

International Reserves and Payments Adjustment (*)

That something is wrong with the international monetary system is now well known to even the most casual newspaper reader. The experts have for some time agreed that the system is not working correctly. Even the few who say that the system itself needs little change believe that the operators of the system do not understand it and so do not operate it correctly. They thereby imply that even if the system is a good one, it is not working well.

The consensus is not confined to the recognition that something is wrong. Intensive study, especially during the past six years, has identified the difficulty in a way that has come to be widely accepted. According to this accepted analysis, there are three logically distinct, although interrelated problems, commonly designated as the problems of international liquidity, of payments adjustment, and of confidence. The problem of world liquidity is generally thought of as the problem of the adequacy of international official reserves and credit facilities that enable national monetary authorities to command the foreign exchange they need to support the value of their currencies relative to other currencies in the foreign exchange markets. The need for such liquidity (in the sense of both reserves and borrowing facilities) is most obvious in a system where foreign exchange rates are expected to be maintained at fixed levels (ignoring permitted fluctuations not exceeding one per cent on either side of the fixed parities) and in which any failure to maintain them at such levels is a sign of breakdown. In the context of the world monetary system, the problem of liquidity is not the adequacy of the liquidity of any one country. Any national inadequacy may reflect merely the running down of a country's international reserves

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as a result of persistent deficits in its balance of payments. In the context of the system as a whole, the liquidity problem refers to inadequacy of the liquidity of all countries taken together. This can become a problem because all countries need reserves or borrowing power to finance deficits and — for a variety of reasons, even in a smoothly operating system — all countries will be in deficit or surplus at some times, so that they must have reserves to pay out or ability to borrow from abroad to finance deficits until they can get into surplus and regain lost reserves, or repay loans made when they were in deficit.

The second problem, that of adjustment of international payments, refers to the process by which a country restores equilibrium in its balance of payments. Satisfactory payments adjustment is generally thought to require that disequilibria be eliminated by means other than the imposition of controls over international transactions for the specific purpose of influencing the balance of payments. One of the purposes of maintaining fixed exchange rates is to facilitate international trade and investment; to maintain them by imposing barriers to such transactions protects the means by sacrificing the end and is therefore widely regarded by economists as an alternative to true adjustment, not a form of it. Since World War II, it has also become generally accepted that the correction of a payments deficit by measures that reduce imports through curtailing domestic demand for goods and services and thereby creating significant unemployment also does not constitute satisfactory adjustment. The standard methods of adjustment that are regarded as satisfactory are reductions of prices, money costs, or incomes of the deficit country relative to those of other countries without the sacrifice of potential output for balance-of-payments reasons. Because it is difficult to reduce prices and money costs measured in the country's own currency, this standard method of adjustment — insofar as it requires absolute declines in prices and money wages — does not work in the modern world. Broadly speaking, this method of adjustment can operate only when the relative reduction of prices, money costs, and real incomes can be accomplished otherwise. Under a system of fixed exchange rates, the only alternative is a more rapid rise of prices, money costs, or real incomes in other countries.

The third problem, generally labelled the problem of "confidence", refers in its broadest sense to the danger of large movements of funds from one country to another by either private

investors or monetary authorities who hold a portion of their country's official reserves in the form of assets denominated in the reserve currencies, mainly the dollar but to a lesser (and decreasing) extent the British pound. In a narrower sense, the problem of confidence concerns the danger of sudden switches between different forms of reserve assets by monetary authorities and excludes such switches by private investors. The label derives from the idea that the reason for such switches is a loss of confidence that the foreign exchange value of the asset will be maintained. The French Government's policy of converting dollars into gold during 1965 and 1966 — apparently in order to put pressure on the United States to change its own balance-of-payments policy or perhaps its other policies — shows however that other motives may cause movements out of one form of reserve into another and that the label "confidence" is too narrow; the problem might better be called one of "conversion" or "reserve-switching".

It is well recognized that these three problems are closely related. To mention only a few of their relationships, it is obvious that the more effective is the adjustment mechanism, the smaller is the need for liquidity to finance deficits because more effective adjustment makes deficits smaller and eliminates them sooner. These two problems are also related in a way that operates in the opposite direction. The larger are a country's liquid international assets, the less is the pressure on it to eliminate a deficit.

Similarly, there is a two-way relation between the liquidity of a reserve-currency country and reserve-switching. The larger is such a country's liquidity, the less probable it is that countries holding assets denominated in its currency will doubt that the exchange value of that currency will be maintained and therefore the less likely they are to withdraw funds owing to lack of confidence. Operating in the other direction is the fact that the greater is the danger that foreign holders will convert assets in a country's currency into other currencies, the greater are the reserves needed by the country in which they hold those assets. Thus, on the one hand, high liquidity both reduces the danger of withdrawals and increases the ability to withstand them when they occur; on the other hand, the greater the danger of such withdrawals, the greater is the liquidity needed.

A corresponding two-way relation exists between adjustment and reserve-switching. Given the amount of a country's liquidity,

the more effectively the country eliminates payments deficits, the less likely it is that foreign holders of assets denominated in its currency will wish to escape for fear of devaluation and therefore the less is the danger of reserve-switching. Operating in the other direction is the fact that instability in the holdings of a country's assets can accentuate the burden on the adjustment process by converting what, in the absence of nervousness or vindictiveness, would be a small deficit into a large one and thereby make what would otherwise be a satisfactory degree of adjustment quite inadequate.

While these and other relationships between the three problems are well recognized, the separation of the three problems has been useful not only for theoretical analysis but for practical policy. In their efforts to improve the monetary system, governments have distinguished between the three problems, and, despite disagreement as to which of the three problems most urgently needs solution, progress has been made by dealing with them one at a time. We are now at a stage in the efforts to improve the international monetary system in which it is timely to reappraise the conventional view of that progress and of the relative importance of some of the problems that remain unsolved.

The Prevailing View of Progress in Improving the System

After what appears, to the outsider at least, to have been a slow start in recognizing international monetary dangers, governments began to address themselves seriously to the issue of liquidity in its global context some five or six years ago. The staff of the International Monetary Fund had earlier given much thought to that question and had published reports on it in 1953 and 1958. There is still no clear and agreed formulation about the criteria for judging whether international reserves are adequate; a variety of criteria have been put forward and criticized.

Despite this fact, a number of steps have been taken over the past decade to expand the portion of international liquidity represented by borrowing facilities. Thus, in 1959 and 1966 general increases were made in member countries' quotas in the International Monetary Fund, which set the limits of their ability to borrow foreign currencies from the Fund. In 1962, ten major countries and the Fund set up the General Arrangements to Borrow, under which they agreed to lend the Fund up to \$6 billion of their currencies if

it was threatened with a shortage of those currencies and might therefore become unable to meet the needs of members who needed to borrow them. Beginning in 1961, the United States began to arrange bilateral agreements with other countries to "swap" currencies, an arrangement under which each partner provided the other with currency in equivalent amounts for short periods, enabling the partner to draw on these credits in case of need. These arrangements expanded into a very considerable network of swap agreements involving many of the major countries; those involving the United States Federal Reserve System alone amounted to \$10½ billion on March 10, 1969. These arrangements provided for substantial increases of liquidity in the form of credit facilities which, when used, became borrowed reserves. Reserves were also increased by the decision of the IMF to allow member countries to borrow up to amounts equal to their so-called "gold tranches" with virtually no questions asked. Since amounts thus borrowed could, when repaid, be immediately borrowed again, the gold tranche became equivalent to owned reserves and is so regarded by all, or virtually all countries, along with their monetary gold stocks and their liquid assets in dollars, sterling, and foreign exchange reserves held in other forms. The major step, however, was the arrangement to provide for owned reserves called Special Drawing Rights. Although there was disagreement as to whether an increase in owned reserves was actually needed, it was agreed that such increases might be needed in the future if they were not already needed. The various countries in the Group of Ten could agree, therefore, that it was desirable to establish a "facility" to increase such reserves and actually to increase them. The prevailing view is that, with this agreement to establish and activate the SDR facility, the liquidity problem has been largely solved.

Some of the leading experts think that the next problem on the agenda should be that of reserve-switching. They believe that this problem was already serious when reserves consisted primarily of gold and of dollars, which the United States undertook to convert into gold on demand of monetary authorities, but that the imminent issuance of SDR's, by creating still another form of reserve asset, will magnify the problem. While most experts agree that the co-existence of different forms of reserve assets presents a problem, the question of adjustment seems to hold a higher priority on the agenda of most private economists and of governments. The observation

of Prof. Meade is representative. In commenting at a conference in Bologna on various approaches to solution of the liquidity problem, he said: "I should say frankly that I feel very sincerely and very strongly that the attention given to liquidity in our discussions is quite out of proportion to the attention that has been given to adjustment. I am saddened at the sight of so many people in such positions of great responsibility, and in such positions of intellectual and academic influence in these matters, spending such a high proportion of time discussing the differences... between the various ways of controlling and increasing international liquidity relative to the proportion of time which they have given to what in my view is the much more important problem of how the countries in the free world adjust their payments to each other" (1).

A symptom of this concern about adjustment is the increased support of greater flexibility of exchange rates in academic circles. The idea that a system of fixed exchange rates actually results in interference with the market mechanism and impairs the operation of the international system has prevailed for many years, especially among economists who most strenuously oppose government interference with market processes. In the past few years, opinion among academic economists has moved strongly in this direction. While the proponents of *completely* flexible exchange rates are still relatively few, there is no question that support of greater flexibility of exchange rates in some form now represents the consensus among academic economists.

Several forms of flexibility have been proposed, ranging from "floating rates" (i.e., complete flexibility free of any government intervention in the foreign exchange market, as advocated by Milton Friedman in his now classic article "The Case for Flexible Exchange Rates", published in 1953) to less extreme forms, such as a widened range of permissible fluctuation around fixed parities, provision for small but frequent adjustment of parities (the so-called "crawling peg"), either automatically on the basis of past actual market rates or on a discretionary basis, or some combination of a widened band and a crawling peg.

Private bankers and government officials have traditionally been so averse to the thought of operating under a system of flexible exchange rates, despite the fact that Canada did so for twelve years

(1) See RANDALL HINSHAW (ed.), *Monetary Reform and the Price of Gold* (The Johns Hopkins Press, Baltimore, 1968), pp. 121-22.

from 1950-1962, that they have generally refused to discuss it in public or even to give it serious consideration in private. The prospect of operating under such a system was just too appalling. The tide of opinion has nevertheless affected them, too. The first sympathetic consideration by an official occurred when Dr. Marius Holtrop, then Governor of the Bank of the Netherlands and President of the Bank for International Settlements and a distinguished economist, expressed the opinion that greater flexibility of exchange rates should be considered.

In the United States, the President's Council of Economic Advisers, in its January 1969 Report, after an 8-page discussion of the adjustment problem, devoted another four pages to discussing proposals for exchange rate flexibility. Its very neutral discussion is introduced with the statement (page 146) that, "The dramatic advances in world trade and prosperity achieved under the present system provide a strong case for conservatism in considering innovations; at the same time, the recurrence of financial strains has aroused widespread interest in possible amendments to the system", an introduction which foreshadows sympathetic consideration. It concludes in an equally neutral tone that, "The various proposed modifications in the exchange rate system raise many difficult technical issues, and clearly a proper evaluation of these proposals must be preceded by a great deal of careful study". What was significant about the Council's discussion was not any conclusion explicit in these carefully worded statements but the willingness to discuss the issue so fully in an official document. This support for greater flexibility of exchange rates has begun now to extend to the private banking community, with the possible exception of the foreign exchange traders themselves. At the annual meeting of the International Monetary Fund in the autumn of 1969, official study was encouraged by finance ministers and central bankers from many countries.

The reasons for this increasing support are increasing pessimism, not to say despair, that the adjustment problem can be solved under a regime of fixed exchange rates and the belief that changes in the exchange value of a country's currency provide a method of altering the level of its costs and prices relative to those of other countries without (in the case of a deficit country) reducing them in terms of its national currency or (in the case of a surplus country) inducing an inflationary rise in them. What, in turn, has caused the increase

in pessimism? Mainly, the increasing frequency of crises. The United Kingdom had deficits in 1967 even larger than in the preceding two years, despite the declared intentions of the British Government to put the elimination of deficits at the top of its agenda. The devaluation of November 1967 is evidence of the complete failure of that effort. The payments deficit of the United States, whether measured on the better known but less appropriate "liquidity" definition or on the alternative "official-reserve-transactions" or "official settlements" definition, was far higher in 1967 than in any preceding year, despite the increasing intensity of controls over capital outflows, and many people regard it as responsible for the hemorrhage of gold which led to the crisis of March 1968. Then came the interrelated but mainly distinct crises of the German mark and the French franc in November, 1968. It is ironic that by the time of the last of these three crises, the only one that clearly reflected a failure of adjustment, so much of the movement of opinion in support of greater flexibility of exchange rates had already occurred.

The truth is that problems of adjustment and of the adequacy of growth in world (not merely national) reserves are not so easy to distinguish, for they are accompanied by the same symptom: persistent deficits in the balances of payments of countries that perform international banking services. Persistent deficits of such countries do not necessarily mean that they have not pursued proper adjustment policies; that is only one possible explanation. Inadequate growth of world reserves produces the same result. A reappraisal of what has occurred in the past few years strongly suggests that much of what has been taken to be a failure to solve the adjustment problem was in fact a failure to solve the problem of growth of international reserves.

A Reappraisal of Recent Deficits

To understand why this is so one must recognize that people think of adjustment, i.e., the restoration of equilibrium, as the elimination of deficits (and also of surpluses, although fewer people think of that, and nearly everyone treats it as less urgent) without the use of controls imposed especially for that purpose. It is quite natural, therefore, that a failure to eliminate deficits is generally interpreted as a failure to solve the adjustment problem and as either

an inadequacy of the adjustment mechanism or interference with its operation. This interpretation, while natural, is not correct for a number of reasons. Several of the reasons need not be developed fully, but should be mentioned.

First, consider a deficit on the liquidity definition of the net balance, which is the more widely reported of the two concepts officially used by the United States. This concept does not treat as a U.S. receipt an inflow of foreign capital, whether privately or officially owned, that the foreign holder invests in "liquid" dollar assets (i.e., short-term dollar assets or U.S. Government securities of any maturity). Such inflows of funds are treated as a means of financing foreign payments, just as gold outflows are, even though such inflows represent a demand for dollars in the foreign exchange market just as much as does the purchase of a dollar of merchandise exports. The United States (or any other country) can be in deficit on that definition even when the demand for its currency exceeds the supply in the foreign exchange market at the prevailing exchange rate, and it can be in surplus even when the supply exceeds the demand. Indeed, transactions that do not affect the foreign exchange market at all can convert a deficit into a surplus or a surplus into a deficit. Clearly, that concept can be misleading as an indicator of disequilibrium in the foreign exchange market. It not only can be but has been misleading. Foreigners have voluntarily increased their holdings of liquid dollar assets more or less continuously throughout the postwar period and over the long run will no doubt continue to do so as long as the world economy and world trade continue to grow. To the extent that the U.S. deficit, on the liquidity definition, consists of such voluntary accumulation, it does not reflect a disequilibrium.

Second, the official settlements concept of the net balance of payments can also be misleading for the same reasons, although it is not likely to be misleading to the same degree as the liquidity concept. The official settlements concept differs from the liquidity concept mainly in treating inflows of foreign private capital as above-the-line receipts, even if they are invested in liquid assets. (A less important difference is that the official settlements definition treats inflows of foreign official funds, even if they are invested in non-liquid forms, as financing items "below the line" rather than receipts above the line.) The reason it can be misleading is that foreign monetary authorities, like foreign private holders of funds, may also

want to increase their holdings of dollar assets, which are part of their monetary reserves, because they want to increase the working balances available for keeping their currencies stable and not merely because they have no alternative. Such voluntary increases in their holdings also do not imply a need for payments adjustment by the United States. Nevertheless, the official settlements concept comes closer to indicating disequilibrium in the foreign exchange market.

But there is another difficulty that, in recent years, has been just as serious as the one just mentioned, and is important for the relation between the liquidity and the adjustment problems.

We may take it to be true, at least for countries whose currencies are not used as reserves by other countries, that from the point of view of one country, a deficit in its official settlements balance is indeed a disequilibrium. In the case of such a non-reserve currency country, a deficit on this definition implies a decrease in reserve assets and, since these assets are exhaustible, it cannot continue indefinitely. But it does not follow, under a system such as we have had, that such a deficit implies a disequilibrium in the relation between the currency of the deficit country and the currencies of other countries. To see why it does not, we must review some of the principles of balance-of-payments accounting.

The international transactions of one country have a counterpart in those of other countries. One country's exports are another country's imports. One country's lending is another country's borrowing. Thus, if all countries define their deficits and surpluses symmetrically (i.e., treat as above-the-line receipts what the partner countries call above-the-line expenditures), then the algebraic sum of all countries' deficits and surpluses will equal zero. Or, to put the same point in a different way, instead of adding up the differences between each country's receipts and expenditures, we may add up the expenditures of all countries and the receipts of all countries and see directly that the two totals will have to be equal, since every international receipt is an international expenditure viewed from the other end. Thus, for all countries taken together, the sums of international receipts and expenditures are equal on symmetrical definitions, and there can be no deficit or surplus for the world as a whole. Or so it would appear.

But the appearance is false. It is false because of the treatment of gold that is transferred between the non-monetary and the monetary spheres. Such transfers, even when they occur within a

country, are treated as though the gold had moved internationally. When gold mines, let us say in South Africa, sell gold to the South African Reserve Bank, their net sales are treated as exports by South Africa. Those export receipts are balanced by an increase in South Africa's official monetary gold reserves, which is a financing transaction rather than a receipt or expenditure. There is no import in any country's balance-of-payments account to match this export. Similarly, when private purchasers in any country buy gold for industrial uses, for hoarding, or for speculation, the transaction is treated as an import, but there is no counterpart export in the accounts of any country. In practice, such individual transactions are not included in exports or imports; only the difference between production and non-monetary consumption of gold is entered, the entry being an export if production exceeds non-monetary consumption and an import if non-monetary consumption exceeds production. These excesses are equal, respectively, to increases and decreases in world monetary gold stocks.

We need not go into the reasons for this treatment of gold in balance-of-payments statistics. For present purposes it is sufficient to point out that gold is the only form of reserve asset now in existence of which this is true because, as Mundell and Machlup have put it, gold is the only asset that is nobody's liability. When SDR's are created, however, it will also be true of them, insofar as countries treat the SDR's they receive by direct allocation as international receipts making for payments surpluses, like excesses of gold production over non-monetary consumption.

As a result of this treatment of gold, the sum of deficits and surpluses, even on otherwise symmetrical definitions, is equal not to zero but to the change in the world's monetary gold stock, being a surplus for the world as a whole when the world monetary gold stock increases because gold production exceeds non-monetary consumption, and a deficit when gold stocks fall because non-monetary consumption of gold exceeds production. This means that when gold production exceeds non-monetary consumption so that world reserves are increasing, it is an arithmetic necessity for the sum of all surpluses to exceed the sum of all deficits. It is even arithmetically possible, however unlikely, for all countries to have surpluses. In the opposite situation, when non-monetary consumption exceeds production of gold, the sum of all deficits must exceed the sum of all surpluses and it is possible, although unlikely, for every country

to have a deficit — again assuming that other transactions are treated symmetrically (2).

Non-monetary consumption of gold began to exceed new supplies in 1966 and the excess increased explosively so long as the price for private buyers was held down by official sales. According to estimates of the International Monetary Fund, the changes in world monetary gold stocks have been as follows (in millions of U.S. dollars):

Year	Total	Quarterly at annual rates			
		1st	2nd	3rd	4th
1964	710	346	2,078	466	50
1965	220	-1,014	838	-130	1,186
1966	-45	40	20	-55	50
1967	-1,580	-280	-560	-80 p	-5,400 p
1968	-715	-5,480 p	1,120 p	820 p	680 p
1969	n.a.	560 p	n.a.	n.a.	n.a.

p = preliminary.

n.a. = not available.

This is the amount of aggregate net balances on an official settlements definition, ignoring errors and omissions in the statistics.

A logical question still remains to be answered. If there is a difference between gold production and non-monetary consumption, what determines which countries get the aggregate net surplus or deficit that results from the difference? It may appear, from the description of how this difference gives rise to a net world surplus or deficit, that the surplus or deficit occurs in the countries in which production and non-monetary consumption of gold differ and which therefore have the corresponding exports or imports. This is true when the differences between production and non-monetary consumption of gold are not associated with other international transactions. But to the extent that these differences are associated with other international transactions, other countries affected by those transactions may bear the impact. Suppose, for example, that the

(2) Balance-of-payments data, as reported by individual countries, are actually not symmetrical, but the International Monetary Fund tries to eliminate the asymmetries in its summaries of the world payments situation. See, for example, the footnotes to Table 11 (page 55) of its 1969 *Annual Report* for an explanation of major adjustments.

residents of Country A purchase gold in excess of Country A's production. If they finance their purchases of gold by selling securities to residents of Country B or by borrowings that, directly or indirectly, come from Country B, then the imports of Country A represented by this excess of non-monetary consumption of gold over its production are matched by an inflow of capital, and its net balance of payments is unaffected. If the excess private purchases of gold come from Country A's monetary gold stock, what offsets this loss of reserve assets in the financing sector of Country A's payments accounts? The answer is that the flow of capital from Country B to Country A gives rise to an excess demand for Country A's currency at the fixed exchange rate. Country B's monetary authorities sell reserves to meet the excess demand for A's currency and, as a result, A acquires reserves in an amount equal to its sales of gold to the private purchasers. Country B experiences an outflow of capital and a loss of monetary reserves, so it has the payments deficit. Thus, insofar as a country finances its excess of non-monetary consumption of gold over its gold production by liquidating privately owned foreign assets or incurring private liabilities to foreigners, it pushes the deficit that it would otherwise have on to the country that provides the financing. If the financing country has so good an adjustment mechanism that it avoids a deficit, it only pushes the deficit on to one or more other countries.

The essential point is that the deficit cannot be eliminated from the system so long as non-monetary consumption of gold exceeds its production. When that is the case — and it was the case from the second half of 1966 through the first quarter of 1968 — we have a game of musical chairs. No amount of agility on the part of the players will permit all of them to find a seat. A player who is more agile than others may succeed in getting a seat for himself but he can do so only at the expense of someone else. The problem in international payments is perfectly analogous. In theory, it is possible, of course, that the struggle to maintain balance in international payments could eliminate the cause of the shortage of reserves. It could do so if the competitive struggle to deflate, by reducing prices and money wages, stimulated gold production or if it reduced non-monetary consumption of gold. It could reduce non-monetary consumption by reducing the prices of metals and other commodities that compete with gold in industrial uses or by making hoarding or speculation on a rise in the price of gold seem unprofitable. This

would correspond to the players at musical chairs running around the room so vigorously that they lost enough weight to enable two of them to occupy one chair — and in the modern world it is no more likely, for it would force a decline of output and employment that would be intolerable.

A situation in which the world's monetary gold stock is declining is thus another situation in which the presence of deficits is not alone sufficient evidence of disequilibrium *among currencies* and therefore of need for adjustment in the position of one currency in relation to others, which is the conventional meaning of "adjustment". This does not mean, of course, that a disequilibrium among currencies may not also exist at the same time, but merely that the presence of a deficit in the international payments of one or more countries is not sufficient to prove the existence of such a disequilibrium.

Misleading signals from balance-of-payments deficits are not confined to situations in which world monetary gold stocks are actually diminishing. They may appear in the payments of some countries even when those stocks are rising, if they are rising less rapidly than the desired rise in the reserves of all countries. In a growing world economy, it is to be expected that most countries will want their net reserves to grow. Some countries, of course, may have reserves larger than they think they need and therefore do not want increases. Some may even feel able and willing to sustain losses of net reserves, as the United States did in the first ten or dozen years after World War II. However, if those countries that feel the need of increases actually achieve those increases, which they can do only by having surpluses in their international payments, and if the combined amount of those increases (surpluses) exceeds the increase in world monetary gold stocks, other countries, taken together, must not only fail to have a net growth of reserves, which they are likely under present conditions to want; one or more of them must have a deficit. That is an arithmetically necessary consequence of the fact that fulfillment of the first group's targets implies that they absorb not only the entire increment of net reserves but some net reserves from other countries. Thus, in this situation, too, deficits may reflect not a disequilibrium among currencies but an excess of demand for new net reserves over the supply.

The situation posited in these logically necessary propositions is not merely hypothetical. We have already noted that world monetary

gold stocks decreased from the second half of 1966 through the first quarter of 1968. World monetary gold stocks increased by too little from, at latest, 1960 and very probably since the early 1950's, as Milton Gilbert argues in his analysis of how the system operates ("The Gold-Dollar System: Conditions of Equilibrium and the Price of Gold", Princeton Essays in International Finance, No. 70, October, 1968).

In the situations described, can we say anything about which country or countries will experience the resulting deficits? Although I have not attempted to test this proposition by any technical methods, there is strong reason to believe that the United States tends to be the country that ends up with most of them, except in periods when it is pursuing an unusually tight monetary policy. Private buying of gold, like buying of any other asset not accompanied by an equal increase in saving, requires that the buyer either liquidate more other assets or borrow more than he otherwise would have done. Even if he sells assets or borrows in his own country, his action makes credit conditions tighter there. When this happens on a moderate scale or is offset by domestic credit expansion, it is not likely to have significant international effects; when it happens on a large scale and credit conditions are allowed to tighten, however, the effects are likely to be felt in other countries, part of the response being a repatriation of some capital held abroad or borrowing from abroad or both. The United States is the foreign country likely to feel more of these effects on its balance of payments than any other country because it is the country whose assets constitute the largest portion of total international asset-holding and are likely to be liquidated in largest amount, and is the country from which incremental financing is most likely to be obtained, except when monetary policy in the United States is very tight. This generalization — admittedly, a broad one — does not depend on the cause of the tightening of credit in other countries.

But international effects, and therefore effects on the United States, are especially likely to occur when the cause of credit-tightening in another country is an increase in private buying of gold. In the first place, for reasons already explained, a tightening attributable to domestically financed private buying of gold has an initial direct adverse effect on the balance of payments of the country in which it occurs. The monetary authorities are less likely to accommodate such an increase in demand for funds than one arising from increases

in demand for domestic financing of, say, plant and equipment expenditure, housing, or durable consumer goods. Indeed, they may actually reinforce the tightening if the gold-buying threatens to cause a deficit or reduce a surplus below desired levels. Therefore, a tightening of credit conditions relative to other countries is more likely to occur when the demand for funds results from an increase in the private demand for gold than when it results from other causes (excluding increased demand for foreign securities). A second probable reason is that, in the case of speculative buying of gold, the buyers themselves are more likely directly to liquidate some foreign assets or to borrow abroad than are buyers of capital goods, houses and consumer durable goods. Large operations in gold are conducted mainly by wealthy people or firms familiar with international markets for financial assets and accustomed to dealing in them.

The same considerations apply if the deficit-inducing effects of increased private buying of gold initially fall upon foreign countries other than the United States. If another country is affected first (e.g., because the gold-buyers happen to liquidate assets in that country) and tightens its monetary policy, the ultimate effect is still likely to fall mainly upon the United States. We have already noted that U.S. private capital normally responds to tight money in another country in larger amounts than the private capital of other countries. Moreover, the United States is likely to react most to non-monetary means that another country uses to protect its payments positions. Thus, a country may cut its foreign aid or its imports, thereby passing the deterioration on to a second country. When it is a less developed country whose balance of payments is thrown into deficit, the United States is — or at least was until recently — the country most likely to provide aid. Especially if the response of the second country is to cut imports, the United States is likely to try to offset its share in the corresponding loss of sales by providing Export-Import Bank or other supportive lending. For these and other reasons, there is a strong tendency for these deficits to show up in the balance of payments of the United States.

It is true that this is only a tendency. Even when the system is out of equilibrium, the United States can be in balance or even surplus. This may occur when it has suffered a cyclical decline that reduces imports below long-run trends, or when a boom abroad increases United States exports, or it may result from tighter money, newly imposed restrictions on capital exports, and similar develop-

ments and measures. The United States can thus shift the deficits to other countries. But such a situation is not likely to last long. It forces other countries to impose restrictions on trade and payments or pursue tighter fiscal and monetary policies, and is likely to result in the deflection of deficits back to the United States.

When private demand for gold increased and the Gold Pool satisfied that demand at a price only slightly above \$35 an ounce, pressure was placed upon the aggregate of world balances of payments and especially on the payments position of the United States. That pressure was not confined to the period beginning in 1966, when those purchases actually exceeded gold production and forced aggregate net deficits. It had already existed before, when gold production exceeded private purchases. Why? Because the excess of gold production over private purchases was less than was required by the targets expressed or implied by national policies under the existing conditions of world economic growth. Under conditions of such growth, reserve-currency countries as well as others need increases in their net reserves as their international transactions grow, and that requires balance-of-payments surpluses. Some had greater surpluses and increases of net reserves than they felt necessary, but did little or nothing to reduce them. Others strained to maintain surpluses. Insofar as the surpluses wanted by all countries added up to more than the excess of gold production over non-monetary consumption, the whole system was under pressure. This pressure, first of an inadequate growth of monetary gold stocks and then, beginning in 1966, of an actual decrease, was an important element in the imbalances of world payments during the several years preceding the emergency conference of the Gold-Pool countries on the critical weekend of March 17, 1968.

What happened on that date? The conference was called because the private purchasing of gold had reached crisis proportions as a result of speculation set off by devaluation of the British pound in the preceding November. The speculation on a rise in the dollar price of gold may appear to have been without rational economic basis, since the sterling devaluation had long been regarded as a necessary step toward, rather than one away from equilibrium. But apparently many people believed that it would or might force the United States to raise its official price for monetary gold. An increase in the private *demand* for gold, of course, is not the same thing as

an increase in private *purchases*, but it was enabled to result in increased private purchases because the seven-nation Gold Pool had undertaken in early 1961 to stabilize the price in private markets by supplying gold from their monetary stocks at a price not far above the official price of \$35 an ounce. What happened at the Washington conference on the weekend of March 17 was that the countries attending the conference (the members of the Pool other than France) decided to stop supplying the private gold market and to let the intensified demand be reflected in higher market prices. Thus, the loss of gold from world monetary stocks, which had amounted to \$2-3/4 billion in the six months ending in March 1968, was stopped at one stroke.

We have already seen that such a change must, as a matter of arithmetical necessity, cause an improvement in the sum of balance-of-payments deficits and surpluses. It was to be expected that a large share of this improvement would accrue to the United States. Its net balance, measured according to the official settlements definition, had been persistently in deficit for years, except for a small surplus in 1966. In the second quarter of 1968, it was suddenly converted into a substantial surplus and it has continued to be in substantial surplus in the five quarters since then (i.e., through the second quarter of 1969).

The change in the United States' payments position from deficit to surplus since the termination of the Gold Pool was, of course, been the subject of much discussion by commentators. They attributed the change to a number of things that affected the United States' balance of payments favorably but did not mention the one thing that dominated the world environment of international payments and was practically, although not logically, a necessary condition for that change: the elimination of gold sales to the private market and thus of depletion of the world monetary gold stock. The reasons that commentators gave for the change ranged all the way from one that is plausible and had some real significance — the tightening of credit policy in the United States — to the sudden development of a foreign taste for American common stocks, the rebellions and disorders associated with the student riots and workers' strike in France in the spring of 1968, and even the Russian invasion of Czechoslovakia, although that did not occur until August 1968. Such explanations are, at best, incomplete. They reflect the tendency to look only at the transactions in the United States' balance of payments to

explain what happened to its net balance and to neglect what lay behind them and permitted the changes to occur.

Of course, any development such as the termination of the drain from world monetary gold stocks can affect the net balance of a country's international transactions only through some component of those transactions. But its effect is not visible in the transactions themselves. To see how these transactions were affected by the change in gold policy, let us assume that the unrest in France or the Russian invasion of Czechoslovakia did frighten French and other European owners of capital and induce them to shift substantial portions of their assets from France and other European countries, but that the Gold Pool had been continuing to feed the private market. What would have happened? Even the most superficial acquaintance with the attitudes of Continental investors, not to mention Middle Eastern oil sheikhs, Latin American capitalists, or others, permits only one answer: they would have shifted their assets largely into gold rather than into American securities. In that case, the enormous increase in the inflow of foreign capital into the United States would not have occurred on the scale that it did, and the United States would not have experienced so large an improvement in its payments position as actually occurred.

This is not to say that the change in the net balance of the United States was exactly equal to the cut in the aggregate net deficit of all countries that resulted from termination of gold sales. The United States might have received only a portion of it or more than all of it. In fact, the improvement in the American position exceeded the aggregate improvement, especially in the second and third quarters of 1968, when the French balance of payments suddenly developed an enormous deficit. Events in France were clearly one element in the shift of the American position. But if gold had been able to continue flowing out of world monetary stocks, a larger portion of the French deficit would have gone into gold and less into improvement of the U.S. payments position.

The rise of interest rates in the United States relative to interest rates in other countries also played a significant role. Had it not occurred, some of the capital that came to the United States would probably have gone elsewhere. But, again, if the rise in American interest rates had been accompanied by continuing depletion of world monetary gold stocks, tight money in the United States would have produced a far smaller improvement in the American payments

position than actually occurred. At best, other countries would have kept their interest rates down and the American deficit could have been reduced on this account (i.e., abstracting from the French crisis) by as much as the amount of capital flow that would have been re-directed by the change in relative interest rates. But if the amount of such capital had really proved to be very large, other countries that were unwilling to see a deterioration of their net balances would have raised their interest rates sooner and further than they did. Probably most large countries are in this position, although Germany is a major exception. The United States deficit could not have improved by more than the deterioration in payments that other countries would have been willing to tolerate. As each country's payments position approached the limit that its monetary authorities would tolerate, they would have allowed market forces to tighten interest rates within their own country and probably would have helped the process along by their own policy actions. The improvement in the recorded American payments position could be as great as it was only because it did *not* require an equal deterioration in the payments of other countries. That possibility rested entirely on the stopping of the gold hemorrhage that resulted from the termination — unfortunately very belated — of the Gold Pool's sales. Everyone recognizes that this change of policy had much to do with ending the drain of gold from United States gold stocks. It should be equally clear that it also had much to do with ending the deficit. Any explanation of the reversal in the American payments position that leaves the termination of Gold-Pool sales out of account misses both an important element in that reversal and a major change in the international monetary environment.

These statements do not mean that termination of Gold-Pool sales sufficed to give the United States an official settlements surplus indefinitely. Nor does the existence of a surplus since then mean that the *composition* of United States international transactions is satisfactory. The wealthiest country in the world should be exporting more goods and services than it imports and providing capital to it, instead of having a nearly even balance of exports and imports of goods and services and absorbing private capital, on balance, from the rest of the world.

Furthermore, in emphasizing that decreases in monetary gold stocks adversely affected the United States balance of payments, the above statements do not imply that the causal connection between

the two runs only in this direction. It is no doubt also true that the wide advertisement of the United States liquidity deficit and the persistence of that deficit stimulated speculation on a rise in the dollar-price of gold and led to the enormous increase in private demand for it after 1960. To the degree that this was the case, the United States deficit was self-aggravating, with deficits stimulating private demand — first despite the price-stabilizing operations of the gold pool and, later, because of them — and expansion of private demand, when satisfied by the Gold Pool's sales out of monetary stocks, aggravating the deficit.

These facts are not denied by the thesis set forth here. But none of them in any way impairs the thesis that a substantial portion of the official-settlements deficit experienced by the United States in recent years reflected the absolute decline or inadequate growth of world monetary gold stocks.

Implications for Reform of the International Monetary System

What is the significance of this recent experience for the liquidity and adjustment problems and the needed improvement of the international monetary system?

One implication is that the significance of changes in a country's balance of payments cannot be understood merely by looking at the country's international transactions. A country's balance of payments is part of a matrix of interrelated international transactions, and that matrix is itself only a reflection of what is going on inside the various national economies. Economists have often preached that sermon, but they, and not only newspaper commentators, constantly ignore it.

The correct interpretation of recent experience has a number of implications. In the first place, although a deficit or surplus in a nation's balance of payments is supposed to be a signal indicating both the presence of a disequilibrium and a need for adjustment in its balance of payments vis-à-vis other countries, the signal may be false, even when deficits and surpluses are measured by the official settlements definition. In a world monetary system that depends in part upon net reserves — i.e., reserve assets that, like gold, are not anyone else's liabilities — a deficit of any country, but especially one of a reserve-currency country, does not necessarily represent a disequilibrium between that country's currency and the currencies of all other countries. It may reflect, instead, a disequilibrium in the rela-

tion between all currencies taken together, representing the combined demand of all countries for net monetary reserves, and the supply of such reserves. In that case, a deficit may not imply a need for payments adjustment vis-à-vis other countries. Nothing in any one country's balance of payments tells the observer whether a deficit reflects a disequilibrium among currencies, a disequilibrium in the market for the net reserve asset, or both.

Deficits in periods of inadequate reserve growth give a signal analogous in its falsity to that given by business losses in a period of shrinking or inadequately growing aggregate demand. When aggregate demand is growing at an appropriate rate, persistent losses are a signal that the enterprise suffering the loss should reduce its output and that some of the resources it uses should be shifted to the production of other goods and services. When a firm's losses result entirely from insufficient growth or actual shrinkage of aggregate demand, however, reallocation of its resources is not called for.

Since deficits make international adjustment appear to be required both when it is and when it is not required, their persistence can appear to demonstrate that the adjustment process has failed when it has not, as well as when it has. Correspondingly, when net world reserves are increasing rapidly, surpluses may conceal a country's relative deficit (i.e., a surplus that is too small in relation to those of other countries), although this is far from being a current problem.

Another implication of the recent experience is that the problem of international liquidity is not confined to that of the adequacy of the *stock* of international reserves but includes also the adequacy of the *increment* of net reserves. The stock of international reserves in the world could conceivably be adequate and even excessive by any of the various criteria that have been proposed, but the increments could still be too small in relation to the net balances of payments that monetary authorities desire, for the authorities may well refrain from reducing surpluses, even when they are satisfied with the levels of their reserves. For example, exporters and import-competitors may resist measures to reduce a trade surplus or private borrowers may resist any reduction in their access to foreign capital, while the authorities themselves, fearing inflation, do not wish to make domestic capital more readily available. Whether their reasons are rational is irrelevant, so long as they act on them. A generalization

of such attitudes can produce mounting barriers of restrictions on trade and capital movements or deflationary monetary and fiscal policies.

These lessons can be summarized very simply: Some of what has passed for the adjustment problem has been a liquidity problem in disguise. The unsolved adjustment problem is smaller than is commonly believed. The pre-SDR liquidity problem was greater than is commonly believed.

Dangers of Not Recognizing the Implications

It may well be asked why these points should be stressed now, when the losses of net monetary reserves of the world monetary system have already been terminated and when arrangements have already been made to increase them through SDR's. The analysis that would have been timely before appears now to be of only intellectual interest. The general answer is that the accepted view of what has so far been accomplished and what still remains to be done is greatly influenced by the interpretation of the imbalances in the international payments of various nations that have occurred in the past. These views persist and so do the policy aims that flow from them.

More specifically, one may point to the view that the dramatic shift in the balance of payments of the United States from a large deficit prior to March 1968 to surplus thereafter is a freakish occurrence and that the United States is likely to revert to a deficit as big as before or even bigger, considering how small the surplus in its current accounts has become. It is true, of course, that the change of \$5 billion in the United States payments position from a deficit of \$3.4 billion in 1967 to a surplus of nearly \$1.7 billion in 1968 is greater than can be explained by termination of the gold hemorrhage. It is also generally agreed that the United States, with its great wealth and high rate of saving, should have a larger current account surplus than it has now. It does not follow, however, that there is grave danger of a reversion to undesirably large and persistent deficits in the total American balance of payments even if the present rise of U.S. prices is substantially slowed and nominal interest rates return to more nearly normal level. Termination of gold losses basically changed the international monetary environment, and issuance of SDR's may reasonably be expected to change it further. To ignore these changes leads to exaggerating both the probability

that the American official settlements position will revert to deficit and the probable size of any deficits that recur.

Another reason why the analysis here presented is still relevant to policy concerns the new SDR's. Some countries among the Group of 10 — and perhaps some outside it — apparently were reluctant to support issuance of \$9.5 billion of SDR's in the first three years, and their reluctance, if based on misinterpretation of deficits, may unjustifiably affect use of the new reserves and attitudes toward further issuance of them. There is a danger that some countries may not treat their direct allocations of SDR's as receipts that improve their surpluses or reduce their deficits and may, at the same time, cling to the view that their net payments positions must be maintained in surplus. How they treat these allocations in their international accounts should be a matter of mere bookkeeping but bookkeeping may not be so "mere" if monetary authorities allow their views about policy to be influenced by its results. Deficit countries probably will feel relief from unjustified, as distinguished from justified, pressure to eliminate their deficits, but it is also probable that surplus countries may feel no more pressure to adjust than they do now.

Another way in which the analysis remains relevant is that exaggeration of the unsolved adjustment problem may lead to corresponding exaggeration of the short-run need for flexibility in exchange rates or of the amount of flexibility that is required.

I am aware that in stressing these implications of the foregoing analysis I risk appearing to deny that there is any adjustment problem at all and appearing to say that all would be well if the problem of reserve growth were solved. That overstates my view. Insofar as restoration of equilibrium in balances of payments requires countries to take domestic measures that they find intolerable or lack the courage to take or lack the sophistication to recognize, there is a real adjustment problem. But one should not regard as a disequilibrium calling for adjustment deficits that reflect failure of net reserves to grow adequately. Nor should one regard as a signal for adjustment deficits on the part of the United States or other reserve-currency countries that are merely a response to the desire of foreign monetary authorities to increase their holdings of liquid assets in the reserve-currency country. Such deficits do not represent disequilibria and do not call for adjustment. It is certain that the United Kingdom has had deficits which do represent real disequilibria, possible that

the United States had one in the early 1960's, and probable that it acquired a new one when price rises accelerated as a combined result of the Viet Nam escalation and the failure to increase taxes and restrain the growth of the money supply. To the degree that this is true — a degree that is highly uncertain — there is an adjustment problem. The most unambiguous evidence that there is a long-run adjustment problem is the persistent German surplus during the 1960s. The French crisis of 1968-69, which accentuated the problem of the mark, also appears to be evidence, although it is not yet clear that it is merely an adjustment phenomenon that can be cured by different monetary arrangements. The German surpluses and the French deficits do represent disequilibria and do not involve a reserve-currency. The question at issue is not the existence of the unsolved adjustment problem but its size relative to the size of the problem of providing adequate levels and increases of net world reserves.

This question is relevant not only to the need for activating SDR's and the amount of SDR's needed — which is now settled for the next three years — but to the need for greater flexibility of exchange rates. The contribution that greater flexibility of rates can make to solving the true adjustment problem and the possible costs of solving it through greater flexibility are now being more widely and searchingly considered than ever before. Recent discussions and writings have thrown new light on old questions and identified new questions. Some claims made for the superior ability of flexible exchange rates to solve the adjustment problem need further consideration, but it would require at least another article to deal with those questions. One serious defect of the current literature, however, is directly related to the main theme of the present article. Much of that literature, in comparing the merits of flexible and fixed exchange rate systems, compares flexible systems with what it calls "the present system" and refers to the chronic crises that have occurred under that system. Many writers now conclude that, at worst, a system of more flexible rates could not do worse than the system we now have. What these writers call "the present system", however, is characterized not only by fixity of rates but inadequacy of growth in net reserves, and a substantial share of responsibility for the increasing intensity and frequency of crises over the past decade has been the result of this inadequate growth, not of the fixity of rates. A logical comparison of flexibility with fixity of rates should distinguish what is inherent in fixity *per se* and not take for granted

that a fixed-rate system operates with defects that are not inherent in it. The literature has often merely assumed that the troubles of the monetary system have come from the fixity of rates rather than the lack of adequate growth in net reserves, and most writers not only fail to examine the assumption but are unaware that they have made it.

The association of inadequate reserve growth with fixity of rates was understandable when fixity of rates was associated with both unlimited convertibility of monetary gold reserves into private gold holdings at a fixed price and rising prices for other commodities — as it gradually came to be during the past two decades. But the monetary system that associated fixed rates with this kind of convertibility, which is the system many writers really have in mind when they refer to “the present system”, has been changed twice since March 1968. The two changes together have broken the tie between fixity of rates and inadequacy of reserve growth. The termination of gold pool sales in March 1968 and the associated measures taken at that time stopped absolute depletion of net monetary reserves. The decisions to establish a facility to create SDR's and to activate it have provided for absolute increases in net monetary reserves. Therefore, “the present system” with which writers compare systems of flexible rates is no longer the present system. The discussion has not taken into account that the system has been changed to one that provides fixity of rates while permitting — although, admittedly, not ensuring — adequate growth of net reserves. To assess the contribution that greater flexibility of exchange rates can make toward maintenance and restoration of equilibrium among currencies, flexible-rate systems must be compared not only with a fixed-rate system in which growth of net reserves is inadequate but one in which that growth is adequate and which therefore has very different implications for deficits and surpluses and for the felt need for adjustment.

The world is now only in the first stage of movement to this new system. It would appear reasonable to see more clearly how the emerging system works. That consideration suggests that whatever need for greater flexibility exists is not likely to be very urgent, especially since adjustments have occurred in the exchange rates of the French franc and the German mark.

These observations do not imply that we should not continue to examine systems with greater flexibility. On the contrary, it is desirable that we do so. Some questions, such as those concerning

adjustment under flexible rates and the success or failure of past adjustment under fixed rates, may have been answered incorrectly or incompletely. Other questions have not been answered at all. It is an open question, for example, to what degree disequilibria among currencies are caused by, rather than merely reflected in, monetary factors and to what degree it is sociologically or politically feasible to overcome them by monetary means, or even whether any broad generalizations about these questions can be valid for all countries or for a given country on all occasions. On the one hand, it is doubtful that flexibility, or even a flexible policy in general, can solve all problems that appear as payments problems in a way that would be widely regarded as satisfactory. On the other hand, it is hard to see how some problems, such as long-run discrepancies in price movements, can be either avoided or solved without greater flexibility.

Failure to appreciate the full significance of the changes that have already been made in the system and to take them into account in appraising the need for improved means of adjustment is only one example of the lag between events and intellectual understanding. Another example may occur in our understanding of what the vast increase in the amount of interest-sensitive, internationally mobile liquid capital implies for the desirable level and growth of international monetary reserves. That development may make inadequate even the amount of SDR's that the nations have recently agreed to activate. We should see how responsive the new system will be to the increases in reserves that have been and will be agreed upon, and we should also continue analyzing the benefits and costs of greater flexibility of exchange rates in its various forms.

Conclusions

I have raised some questions that I have not answered and hinted at others. Nevertheless, some conclusions can be readily summarized and some questions at which I have hinted may be made more explicit:

1. Deficits and surpluses in international payments do not necessarily reflect disequilibria among national currencies and therefore do not necessarily indicate a need for “adjustment”.

2. Some of the difficulties that have been associated with the fixed-exchange rate characteristic of what is called "the present international monetary system" are not attributable to the fixity of exchange rates but to inadequate growth — or actual shrinkage — of world *net* monetary reserves.

3. Although a flexible-rate system may (and probably would) be better than a fixed-rate system in which net reserves are being lost to the system as a whole, that does not mean it would be better or even as good as a fixed-rate system in which the world's net monetary reserves are growing at a steady rate.

4. Increases in the world's net monetary reserves are easy to obtain if we agree to get away from the fixation on gold. With the agreement to establish and activate Special Drawing Rights, we have made a major beginning toward that goal. The system now in place is different from, and has the potentiality of being a real alternative to the brand of fixed-rate system that we had until March 1968.

5. The installation of the new system makes a flexible-rate alternative less urgent. We should see how the new system operates.

6. We should nevertheless continue to examine various methods of increasing the flexibility of rates and of the internal policies appropriate to them because, although we have been wrong in identifying some of the problems of the international monetary system as those of disequilibria among countries, such problems do exist and presumably will continue to exist. On the one hand, we need to consider more deeply how far we can realistically expect greater permitted flexibility of exchange rates to solve them. On the other hand, we need to recognize that the direction of technological change, especially in communication and transportation, — through its effects on the mobility of goods, capital and perhaps also of labor — is increasing the economic integration of the world to the point where the nation-state finds it increasingly difficult to exert the sovereignty over economic policy that it thought it had. How to reconcile the conflict between nationalism and the pressure toward increasing integration is the basic problem.

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