

Mr Eccles: -

Attached is
a memorandum on the
stabilization plans which
Alvin Hansen prepared for
the Council of Foreign Relations.

Foreign Eleg

INTERNATIONAL ADJUSTMENT OF EXCHANGE RATES

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INTERNATIONAL ADJUSTMENT OF EXCHANGE RATES*

A. Recommendations

1. We recommend that United States policy should be directed toward establishing an international institution whereby substantial stability of exchange rates may be provided. This institution might be either an International Exchange Fund or an International Clearing Union. (The relative merits of the two forms are discussed in the memorandum, pp. 10-12.)
2. Contributions (in the case of the Fund) or overdraft quotas (in the case of the Union) should be assigned to each country in accordance with some agreed formula, which takes account of the national income and the foreign trade of each country. (For instance, if the total fund were \$12 billion, it is probable that the maximum overdraft or total contribution for the United States ought to be about \$3 billion.)
3. The Governing Board of the Fund or Union should be given the power to recommend and approve the adjustments of exchange rates whenever such action appears likely to facilitate equilibrium.
4. The Governing Board should be empowered to make reports and recommendations to member countries urging appropriate national policies that may involve tariff adjustments, foreign lending, control of capital movements, internal expansionist programs, and other measures designed to promote equilibrium.
5. One member of the Governing Board of the Fund or Union should be a member of a General Economic Staff. The other members should be directors from each of such major international economic agencies as may be established (it is assumed for the purpose of this memorandum that these agencies will include an International Development Authority, an International Commodity Corporation, and an International Bank), with an independent chairman. The General Economic Staff should coordinate the operations of international economic institutions with a view to developing a unified international program designed to counter depressional or inflationary tendencies, to promote international world-wide expansionist and developmental programs, and to foster adjustments leading toward international equilibrium.

* This document consists of two parts: (A) Recommendations by the Group, and (B) Memorandum by Mr. Hansen on which the recommendations are based.

INTERNATIONAL ADJUSTMENT OF EXCHANGE RATES

B. Memorandum

Prepared by Alvin H. Hansen

International monetary problems may be grouped under the following headings:

1. International collaboration designed to promote equilibrium.
2. International mechanisms designed to secure substantial stability in exchange rates.

These problems are obviously closely interrelated and a discussion of one inevitably leads into a discussion of the other. Something, however, can usefully be said under each heading bearing in mind the interrelation with other aspects of the problem.

1. International collaboration designed to promote equilibrium

That international monetary relations had reached a serious impasse by September 1939 is fully evident from the growth of bilateralism, clearing agreements, and foreign exchange control.

The reconstruction of a free exchange system will obviously encounter serious obstacles. To begin with, there is the current maldistribution of international monetary reserves evidenced by the fact that the United States now holds \$23 billion of gold, two-thirds of the world's supply of monetary gold. It is true that the abnormal holdings by the United States do not necessarily imply that foreign countries are possessed of insufficient reserves to operate a free exchange system. Foreign countries outside of the United States and Russia hold $9\frac{1}{2}$ billion of gold which exceeds the total gold held by all countries in the world in 1925. Moreover, new gold production is now enormously greater than in the 'twenties and this also must be taken into account. The gold holdings of foreign countries are, however, not well distributed among the different countries nor do all countries participate at all equally in the new gold production. It is also true that the abnormal gold inflow into the United States in the 'thirties was related not solely or even mainly to a world disequilibrium in the current international account but largely to capital movements. Thus, of the \$16 billion gold inflow, \$6 billion may be attributable to an export surplus (heavy in the years 1939, 1940, and 1941), while the remaining \$10 billion are attributable either to recorded capital inflow (\$6 billion) or to unidentified transactions (\$4 billion). Of the capital inflow, about \$2 billion represents return of American capital, about $\frac{1}{2}$ billion foreign purchase of American securities, and about $1\frac{1}{2}$ billion increased balances of central banks and governments in the United States. A considerable amount of the capital inflow clearly represents "hot money" and the whole is more or less related to disturbed political conditions. Thus it would be quite wrong to attribute the heavy gold inflow into the United States mainly to a

"chronic world shortage of dollars." But apart from the political and other factors, the United States has tended over many years to drain a disproportionate share of the world's gold owing to underlying economic factors affecting its current international account.

Related to this chronic disequilibrium is the long-run tendency through several decades of the terms of trade to move against the agricultural and raw material countries. This tendency basically rests upon the relatively inelastic demand for most agricultural products. Moreover, the increasing diversification of consumption and higher standards of living in the advanced countries have caused the demand for agricultural products to fall in relation to that for industrial products. A rapidly developing agricultural technique (increasing agricultural efficiency and productivity) confronted by an inelastic demand schedule compels either serious deterioration of the terms of trade for these countries or emigration of their population or their transfer into industry in their own country. The net effect in fact has been partly deterioration of the terms of trade and partly an accentuation of industrialization.

The revolutionary redistribution of international assets (Germany in the last war and England in World War II) accentuates the international disequilibrium. Britain having largely lost her net creditor position and having suffered a substantial deterioration in her exports must, nevertheless, import foodstuffs and raw materials to prevent a decline in her standard of living. Britain is, moreover, unable to compete with the United States in just those products in greatest demand as living standards rise--automobiles, radios, phonographs, typewriters, electrical appliances, and the like. The technical superiority of the United States, the unfavorable terms of trade in the agricultural and raw materials countries, and the drastic redistribution of international assets combine to create a continued disequilibrium in world trade.

The appreciation of the dollar in relation to foreign currencies by itself alone would not prove very effective in achieving international equilibrium. Especially is this true if the price elasticity of demand for foreign goods in the United States is less than unity, or if foreign countries are highly dependent upon imports of foodstuffs and raw materials (as in the case of England) or upon machinery and highly finished industrial products (as in many undeveloped countries). Thus a rise in the foreign exchange value of the dollar may have little effect on the quantity of imports into the United States and may indeed even lower the value of total imports, and on the other hand will not materially decrease United States exports especially in the important range of industrial commodities in which the United States has a wide margin of competitive advantage. Moreover, exchange appreciation may simply be offset by deflation of prices in the United States, so that a change in rates may fail to change the competitive price situation of United States imports or United States exports, and thus fail to increase imports or to deter exports. Thus when the pound sterling fell from 1931 to 1933, price deflation in the United States accompanied the appreciation of the dollar. The current account balance continued favorable, though the magnitude of the active balance did decline.

The above arguments should not be interpreted to mean that exchange rate adjustment is of no importance as a means to promote international equilibrium but rather that it operates, unless combined with other equilibrating policies, within fairly restricted limits.

This leads to the conclusion that adjustment must be sought mainly along other lines. If, however, these other steps are taken, exchange adjustment can play an important though secondary role in the achievement of international equilibrium.

Means of achieving equilibrium

The main means to achieve international equilibrium are: (a) the promotion of full employment in the industrially mature countries, and especially in the United States; (b) the development of industrialization of the backward countries designed to change the structure of their economies; and (c) tariff reduction in the United States.

International collaboration to secure full employment in the industrially mature countries promotes international equilibrium in the respect that a full-employment income in these countries tends to spread prosperity throughout the world and in general promotes a high level of world trade. Within the framework of full employment and a high level of world trade substantial tariff reductions in the mature countries become feasible, and price adjustments incident to changes in the United States tariffs and in United States exchange rates can be more effective than is possible under conditions of under-employment.

A structural change in the economies of undeveloped countries is equally important. This means diversification of agriculture and the spread of industrialization. Industrialization is typically possible along the following lines: (a) the first stages in the processing of indigenous raw materials, (b) the development of lighter consumers' goods industries, and (c) the assembling of complicated industrial products manufactured abroad. Diversification and industrialization, moreover, require the promotion of large-scale developmental projects, including electric power, port facilities, river valley development, roads, railroads, airways, and other communications. Thus the basic solution runs in terms of the spread of capital equipment and modern techniques throughout the world.

In order to effectuate these two main programs of adjustment it will be necessary to set up international institutions which will be concerned (a) with counter-cyclical policy and the maintenance of substantially full employment, and (b) with the development and industrialization of backward areas.

Proposed institutions

In order to implement both the cyclical and the long-run development program the following institutions for international collaboration are

suggested: * an International Bank, an International Clearing Union or Exchange Fund, an International Commodity Corporation, and an International Development Authority. ** The close integration of the four institutions--the Bank, the Union (or Fund), the Corporation, and the Authority--might be implemented by one director from each, together with an independent chairman, constituting a General Economic Staff. Through this General Economic Staff the operations of the four institutions could be integrated with internal expansionist programs in the various countries designed to counter depressional or inflationary tendencies and to promote full employment.

The Bank would finance, or promote ways and means of financing, international programs in the manner indicated below. The Clearing Union (or Fund) would facilitate the provision of adequate exchange, and especially promote adjustments leading to international equilibrium. The Commodity Corporation would engage in the purchase and sale of storable raw materials. The Development Authority would plan and promote international development projects and provide management and technical skill.

At the onset of an impending depression, all four institutions would play an important anti-deflationary role. In particular, both the International Commodity Corporation and the International Development Authority should enter vigorously with expansionist programs affecting, on the one side, the prices of international storable materials and, on the other side, the capital goods industries through an expansion of international capital outlays. In this manner the action of the Authority and the Corporation collaborating through the General Economic Staff (acting in effect as an international anti-depression board) would powerfully reinforce and sustain national policies designed to offset cyclical fluctuations and to promote stability of prices, full employment, increasing productivity, and rising living standards throughout the world.

Deflation involving a sharp decline in raw material prices could be countered by large purchases of storable commodities by the International Commodity Corporation. The International Commodity Corporation would permit the free play of market price forces within upper and lower price ranges for each commodity. Buying operations would be indicated as soon as the price pierced the lower limit, and selling operations as soon as it rose above the upper limit. These upper and lower limits should be the subject of continuous study by the Corporation and should be adjusted from time to time according to fundamental trends of normal demand and normal supply. It would be a part of the function of the Corporation to search for new uses for basic raw materials in order to increase the normal demand and, on the other side, to facilitate the movement of resources out of sub-marginal areas in an effort to adjust normal supply to normal demand.

* The Group has already recommended the creation of an International Trade Authority (E-B 55) which will not be further discussed in this memorandum. The Trade Authority would have no financial relations with the International Union or Fund such as the Commodity Corporation would have; it is only because of this aspect that the latter is included here.

** Creation of an International Development Authority has already been recommended by the Group. See E-B 44 and E-B 45.

The International Development Authority should set up under its supervision an International World Resources Survey research unit consisting of specialists from the various countries involved, including the beneficiary countries in which development projects will be made. Studies should be made involving not only the engineering aspects of the developmental projects but also the broad social and economic aspects, including not only questions of productivity and yield but also the social implications with respect to standards of living, economic diversification, urbanization, and the like. The productivity aspects of these developmental projects should be considered broadly in terms of the impact on the whole social structure, including induced private investment outlets, the increased productivity of subsidiary industries, increased employment, and real income.

National Development Authorities should be organized in each country or area in which developmental projects are undertaken. Thus, for example, there would be organized a Chinese Development Authority, a Brazilian Development Authority, etc.

Taking China as an illustration, there might be organized, let us say, half-a-dozen large developmental projects in that country. For each of these projects there would be organized an authority, for example, the Yangtse River Valley Authority. The stock of the Yangtse River Valley Authority in turn would be owned jointly by the International Development Authority and the Chinese Development Authority. Thus the International Development Authority would exercise joint control with the Chinese Development Authority of each development project and would furnish its due proportion of capital, management, and technical skill.

There would remain ample room for purely private projects. Some of these would be suitable for Chinese corporations and business firms; others would be suitable for foreign private corporations. The foreign corporations should be subject to the labor regulations of the country in which they are operating as well as to a special supervisory international agency, which might be called the International Private Development Authority, designed to regularize the conduct of private corporations in foreign countries. Both the beneficiary government and the International Private Development Authority might utilize the facilities of the International Labor Office in setting up coordinating machinery of control.

The International Bank should finance the operations of the International Commodity Corporation and assist in the financing of the work of the International Development authority.

The International Bank should be set up in the first instance with capital stock of \$5 billion (expressed in United States dollars) consisting of 5 thousand shares having a par value of \$1 million each. The shares should be purchased by the cooperating governments in proportions corresponding to the estimated national income of each country. Fifty per cent of the authorized capital stock should be paid at the time of subscription in cash (consisting of gold or of the currency of the participating country) and the remaining 50 per cent as and when called for by the Bank.

The International Commodity Corporation should be empowered to discount bills of exchange secured by its commodity holdings with financial institutions including: the International Bank, the various central banks, and commercial banks, with the consent of the relevant central bank.

The International Development Authority would be financed partly by funds advanced (in exchange for debentures) from the International Bank out of its capital funds, and in the case of special ventures (where the earning prospects were sufficiently promising) through the issue of bonds in the capital markets of the various capital-surplus countries -- such bonds to be insured by the International Bank. Each project would be required to pay a premium into an insurance fund managed by the Bank.

2. International mechanisms designed to secure substantial stability in exchange rates*

It needs to be emphasized that mechanisms designed to facilitate stability in exchange rates must definitely be regarded as of secondary importance. Indeed such mechanisms will inevitably fail, just as the restoration of the International Gold Standard following the last war failed, unless it proves possible to maintain continuing prosperity on a fairly high plane throughout the world. If, however, substantially full employment can be secured in the leading industrial countries, and if international machinery can be devised for long-term international development loans, then it should not prove too difficult to establish and to maintain a workable international monetary system with substantial stability of exchange rates.

The monetary lessons emerging from the experience of the last quarter-century point clearly to the conclusion that there can be no return to an international gold standard designed to serve as a regulatory mechanism. The control of the international monetary system which will emerge from this war must be a conscious control carried out through international collaboration. The new international system following this war must be managed through the concerted action of competent authorities operating through international institutions. Within the framework of an expansionist and developmental program designed to promote full employment in the mature countries and to raise the productivity in backward areas a system of flexible but substantially stable exchange rates can be realized.

The new international standard must not be a task-master forcing each national economy to follow its dictates as in the old rigid gold standard; nor can it be a system subjected to the erratic disturbances of separatist national policies, as evidenced in the chaotic conditions of the early and middle thirties; instead it must seek to secure that flexibility necessary to permit a degree of national freedom, yet a flexibility tempered and restrained by international sanction and collaboration.

* It should be borne in mind that throughout this memorandum the discussion runs in terms of long-run postwar requirements. The mechanisms proposed are not designed to meet the needs of the relief or transition period right after the war. However, the agencies should be set up as soon as possible so that they may prepare their work.

If the basic underlying conditions for international economic equilibrium are present, it might be argued (in the absence of deliberate action by governments) that stability of exchange rates would automatically follow and that there would therefore be no need for any specially designed mechanism intended to regulate the system of exchange rates. But this would imply a degree of perfection in the fundamental adjustments leading to equilibrium which cannot be reasonably expected. The essential purpose and function of an international monetary mechanism is to provide ways and means to soften the impact of disturbing forces tending to overthrow the equilibrium and to provide time for making the adjustments necessary to restore equilibrium. The international monetary mechanism not only acts as a safety valve by relieving pressure while more fundamental programs are being devised, but also acts as a weather chart by showing the areas of disturbance in which action will be necessary.

The essentials of an international monetary system appropriate under current conditions are relatively simple. A central pool of liquid funds must be established which can equalize any gaps developing in the balance of payments of each of the various collaborating countries. In all the various schemes, however novel or ingenious, that have been proposed there is no escape from the simple fact that any gap in the balance of payments not filled by gold transfers involves in essence an accumulation of international indebtedness, whether short-term or funded into long-term loans.

While in the new international system gold cannot be allowed to act as the regulator of basic internal or international economic policies, it can continue to serve as an international store of value capable of filling for substantial periods temporary gaps in international accounts.

Current distribution of gold

In order to appraise the degree to which gold may serve this function following World War II, it is necessary to make a quantitative appraisal of the current world gold situation. Three revolutionary developments with respect to gold are particularly relevant to this appraisal. One relates to the fact that for many countries the monetary gold holdings are now, or could easily be made, available exclusively for the settlement of international accounts. In contrast, prior to World War I, most of the world's monetary gold was put to internal monetary uses, either in the form of a medium of exchange in actual hand-to-hand circulation, or in the form of a base for note issues or demand deposits. The second revolutionary change in the gold situation relates to the current quantity of gold. In 1913 the total world's monetary gold amounted to only \$4 billion (Russia excluded). Today the world's monetary gold, Russia excluded, is eight times that amount, or \$32 billion. It is true that \$23 billion is held by the United States. But what is usually overlooked is the significant fact that the rest of the world (Russia excluded) currently holds about \$9½ billion of gold--which is slightly more than the total monetary gold in the world in the year 1925, a year in which the price level, measured in terms of American dollars, was approximately the same as today. A third revolutionary change relates to the volume of gold production, which in 1941 amounted to \$1.3 billion (Russia excluded). With this figure one may contrast the production of about

\$450 million per annum in the period 1911-1915. Because of these three revolutionary developments it is clear that a vastly larger volume of gold can be used now to meet deficits in international account than was available twenty-five years ago.

Yet while the world's (outside of the United States) current and prospective holdings of gold are enormous measured in terms of the standards of 15 or 20 years ago, it would be dangerous to build on international monetary system with exclusive reliance on gold as the means of international settlement. This is true partly by reason of the unbalanced distribution of current gold holdings (outside the United States) and partly by reason of the still greater differences as between countries in the production of new gold.

The distribution of current gold holdings (outside the United States and Russia) is approximately as follows:*

	(millions of dollars)
United Kingdom	750
British Dominions and India	1,070
Western Europe (Netherlands, Belgium, France, Spain, Portugal, Switzerland)	4,575
Scandinavia	435
Latin America	1,075
Asia (excluding Japan and India)	395
Africa (excluding British Africa)	75
Eastern Europe (Poland, Czechoslovakia, Austria, Rumania, Yugoslavia, Bulgaria, Greece, Hungary, Latvia, Estonia, Lithuania)	635
Germany	130
Italy	120
Japan	350

Gold production is highly concentrated in the British Empire. The gold production in 1941 in the leading production areas (exclusive of Russia) was as follows:

	(millions of dollars)
British Empire	805
United States	170
Latin America	105
Africa (excluding British Africa)	65
Asia (excluding Japan and India)	60
Japan	70

Partly by reason of the inequality in current gold holdings and in new gold production and partly by reason of the extraordinary foreign exchange requirements which a large part of the world will need following the war, it will be necessary to form an international pool of foreign exchange funds to supplement the available monetary

* A more detailed table is given in the Appendix.

gold resources. Unless we provide resources which will ensure an adequate supply of foreign exchange, many countries may quickly be compelled to resort to severe restrictive policies, including quotas, exchange control, and bilateral clearing in order to protect their balance of payments position. These restrictive policies must inevitably curtail trade, employment, and production. The repercussions therefrom cannot fail to spread throughout the world.

While it will be necessary to provide foreign exchange resources other than gold, these resources should accomplish some other purpose than merely to add, so to speak, artificial gold to the current gold stock. Indeed, it is important that the international foreign exchange mechanisms serve the purpose of reducing the reliance upon gold and of facilitating adjustments leading to equilibrium. If indeed this is done (and particularly if gold ceases to flow continually one way to the United States) we can be sure that at long last a vigorous attack will be made through international action to limit the new production of gold to a level more reasonably commensurate with needed monetary requirements. On the other hand, we can be sure that the problem of gold production will not be attacked by international collaboration until the one-way flow to the United States is stopped. In this connection, it should not be overlooked that a high degree of liquidity, particularly in the leading industrial nations, is essential if we are to continue to maintain, as we should, low rates of interest in the money and capital markets.

If the current monetary gold stock were properly distributed, it would probably be sufficient to insure adequate international monetary reserves. But it is just the unequal holdings which require the creation of supplementary international monetary resources. It must always be remembered that these international monetary resources must be regarded as an exhaustible resource which serves the purpose of forming a cushion or temporary stop-gap until more fundamental adjustments leading to international equilibrium can be brought about.

From the stream of recent monetary thinking two major types emerge--each designed to provide foreign exchange resources other than gold. The first type can be described under the title, an International Exchange Fund. The second can be described as an Overdraft Clearing Union. In essence the two proposals are not widely divergent and accomplish much the same results.

Fund and Overdraft proposals

The International Exchange Fund establishes a pool of exchange resources to which each of the collaborating countries contributes in accordance with some prearranged formula. The contribution made by each country to this central fund should be made in its local currency, or in gold. Each country might be required to make as an initial payment only a part of its full contribution, say 50 per cent. In the case of the United States and other countries with large gold holdings in relation to their contribution, it might be required to make the contribution exclusively in the form of gold though no country would be required to contribute more

than half of its gold. Countries having very small gold resources might be permitted to make their contribution exclusively in the form of local currencies. Whether the local currency contributed by a country were supplied from central bank credit or from the budget would be a matter for internal domestic policy.

The contribution of each country of local currencies adds in effect exchange resources to the gold holdings and new gold production available for the settlement of international accounts. International reserves are increased in so far as member countries obtain the right to purchase foreign currencies through the Fund in the basis of contributions of local currencies rather than gold. The new international reserves, it may be noted, are less powerful than gold. The country's right to draw on the Fund for any particular currency is restricted and the Fund might even ration scarce currencies.

What magnitudes ought reasonably to be considered in fixing the global amount subscribed to the Fund? In the event that the major problem (possibly following a temporary redistribution of gold incident to repatriation of foreign balances and holdings of securities in this country) should turn out again to be a world shortage of dollars, the magnitude of the global contribution to the Fund can be posed in terms of the provision of a reasonable supply of dollars. Considering the fact that the outside world holds over \$9 billion worth of gold, it would seem that an International Stabilization Fund of \$12 billion, with the United States supplying 25 per cent of the global quota, should prove adequate and at the same time hold to reasonable dimensions the contribution of the United States.

The Overdraft Clearing Plan similarly provides additional international resources over and above the current gold holdings and the new gold production. It is proposed that these resources shall be created by central bank credit. No funds are initially paid into the central pool. Instead, as gaps develop in the balance of payments, each of the countries with a credit balance (in other words, countries with an "export surplus" whose currencies are in great demand by other countries) are called upon to make available the requisite amount of their local currencies in exchange for a claim upon the currencies of all other countries. The claim on foreign currencies might conveniently be universalized in the form of an international monetary unit which would serve as a standard of measurement for all currencies and which would be exchangeable at a fixed exchange rate for the currency of every collaborating country. Terms that have been suggested for such an international monetary unit are (a) international franc, (b) unitas, and (c) bancor. In what follows we have used the term "bancor."

The Overdraft Clearing Plan differs from the International Exchange Fund in the respect that under the latter the amount of local currency or gold contributed to the Fund by any one country is limited to its initial contribution. Under the Overdraft Clearing Plan the amount of local currency which any one "export surplus" country might be called upon to supply could conceivably equal the global overdraft quota minus its own overdraft claims. Therefore a limit should be imposed, in the

case of the Clearing Union, upon the obligation of any one country. The difference between the two plans can readily be seen from the following: Under the Fund plan each country contributes to the Fund a definite supply of its own currency or gold, and it is given a right to draw by an equivalent amount on the Fund. Under the Overdraft plan each country, instead of making a contribution, accepts the obligation to supply its currency against a claim on foreign currencies, and each country is assigned a contingent claim upon other currencies. Thus for any one country (such as the United States) the amount of dollars which we might be required to supply (were no limitation imposed) might equal the sum of the overdraft quotas assigned to all other countries combined. Since there are grounds for fearing that the liability of the United States might under such a plan become grossly excessive, a limit should be assigned to the currency which any one country is required to supply. Thus a limit of, say, \$3 billion might properly be assigned to the United States unless increased by the special consent of this country. In this manner the United States' liability need be no greater under the Overdraft plan than under the Fund plan.

The Overdraft plan is similar to established practice in the United States in the respect that under our unilateral gold purchase program the Treasury stood ready to supply dollars in exchange for gold at a fixed price. The Overdraft plan similarly proposed that the central bank (in our case the Federal Reserve System) should stand ready to exchange dollars for "bancor" at the prevailing agreed-upon rate. The volume of "bancor" which other countries would wish to exchange against dollars would of course depend upon the supply of dollars necessary to equate the supply and demand for dollar exchange. All of this is similar to the gold purchase.

In fact the United States could implement its part of the Overdraft plan without violent departure from established practice. The Treasury might buy "bancor" (which is by international agreement accepted as equivalent to gold for purposes of international clearing) in exchange for dollars just as it has purchased gold. Against such "bancor" balances the Treasury could similarly deposit "bancor" certificates with the Federal Reserve, thereby rebuilding its balance and thus causing no drain whatever upon the budget. This, to be sure, would require legislation. Could such legislation be obtained, and would there be general public consent if the action were undertaken? It is arguable that this should not be too difficult. The public might react more favorably to the Treasury accumulating a credit of "bancors" (which represents under the International Clearing Union a symbol for international collaboration to promote trade, economic expansion, and employment) than to the policy of buying gold and burying it in a hole in the ground at Fort Knox.

The essential difference between the Fund plan and the Overdraft plan is that under the Fund plan each country is required to make a prior contribution of its currency or of gold whether or not such currency will in fact be in demand in view of the international balance of payments. Thus, as and when a "credit balance" country accumulates claims on foreign currencies, these claims would apply to tangible assets that are actually available in the Fund. In the case of the Overdraft plan the claims of the "credit balance" country on foreign exchange would be balanced in the International

Clearing Union simply by debit accounts on the "debit balance" countries.

Both the Fund plan and the Overdraft plan differ from our Gold Purchase plan of the 'thirties in that the latter was completely unilateral and provided no machinery for international collaboration by means of which an equilibrium might be reached. Both the Fund plan and the Overdraft plan provide such machinery and at the same time afford sufficient flexibility so that one may hope that equilibrium might be reached on the basis of expanding multilateral trade and full employment and not through the application of restrictionist and bilateral arrangements.

Creditor country adjustment

A definitely new approach should be adopted with respect to a program of international adjustment. In the past, it has always been assumed that it was peculiarly the international "debit" country which needed to make the adjustment. The adjustment which it would be necessary for the "debit" country to undertake would naturally consist either of (a) deflation, involving wage reductions and in extreme cases the arbitrary reduction of contractual interest payments and rents, or (b) the depreciation of the "debit" country's currency. It may be suggested that in the future emphasis should be laid upon adjustment in the "credit balance" countries and that appropriate policy in these countries is one designed to bring about expansion. If the United States, for example, continues to have an active balance it would be appropriate to introduce internal measures of expansion in this country, bringing employment and production up to a full employment level. At the point when income has been raised sufficiently so that inflationary developments are impending, it would be appropriate to appreciate the dollar. Such action would tend to club down the inflationary development of raw material prices whether agricultural or industrial. Typically, it is agricultural and industrial raw material prices which first show inflationary tendencies. This was true, for example, in late 1936 and early 1937 (probably the only period in the 'thirties when appreciation of the dollar could reasonably have been considered as rational from the standpoint of the internal domestic economy). Once full employment were reached and inflationary tendencies were under way, the appreciation of the dollar would serve as a means not merely to stabilize the internal economy but also to facilitate international adjustment.

Internal expansion to the point of full employment would not only render the policy of appreciation of the dollar feasible and in line with a program of internal stability but would also (as already noted at an earlier point in this paper) powerfully contribute to international equilibrium. That this effect would follow may be stated in a formal and technical manner as follows: Let us assume that governmental loan expenditures are undertaken to raise income in the United States. As the expansionary process develops, a new equilibrium position is approached at which current savings equals internal investment (including governmental loan expenditures) plus the net export balance. The expansion in the United States will promote expansion of income in the foreign countries which in turn will induce a certain volume of savings. While temporarily this net increment of savings in foreign countries may be balanced by an induced investment, such induced

investment would quickly run out as soon as the capital stock has been built up to the new income level after which only replacement investment would be required. Thus the new savings in foreign countries would, at internal equilibrium in those countries, have to be balanced by a net improvement in their balance of payments position and this correspondingly would mean in the United States a net decline in its active balance. This analysis points to the conclusion that an expansion in the United States relative to the outside world would tend to correct the disequilibrium in international accounts. A part of the expansionist program in the United States (the United States is here used as the leading example of an international "credit balance" country) might well take the form of an increase of international loans for the development of backward countries. To the extent that such loans were used to increase exports from the heavy goods industries, it would promote internal expansion in the United States; to the extent that the loans provided exchange funds for backward countries to purchase in other countries, it would help to fill the gap in the United States international account.

Backward countries might in certain cases be permitted to make special arrangements to encourage the inflow of foreign capital and stabilize capital movements. The Governing Board of the Fund or Union together with the Governing Board of the International Development Authority would both be concerned to study the impact of capital movements upon the structure of the country and the ensuing effects upon the international exchange position of the country in question.

Internal expansion in the United States would facilitate not merely a managed appreciation of the dollar but also a thoroughgoing program of tariff reduction. Thus these equilibrating measures fundamentally rest upon internal expansion.

Currency adjustments

Under such of the plans proposed it is suggested that the essential criterion which should determine changes in the structure of exchange rates should be the degree to which the overdraft quota in the Union or the exhaustion of the right to draw on the Fund has been utilized in any one year. It has been suggested that if, say, one-fourth of the "quota" of a country has been used up within one or two years, that the currency of such "debit" country should be depreciated by, say, 5 per cent and that following the exhaustion of one-half of its "quota" a further depreciation of, say, 5 per cent be instituted. A defect in this procedure is that insufficient attention would be paid to the position of a "credit balance" country. With respect to the "credit balance" country, as already indicated above, appreciation of its currency should come only after internal expansion had developed to the point of full employment or at the beginning of inflationary tendencies. It is true that certain "debit" countries may be so seriously out of balance that the above measures undertaken by the "credit balance" countries would be inadequate and that the currency of a particular "debit balance" country seriously out of line must be depreciated.

It may be questioned, however, that either the appreciation of the currency of "credit balance" countries or the depreciation of the currency of "debit balance" countries should be made by discontinuous jumps such as 5 per cent or 10 per cent. It may be argued that when either a "credit balance" country or a "debit balance" country reaches a point at which its currency should be adjusted, a flexible program of adjustment be undertaken by the Governing Board of the Fund or Union in collaboration with the countries in question. Such a program of adjustment, it is believed, might well be preferable to a sharp break in the exchange rate. This, however, is perhaps a matter which had better be left to experience and further study by the Governing Board once a Fund or Union has been established.

Penalties

It has been suggested that "credit balance" and "debit balance" countries might be required to pay a certain per cent (say 1 per cent per annum) into the Fund or Union on the average credit or debit balance in excess of, say, one-fourth of its "quota" in the Fund or Union and that a stipulated increase be required to 2 per cent or more when the average balance exceeded, say, one-half of the "quota." These penalties would be designed to induce both "debit balance" and "credit balance" countries to undertake programs of adjustment to facilitate equilibrium. Such provisions are certainly not necessary features in either the Fund or Union plan, and it may be debatable whether on balance they would not give rise to irritation rather than promote the kind of collaboration which is necessary to achieve adjustment. This argument might well be a matter for consideration and study by the Governing Board after a Fund or Union has been established.

The role of gold

An important question which requires careful consideration is the role of gold in such an international monetary system as is here under consideration. It has been proposed that gold should be convertible into the international unit ("international francs," "unitas," or "bancor") at a fixed rate. It would follow that gold would therefore also be convertible into all currencies at fixed rates since these in turn are tied to the international unit. It might be provided that the Fund or the Union could always buy gold and in turn should exchange gold against local currencies while, on the other side, no country could demand that the international unit ("bancor," for example) could be converted into gold. Under this proposal it is clear that any one country would always have international monetary resources equal to (a) its claims on foreign exchange as provided by the Fund or the Union plus (b) its own gold resources.

If, however, all international purchases had to pass through the Fund or the Union, it would be possible to limit the amount of gold that any one country would be required to accept in exchange for its local currency. This would correspond to the provision in the Clearing Union plan that there might be a limit set to the amount of local currency which any one country would be required to exchange against the "bancor" made available to foreign countries. Such a scheme would limit the possible monetary use of gold. It

might be argued that such a provision is desirable in order, on the one side, to compel more serious consideration of equilibrating policies and, on the other side, to insure that serious international consideration be given to a rational solution of the problem of gold production. It may be argued, however, that a prior limitation on the use of gold might limit the willingness of the Fund or the Union to purchase gold, resulting in an unofficial gold market and high uncertainty with respect to the probable future price of gold and hence in chaotic conditions in the gold production countries. It is probable that a better solution may be found in reliance upon the machinery for collaboration implicit in the Fund or the Union. If adequate equilibrating policies are undertaken through the Governing Board, and thereby a one-way flow of gold to the United States is stopped, it follows that a specific and systematic attack on restriction of the world output of gold must sooner or later be undertaken. It is probably better to rely upon international collaboration through the Governing Board of the Fund or the Union than to set up arbitrary limits on the use of gold designed to force action. It may perhaps be said that in the final analysis the only merit in setting up a Fund or a Union is (a) that such a program would provide at the outset a somewhat more equitable distribution of international monetary resources, and (b) that the establishment of machinery *per se*, gives ground for hope that international collaboration looking toward equilibrating policies will in fact be undertaken. There is indeed no assurance that the desired results will be reached, but it is perhaps even more to be questioned that rigorous limits on the use of gold would be any more likely to insure the achievement of adequate equilibrating policies.

Role of the International Bank

In the preceding section reference was made to an International Bank designed to finance, or to assist in the financing of, the International Commodity Corporation and the International Development Authority. Conceivably the functions of an Exchange Fund or an Overdraft Clearing Union, whichever were adopted, might be undertaken by the International Bank. On the other side it may be argued that it would be better to reserve the International Bank exclusively for the financing of agencies such as the Commodity Stabilization Corporation and the International Development Authority--agencies designed to attack the more fundamental causes of unbalance in the world economy and to promote developmental projects, productivity, and full employment. It may be argued that the financial operations involved in the financing of these agencies ought to be sharply differentiated from the financial operations involved in the stabilization of foreign exchange.

Whether or not such differentiation were made in the form of two separate institutions, (1) an Exchange Fund or Clearing Union, and (2) the International Bank, it is at any rate true that a sharp differentiation must be made in our thinking and planning between two quite separate and distinct functions: (a) the creation of a supply of exchange, and (b) the provision of capital funds. The Exchange Fund or the Overdraft plan provides a means to ensure that foreign exchange at established rates shall be available. They provide that exporters everywhere shall be able to receive payment in their own currencies whenever sales have been made across international

boundaries. They ensure that whenever any person or corporation possessed of means of payment in terms of his own currency wishes to import from any place in the world, he shall be able to obtain the exchange. The function of providing exchange, however, does not involve the granting of purchasing power to the importer. The importer is presumed himself to be possessed of purchasing power in terms of his own currency, and the only question is that of ensuring that he shall be able to exchange his own currency for the foreign exchange needed. The problem therefore of ensuring an adequate supply of exchange is quite separate and distinct from the problem of providing funds to a Development Authority or to a Commodity Stabilization Corporation.

Nevertheless, the two functions--(a) of providing exchange and (b) of providing funds for development in backward countries or commodity stabilization--are alike in that both involve a form of international lending and both may be financed either through the budget or through the creation of central bank credit (though in the case of the international development projects funds might of course be raised through the flotation of bonds in the capital markets without drawing upon the budget or upon central bank credit). Both functions, to repeat, involve international lending. When foreign exchange is made available to other countries, the asset received in return for this form of international lending is a claim on foreign currencies. In the case of the supplying of funds for developmental projects or for stabilization corporations, the asset obtained in return for this form of international lending is a debenture of the stabilization corporation or of the development authority, which debenture in turn is secured by the assets of the corporation in question. One financial operation ensures an adequate supply of whatever foreign exchange is required, while the other merely provides funds in the local currency of the country in which the funds are raised. In the event, however, that it is desired to spend these funds in some other country, the problem of obtaining exchange still remains. The one financial operation involves the supplying of foreign exchange; the other involves the supplying of capital funds.

It is just such an issue as this that suggests the probable advantage of making sharp separation between the Exchange Fund or the Overdraft Union (designed to provide foreign exchange) and an International Bank designed to finance international development projects and commodity stabilization projects. The two things ought not to be mixed, and accordingly there may be an advantage in separate institutions each with its own functions.

The question still remains whether it might be appropriate for the International Bank to obtain its funds for developmental or stabilization projects (a) from its own capital funds subscribed by the various collaborating countries, or (b) by floating insured bonds in capital markets of capital surplus countries, or (c) by discounting at central banks. The funds for international development projects ought probably to be financed ultimately either from the capital funds of the International Bank (contributed by the collaborating governments by budgetary appropriations) or from flotation in the capital markets. Interim financing, however, might well be undertaken by the International Bank itself through discounting of its own notes at central banks. In the case of the International Commodity Corporation, however, a good case might perhaps be made for long-term financing by

recourse to central bank credit through the International Bank. Such a corporation is expected to buy and sell storable raw materials and to stabilize their prices. The utilization of central bank credit to provide funds for such a corporation might be defended on the ground that the corporation would be continuously buying and selling storable raw materials and would not ad finitum accumulate an ever-mounting volume of stocks. Thus in the process of its operation the volume of credits would automatically be limited to fairly moderate proportions. Also it could be argued that storable raw materials are peculiarly an asset upon which central bank credit might legitimately be granted, since the commodities are storable, used throughout the world and are readily saleable. The case is obviously quite different from that of an International Development Authority which as it expands its operations would invest in an ever-increasing volume of fixed capital.

The International Commodity Corporation and the International Development Authority might, if preferred, be made subsidiaries of the International Bank.

C. Summary

An International Exchange Fund or an Overdraft Clearing Union would equally serve the purpose of supplying the necessary volume of foreign exchange and promoting the exchange and other adjustments necessary to secure international equilibrium. If the Overdraft plan were adopted it would be necessary that the Governing Board should satisfy itself that monetary and banking legislation (including the charter of the central bank) are adequate to meet the overdraft obligations. If these conditions are not satisfactorily met, the country in question would be required to deposit with the Union local currency up to its maximum obligation.

In the case of the Exchange Fund a "credit balance" country (the United States, for example) would accumulate a claim on tangibly represented assets already paid into the Fund, whether in the form of local currencies or of gold. In the case of the Overdraft Union, apart from gold holdings, the balance of the "credit" country is represented only by a claim on foreign currencies. It is difficult to see that this really constitutes a genuine advantage in favor of the Fund, unless one takes a position representing complete lack of confidence in international institutions. Such a position would logically lead to a demand for the physical possession of gold within one's own political borders. The mere fact that the International Exchange Fund would be actually possessed of local currencies does not appear to offer in fact any real advantage over and against the claim of the International Clearing Union on the "debit balance" countries. In either case the value of the assets in question depends in fact upon the workability of the international collaboration under consideration and the good faith of international credit.

APPENDIX

GOLD RESERVES AND SHORT-TERM DOLLAR ASSETS OF FOREIGN COUNTRIES
 (In millions of dollars - round figures)
 (Gold at \$20.67 an ounce in 1929; at \$35 an ounce in 1942)

Country	End of 1942				End of 1929			
	Gold and dollar reserves			Private dollar balances	Gold and dollar reserves			Private dollar balances 3/
	Total	Gold 1/	Official dollar balances		Total	Gold	Official dollar balances 2/	
Europe								
France	2,665	2,285	4/ 380	210	1,825	1,635	190	735
United Kingdom	1,010	750	260	290	805	710	95	205
Switzerland	845	825	20	155	155	115	40	65
Netherlands	530	5/ 505	25	160	225	180	45	55
Germany	130	6/ 130	7/	5	580	545	35	170
Italy	120	120	7/	10	320	275	45	115
Other Europe	4,035	3,675	360	285	1,345	1,250	95	8/ 275
Russia	1,640	1,630	10	7/	145	145		
Belgium	755	750	5	115	175	165	10	
Sweden	465	330	135	15	70	65	5	
Rumania	245	240	5	5	65	55	10	
Portugal	180	165	15	20	10	10	-	
Norway	155	60	95	40	40	40	7/	
Yugoslavia	110	95	15	5	35	20	15	
Denmark	50	45	5	15	45	45	-	
Spain	50	45	5	10	495	495	-	
Greece	50	30	20	20	30	10	20	
Finland	10	5	5	5	10	10	7/	
Luxembourg	7/	-	7/	20	-	-	-	
All other	325	280	9/ 45	8/ 15	225	190	35	
Czechoslovakia		60	7/		35	35	7/	
Poland		55	7/		95	80	15	
Austria		45	-		40	25	15	
Hungary		40	7/		30	30	7/	
Bulgaria		25	7/		15	10	5	
Latvia		15	5		5	5	-	
Estonia		15	7/		7/	7/	-	
Lithuania		10	7/		5	5	-	
Eire		10	-		-	-	-	
Danzig		5	-		-	-	-	
Iceland		7/	15		-	-	-	
Albania		7/	-		7/	7/	-	
Total Europe	9,335	6/8,290	1,045	1,115	5,255	4,710	545	1,620

GOLD RESERVES AND SHORT-TERM DOLLAR ASSETS OF FOREIGN COUNTRIES (Continued)
 (In millions of dollars - round figures)
 (Gold at \$20.67 an ounce in 1929; at \$35 an ounce in 1942)

Country	End of 1942				End of 1929			
	Gold and dollar reserves			Private dollar balances	Gold and dollar reserves			Private dollar balances 3/
	Total	Gold 1/	Official dollar balances		Total	Gold	Official dollar balances 2/	
Latin America								
Argentina	635	610	25	45	435			-
Brazil	165	115	50	20	150			-
Mexico	95	40	55	40	5			-
Venezuela	80	70	10	15	20			-
Colombia	60	25	35	10	20			7/
Chile	50	35	15	15	10			-
Peru	30	25	5	10	20			-
Cuba	20	15	5	95	-			-
Bolivia	15	10	5	5	5			-
Netherlands West Indies and Surinam	10	5	5	15	-			-
Costa Rica	10	7/	10	5	-			-
French West Indies and Guiana	5	-	5	7/	-			-
Panama	7/	-	7/	35	-			-
Other	155	125	9/ 30	8/	75			-
Uruguay		90	7/		70			-
Guatemala		20	7/		7/			-
El Salvador		10	5		5			-
Ecuador		5	7/		7/			-
Nicaragua		7/	7/		-			-
Haiti		7/	-		-			-
Total Latin America	1,330	1,075	255	345	740	740	7/	8/ 190
Asia								
Japan and Manchuria	350	350	7/	5	550	545		5
Netherlands East Indies	360	200	160	7/	60	55		5
India, Burma, and Ceylon	275	275	7/	15	130	130		-
China	270	10	260	100	-	-		-
Turkey	140	115	25	5	-	-		-
French Indo-China	25	-	25	5	-	-		-
Philippine Islands	15	-	15	25	-	-		-
Hong Kong	7/	-	7/	40	-	-		-
Other	90	70	9/ 20	8/	15	-		-
Thailand		35	-		-	-		-
Iran		25	-		-	-		-
Afghanistan		10	-		-	-		-
Total Asia	1,525	1,020	505	210	740	730	10	8/10/ 40

GOLD RESERVES AND SHORT-TERM DOLLAR ASSETS OF FOREIGN COUNTRIES (Continued)
(In millions of dollars - round figures)
(Gold at \$20.67 an ounce in 1929; at \$35 an ounce in 1942)

Country	End of 1942				End of 1929			
	Gold and dollar reserves			Private dollar balances	Gold and dollar reserves			Private dollar balances 3/
	Total	Gold 1/	Official dollar balances		Total	Gold	Official dollar balances 2/	
Canada	270	130	4/ 140		210	80	80	-
Other countries								
Union of South Africa	640	635	5		5		35	
Australia	15	5	10		10		90	
Egypt and Anglo-Egyptian Sudan	50	50	7/		5		20	
New Zealand	25	25	7/		5		30	
French Morocco	15	5	10		5		5	
All other	70	20	9/ 50		8/ 40		10	
Algeria		15	35				10	
Belgian Congo		5	-				7/	
Total "Other countries"	815	740	75		70	190	190	-
Grand Total	13,275	11,255	2,020		1,950	7,005	6,450	555
		6/						2,120

1/ Figures subject to revision.

2/ Deposits, acceptances, and short-term Treasury securities held with Federal Reserve Bank of New York.

3/ New York City only. Includes official balances not held with Federal Reserve Bank of New York.

4/ Adjusted for 157 million dollars of French official balances held in name of Canadian Government.

5/ Gold reserves of the Netherlands Bank declined from 645 million dollars at the end of April 1940 to 505 at the end of 1942 notwithstanding decrees requisitioning gold from private Dutch holders. The transfers of gold to Germany evidenced by this decline constitute an offset to such gold as may have been transferred out of Germany since February 1938. Cf. note 6/.

6/ Reichsbank reserves reported in February 1938 plus secret reserves estimated at 100 million dollars. Gold subsequently confiscated in invaded countries is in general attributed to those countries, since their claims to it will presumably be honored after the war. This procedure, while affecting the distribution of foreign gold by countries, will affect the aggregate amount of such gold only to the extent that there have been net transfers of gold out of Germany on other accounts since February 1938. To this extent there is double counting. Cf. note 5/

7/ Less than 2-1/2 million dollars.

8/ Country breakdown not available.

9/ Country breakdown not available except for portion of these balances held at Federal Reserve Bank of New York.

10/ Asia other than Far East included in total "Other Countries".