can be made in forwarding developments on the international monetary front may be listed as follows:

(a) Can the present range of exchange rates be maintained among the dollar, franc, pound, guilder, and Swiss franc?

(b) Will the erstwhile gold-bloc experience a repatriation of capital, dishoarding, and the return of confidence?

(c) Will the level of national money incomes rise in the former gold bloc, and will industrial and trade activity likewise pick up?

(d) Will foreign trade recover?

These questions are, of course, all interrelated in that to some extent the answer to any one either follows from or is necessary to the answers to the others. Yet they may be asked separately inasmuch as the answers to most of them will probably be given over the course of the next six months or so, in an order that cannot be foreseen at present. For example, the French might succeed in inducing economic recovery by experiencing a return flow of capital, dishoarding and domestic investment, and a rise in monetary incomes brought about by the reemployment of formerly hoarded and expatriated capital. On the other hand, capital, both abroad and hoarded at home, might delay its investment in French enterprises until recovery had already been initiated and taken hold through governmental "reflationary" expenditures. At present - although the

time that has elapsed since the promulgation of the agreement does not enable the formation of a definite opinion - it appears that the hope for a recovery in the level of French national incomes lies rather along the second path. After two weeks in which French funds were repatriated, the monetary authorities were forced to turn about and support the franc, and a wide discount opened up in the forward franc market. Whether this capital flow will again be reversed prior to a recovery induced by armament and public works expenditure, remains a question more readily posed than answered. It may be mentioned, however, that Holland and Switzerland appear at the present time to be enjoying a return of expatriated capital for the purpose of domestic investment, and that prospects for recovery seem good.

For France the possibility remains to be considered that the domestic program of recovery through public expenditures will fail, induce a renewed outflow of capital and make necessary the abandonment of the present level of the franc. Such an eventuality - by no means improbable - might be expected to have serious repercussions of a political as well as economic nature. It may be suggested that the prospects of recovery would not be greatly enhanced by a franc of 4.35 cents as opposed to one of 4.67 cents. In so far as recovery depends upon an upturn in confidence, further depreciation of the franc would militate against it. It may not be doubted, either, that if depreciation below the statutory limit of 4.35 cents became necessary, it would have serious repercussions on the internal political situation and could only be accomplished by a re-alignment of political parties.

If then the French are to recover from the present low levels of money incomes and industrial production, and are able thereby to aid in the promotion of freer conditions of international trade, it appears that the maintenance of present approximate exchange rates is of considerable importance. Firmness in the franc might induce a return flow of capital, given other appropriate conditions, while weakness in French exchange might cause repatriation to be deferred.

With no immediate return of capital, a firm rate for the franc until the spending program had an opportunity to make itself felt would facilitate the return flow at that later time.

Longer Term Prospects

Over the longer period, the prospects for a development of the currency arrangements recently negotiated depend on such factors as (1) the possibility of a European war; (2) the possibility of the breakdown of the French recovery effort; (3) the possibility of legislation enacted in the United States to curtail or prevent foreign purchases of American securities; (4) the direction to be taken by English policy in consequence of a depression of trade expected by some in 1939-41. If these possibilities be disregarded, since the repercussions from the realization of any one or more of them would lead beyond the scope of the present paper, certain general points stand out.

In the first place, it is clear that the United States, England and France are all embarked upon domestic monetary programs which differ in the degree, if not the direction of the ends desired. Employment in the United States is still below that desired, requiring a further rise in the national monetary income from the estimated 1936 levels. As a pure guess, it may be expected that monetary authorities will not take steps to halt expansion until a national money income at least equal to that of 1929 (81 billions) is at hand. This rise would be on the order of 35 per cent. In Great Britain, it is apparent that no expansion of this magnitude is possible. The important problem there appears to be that of maintaining approximately the present level of national money income. In France a rise in the national money income of considerable proportions will be sought, probably exceeding the percentage increase from present levels in prospect for the United States.

With these disparate aims of monetary policy, it would appear that the present exchange relationships are subject either to revision or some strain

from the larger view even during the present recovery phase of the business cycle. Theory would suggest that the pound will be undervalued when and if American and French expansion in the degrees noted above take place, since increased buying power elsewhere will induce a rise in British exports, while the stability of British incomes will prevent any further increase in imports. It will more likely be found, however, unless steps are taken to prevent the result, that continued expansion in the United States will induce continued British purchases of American securities to weaken sterling, and that rising prices for raw materials and foods for which British demand is inelastic will promote an expansion of imports which will fully keep pace with the increase in exports. Under such conditions the British may be forced either to allow the pound to depreciate or to raise interest rates in order to keep the trade balance from growing more adverse. Whichever result appeared, and even if the two tendencies canceled one another to leave the level of exchange rate fluctuations unaffected, British policy will be influenced.

The British are at present embarked upon a program of sustaining employment and liquidating the depressed export trades. As short a time ago as a year, it was still felt that Great Britain should lower tariffs, lend abroad and attempt by all available means, direct and indirect, to revive her export trade. Official action has shown little interest in such policy. England appears to be turning her reserves and energies largely inward.

This has a bearing on exchange policy, of course, in either of the possible circumstances which might result from continued American and French monetary expansion. In the unlikely event that such expansion strengthened the pound by sharply increasing the demand for British exports, and if British emphasis continued to be on internal trade, the pound should presumably be allowed to rise to prevent an expansion in the export trades which England felt would not be sustained, and which might check the building boom and make rearmament both

more costly and more difficult. If, on the other hand, the pound became weak as a result both of a movement of funds to the United States and of higher import prices, it would presumably have to be supported if it were felt that substantial depreciation would have an expansive effect on English export trade at the expense of curtailed activity in domestic goods industries, such as building and armaments.

It would not, however, be surprising to witness some lessening in the English policy of turning inward in its economic and monetary policy. Indeed, it would be the occasion for some surprise if the English followed the war-time Swedish example and attempted to prevent inflationary policies abroad from affecting the direction and extent of trade. The halt called to gold bloc deflation by the recent devaluation will probably swing an essentially opportunistic economic policy in England around to the point where inflationary stimuli from abroad will be permitted to have their full effects and deflationary measures will continue to be avoided. These inflationary stimuli are of two sorts, namely, increased foreign demand for British goods, and a depreciation of sterling as the result of a movement of British capital into the New York stock market. If the above appraisal be correct, it may be expected that the pound will not go higher than its present approximate level, and, in the long-run, should British purchases of American securities continue to be made in heavy volume, the pound will be allowed to go considerably lower.

A second interesting aspect of the devaluation is the present completeness of the economic isolation of Germany. In any recovery in international trade, it may be expected that German attempts to hold together its barter trade with Southeastern Europe will collapse. Eventually - unless a cataclysm of a political nature intervenes - it is likely that Germany will be forced both to devalue and to borrow abroad to acquire reserves on the basis of which to free her trade and foreign exchange restrictions. In her present political condition,

however, it is doubtful whether Germany could obtain a loan from any possible lender. Consequently, some modification of her external political program of armament and defiance would seem to be entailed by an attempt to rebuild foreign trade when the recovery of world trade weakens the ties that bind her present customers to her.

Summary

The devaluation of the franc and the other gold bloc currencies, long expected and long postponed, clears the way for possible advances in the development of international monetary organization. It should be noticed, however, that certain problems remain to be resolved before any further progress can be made beyond the scope of the present arrangements concluded among the United States, Great Britain, and France. The arrangements, though tentative by agreement, appear temporarily to involve stabilization within comparatively narrow limits, and they should be continued in effect until the recovery of France is assured and the policy of Great Britain clarified.

Both the hope of recovery of France and the future policy of Great Britain are related to future prospective capital movements. Although, in France, a rise in the national money income, industrial production, and foreign and domestic trade might be achieved (after the present German model) through government spending in excess of revenue, yet that recovery would be made easier by a restoration in the French public's confidence in business prospects, a repatriation of capital held abroad, and a revival in domestic private investment. The English will doubtless refrain from further commitments in the sphere of international monetary affairs until they know (1) whether a repatriation of French capital will take place; (2) whether British funds will continue to flow into the New York stock market as American recovery advances; (3) what the effect on the future level of sterling will be of continued recovery in the United States, and a possible similar recovery in Continental Europe. The capital

outflows mentioned in (1) and (2) would be likely to induce a lower level of the pound sterling; while, in the sphere of merchandise trade, recovery in the United States and in the former gold bloc countries will tend both to expand the demand for British exports and to increase import prices. On the whole, it seems likely that the underlying position of the pound will be one of weakness over the next few years, and that under such conditions the British will refrain from any long-run commitments about the future value of sterling.

APPENDIX

A THEORETICAL APPROACH TO INTERNATIONAL MONETARY POLICY

Analysis of Trade Adjustment Under Fixed and Free Exchanges

Introduction

Classical economists urged the adoption and have long defended the permanent retention of the gold standard as an efficient and desirable system of international monetary organization. Events of the past decade, however, have led some observers to believe that such a system is incapable of providing either for the welfare of individual nations in particular or for the world generally. In place of the gold standard, there is suggested by its opponents the system of free exchanges. Let us briefly investigate the theoretical and practical implications of each.*

Hypothetically, the operation of the gold standard is intended to maintain a balance among the individual economies composing the trading world. Simply put, a rise in prices in one country is supposed to be followed by a fall there in the volume of exports, a rise in imports, an outflow of gold, stringent money and credit conditions, and a return toward equilibrium and international balance. A fall in prices would have effects which are opposite but which would, in the end, lead also to the restoration of a balance.

It is familiar that the weakness with such a line of reasoning lies in the ignoring of certain important factors pertaining to the complete repercussions attendant upon various types of economic changes that occur among nations. For the sake of simplicity, now, let us take the case of two nations - each of similar size and with wide resources - who are engaged in international intercourse. And let us list six different types of basic changes which may occur between

*The consideration of capital movements is deferred to a later portion of this study. This phenomenon is recognized to constitute an important element in the present analysis; but it introduces new complicating factors into the problem rather than basically new principles. For the present, the intention here is to avoid the former and to concentrate upon the latter.

them. The following cases do not, of course, exhaust all of the possible permutations; but for the purpose of very simply illustrating the fundamental issues, they are sufficient for the present.

	Country A	Country B
Case (1)	Rising prices Lagging costs " wages	Equilibrium
" (2)	Equilibrium	Lower prices " costs Unchanged wages
" (3)	Equilibrium	Lower prices Lagging costs " wages
" (4)	Equilibrium	Lower prices " costs " wages
" (5)	Equilibrium	Higher prices " costs " wages
" (6)	Lower prices Lagging costs " wages	Equilibrium

Under a gold standard, the result of the first set of circumstances would be, it is known, an outflow of gold from country A. But if it is assumed that this phenomenon is due to an untoward inflationary policy in that country, it may be desirable that gold does flow out and that a measure of deflation, with all of its implications, be imposed. In the absence of such a method of control, the developing dislocation will become more serious, the reaction which must inevitably set in will be more severe, and the ensuing period of readjustment more prolonged. A gold flow serves, in this case, therefore, as a salutary check upon a progressing state of disequilibrium.

Case 2 exhibits the circumstance of an increase in efficiency in country B and a resultant price decline. Here again, gold would flow from country A,

and theoretical speculations would lead to the conclusion that the results would be similarly desirable. In this case, the loss of the metal would impose upon Country A a price deflation and would involve it in the necessity of reducing its costs by matching the increase in productive efficiency abroad with a similar policy at home. On this, and on the previous count, therefore, the system of fixed exchanges and gold flows may be said to provide a mechanism designed to cater to the best interests of the national economies. Indeed, those who oppose the gold standard rarely have considered the function of gold flow in these particular circumstances and have thus failed to investigate their implications or to challenge their efficacy in attaining their particular ends.

It is Case 3, however, which constitutes the focal point of interest for the advocates of free exchanges and which exhibits the basic weakness of the gold standard theory. Providing the free exchange theorists with their chief weapon of attack is this circumstance in which there is a price deflation abroad unaccompanied by a commensurate fall in costs there. For it is apparent that such a motivation for a gold efflux from the nation in equilibrium serves only to hasten that nation into a price deflation which the underlying economic conditions do not warrant; and - taking account of the factor of rigidity - imposes upon it a price-cost disparity that spells depression for it in the same manner as for the originally dislocated country. The free exchange theorists therefore, argue that it is undesirable that a country enjoying a satisfactory degree of equilibrium and prosperity should be bound to other nations by ties of gold and insist that it should not thus be forced to participate in disturbances arising among them. They would free the exchanges from their gold incubus; and this, the theory continues, would effect a liberation of the home economy from its external ties and would permit it to pursue a policy independent of the rest of the world and one best suited to its own particular needs. This familiar argument needs no amplification.

It is significant to observe at this point, however, that the free exchange theorists have never approached to a thorough examination of the implications inherent in the policy which they advocate. They have in the first place, never demonstrated that exchange flexibility, even given the circumstances of Case 3, will really render entirely independent of external disturbance a nation which is already engaged in international intercourse. In the second place they have failed to consider the various other types of disequilibrating forces and have limited their attention to this one particular type of circumstance. It is not at all clear, for instance, whether the advocates of free exchanges, in offering their system as a permanent policy, would find the same objections to the gold standard and to gold flows in circumstances exemplified by Cases (1) and (2) as is exemplified in Case (3). In other words, are gold outflows undesirable both when efficiency is rising and prices are falling abroad, and also when inflation is getting out of hand at home - in addition to being undesirable in the instances when price declines abroad are attributable to deflated price dislocation there? Only the latter exigency is considered although it is apparent that any permanent policy of international organization must recognize the implications inherent in the first two as well.

Up to this point, therefore, an attempt has been made simply and briefly to outline the case for and the conditions under which a gold standard might theoretically be expected to work. The conditions have also been cited under which its operation is most commonly held to be a disturbing influence in itself. This set of circumstances, it was further pointed out, is advanced by free exchange theorists to illustrate their principal objection to the gold standard system. In effect, however, this objection constitutes but a negative argument in favor of free exchanges, since, in this particular case, it serves only to point out the weakness of fixed exchanges but fails to demonstrate precisely how and to what degree flexible exchanges would alter the situation. With regard to

the effects of the impact of other types of phenomena upon a system of free exchanges, the theory offers nothing. Thus, although the case for gold is familiar, the positive case for permanently free exchanges remains relatively unexplored. It is submitted here that until the implications of such a system are fully investigated, it is meaningless to hazard a choice among it, the gold standard, and some compromise between the two.

In the following section of this paper, it is therefore intended, with the aid of the foregoing Cases, to explore more comprehensively the economics of free exchange in a dynamic world. Equipped then with a rounded theory, it will be possible effectively to compare it with the gold standard theory of international monetary organization, and - introducing the various types of circumstances and the various types of complicating factors to be noted later - it may be possible finally to establish a margin of gain in favor of one or the other, or perhaps a modification of one or the other.

Economics of Free Exchanges

Flexible exchanges are theoretically justified on the grounds that whenever they are exposed to a relative price decline abroad, they adjust themselves to and absorb such a change, and by so doing insulate the internal economy from the external disturbance. Given certain specialized conditions, this is true. But as a statement of universal application, such a principle cannot be accepted. A brief study of the economics of free exchanges is offered here in support of this allegation.

If a price fall in country B, let us say, is observed to have no ultimate effect on the volume or prices of imports from or exports to country A and hence if no internal repercussions are generated within A (assuming A to have been in stable equilibrium), then it is implied that the decline in B's money demand for A's currency and goods was proportional to the decline of prices in B. That

is to say, if prices in B fell 25 per cent, the maintenance of the status quo in A would require that B reduce its money demand for A's currency and goods by a proportion identical to this fall. By way of illustration:*

Before Change

Country A	Country B
Price of Commodity Unit = $5	Price of Commodity Unit = £1
Money demand for B's currency = $5,000,000	Money demand for A's currency = £1,000,000

Exchange rate
$5 = £1
1 A C.U. = $5 = £1 = 1 B C.U.

C.U.'s sold to B at cost = 1,000,000	C.U.'s sold to A at cost = 1,000,000
C.U.'s bought from B	C.U.'s bought from A
Price per C.U. of export = $5	Price per C.U. of export = £1
Price per C.U. of import = $5	Price per C.U. of import = £1

After Change

Price of Commodity Unit = $5	Price of Commodity Unit = £3/4
Money demand for B's currency = $5,000,000	Money demand for A's currency = £750,000

Exchange rate
$5 = £3/4
1 A C.U. = $5 = £3/4 = 1 B C.U.

C.U.'s sold by A to B = 1,000,000	C.U.'s sold by B to A = 1,000,000
C.U.'s bought from B	C.U.'s bought from A
Price of exports = $5 per C.U.	Price of exports = £3/4
Price of imports = $5 per C.U.	Price of imports = £3/4

It is thus seen that the movement in the exchange rate is such that importers in A spend the same sums of money and are enabled to purchase the same volume of goods as previously; and exporters there may quote the same prices--in terms of their own currency--and also sell as much as previously.

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*The item "C.U.'s sold to B at cost" is computed by dividing A's "Money demand for B's currency" (since this is the sum which is placed at the disposal of B by A for purchases in A) by the "Price of a C.U." in A--dividing $5,000,000 by $5.

"Price per C.U. of export" from A is computed by dividing the volume of A's money which B has at its disposal ($5,000,000) by the volume of C.U.'s which A sells to B.

"Price per C.U. of import" into A is computed, of course, by dividing the volume of money A offers for B's goods by the volume of goods which B had prepared to sell to A.

That this is a very simple and perhaps unconvincing exposition of the chain of circumstances by which a price decline in one nation may be translated into such an adjustment of the exchange rate as completely to absorb that price change, is, of course, well realized. The free exchange theorists themselves offer no less, if not more, fragmentary an exposition of this process. Indeed, it appears that this must necessarily be so. There is such a variety of extenuating circumstances that may enter into consideration to belie the theory, that one is almost forced to concede that its validity is more hypothetical than actual.

It is possible, however, that given the circumstances of Case (4) above, the theoretical implications inherent in the theory may be realized. Where a commodity price decline in B is attended by and is concurrent with a fall in the general level of all prices, so that price relationships remain unchanged, and absolute values of goods and services merely come to rest at uniformly lower levels, it may be expected that the decline in money demand for domestic goods in B may be exactly matched by a proportionate decline in money demand for foreign currency and goods. If, during the interval of this transition, A submits itself to a passive position, then no change is effected either in the internal or external total real value of B's effective money supply, and the consequence, to repeat, is that A remains undisturbed.

But though the absorbent power of the flexible exchange rate mechanism may be demonstrated in an instance in which the price fall abroad is merely a uniform writing down of all money values and involves no change in economic relationships and thus no alteration of basic economic data, a true test of this mechanism requires that its behavior be observed when exposed to other and less hypothetical circumstances.

Consider, then, the conditions as represented by Case (2), in which the price decline in B is attributable to increased productive efficiency and lower

unit costs and in which wages, meanwhile, are being sustained. Given such circumstances, it would largely be the relative elasticities of supply and demand characterizing A and B that would determine the ultimate outcome of the price change. Let us consider several possible alternatives. Assume, first, that the urgency of B's demand for A's goods and services is considerable and that despite its domestic price decline, it must continue purchasing from A as much as previously. Starting from the point of equilibrium before the changes were effected and with the circumstances represented above, and then further assuming A to remain passive, we might expect the following set of phenomena to ensue;

Country A	Country B
Price of C.U. = $5	Price of C.U. = £3/4
Money demand for B's currency = $5,000,000	Money demand for A's currency = £1,000,000

Exchange rate
$5 = £1
1 A C.U. = $5 = £1 = 1 1/3 B C.U.

C.U.'s sold to B at cost = 1,000,000	C.U.'s sold to A at cost = 1,333,000
C.U.'s bought from B	C.U.'s bought from A
Price per C.U. of export = $5.00	Price per C.U. of export = £3/4
Price per C.U. of import = $3.75	Price per C.U. of import = £1

It is seen, therefore, that while B expends the same sums of money and receives the identical volume of goods and services in return as previously, A can purchase 1/3 more in goods with no additional outlay and thus enjoy a 25 per cent reduction in the cost of its imports. And if, further, A's elasticity of demand for B's goods is also low, then it will have little or no inclination to take advantage of the favorable exchange rates and the situation here represented thus becomes the equilibrium position. The inelastic nature of B's demand is illustrated further by its willingness to pay the old price for its imports in the face of the 25 per cent decline in its domestic price level.

Let us proceed with our illustrations by dropping at this point the assumption of A's insensitivity to the fall in the price of its imports and let us

presume that the demand for these imports is perfectly elastic and that as a consequence entrepreneurs here will attempt to maximize their profits by purchasing more of B's goods. Given unit elasticity of demand on the part of A and assuming in this instance that B remains passive, the following circumstances may be expected to ensue:

Country A	Country B
Price of C.U. = $5	Price of C.U. = £3/4
Money demand for B's currency = $6,667,000	Money demand for A's currency = £1,000,000

Exchange rate
$6 2/3 = £1
1 A C.U. = $5 = £3/4 = 1 B C.U.

Country A	Country B
C.U.'s sold to B at cost = 1,333,000	C.U.'s sold to A at cost = 1,333,000
C.U.'s bought from B	C.U.'s bought from A
Price per C.U. of export = $5	Price per C.U. of export = £3/4
Price per C.U. of import = $5	Price per C.U. of import = £3/4

In this instance the price of imports in A reaches a level equivalent to the level of domestic prices there. If more goods were demanded from abroad (and still assuming B to be passive) the unfavorable exchange rate movement would raise the price of imports and would thereby make it more profitable to buy at home; if less than the volume indicated above were demanded, the price would decline and it would be profitable for entrepreneurs to purchase abroad rather than at home.

The question now to be asked is this: What are the effects of the phenomena discussed above upon A's internal position? Where B's decline in money demand for A's goods was exactly proportional to the decline in its price level, A was seen to remain unaffected. But where B was seen to sustain its money demand for A's goods, the position of A was altered. Considering the illustration in which A's demand for B's goods and services was also inelastic, the price per unit of import into A declined. And in the illustration in which A's demand was elastic, there was seen to be involved an increase in the volume of A's exports as

well as of its imports. In the former case it would mean that to the extent to which imports from B constituted an essential element in the cost structure of A, costs in A would tend to decline; and an initial consequence of this might be a competitive reduction in prices of the affected commodities. In the latter case, there would be necessitated a change in the direction of flow of a portion of productive factors from domestic-market to foreign-market goods industries, and an occasion for internal readjustments and thus perhaps for internal disturbances to arise. The significant point in each of these cases is that, notwithstanding the free exchange mechanism, A does not remain unaffected by external phenomena and as long as it maintains commercial relations with B its economic independence is substantially modified. It would be interesting to trace through some of the further ramifications within A's economy of these initial consequences; but this is a difficult and highly speculative task, and since for the purposes here it is not imperative, no attempt will be made to undertake it.

In the immediately preceding paragraphs, we have dealt in outline with a price decline in B to which in one case A's demand was assumed to be unresponsive and in another case was assumed to be responsive. Instead, however, of premising as we did in each case that B was relatively unresponsive to alterations in its terms of trade with A, let us now consider a case in which B's reaction to a decline in the price of its own goods is decidedly marked and that it consequently reduces its money demand from A by 40 per cent. Assuming A's elasticity of demand now to be low, the ensuing position of equilibrium will be represented as follows:

Country A	Country B
Price of C.U. = $5	Price of C.U. = £3/4
Money demand for B's currency = $5,000,000	Money demand for A's currency = £600,000

Exchange rate
$8 1/3 = £1
1 A C.U. = $5 = £3/5 = 4/5 B C.U.

C.U.'s sold to B at cost = 1,000,000	C.U.'s sold to A at cost = 800,000
C.U.'s bought from B	C.U.'s bought from A
Price per C.U. of export = $5	Price per C.U. of export = £3/4
Price per C.U. of import = $6 1/4	Price per C.U. of import = £3/5

Prior to evaluating the implications in this case, let us consider one final possible set of circumstances. Assume that the nature of A's demand for B's products is this time at unit elasticity and that as a reaction to the unfavorable movement of the exchange rate which is occasioned by B's reduced money demand (as represented above) it (a) decreases its own demand for B's goods by 20 per cent. If B passively accepts the resulting changes, then equilibrium in this case is represented as follows:

Country A	Country B
Price of C.U. = $5	Price of C.U. = £3/4
Money demand for B's currency = $4,000,000	Money demand for A's currency = £600,000

Exchange rate
$6 2/3 = £1
1 A C.U. = $5 = £3/4 = 1 B C.U.

C.U.'s sold to B at cost = 800,000	C.U.'s sold to A at cost = 800,000
C.U.'s bought from B	C.U.'s bought from A
Price per C.U. of export = $5	Price per C.U. of export = £3/4
Price per C.U. of import = $5	Price per C.U. of import = £3/4

It is thus recognized from these two cases that if B should reduce its money demand for A's goods and services--prices of these remaining unchanged--then A will be required either (1) to pay more per unit of import while the volume and price of exports is sustained (in the event its demand is inelastic); or (2) it will have to reconcile itself to the condition of a reduced volume of exports at cost prices while import prices are unchanged (in the event that its demand is elastic). Given possibility (1), the rise in import prices may serve in certain portions of industry to upset the cost-price equilibrium which was assumed to have obtained in A and may thus lead to an increase of unemployment in these industries, a decline in purchasing power for the products of other industries, and finally a cumulative loss of business confidence and ensuing industrial stagnation of the type associated with the downward movement of the business cycle. Given possibility (2) the reduction in the volume of exports which can be sold at a profitable (cost) price will imply that if equilibrium is to be maintained, a portion of

productive factors must be shifted from export into home market industries in A. If A will not or cannot effect the shift immediately and persists in producing for exports as much as previously under these conditions, it must suffer a reduction in the price of its exports below their cost. In the illustration above, the customary million units produced by A for export to B would bring a return of but $4 per unit as compared with a $5 unit cost. The flow of a portion of resources out of the export industries would thus be forcibly imposed; and now taking consideration of the immobility of productive factors and the general rigidities which characterize the modern economy, such a shift is considerably likely to involve a measure of unemployment and extinction of purchasing power which, if they should become cumulative, might generate the same ultimate consequences as were suggested above in the instance of a rise in import prices.

Hence it is here recognized that if B should reduce the magnitude of the money demand for A's goods beyond the proportion of its own price fall, then A will invariably be more or less adversely affected. Flexible exchanges are in such cases no barrier to the transmission of disturbances arising from the evolution of economic sequences abroad.

In the foregoing section of this analysis of the economics of free exchanges, then, an attempt was first made to establish the conditions under which a nation might conceivably remain unaffected by a price decline abroad. And several conditions under which it could <u>not</u> escape so being affected--whether favorably or unfavorably--were also illustrated. It should be recalled now that the type of price decline and exchange rate alteration which gave rise to no further changes in economic data abroad were largely of a hypothetical nature and hardly to be looked for outside the realm of theory. As long, therefore, as commercial relations between two nations are carried on to any appreciable scale, the claim of the complete absorbent power of free exchanges must be concluded to be unfounded.

But though it may be accepted that free exchanges give no assurance of immunity against external disturbances, yet it is not to be implied that such a system would operate in a manner identical to a system of fixed parities. It is known that gold flows, through their familiar generation of multiple expansion or contraction of deposits, place the entire burden of a readjustment upon the internal economy. By their influence over the general level of prices, they are invested with considerable potency, and--in the absence of a central bank mechanism--they act with marked facility. With free exchanges, on the other hand, the initial pressure for adjustment is applied, as it has been demonstrated, to the volume or prices of exports and imports. And only through this channel can disturbances abroad be transmitted to the internal economy. In a complex, delicately balanced economy, a disturbance of the international commercial relations of the nation may be sufficient, it is true, to upset its entire equilibrium. This possibility has been suggested on pages 10 and 11. Yet it is evident that if the international aspect of a country's economy is relatively unimportant as compared with the national aspects, a change in export or import prices or volume will involve repercussions of a substantially less severe nature than would an alteration in the nation's gold stock with its attendant manifold deposit contractions and expansions and the subsequent movement in the general level of internal prices. The conclusion appears to be warranted, therefore, that in actuality free exchanges--as compared with the system of fixed exchanges--afford greater protection against externally changing circumstances only to the degree to which the national dominates over the international aspects of the country's economy. The bearing of these considerations upon the practical problem of international monetary organization and policy remain now to be examined in the following section.

Evolution of a Standard

Three aspects of our analysis have been particularly emphasized in the discussion thus far. First, the familiar method of operation of the traditional gold standard - fixed exchange system has briefly been outlined. Second, there was an attempt made also to demonstrate the method of operation and the implications of the contrasting system of free exchanges. And third, in order to arrive at a more lucid understanding of the long-run range of possible circumstances to which any type of international monetary system might be exposed and thus be required to adjust itself, we have examined a group of representative combinations of such circumstances as might occur between two trading nations. The task now before us, therefore, is to return to these cases (page 2) and to apply to each in turn the generalizations which have been drawn from the fixed and free exchange analyses. This process really constitutes the pivotal point of this study. For the only effective and accurate method of ascertaining the economic utility of a system of international monetary organization is to expose it to the various types of phenomena which are known to occur in a dynamic world, and then to observe and carefully to weigh the significance of its immediate response and of the ensuing repercussions for which it is responsible both upon the internal and external scenes.

Let us begin with a consideration of Case (1) in which country A was assumed to be experiencing an unsalutary price and profit inflation, country B meanwhile attempting to maintain its equilibrium. Such a condition presents the ideal setting for the enunciation of the orthodox fixed exchange position. As it has already been suggested above, a gold outflow from A would appear to be the most effective method of tightening money rates and curbing the currency and credit expansion there. Free exchanges under such conditions could at best operate only through the circuitous process of first affecting the cost-price equation in export and import enterprises and but secondarily the cost-price

equation in the remaining and substantially more important home economy. At worst, such a system might serve even further to aggravate the progressing inflation.

There is a further consideration, however, that suggests itself at this point. I refer to the possible effects of a gold efflux from A upon the credit structure of B. For it is apparent that if B were in a position of equilibrium, an inflow of gold, which is permitted to exercise its familiar consequences there, might very likely give rise to an internal disturbance. Thus we become involved in a veritable dilemma. A must readjust its domestic economy - and the most effective method is a gold outflow with its attendant credit and price restrictions. In this instrument, A thus finds a positive weapon of control. But B is interested in remaining as much as possible aloof from disturbances in A, and this requires that it adopt the relatively protective mechanism of free exchanges, which would permit it to readjust its position through its export-import enterprises. In other words, the counterpart of the process which was considered as salutary in A may be detrimental to the best interests of B, and, conversely, that which was considered salutary for B may be detrimental to A.

The solution of this problem introduces the mechanism of the central bank and of the type of international monetary organization popularly known as the managed gold standard. Such a mechanism represents what might be termed a partial compromise between the two unqualified and mutually exclusive systems of fixed and free exchanges. According to the method of operation of such a standard, B would permit an inflow of gold; but, as it is familiarly known, it would absorb the metal in its central bank, and in this manner it would preclude any internal inflationary tendencies of an undesirable nature. Export and import enterprises would not, of course, escape under fixed parities from the pressure of the alterations in A. To a lesser degree, perhaps, would they escape them under free exchanges. But if the managed gold standard can, under such circumstances,

permit a gold outflow from A and induce a correction of the disturbance there, and if at the same time it can confine to a minor segment of its own economy the burden of the readjustment, then there is established sufficient grounds for justifying the adoption of such a policy as opposed to flexible exchanges. Parenthetically, it might be observed that if, due to a previous maldistribution of reserves, the credit base in B is insufficiently large for insuring the maximum of efficiency and productive activity then it would be for B to permit the mechanism of the unqualified gold standard to work out its course.

Let us turn now to Case (2). Country A is here represented as being in a position of equilibrium, while in B there is a commodity price fall attributable to an increase in productive efficiency. In the preceding section we have entered with some detail into the probable effects upon A of such a series of circumstances - given a free exchange standard -, and the conclusion was reached that, depending upon the respective elasticities of demand and supply in A and B and also upon the relative importance of international trade in each, the export-import position and the internal economy in A would be more or less affected. This complexity of variables renders it a difficult task to determine which from among the three systems now at our disposal is most desirable. It is suggested that there be employed some combination from among them. If A's international relations constitute an important factor in its economy and if demand elasticities are such that under fixed exchanges gold would tend to flow out, then it is suggested that a contraction in credit and a measure of deflation be directly imposed. With prices subsequently receding below costs, the economy would find it imperative to correct the disparity by matching the efficiency increase of B with a similar program of its own, - i.e., by reducing its costs to equality with the lower level of prices. And thus would be facilitated the necessary steps toward effecting the dissemination of the methods of improved industrial technique. Whether the gold influx should be permitted to exercise its customary effects within B depends, as it was suggested above, upon the desirability of the internal

consequences that might be expected to develop. Under free exchanges, on the other hand, the pressure for adopting the more efficient, cost-reducing productive methods is less pronounced and the transition proceeds by a more roundabout, slower route.

If, however, the relatively inefficient export and related industries in A constitute but a small factor in its whole economy, then a gold outflow (given the proper demand elasticity) might readily subject the nation to a deflationary readjustment unwarranted by the underlying economic facts. The unfavorable movement in the rates under a flexible exchange system would, under such circumstances, provide a sufficient impetus to the backward segments of industry for undertaking more efficient methods of productive technique; and of equal importance, this process would be achieved without seriously dislocating the remainder of A's economy.

Turn now to a consideration of Case (3). The circumstances represented here, in contradistinction to those in Case (1), are ideally suited to demonstrate the validity of the flexible as opposed to the fixed exchange mechanism. Here we find a depression variety of price decline in B, with A in a position of equilibrium. The question here again to be asked is: given these circumstances, what type of standard can be expected to generate in A the minimum of disturbance? First, it might be contended that with a strong central bank, A may keep its exchanges stable as related to B, and, by counteracting the internal influences of a gold outflow, - i.e., by adopting the mechanism of the managed gold standard - it might sustain the level of its domestic price level. But upon a moment's reflection, it is realized that if the exchanges are kept fixed against B, which is suffering a decline in prices and in purchasing power, its ability to purchase from A will be curtailed to a greater extent than if the rates were flexible and were permitted to move in its favor. To allow the exchanges to fluctuate under such conditions would, therefore, benefit A by relatively enhancing the possibility

of sustaining its export volume; and it would benefit B by enabling it to obtain its necessities abroad at better terms than it otherwise could. It would thus appear, theoretically, and it has been demonstrated, empirically, that even if it is possible to sustain the level of internal prices in the face of gold outflows (although in the long run even this is not possible) a depression type of price decline abroad can best be combated with a depreciation of the currency upon the foreign exchange. This will at once preclude the possibility of a gold outflow and multiple deposit contraction internally; it will confine, if possible, the inevitable disturbance to the export-import position to these enterprises alone, and it will render it less difficult for A to export than would otherwise be the case.

Orthodox gold standard theorists might of course argue, at this point, that only by a gold outflow from A and an ensuing inflow into B could the price decline in B be arrested, and they might therefore insist that fixed exchanges ought to be retained. But aside from the deleterious effects which such a process may have upon A, internally, and upon commercial relations between A and B, it will not follow that a gold inflow and more favorable reserve ratios in B's banks will be particularly instrumental in hastening recovery there. In the light of recent monetary and banking experience, this point needs no amplification.

With regard to Cases (4) and (5), little can be said which may have any practical bearing upon our problem. As it has already been pointed out, the circumstances represented in each of these two cases are largely of a hypothetical nature. They concern us only as illustrations of the conditions under which the orthodox gold standard or the orthodox free exchange standard might be expected to operate as permanent international monetary systems. For all practical purposes, the soundness of either of these systems in their unmodified form is invalidated by a single factor which can be represented by a single word: rigidity.

The sixth and final Case under consideration is a reversal of the positions of A and B as they were found in Case (3). Country A, instead of requiring protection against a depression price decline in country B, is here involved in such a price decline itself; and it is B which is assumed to be in equilibrium. The conclusions to be reached with respect to the proper policy under these circumstances, and the reasons offered in justification, are, of course, identical in reverse order to those intimated in the discussion of Case (3). If the exchanges are fixed, A finds it relatively more expensive than previously to purchase from B, and to the extent that imported goods and services constitute an element in A's cost structure, the correction of the disparity between costs and prices is deferred and the depression is therefore prolonged. The objection may be raised, as it has already been suggested, that the gold flow into A for which the fixed exchanges were responsible would tend subsequently to reduce interest rates, expand credit, and thus favorably to affect the price element in the equation. And furthermore, it might be held that by elevating in this fashion the money demand, for goods, and by raising prices thereby to an equality with the level of costs the disparity would be dissolved and the depression overcome. But this argument, to repeat, is lacking in factual substantiation. The unwillingness of the banking system sufficiently to lower its effective rates of interest, even in the face of large excess reserves, together with the acknowledged insensitivity of industry to low rates even if such rates were instituted, takes much of the significance from gold inflows - during, at least, the lower phases of the cycle. And considering also the possible harmful effects upon B of such a flow, there remains little by which to recommend an unequivocal policy of fixed changes. An alteration of exchange parities, it is to be concluded, is, for both A and B, the procedure to be pronounced most economically beneficial and desirable under the given circumstances.

What implications that may have a direct bearing upon the problem of international monetary organization and long-run policy and objectives can now be drawn from the above analysis?

It might be replied, in the first place that, in actuality, little, if any, significance can be attached to a set of conclusions that are drawn from admittedly hypothetical premises. The notion of an economy in stable equilibrium is certainly unreal. Nor are those assumptions which involve the relations between two individual nations exclusive of all others based upon widely observed fact. Yet, accepting these shortcomings, it cannot be denied that all nations appear to move in concert around the cycle of economic activity nor that this phenomenon is due to a close associationship and dependence among nations rather than to mere coincidence. It is to be asserted, however, that the germs of a disequilibrium are not sown in all nations simultaneously, that disturbances do not proceed exactly apace in all nations, but rather that they may originate in one and may become transmitted to the others through the medium of their mutual commercial relations. And it is to be asserted, finally, that the apparent concert of movement is basically, therefore, a forced rather than a spontaneous alignment.

If such is the case, then it is not a matter of great difficulty to invest with practical value the generalizations drawn from the preceding analysis. A disturbance in an individual nation may arise which is traceable to circumstances entirely of a domestic nature. Or else a disturbance may arise which is due to forces of an external nature. Or thirdly, a disturbance may arise which finds its sources in simultaneous, but independent, external and internal disequilibrium. In the first case, there is no logical alternative but to prescribe that an attempt be made to correct the internal difficulties, and at the same time to protect the remaining nations from the more serious repercussions which may be generated. Similarly, in the second case - and whether or not the nation is in

equilibrium - an attempt should be made to protect it as much as possible from the aggravating forces of the external dislocation. And in the third case, the adoption of a combination of the previous two policies is required.

The term "protection," it should be noted here, is not to be interpreted in the ordinary sense. From the context of the discussion thus far, it can be gathered that that which is to be protected against are not the "appropriate" and economically inevitable adjustments to alterations in data that occur, but rather those cumulative, "inappropriate" movements which may follow thereupon, and which are attributable to unnecessarily close ties (such as the unmanaged gold standard mechanism) between the source of the disturbance and segments of the economy which are further removed.

It is thus to be concluded that, from the realistic viewpoint of an individual nation, a variety of circumstances may be confronted over a period of time to which adjustment must be made. The nature of these circumstances being different in each case, it is logical to believe (and an attempt has been made to demonstrate) that the method of the adjustment must also be different. It is here recommended, therefore, that only such a type of mechanism is basically sound which is prepared to effect the least injurious type of adjustment to the succession of <u>all</u> types of changes - (part of which have been referred to above) - and that in order to meet these requirements, such a system would have, of necessity, to alternate among three types of policies: (1) fixed exchange, gold flow, and price response (unmanaged gold standard); (2) fixed exchange, gold flow, no price response (managed gold standard); and (3) flexible exchanges. To provide for this compound type of need appears to be the mechanism which is presaged by the recent tripartite agreements. Presented in a previous paper,* however, is the outline of a more definitive type of international monetary standard, together with

*See "International Monetary Organization and Policy."

concrete suggestions for mechanical modes of operation. The intention of the current study has been to suggest an approach toward promulgating a body of long-run policies and objectives which might serve as a criterion for the operation of such a standard.

Concluding Theoretical Remarks

Considering technicalities and refinements aside, it may be said that the definitive characteristic of a metallic standard of international monetary organization is the provision permitting the two-way conversion at a fixed price between a nation's currency and its monetary metal and the free import and export of that metal whether by individuals or by a properly constituted authority. It is this feature of the system which insures to the various participating nations the fixity of their exchange rates in terms of one another. And it is this condition, further, which is commonly considered as being synonymous with the concept of de jure international monetary stabilization.

Perhaps in the light of this interpretation, definite meaning can be ascribed to Secretary Morgenthau's well publicized statement alleging that the developments announced September 26 and October 13 constitute the establishment of "a new kind of gold standard." The old kind of gold standard might be said to have involved a permanently fixed price for gold. The new kind presumably involves a gold price subject to change as conditions may warrant them. Fundamentally, I believe, this is the basic distinction between the external aspects of our present arrangements and the external aspect of previous metallic standards. And whether the former represents any vital improvement over the latter is to be determined--so far as exchange stability is concerned--solely by the economic validity of the theory which underlies the decision to provide for secularly flexible rates.

With regard to this question, let me quote a portion of an article appearing in the London Economist for October 24.*

* page 151-2

"The argument for preserving a regime of permanently fixed exchanges and altering money costs rests on the supposed difficulty of conducting international trade and lending on any other basis than that of rigid exchange rates. But it is absurd to suggest that slight or occasional fluctuations, or the risk of them, mean that virtually no trade will be carried on at all. The volume of international trade depends partly on the absence of exchange fluctuations, but also partly on the prosperity of the countries concerned; and the last three years have shown that the sacrifice of internal monetary stability to the preservation of fixed exchanges may actually reduce the volume of international trade.

". . . The real question is: What international regime will achieve the greatest volume both of production and trade? In considering this question, there are strong grounds for thinking that absolute exchange rigidity is not merely the more painful way of achieving international adjustments, but that it is not a way of achieving it at all. The experience of Great Britain in 1925-31 and of the gold bloc in 1932-36 suggests that in modern social conditions the attempt to reduce money costs is almost bound to fail unless the necessary adjustment is very small. Absolute exchange rigidity, therefore, in the case of serious maladjustments, may mean not merely that a prolonged deflation will be imposed on a country but that in the end it will be forced to devalue after all.

"If, however, we reject absolute exchange rigidity even as an ultimate goal, there is every reason to prevent all exchange movements which are not indubitably necessary . . .

"The problem is to obtain the greatest stability in the short and medium period without committing ourselves to absolute rigidity."

The above observations, it must be granted, are typically representative of current British opinion and national interests. Yet from a purely objective point of view and based upon the analysis in preceding sections of this study, I find myself largely in accord with these views. As long as there continue oscillations in the intensity of industrial activity,--and it is now generally accepted that in a progressive capitalistic society, there are at least mild fluctuations of the "appropriate" variety which are unavoidable--if such must be the case, to repeat, then I believe that a margin of flexibility should become an essential part of a newly-evolving international monetary system.

This argument does not, however, entirely dispose of the problem of long-run exchange flexibility. For if there is any validity to the thesis that currency devaluation committed in a time of stress by one nation will merely invite retaliatory tactics by other nations and will thus nullify any of the benefits to be derived from the original effort to correct a progressing disequilibrium, then it becomes evident that for such a policy to be successful, a measure of international co-operation and understanding is a categorical necessity. And to the consummation of this end, as it has been repeatedly pointed out in recent weeks, the tripartite agreements appear to be encouraging preliminaries.

Dwarfing in importance these initial gestures aiming at the permanent restoration of international economic stability and prosperity, however, are two conditions of transcendental significance. They are: (1) the maintenance of peace, and (2) the elimination of the extreme swings of the business cycle. This observation is fast becoming platitudinous; but its import can hardly be overestimated. With the abrogation of peaceful relations among the nations of the world, there must necessarily follow the abrogation of international monetary agreements and the revival of international monetary anarchy. And with the failure of efforts effectively to constrict the amplitude of variations in the intensity of business activity in individual countries, it can hardly be expected that each will not seek protection behind a wide variety of trade barriers (devaluation, tariffs, quotas, etc.) at the first serious signs of distress, regardless of the effects upon other nations and oblivious to the ultimate consequences to itself.

It is correct to imply from this, I am convinced, that no system of international monetary organization which pretends to insure the maximum of international intercourse--and it is this which, in the last analysis, is the objective of an international monetary system--can be anything but a "fairweather" system. The pre and post-war gold standard mechanisms were said to be fairweather; and

the very essence of the present arrangements mark them with the same identification. It is an error in logic to believe that there is any conceivable type of standard which can withstand the impact of war or of severe economic depression. The type of nationalism which is born of these phenomena has invariably led in the past and must inevitably lead in the future to the disruption of international commercial and financial relations, and with this it must lead to the collapse of the international monetary system. The one is simply synonymous with the other.

But to attempt to establish that no standard can operate under peculiarly unfavorable circumstances is not to say, however, that all systems could operate equally well given conditions that are reasonably favorable. It is this consideration which returns us briefly now to the issue of the previous sections, and to a brief summary and concluding considerations of the theoretical aspects of the foregoing study.

With regard to the external aspects of rigidly fixed rates as opposed to a system which provides for cooperative readjustment of long-run exchange parities, little need be added to what has already been said. Alterations in data which are economically justifiable or relatively mild render the flexible exchange system preferable to that in which there is absolute rate rigidity. Alterations in economic data which are "inappropriate" and severe are fatal to any type of standard; and indeed any conception of a permanent system which is not premised upon the basic conditions of relative stability and of peace is a contradiction.

Accepting, then, the achievement of peace and the successful effort to reduce the number and potency of the internal causes making for disequilibria, the remaining problem is to consider a method of operating technique by which a nation's external monetary relations might be linked with its domestic system in the most economic manner.

It has been intimated at the close of the preceding section that the present stabilization fund-central bank-treasury combination of factors may form an effective basis for such an operating technique. But here again, little need be said in amplification of the foregoing discussions. The development of certain standards by which policies of internal and external monetary administration might be determined was attempted in a fragmentary fashion in the preceding section. For the mechanism of meeting the exchange, or external problem, the precedent for consultation among national fiscal authorities upon the question of parity adjustments has already been established. And to meet the various problems which a nation's international relations may impose upon the task of properly ordering its internal economy is a task to which the various central banks and stabilization funds are also now beginning to address themselves anew.*

A host of new and complex technical problems of practical importance are, of course, raised by these considerations. All the elements of detail remain yet to be inserted. Such a further study, however, must be reserved for a separate series of memoranda.

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*See also preceding section, "Evolution of a Standard."

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