ESSAYS IN INTERNATIONAL FINANCE

No. 4, Spring 1945

CONDITIONS OF INTERNATIONAL MONETARY EQUILIBRIUM

RAGNAR NURKSE



INTERNATIONAL FINANCE SECTION DEPARTMENT OF ECONOMICS AND SOCIAL INSTITUTIONS PRINCETON UNIVERSITY Princeton, New Jersey This is the fourth in a series of essays in international trade and finance published by the International Finance Section of the Department of Economics and Social Institutions in Princeton University.

While the Section sponsors the essays of this series it takes no further responsibility for the opinions therein expressed. The writers of the essays are free to develop their topics as they will, and their ideas may or may not be shared by the committee on publication of the Section or the members of the Department. The views here expressed by Mr. Nurkse are not, moreover, in any way to be construed as representative of the organization in which he is engaged.

CONDITIONS OF INTERNATIONAL MONETARY EQUILIBRIUM

RAGNAR NURKSE

Economic, Financial, and Transit Department, League of Nations, Princeton, N.J.

THE purpose of this article is to consider some of the central issues of international monetary relations in the light both of pre-war experience and of the post-war plans now under discussion. For the facts of recent history and the conclusions to which they point, our principal source is a League of Nations publication entitled *International Currency Experience: Lessons of the Inter-War Period.*¹ For the post-war plans, reference will be made to the Draft Agreements adopted at the Bretton Woods Conference.²

Our discussion is concerned with relations between independent national currencies. It may be well to state at the outset that the system of relations here envisaged is not of the gold-standard type if that means immutable exchange rates with domestic monetary and economic policies subordinated to the balance of payments. Changes in exchange rates are accepted as a legitimate method of adjustment, and the conditions in which such changes are appropriate will be our first topic (Sections I and II). We shall then comment on "cyclical" fluctuations in the balance of payments for which the method of exchange adjustment is unsuitable (Section III); on the importance of foreign investment for the successful functioning of the international currency mechanism (Section IV); and on the interrelationship of monetary, commercial, and employment policies (Section V). One of our main preoccupations throughout the paper will be to determine the international monetary framework compatible, on the one hand, with the pursuit of national policies for the maintenance of employment and, on the other, with the fullest possible development of international trade.

I. THE EQUILIBRIUM RATE OF EXCHANGE

Let us begin with the concept of the equilibrium rate of exchange. This, to be sure, is a rather hackneyed subject; but it is of considerable practical importance and, despite all the attention it has received, still remains in need of clarification.

A notable feature of the plan for the International Monetary Fund

¹ Columbia University Press (International Document Service), New York, 1944. ² United Nations Monetary and Financial Conference, *Final Act and Related Documents*, U.S. Government Printing Office, Washington, 1944. as drawn up at Bretton Woods is that it provides for agreed and orderly changes in the exchange rates of member countries whenever a change is considered necessary to correct a "fundamental disequilibrium." Other terms are defined and explained in the plan at some length, but no attempt is made to give a definite meaning to the phrase "fundamental disequilibrium." From a tactical point of view, of course, it may be wise to leave the interpretation of this phrase to the managers of the Fund or to the member countries concerned in each particular case; the statutes of the Fund may not be a suitable place for the definition of so abstruse and perhaps controversial a subject. But, if the machinery of the Fund is to operate successfully, there should be some more or less generally accepted notion as to what constitutes "equilibrium" or "disequilibrium" in regard to international exchange rates.

At the various monetary conferences after the last war, the late Gustav Cassel campaigned vigorously for the theory of "purchasing power parity." He and his followers were under the impression that this theory furnished all that was needed for a definition of the equilibrium rate of exchange. Today it is realized that the purchasing-power-parity theory cannot provide a definition of the equilibrium rate; that it can provide only a pseudo-definition in terms which themselves require definition and, indeed, turn out to be incapable of precise interpretation.

The only satisfactory way of defining the equilibrium rate of exchange is to define it as that rate which, over a certain period of time, keeps the balance of payments in equilibrium. This seems very simple. Indeed, for any practical use, it is much too simple. We must carefully examine the component elements of this definition.

Take, first of all, the phrase "over a certain period." What is the length of the period over which payments have to be balanced? Is it a day, a month, a year, or ten years? If, for the purposes of this definition, the balance has to be in equilibrium every hour, every day, or even every week, then we have in effect a constantly fluctuating exchange rate. The rate is left free to vary in order to secure equilibrium in the balance of payments over these very short periods. Now experience has shown that freely fluctuating exchanges are apt to give rise to speculation of a disequilibrating kind, including disequilibrating movements not only of capital but also of commodity exports and imports. Under a system of freely fluctuating exchanges there may be little or nothing to limit people's "elasticity of expectations," at least in the short run. Any change in the rate is likely to create anticipations of a further change in the same direction. Thus exchange depreciation may well occasion a flight of capital, leading to further depreciation, and, if the prices of commodities exported and imported also come to be affected by disequilibrating anticipations, exports will fall instead of rise and imports rise instead of fall, so that the result is still further depreciation. Such self-aggravating

processes make it impossible to achieve equilibrium in the balance of payments even in very short periods such as a day or a week.

Moreover, there are reasons why freely fluctuating exchanges would be undesirable even if they *could* secure continuous equilibrium in the balance of payments. For one thing, they create considerable exchange risks, which tend to reduce international trade. For another, they call for constant shifts of domestic factors of production between export and home-market industries, shifts which may be disturbing and wasteful. No country has shown any desire for a system of wholly uninhibited fluctuations in exchange rates, and a prime objective of the International Monetary Fund is to make such a system unnecessary.

The period which we contemplate in the definition of the equilibrium rate of exchange cannot, therefore, be as short as a day or a week. Even if it were a month, exchange rates in most countries would be subject to seasonal fluctuations within each year. The period, therefore, should certainly not be less than a year. But if we make it long enough to eliminate seasonal fluctuations, why not make it long enough to eliminate "cyclical" fluctuations as well? This would give us a period of between five and ten years. If, that is to say, a country's external accounts, at a given rate of exchange, attain an even balance over a period of five to ten years, then that exchange rate would be regarded as an equilibrium rate.

Some countries—especially those exporting primary commodities have often shown a wide cyclical movement in their balance of payments, and here it is particularly desirable to strike the balance for a period long enough to cover a whole cycle. There are, however, countries (such as France or even England) in which the balance of payments normally shows no very marked cyclical behavior, and, in these cases, it might be safe enough to take the balance over a shorter period—say, two or three years—as an indication of equilibrium or disequilibrium.

But as soon as we turn away from the imaginary system of freely fluctuating exchanges, in which the balance is kept in equilibrium every hour or every day, we must assume that there exists some medium to settle the discrepancies arising within the standard period. To act as such a medium is the most elementary function of the central reserves of international means of payment held by each country in the form of gold, foreign exchange, or international borrowing facilities. Later in this article there will be more to say on the functions of international liquidity. For the present, it is clear that, if we wish, we can alter the wording of our definition and describe the equilibrium rate as that rate at which, over a certain period, there would be no net change in a country's reserve of international means of payment. The longer we make the standard period the larger is the amount that is likely to be needed for settling the intervening discrepancies. As a rule, it takes a larger reserve to even out cyclical fluctuations than it takes to meet seasonal fluctuations. The larger the stock of international means of payment held by any country, and by countries in the aggregate, the less will be the need for changes in exchange rates. It is, therefore, natural that the International Monetary Fund agreement should contain more liberal provisions for exchange adjustments than the British scheme for an International Clearing Union since that scheme proposed to create an amount of international liquidity more than three times as large as the resources of the Fund.

So much for the period over which we consider the balance of payments for the purpose of defining the equilibrium rate. We must now look at the balance of payments itself. What shall we include in the balance of payments for the purpose of this definition? Or rather, is there anything we do not wish to include? There is at least one thing that must be excluded, namely, the transfer of gold or other liquid reserves which may be necessary to balance a country's external accounts. Otherwise these accounts would always be in balance and there would never be any disequilibrium. A net change in any country's international currency reserve is, in fact, our criterion of disequilibrium.¹

Another item that should be excluded is short-term capital movements. Such capital movements may be of two kinds. They may be of the equilibrating kind, such as used to occur in the gold standard mechanism in response to temporary changes in discount rates or to movements in exchange rates within the gold points. In that case they merely take the place of—and fulfill the same function as—transfers of gold or foreign exchange reserves. A country with a deficit in its balance of payments can cover the deficit either by an outflow of gold or an inflow of foreign short-term funds, if it is able to attract such funds by raising its bank rate or otherwise. These funds are equivalent to a loan by foreigners and should be regarded as a draft on the recipient country's stock of international reserves. Whether there is an outflow of gold or an inflow of foreign short-term loans, the country's net international liquidity will be reduced. The foreign short-term funds are a liability, can be withdrawn at any moment, and must be treated as a negative gold reserve.

Short-term capital movements of the *dis*equilibrating kind should also be excluded from the balance of payments which we wish to use as a standard of the equilibrium rate. Such capital movements became very familiar during the 'thirties, in the form of capital flight and "hot money," and were due mainly to fear of exchange depreciation and of war. They gave rise to large discrepancies in balances of payments which it proved impossible or undesirable to meet by means of adjustments in trade and other normal items and which, therefore, were generally settled by large gold movements. In considering the balance of payments as a criterion of exchange equilibrium it is desirable, as a rule, to exclude all discrepancies which are due to such abnormal factors. There is now almost general agreement that, in the future, capital movements of this type had better be prevented, or at least curbed, by some form of control.

Apart from international currency transfers and short-term capital movements, no exclusions are necessary or desirable for the purpose of our definition. We must include all other international transactions entering into the balance of payments. In particular, we must include all capital movements relating to international investment. A certain rate of exchange may be an equilibrium rate with a certain flow of foreign investment. With a different flow of foreign investment, this rate is not likely to be an equilibrium rate. After the last war, the exchange rates which were established during the 'twenties may have been appropriate so long as there was a certain average annual export of capital from the United States. The fact that during the 'thirties the currencies of practically all debtor countries depreciated below their previous parities with the United States dollar was no doubt partly due to the complete cessation of capital exports from the United States; some depreciation of these currencies in relation to the dollar may well have been necessary to the restoration of equilibrium in the international accounts under the new conditions in the capital market.

Having examined the "standard period" and the "balance of payments" to be used for the purpose of our definition we come now to a third element that needs clarification. The balance of payments is said to be "in equilibrium" when payments are equal to receipts (apart from the items which, for the reasons given, must be excluded). But payments can be made equal to receipts by artificial restrictions on imports.¹ If a deficit appears in the balance of payments, and the deficit is closed by cutting down imports, are we to conclude that the rate is now at the equilibrium level? The answer is clearly in the negative. To use our definition properly, we must take the structure of trade barriers existing at a given starting-point. If subsequently a certain exchange rate can be maintained, or a balance-of-payments deficit closed, only by means of an increase in trade barriers, then the rate cannot be accepted as the equi-

¹ Artificial stimulation of exports by means of subsidies has, for fiscal reasons, been much less common, but it may obviously achieve the same result. We should observe, however, that a *combination* of uniform *ad valorem* import duties with uniform *ad valorem* export subsidies can be exactly equivalent to a devaluation of the exchange. If a deficit in the balance of payments is closed by means of such a combination, then the exchange will, in effect, already have been devalued. In practice, of course, the distinguishing feature of import duties and export subsidies is that they are not uniform but selective and discriminating.

¹ If there are changes in the world total of international currency reserves (as a result, for example, of new gold production), this criterion should of course be applied not literally but rather in the sense of the *relationship* between the reserves held by the several countries.

librium rate. The true equilibrium rate is that rate at which payments and receipts are equalized without additional restrictions on trade.

This point has been of great practical importance without having always been clearly apprehended. Germany had no balance-of-payments deficit and suffered no loss of gold after 1934. Nevertheless the reichsmark was rightly regarded as overvalued. At the given exchange rate, Germany's external accounts were balanced only by means of additional import restrictions, which took mainly the form of drastic exchange controls. In the same way France, though failing to close her balance-ofpayments deficit, certainly managed to reduce it by means of import quotas.

When a currency is kept far above its equilibrium level, and especially when the country's gold and exchange reserves run out—as they did in Germany—, import restrictions become practically inevitable, and the result is a sharp cut in the volume of foreign trade. A country with an overvalued currency suffers a loss in its competitive power to export and, as exports decline, imports must be cut down correspondingly if the external accounts are to be balanced. The methods by which the cut is brought about are of secondary interest : they may be exchange controls, import quotas, prohibitions, licenses, or merely increased import duties. Exchange control, in particular, was often blamed for the contraction of world trade in the 'thirties. The underlying causal condition was rather the extreme dislocation of exchange rates.

The mere equality of a country's foreign receipts and payments is not, then, an acceptable criterion of the equilibrium rate of exchange if the equality must be enforced by restrictions on imports. There is another important case in which such equality is not a sufficient criterion. It is conceivable that a country may keep its balance of payments in equilibrium by reducing the demand for imports through a depressed level of aggregate domestic money income in relation to productive capacity, and, if wage rates and prices are rigid, this contraction in money income will manifest itself in large-scale unemployment in that country. The balance of payments is in equilibrium; yet it is hardly proper to call the exchange rate a true equilibrium rate if it can be maintained only by means of depression and unemployment at home.

Great Britain in the years 1925-1930 affords a good illustration of this point. There was little sign of disequilibrium in the British balance of payments, yet the pound was rightly regarded as overvalued. There was practically no net change in the British gold reserve during that period. An inflow of foreign short-term funds, however, would have been equivalent to an outflow of gold. What happened before 1927 is largely a matter of guesswork, though some inflow undoubtedly occurred, especially as a result of capital flight from France and of speculative anticipation of the pound's return to its former gold parity in the spring of 1925. But for the period from the end of 1927 to the end of March 1931 we have the estimates of the Macmillan Committee, and these show no increase in London's net foreign short-term liabilities.¹ On the contrary, they show a slight reduction which, however, was matched by a slight reduction in the gold reserve, so that, on balance, no change seems to have taken place in Great Britain's international liquidity over those years. If we apply our definition of the equilibrium rate literally, the pound cannot be said to have been overvalued. The British balance of payments was kept in equilibrium, however, only at the cost of depressed conditions at home compared with conditions in the outside world.

Just as the German case led us to conclude that balance-of-payments equilibrium is not a sufficient criterion of an equilibrium exchange rate in the presence of special or additional import restrictions necessitated by the maintenance of the actual rate, so the British case suggests that it is not a sufficient criterion in the presence of a special or additional depression necessitated by the maintenance of the actual rate. At different levels of national income and employment in a given country, equilibrium in the balance of payments can be secured at different rates of exchange. It would seem better therefore to define the true equilibrium rate of exchange as one that maintains a country's external accounts in equilibrium without the need for wholesale unemployment at home. And, if we extend our view from the position of a single country to the whole network of international exchange rates, this would lead us to define an ideal system of equilibrium rates as one that maintains the accounts of all countries simultaneously in equilibrium when all countries simultaneously are free from mass unemployment on the one hand and inflation on the other.

A country which, at a level of full employment, has a deficit in its balance of payments must reduce its national income below the level corresponding to full employment if balance-of-payments equilibrium is to be restored at the existing exchange rate. Of course, by depressing its national income still further, the country in question may actually produce a surplus in its balance of payments and an increase in its international currency reserve. But this would be needless self-torture. Even to depress the national income to the point at which the balance of payments is in equilibrium is necessary only if the country's reserve is not adequate to meet the deficit.

One might argue that Great Britain should have expanded her

¹ The fact that the estimates were incomplete can scarcely invalidate the evidence they afford in the present context. For we are concerned with the *movement* in the total over a period of time, and we have no reason to suppose that the amounts not covered by the Macmillan estimates moved in an entirely different manner from the amounts covered, which certainly formed the greater part of the true total.

domestic income and employment to a normal or satisfactory level: at that level she would have had a deficit in her balance of payments ; this deficit would have been conclusive proof that her currency was overvalued; and only after furnishing this proof should the pound have been permitted to depreciate. This would be an excellent general rule: but it may not work in the case of a country whose margin of international liquidity is so small that it cannot afford to incur a deficit. The British gold reserve of about 150 million pounds in the late 'twenties was in itself rather a small margin; and if we take into account Britain's net foreign short-term liabilities at that time (about 275 million pounds. according to the incomplete estimate of the Macmillan Committee), there may well have been no margin at all. A lowering of money rates in England might have led immediately to an outflow of foreign shortterm funds and a corresponding loss of gold. This gold would then, of course, not have been available for meeting the subsequent deficit in the balance of payments (exclusive of short-term capital movements) which would have tended to result from Great Britain's domestic expansion.

As a general rule, however, so long as its liquid international reserves are adequate, a country should be expected to make use of these reserves to meet an actual deficit in its balance of payments before a downward adjustment of its exchange rate can be approved. This principle was embodied in the "Keynes Plan," which provided for devaluation only after a country had used up a certain proportion of its quota in the International Clearing Union.

A publicly recognized and recognizable criterion of exchange adjustment has, it is true, the disadvantage that it may act as a signal for speculative capital transfers in anticipation of changes in exchange rates. It may be partly for this reason that such a criterion was not included in the Bretton Woods agreement. But the absence of an objective criterion does not by any means ensure absence of "speculation" and of speculative capital movements. Theoretically such capital movements could be offset, but for this purpose the Fund would need enormous additional resources. The limited resources with which, in fact, it is to start had certainly better be devoted to the balancing of normal international transactions, including trade, services, and productive investment. Since, in any case, the Fund wisely provides for restrictions on capital movements that might drain its resources for speculative purposes, it is doubtful what force remains in the objection to an agreed and recognizable criterion of exchange adjustment.

II. PRINCIPLES OF EXCHANGE ADJUSTMENT

In spite of the qualifications we have discussed, our general conclusion is that the balance of payments must be the chief criterion for any changes in exchange rates. A country with a surplus in its balance of payments should never resort to devaluation; on the contrary, it might be asked to appreciate its currency. Only when a country's balance shows a persistent deficit can devaluation be approved, though in special cases, as we have seen, it may be desirable to permit devaluation even if the balance of payments is apparently in equilibrium.

This simple code is sufficient to regulate the use of devaluation as a means whereby an individual country may seek to influence total demand for its output in the interest of its domestic employment situation. As an anti-depression measure, devaluation can represent either a beggarmy-neighbor policy or a buffer policy. The case of a beggar-my-neighbor policy of devaluation arises when a country that suffers from a depression of mainly domestic origin seeks to cure that depression by improving its balance of payments through devaluation: that is, in effect, by securing for its own national output a larger share of the existing world demand at the expense of other countries. Even without any devaluation such a country is likely to develop a surplus in its balance of payments as an automatic consequence of the fall in its demand for imports and possibly also as a result of a fall in its export prices with a more than corresponding increase in sales. The simple code just mentioned will generally not authorize a country in these circumstances to devalue, since the circumstances themselves will already have given a favorable turn to its balance of payments. Thus the beggar-my-neighbor policy of exchange depreciation would be effectively ruled out. This alone would be a gain, for otherwise any country suffering a depression in its domestic market might claim that such depression constitutes a "fundamental disequilibrium" justifying exchange depreciation. As long as the term is not defined, it may not be easy to reject such a claim. Yet the claim is obviously groundless, because any country that suffers a depression as a result of a fall in domestic investment can and should cure its depression by domestic measures. When depression at home creates a surplus in the balance of payments, there is nothing in the international monetary position to prevent the country in question from adopting a policy of domestic expansion.

The case is quite different when the purpose of devaluation is to act as a protective buffer against a depression originating abroad. If a given country is faced with a depression in one of its foreign markets, this depression will tend to spread to its domestic economy through an adverse balance of payments resulting from a fall in its exports and, if prices abroad are reduced, a rise in the volume of its imports. According to our definition of the equilibrium rate, the deficit in the balance of payments would in this case justify a certain measure of devaluation. Thus it is clear that the definition, if applied in practice, would, on the one hand, exclude devaluation of the "beggar-my-neighbor" type and, on the other, permit the type of devaluation which serves the purpose of a "buffer" policy designed to prevent the spread of depression from country to country.

Devaluation for buffer purposes is defensible, but it should not, in general, be necessary. The first and most desirable method of checking the spread of cyclical depressions is the policy of "offsetting," coupled with the use of international currency reserves for meeting cyclical balance-of-payments discrepancies in a manner presently to be considered. Another possible instrument that might help to insulate a certain area of depression would be the apportionment of scarce currencies, contemplated under the Bretton Woods agreement, which would tend to have the effect of discriminating against the exports of any country that allows its national income, and hence its imports, to decline far below the level corresponding to full employment. The method of exchange-rate adjustment constitutes only a third line of defense. Exchange adjustments for cyclical purposes are likely to be comparatively ineffective. Cyclical shifts in demand schedules may be so wide and violent that it is difficult, or even impossible, to determine precisely what alteration in exchange rates would secure balance-of-payments equilibrium in the short run. Besides, it is generally not worth while to create all the disturbances attending an alteration in exchange ratesincluding the shifts induced in the structure of production as between export and home-market industries-if the change is required for only short-term reasons; and cyclical factors must certainly be regarded as short-term reasons in this context. As we have seen, the standard period over which the balance of payments is to be balanced as a test of exchange-rate equilibrium should be long enough to permit any cyclical changes to cancel out. This presupposes a volume of international liquidity adequate to settle any temporary deficits within the standard period. It should be the function of international currency reserves, and not of exchange-rate adjustments, to meet cyclical and other short-term discrepancies in the balance of payments.

Exchange-rate adjustments are appropriate mainly in cases of chronic or structural disequilibria in the balance of payments. As a remedy for such persistent strains, they can scarcely fail, given time, to produce the desired effect. It is sometimes objected that the demand for imports on the part of an individual country, as well as the foreign demand for that country's exports, may be so inelastic with respect to price changes that a depreciation of the exchange would increase instead of reduce a deficit in the balance of payments. But even in this case exchange adjustment might still be capable of securing equilibrium though it would then have to take the form of an *appreciation* of the exchange.

III. THE FUNCTIONS OF INTERNATIONAL LIQUIDITY

In a world in which economic activity is subject to fluctuations but in which there is a growing demand for stability, the basic function of international currency reserves is to serve as a "buffer" giving each country some leeway for the regulation of its national income and employment and providing it with a means to soften the impact of economic fluctuations arising outside its borders.

This buffer function of international liquidity can be made clear by a simple example. Imagine a country whose monetary authorities are intent on keeping the national income at a level compatible with good employment at the given wage structure. Suppose a depression occurs abroad. The country's exports will fall as a result of the fall in foreign demand. There will be a loss of income and employment in the export industries. If nothing is done, the depression in the export industries is likely to lead, through the familiar "multiplier" mechanism, to a general and cumulative depression in the home-market industries as well. After a point, the depression at home will bring about a reduction in imports large enough to balance the fall in exports. Equilibrium will have been restored in the balance of payments, but only by rendering the depression general.

In order to prevent the spread of depression, the country we are considering must endeavor to offset the fall in foreign expenditure on its exports by an increase in domestic expenditure. Though a local or partial depression in its export industries may be inevitable, a general and cumulative depression of the whole economy can undoubtedly be averted by such a policy of "offsetting." In so far as the volume of employment depends on total expenditure, it is essential that total expenditure be maintained, which means in this case that the flow of domestic spending must be increased so as to compensate for the decline in foreign expenditure on the country's exports.

This is the policy required for domestic stability; but it does nothing to remove the deficit in the balance of payments resulting from the fall in exports. The deficit will tend to persist so long as the depression abroad continues. The country pursuing an "offsetting" policy must be prepared to give up temporarily some of its international currency reserve in order to meet this deficit. Only with an adequate reserve of international means of settlement will a country in this situation be able to avoid exchange depreciation or import restrictions.

The policy of offsetting is intended not to raise total expenditure, but to prevent it from falling. Since, therefore, the national income is not raised above its previous level, there is no reason to expect this policy to produce an increase in imports above their previous level. Yet the amount of imports, and hence the gap in the balance of payments, will necessarily be greater than if the country allowed depression to spread to its whole domestic economy. This means that the volume of international liquidity required is larger, with a compensatory national income policy of the type described, than it would be if a country left things to take their "natural" course.

Under the gold standard, not only were things expected to take their natural course but a country in the situation described was even expected to accelerate the spread of depression by pushing up discount rates and contracting credit as gold flowed out. No doubt the gold standard "rules of the game" tended to reduce the loss of gold to a minimum; but they did so only by speeding up the propagation of depressions.

The offsetting procedure described is precisely the opposite of that which would be called for under the gold-standard rules of the game. The essential principle is that any deflationary or inflationary shock entering from abroad and threatening a country's economic stability is to be offset rather than reinforced; and the resulting discrepancy in the balance of payments is to be settled through a transfer of international liquidity. The example just discussed was that of a deflationary shock; but, with the signs reversed, the discussion applies in exactly the same way to the case of an inflationary disturbance.¹

Even in the best days of the gold standard, of course, the rules of the game were not always very strictly observed. There is some statistical evidence of "neutralization," for example, on the part of the Bank of France and the Bank of England in the nineteenth century.² In the inter-war period neutralization of gold movements by central banks became, in fact, the rule rather than the exception. Neutralization of this type was concerned primarily with the cash base of the banking system; any change in a central bank's gold and foreign exchange reserve was usually accompanied by a change *in the opposite direction* in the bank's domestic loans and securities. This tended, no doubt, to stabilize the volume of money in a country. It certainly went some way, though only a small part of the way, towards the more comprehensive policy of offsetting designed to give stability not merely to the money supply but to the national income.

Though neutralization by central banks was very common in the inter-war period it was nearly always frowned upon; it was widely regarded as wicked and disreputable behavior. The hold which the orthodox rules of the game had on people's minds was evidently strong—

¹ See International Currency Experience: Lessons of the Inter-War Period, op. cit., pp. 214ff.

² See Harry D. White. The French International Accounts 1880-1913 (Harvard Economic Studies, vol. XL, 1933, p. 198); and Elmer Wood, English Theories of Central Banking Control 1819-1858 (Harvard Economic Studies, vol. LXIV, 1939, p. 216).

much stronger than the hold they had in practice. It is time to recognize that for any country aiming at some stability in its national economy, the policy of offsetting—which of course includes "neutralization" in the narrow sense—is the natural method of making use of its international currency reserves: it is time to accept it as a normal and respectable procedure.

The main function of the International Monetary Fund will be to create an addition, and quite a substantial addition, to aggregate international liquidity. Without this function, the Fund might still be a useful institution; in particular, it could still serve as a center for international consultations concerning the fixing and adjustment of exchange rates. But even as regards exchange rates, the Fund's effectiveness is likely to rest to some extent on its power to provide countries with additional liquidity.

The additional liquidity furnished by the Fund would no doubt make it easier for countries to pursue what we have called "offsetting" policies in the interests of domestic economic stability. The statutes of the Fund, however, are not very explicit as to the way countries are expected to use the Fund's resources. In regard to the contrast we have discussed between the buffer function of international liquidity and the orthodox rules of the gold standard game, the Bretton Woods agreement gives little or no indication of what will be the attitude in the administration of the Fund, though here again, as in the case of "fundamental disequilibrium," any attempt to lay down a hard-and-fast doctrine would no doubt have been out of place in a document of this kind. In Article I of the agreement there is a general statement of objectives according to which one of the purposes of the Fund is "to shorten the duration and lessen the degree of disequilibrium in the international balances of payments." This may be variously interpreted; but it sounds rather like the orthodox rules which placed all the emphasis on countries keeping in step with one another, and removing as rapidly as possible any discrepancies in the balance of payments among them, no matter what happened to production and employment. In fact, production and employment were left free to move up and down in all countries more or less simultaneously, and a deflationary process in any important country was communicated to the others.

All this is no longer practical politics. In a system of generally stable and unrestricted exchanges the only way to "shorten the duration and lessen the degree of disequilibrium" in balances of payments is to establish close co-ordination between the domestic policies of the different countries with a view to keeping prices in harmony and national incomes at a level corresponding to good employment in all the countries concerned.

Any formal resolution in favor of such co-ordination may not, of

course, do much good. Some countries will be less successful than others in maintaining their national economy on an even keel. Occasional breakdowns are likely to occur here and there in the form of either deflationary or inflationary disturbances in particular countries.

Under such conditions any single country pursuing, or at least aiming at, a policy of good and steady employment without inflation will find some reserve of international liquidity indispensable if, without resort to either exchange depreciation or import restrictions, it wishes to offset external disturbances of a cyclical character affecting adversely its balance of payments. What a country pursuing this policy must do is simple; it must endeavor to keep total expenditure on its current national output at a level corresponding as nearly as possible to full employment. But a part of the total expenditure on its output is expenditure by foreigners on its exports. Over that part, the country can have no control. It must therefore be prepared to offset variations in foreigners' expenditure by opposite variations in its own domestic expenditure in order to keep the total flow of spending at the optimum level.

This "offsetting" policy has its limitations. As stated before, it cannot as a rule prevent booms and depressions in the export industries. It can prevent them only if the export goods are storable and are actually stored by the country in bad years for release in boom years. In this ideal case the compensatory domestic expenditure would be directed to the same goods that are affected by the change in foreign expenditure, so that even local and "frictional" unemployment would be kept to a minimum. This may not usually be practicable; and just as a road-building program, for example, owing to the imperfect mobility of labor, is not likely to remove all unemployment in, say, the textile industry, so a compensatory increase in domestic spending is not likely to be a complete remedy for depression in the export industries. But the offsetting policy should at least be able to prevent the wide and cumulative fluctuations throughout the domestic economy which might otherwise result from fluctuations in foreign demand.

This seems to be the kind of system for which the world was groping in the inter-war period, and it seems the only one that is compatible at once with a national full employment policy and with a reasonable stability of exchange rates and freedom from severe exchange restrictions.

IV. INTERNATIONAL LIQUIDITY AND FOREIGN INVESTMENT

So far we have spoken as if all countries were economically more or less equal. That is a necessary and common but at the same time a dangerous simplification. There are vast differences in the size, wealth, and economic structure of different countries. Thus the position of the United States with its enormous wealth on the one hand and its cyclical instability on the other, is unique. In the words of Professor Hansen, the United States "could make no greater contribution to the solution of the international political as well as economic problems than that of achieving a high degree of internal economic stability at a level of fairly full employment of labor and other resources."¹ But the position of the United States in international monetary relations, reflected in the "dollar shortage" now frequently discussed, is a rather special subject. Our interest here is more general. From the *function* of international currency reserves we now turn to consider certain general forces affecting their *distribution*.

The global volume of international liquidity must be large enough to permit the settlement of all short-term balance-of-payments discrepancies. Obviously the world total must be distributed among the various countries in accordance with their needs, and the only relevant criterion of need is the size of the discrepancies a country is likely to suffer in its balance of payments as a result of cyclical and other short-term factors. The size of a country's foreign trade, or its share in total world trade, is not a strictly relevant criterion. In the inter-war period, primary producing countries as well as countries depending heavily on capital imports showed a much wider relative range of year-to-year variation in their balance of payments than did the industrial creditor states. If international currency reserves had been distributed according to needs, the agricultural debtor nations should have had reserves, on the average, more than proportionate to their share in world trade, while the reserves of other countries should accordingly have been less than proportionate. In fact, the average reserves held by debtor countries exporting primary commodities were nowhere near the amounts they should have held on the basis of their needs.

In order to account adequately for this disparity between the actual and the appropriate distribution, we must recognize that the objective need for international currency reserves is only one of the factors determining the size of a country's monetary "buffer stock." As in the case of individuals, the "optimum" or "equilibrium" amount of liquid reserves which nations endeavor to hold is determined not only by the objective need for such reserves (that is, by the possible or probable range of discrepancies between receipts and disbursements) but also by "the will or inclination to hold them (desire to be protected against emergencies or, more generally, desire for stability)" and, above all, by "the ability to hold them (the level of wealth, the extent to which more vital desires are satisfied)."²

¹ Alvin H. Hansen, Fiscal Policy and the Business Cycle. (W. W. Norton, New York, 1941, p. 450.)

² See International Currency Experience, op. cit., p. 92.

The holding of a buffer reserve of international liquidity means that a country must abstain from importing a certain volume of real goods and services. Just as a poor man, in contrast to a rich, will feel that he cannot afford, and will probably not desire, to hold a large idle cash balance, so a poor country is less likely than a rich one to abstain from much-needed imports and to tie up a part of its limited resources in an international cash reserve.

It has often been said that, in the course of time, economic progress tends to give rise to a relatively increased demand for economic stability as part of a higher standard of living. This, indeed, may be one explanation for the growing concern with anti-cyclical policies. An obvious corollary of this proposition is that, at any given time, different countries at widely different levels of real income and wealth are likely to attach a different relative importance to stability as compared with greater immediate satisfaction of urgent material needs.¹

Considerations such as these lead us to conclude that for each country, at any given time, there exists a normal or equilibrium level of international liquidity, a level determined by the various factors governing the need, the desire, and the ability to hold international cash reserves. But here we face the difficulty that the distribution of international reserves appropriate or necessary to the working of a system of free and stable exchanges may not at all correspond to the equilibrium levels of international liquidity from the point of view of the individual countries. Some countries, in fact, given their resources and preference schedules, may feel that they cannot afford to hold the amount of reserves necessary for the maintenance of free and stable exchanges. A reserve which a rich country might consider just sufficient might, to a poor country, seem a luxury beyond its means. Through its central bankers, finance ministers, and other authorities, acting under the pressure of public opinion, political institutions, business interests, demand for credit, and demand for foreign goods, a nation will generally contrive-however imperfectlyto give effect to its scale of comparative necessity.

It is the unequal distribution of wealth and the unequal economic requirements of different nations that largely account for the maldistribution of international currency reserves in the past. It is these fundamental conditions that are apt to distort or even wreck any system of international currency reserves aiming at generally stable and free exchanges in the future. If the economic needs of the poorer nations are not met by other means, there will be a strong and perhaps irresistible tendency for those needs to be met by the use of international currency reserves, including such facilities as are to be provided by the International Monetary Fund. Unless, therefore, something is done to change the underlying conditions there may not be much hope of preventing a new distortion or breakdown of the international reserve system and a new maldistribution of liquid reserves.

One way of dealing with the underlying conditions, and in practice perhaps the most important way, is through international investment. In the world as we find it, in a world in which enormous differences exist between the needs and resources of different countries, international investment is thus of crucial importance for the functioning of the international liquidity mechanism.

The equilibrium level of international liquidity in relation to the needs and resources of particular countries is, in normal times, a long-term problem. But after the war, it will present itself immediately and in a very acute form; for what we have said about the poorer nations in normal times applies equally to countries devastated or impoverished by war. If either an undeveloped or a war-ravaged country is unable to meet its capital requirements by capital imports, then it may be driven to use up whatever international cash reserves it can command, so as to meet at least part of those requirements. International liquidity, which should serve merely as a short-term buffer in the balance of payments, will be used in effect for long-term capital purposes. If international currency reserves are distributed among countries in accordance with needs arising from normal short-term balance-of-payments fluctuations, and if these reserves are in fact expended for capital purposes, then capital will have been distributed according to an inappropriate criterion; that is, not according to capital requirements but according to international liquidity requirements. There is, of course, no necessary or even probable correlation between the two kinds of requirements.

The upshot of the preceding discussion is clear. The Bank for Reconstruction and Development, the statutes of which were agreed upon at Bretton Woods, is essential to the success of the International Monetary Fund. The Bank could stand without the Fund, but the Fund would have a difficult time without the Bank.¹ Without an adequate volume of reconstruction loans, the Fund quotas of many countries might come to be used up directly or indirectly for capital purposes, with the result that in a few years' time the Fund would be to some extent immobilized and the countries concerned would again be short of international liquidity. It should be recalled, however, that the Fund agreement permits countries to maintain exchange control on current payments during the transition period. To the extent that countries rely on exchange control, the provision of—as well as the need for—liquid resources for short-term balancing purposes may, in fact, come to be postponed. Besides, it will

1 Ibid., pp. 92-94.

¹ This is not to deny the efficacy of the Fund or to assert that it has no functions which the Bank could not as well perform. On the contrary, the Bank would not provide for any country an assured supply of international liquidity and conditional liquidity is not liquidity at all.

in any case take a year or more before the Fund is definitely established and ready to start operations. It is possible that in the meantime the most urgent relief and reconstruction requirements will be met through UNRRA, disposal of surplus stocks, mutual aid, and other methods developed during the war.

Sooner or later, however, the more normal methods contemplated in the plan for the International Bank for Reconstruction and Development will become indispensable. The plan for the Bank attacks the problem of international investment in a central and strategic place by attacking, above all, the problem of risk. There are other factors tending to reduce the international mobility of capital, but the influence of the risk element alone is enormous. The Bank by itself may not be able to do much toward reducing the actual risk factors; most of these may remain outside its control. What it sets out to do-and even that is a great deal-is to pool the risks and equalize the risk premium; and it proposes to do so through a procedure of joint international guarantees and a I-I 1/2 per cent guarantee commission or "insurance premium." Undoubtedly the Bank agreement represents a novel and promising attack on the troublesome risk problem in foreign lending. However admirable a piece of mechanism the proposed Fund may be, this mechanism-or indeed any currency mechanism aiming at reasonably free and stable exchanges-would be in danger of getting jammed without some means of securing a steady and adequate flow of international investment.

V. COMMERCIAL VS. MONETARY POLICY

International monetary policy, in the strict sense of the term, falls into two main compartments: (1) that which has to do with exchangerate adjustments and (2) that which relates to international liquidity. The former, we have suggested, is appropriate in the case of persistent or structural strains in the balance of international payments, while the latter should take care of all short-term discrepancies.

Other instruments of policy in international economic relations fall more properly under the heading of commercial policy. This applies especially to exchange control (excepting perhaps the limited form of exchange control designed to restrain abnormal short-term capital movements). The distinction which has sometimes been drawn between exchange control and trade control on the ground that the former affects *payment* for goods, whereas the latter affects the actual *movement* of goods across national frontiers, is purely legalistic. In the 'thirties, control of commercial payments proved interchangeable with, and often actually merged into, a system of control of imports. Exchange restrictions on current transactions are a form of commercial policy on a par with import quotas, licenses, or tariffs. For this reason the agreement concerning the International Monetary Fund, in so far as it aims at multilateral freedom of transfer for commercial payments, would be pointless if countries were at liberty to evade it by arrangements affecting not the payments for, but the actual movement of, goods. A distinction between monetary and commercial measures in this connection can have a bearing solely on the legal form and not on the economic substance of policy. Suggestions to the effect that the monetary scheme of Bretton Woods is compatible with bilateral trade arrangements can therefore scarcely be in harmony with the intent of the Bretton Woods agreement.

Besides, the Bretton Woods scheme is not strictly confined to monetary policy. That part of it which provides for the apportionment of any currency declared by the Fund to be "scarce" represents essentially a measure of commercial policy. A hypothetical example will make this clear. If the dollar were to become a scarce currency under the Fund arrangement, the rationing of dollars which would then come into operation would discriminate against the exports of the United States. Such rationing would, for example, divert Britain's demand for cotton from the United States to, say, Brazil, even if cotton were cheaper in the United States; and it would similarly divert Brazil's purchases of automobiles from the United States to England, even if automobiles were cheaper in the United States. In sum, it would divert the effective demand of the outside world away from United States' products in order to make it equal to the United States' demand for the products of the outside world. In monetary terms, this would mean cutting down the international demand for dollars so as to make it fit the available supply. The same result of equating demand and supply could be achieved if, in the circumstances considered, the United States were to lower its tariff. The only difference would be that in this case demand and supply would be equated by increasing the supply of dollars rather than by cutting down the demand for them.

A currency might become "scarce" because of a slump in domestic activity in a certain country and a consequent fall in that country's imports from abroad. In these circumstances, the country in question is likely to develop a surplus in its balance of payments, which will indeed tend to alleviate its depression but only at the cost, or at any rate the danger, of spreading the depression to other countries. Any measures taken to eliminate the surplus—whether by discrimination against the country's exports or by a reduction in its import barriers—would, it is true, aggravate the slump in the surplus country. But they would help to arrest the spread of depression to the rest of the world; and, as noted before, there is nothing to prevent the surplus country from offsetting their deleterious effect by a policy of domestic expansion.

18

The apportionment of scarce currencies in the Bretton Woods plan is clearly intended as a measure of last resort, for temporary use in any emergency—such as a sudden and serious depression in a leading member country—in which a change in exchange rates would be too slow and uncertain a remedy. Considered as a measure of commercial policy it has this distinctive feature that it is to come into operation only under certain definite conditions agreed upon beforehand among the nations adhering to the scheme. This element of prior international agreement should render it more palatable to a country against which it might have to be applied, and should, in particular, obviate the danger that the country concerned may retaliate by import restrictions of its own.

It may, of course, be vain to expect this measure of international commercial policy to remove any desire of individual countries to resort to individual acts of commercial policy in the form of import duties, quotas, licenses, exchange allocations, or bilateral purchase agreements. Even if, thanks to the Fund, a country may no longer have to worry about its net balance of payments, it may still worry about its terms of trade, about the volume of its imports and exports, or about the composition of its imports in the light of social priority considerations. To reach a common understanding on these matters is doubtless far more difficult than to agree on any monetary scheme; yet some minimum code of good-neighborly behavior seems essential in order to prevent commercial policy from degenerating into commercial warfare.

Skeptics may wonder if there is any future at all for international monetary, as distinct from commercial, policy in a world in which they see a persistent trend towards increased state regulation of foreign trade, culminating logically in complete state trading on the Russian model. Would not any international monetary system under such conditions tend to lose its raison d'être? It may be that, in a world of state trading monopolies, exchange-rate adjustments would cease to have much significance. But it is by no means certain that "liquidity" would cease to be a necessity, or at all events a convenience, in international economic relations. Even nations trading with one another as units may find it desirable to have, and may consequently agree upon, some medium of international settlement commanding general acceptance and hence capable of serving as a source of "liquidity," giving each individual state some protection against the risk of having its foreign-trade budget upset by crop failures, changes in production plans at home or abroad, non-fulfilment of delivery or purchase agreements, or the like. The example of Soviet Russia before the present war may not be conclusive since it relates to a single state-trading unit in a world still operating mainly on private business lines. Nevertheless, the fact is worth recalling that it was not from Soviet Russia that the movement towards bilateral

barter originated during the 'thirties. The Russians seldom hesitated to drive a hard bargain; but they found it generally to their interest to sell in the dearest and buy in the cheapest market; and they did not seem to underrate the usefulness of their gold reserves in thus conducting their foreign commercial relations.

Among countries continuing to rely in their foreign as well as domestic trade largely on private price and profit incentives, the regulation of exchange rates must remain an important subject of international monetary policy along with the use and distribution of international currency reserves. Not long ago it was commonly taken for granted that a single country could alter its exchange rates at will, by varying its price of gold or otherwise. Experience has shown, however, that purely unilateral action in regard to exchange rates is not merely undesirable but that it cannot be made effective. An exchange rate, by its very nature, is something that concerns more currencies than one, and any change that one country may wish to make is necessarily subject to the tacit or explicit consent of the others. As we saw in the 'thirties, a change in the price of gold in one country does not produce a lasting change in the exchange rate if other countries follow suit and likewise alter their price of gold. In a system not based on gold, a country's central bank may raise the price at which it is prepared to buy another country's currency; but, if the other country similarly raises its price for foreign currency, then the efforts of the two countries trying to buy up each other's currencies will tend to cancel out without any effect on the exchange rate. In practice, no doubt, it may be possible for an individual country, especially if it is a small country, to change the external value of its currency by unilateral action; so long as other countries feel no strong objection they may condone such unilateral change and refrain from adopting countermeasures. But this does not alter the fact that the change depends, ultimately, on their tacit consent.1

The International Monetary Fund Agreement has in some countries been criticized on the ground that it unduly restricts the freedom of national authorities to alter the value of their currencies.² This freedom has proved illusory. It is understandable that people in Britain, with the years 1925-1931 still in memory, should feel uneasy about rigidly tying

¹ In the pre-war Sterling Area, the member countries seemed to be able to set, and to alter, their rates on the pound at their own free will, sometimes in a manner far from agreeable to the United Kingdom. But this was so only because their central banks were prepared to hold sterling, while the Bank of England would not hold their currencies. The limitation on the English monetary authorities was, of course, a self-imposed and not an inevitable one. A similar situation prevailed in the United States as a result of the offer of the Treasury to buy gold at a fixed price while other countries could, at will, alter the price they would pay for gold.

² See, e.g., The Banker (London), 1944, vol. LXXI, pp. 112-122, vol. LXXII, pp. 15-26, 58-65.

down the pound's external value. It is equally important to remember, however, that in 1936, after the "devaluation cycle" of the great depression, the value of sterling in dollars and other free currencies was practically the same as it had been before September, 1931. In effect, Britain was not able to devalue the pound by her own unilateral action; other countries followed suit, so that, before long, something very like the former set of relationships was re-established. The Tripartite Agreement of 1936 was a recognition of the fact that, in the long run, exchange rates cannot be changed without the consent of at least the principal parties concerned. The Bretton Woods plan, if properly carried out, should not result in the "freezing" of a given structure of rates, but should constitute a machinery for mutually agreed adjustments—the only adjustments which, in the last analysis, are possible at all.

Barring inflationary developments in individual countries such adjustments should not be necessary except at infrequent intervals (say, five, ten, or fifteen years) in order to remove chronic or "structural" strains in the balance of payments. The international reserve system should be able to take care of all short-term discrepancies, whether fortuitous or "cyclical." Any such system, however, requires two things for its successful operation: first, a certain minimum degree of domestic stability at high levels of employment in the principal trading nations; and, secondly, a steady and adequate flow of long-term international investment. Needless to say, both are desirable things as such and not merely as prerequisites for a stable international currency system.

The Bretton Woods Conference made a laudable effort to meet the second prerequisite through the proposed Bank for Reconstruction and Development. It did nothing to meet the first, except to issue a general recommendation with a view to "the harmonization of national policies designed to promote and maintain high levels of employment." Such national policies, of course, must exist before they can be harmonized. As Professor Graham has emphasized, the maintenance of full employment in any nation is primarily a domestic responsibility.¹

The conditions which made the nineteenth-century gold standard workable no longer exist. In the gold-standard days the correct behavior for each country was to keep on a level with the others—to rise with the tide and sink with the ebb of the general business cycle. For most, if not all, advanced industrial nations, this sort of behavior is out of the question today. Rather than float helplessly up and down as the level of world economic activity rises and declines, countries will seek stability by regulating their domestic money income and expenditure with a view to avoiding depression and unemployment on the one hand and inflationary disturbances on the other. But unless all countries attain such stability, and maintain a steady and active domestic economy without inflation, their balances of payments will perforce be subject to stresses and strains which, if they pass beyond a point, are likely to result in a breakdown of the international reserve system—in a failure, that is, to keep exchanges stable without additional restrictions on foreign trade or payments.

It would be an exaggeration to say that a system of stable and unrestricted exchanges is impossible unless countries maintain absolute stability at home. The buffer mechanism of international liquidity should certainly be capable of meeting "cyclical" balance-of-payments discrepancies resulting from moderate and temporary deviations from stability in individual countries. What the liquidity mechanism can hardly be expected to meet is a severe and protracted slump in an important member country, or a situation such as occurred in the early 'thirties. Obviously the amount of liquidity in the system-the volume of international monetary reserves-determines the maximum amount of strain the system can bear. With the offsetting policies outlined earlier, the amount of liquidity required is far greater than it would be if countries were prepared to let their entire national income fluctuate at the behest of the balance of payments, though it should also be noted that restrictions on abnormal and speculative capital movements would stop what was perhaps the most serious drain on international liquidity in the 'thirties.

The amount of liquidity to be provided by the International Monetary Fund, though substantial, is by itself far from adequate. It is true that countries outside the United States hold, in the aggregate, more gold and dollar reserves today than they ever held before.¹ But it would be rash to assume that the present amount of gold and dollars will all be available for normal peacetime "buffer" purposes. A large part of it represents deferred expenditure, a form of war-time "compulsory saving." Many countries, including notably the South American republics, have been obliged to hoard their gold and dollar receipts because transport difficulties, war-time scarcities, and production controls abroad have not allowed them to import the goods they would have liked to import. After the war, they will need to replace their worn-out machines and depleted raw-material stocks, and it is doubtful how much of their present currency reserves will be left for use as international liquidity.

The successful operation of post-war monetary mechanisms may therefore come to depend rather closely on the concerted maintenance of stable business conditions at high levels of employment, above all in the major industrial states. If this fundamental requirement is not ade-

¹ See Frank D. Graham, Chapter on "Economics and Peace," in *The Second Chance: America and the Peace*, edited by John B. Whitton (Princeton University Press, 1944, p. 127).

¹ "It is estimated that by the end of September, 1944, foreign countries had gold and dollar reserves of some 17 billion dollars, as compared with 7 to 8 billion dollars at the close of the 1920's." *Federal Reserve Bulletin*, November, 1944, p. 1043.

quately met, resort to the armory of commercial rather than monetary policy is likely to become the order of the day. Even the entry into force of the Bretton Woods "Scarce Currency" provisions would, in substance though not in form, constitute a breakdown of the monetary system; and it would probably be optimistic to hope that, in the event of such breakdown, commercial policy could be confined to the concerted and prearranged international measures which those provisions imply.

In the event of severe and protracted departures from the norm of domestic stability in some country or countries, the shifts in effective international demand may be so wide that exchange-rate adjustments would not quickly enough succeed in righting the balance of payments, or would succeed in righting it only at a level of total trade which is too low for the essential import needs of countries that continue to uphold a steady and active internal economy. That is why measures of commercial policy, including discriminatory and possibly bilateral arrangements, will be difficult to avoid so long as all the major powers are not able to devise appropriate domestic measures for the maintenance of economic activity. Such, at any rate, are the grim lessons of the inter-war period; if they should prove irrelevant in the post-war period, so much the better.

While thus a system of reasonably stable and unrestricted exchanges, under present-day conditions, is possible only on a foundation of domestic stability in the member states, it is equally well to recognize the correlative proposition that, as a rule, the external balance of payments should not require an individual country to depart from domestic stability and to undergo either a general inflation of its price structure or a deflation of money income far below the level corresponding to good employment. If there is a persistent discrepancy seeming to require adjustment through inflation or deflation, it is the exchange rate that should be changed and not the domestic price or income level. Ideally, as we have seen, exchange rates should be fixed for long periods in such manner that, when all countries enjoy satisfactory levels of employment without inflation, the international accounts are in equilibrium. It is the business of the buffer mechanism of international liquidity to meet any moderate and temporary departures from this happy state; it is the business of domestic employment policy to prevent severe and protracted departures.

BOOKS PUBLISHED BY INTERNATIONAL FINANCE SECTION, PRINCETON UNIVERSITY

Ι.	Exchange, Prices, and Production in Hyper- Inflation: Germany 1920-1923. By Frank	
		f print
2.	Governmental Control of Crude Rubber. By Charles R. Whittlesey	\$2.50
3.	Monetary Inflation in Chile. By Frank Whit- son Fetter	
		2.50
4.	The Gold-Exchange Standard in the Philip-	
	pines. By George F. Luthringer	3.00
5.	Railway Nationalization in Canada. By Leslie	
	T. Fournier out of	print
6.	The Monetary Experience of Belgium, 1914-	7
	1936. By Henry L. Shepherd	3.00
7.	Monetary Experiments: Early American and	
	Recent Scandinavian. By Richard A. Lester	3.50
8.	The Anglo-American Trade Agreement. By	3.30
	Carl Kreider	2 50
0		3.50
9.	Protective Tariffs. By Frank D. Graham	2.00

Order from any bookseller or from

PRINCETON UNIVERSITY PRESS PRINCETON, NEW JERSEY

Essay Series

- 1. International Monetary Mechanisms: The Keynes and White Proposals. Friedrich A. Lutz.
- 2. Fundamentals of International Monetary Policy. Frank D. Graham.
- 3. International Aspects of Wartime Monetary Experience. Richard A. Lester.
- 4. Conditions of International Monetary Equilibrium. Ragnar Nurkse.

Order from International Finance Section Princeton University