426

NEXT STEPS IN INTERNATIONAL MONETARY REFORM

HEARING

BEFORE THE

SUBCOMMITTEE ON INTERNATIONAL EXCHANGE AND PAYMENTS

OF THE

JOINT ECONOMIC COMMITTEE CONGRESS OF THE UNITED STATES

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NEXT STEPS IN INTERNATIONAL MONETARY REFORM

MONDAY, SEPTEMBER 9, 1968

CONGRESS OF THE UNITED STATES,
SUBCOMMITTEE ON INTERNATIONAL EXCHANGE AND
PAYMENTS OF THE JOINT ECONOMIC COMMITTEE,
Washington, D.C.

The Subcommittee on International Exchange and Payments met, pursuant to notice, at 10:05 a.m., in room S-407, the Capitol, Hon. Henry S. Reuss (chairman of the subcommittee) presiding.

Present: Representatives Reuss, and Moorhead; and Senator Proxmire.

Also present: John R. Stark, executive director; John R. Karlik, economist; Douglas C. Frechtling, minority economist.

Chairman REUSS. Good morning. The session of the Subcommittee on International Exchange and Payments will be in order.

This session was called largely because of the upcoming annual meeting of the Board of Governors of the International Monetary Fund here in Washington from September 30 to October 4.

We believe this meeting offers an appropriate forum to consider next steps in international monetary reform. We rejoice that the special drawing rights amendment is now before the member nations of the IMF for ratification, but even the ratification and distribution of SDR's will still leave a number of vital international monetary issues unresolved and demanding immediate attention.

Among these are the current ambiguity about the future of the international monetary role of gold; the obvious need to facilitate adjustments for the elimination of payments deficits, and the threat of possible large scale conversions of sterling reserve balances into dollars and of dollar reserves into gold.

We hope this morning to discuss specific suggestions to deal with these problems, and we have before us three internationally known experts in international monetary affairs, Prof. Fritz Machlup of Princeton; Mr. Edward M. Bernstein, former Director of Research and Statistics of the IMF, and Prof. Robert Mundell of the University of Chicago.

We hope via the U.S. representative to the meeting of the Board of Governors of the International Monetary Fund, Secretary of the Treasury Fowler, to present a number of suggestions for action when the Governors meet at the end of this month.

I regret that our senior colleague on the minority side, the Honorable William Widnall of New Jersey, was suddenly taken ill last night, and while he is now feeling all right, unfortunately cannot be here this morning. He has submitted a statement, and without objection it will be received in full in the record, and since it is brief I shall read it.

STATEMENT OF HON. WILLIAM B. WIDNALL, A MEMBER OF THE SUBCOMMITTEE ON INTERNATIONAL EXCHANGE AND PAYMENTS

"Mr. Chairman, I think this one-day hearing can prove to be very useful and certainly very timely, in view of the nearness of the annual meeting of the International Monetary Fund here in Washington and discussions likely to be held on the question of gold.

"By now it should be clear to all that on one major point involving the March 17th Agreement on gold the chairman of the subcommittee and I are in complete agreement; namely, the need to avoid any new arrangement which would in any way reconstitute the $35 per ounce floor on free market gold.

"One day after the March 17th Agreement, I stated publicly my complete support for the changes made by the former Gold Pool members and my feeling that this move toward demonetization of gold was of truly historic proportions. Nothing has transpired since that time to have altered my opinion. One will recall that there were many predictions by monetary experts that the free market price of gold under the two-tier arrangement would skyrocket. This has not happened. Others predicted that any substantial divergence between the free market price and the monetary price would freeze and immobilize monetary gold reserve stocks. This, too, has failed to materialize and in fact during the period since March 17th nations whose economies were under severe strain have managed without hesitation to defend their currencies, aided by the orderly transference of gold and other reserves to monetary authorities who assisted in their defense.

"With this history of success, it is indeed unfortunate that there has been serious discussion of re-creating a floor and a protection for speculators and hoarders by those who feel that there must be an accommodation with the gold producing nations for the sale of their newly mined gold. The rumors persist that pressure will be brought to bear at the September IMF meeting to institutionalize a system whereby gold producers will be assured of a minimum free market price around $35 per ounce by systematic purchases by the International Monetary Fund. Both the chairman of this subcommittee and myself vehemently oppose any such arrangement, and both of us were heartened by the vigorous support for our position recently stated by the Secretary of the Treasury, Henry Fowler.

"Nevertheless, since reports of efforts of an IMF accommodation for gold producing nations persist, I would like to suggest a possible solution which at the same time would conform with the U.S. position firmly in support of the principles of the March 17th Agreement.

"At the outset, it should be stated that the United States is not necessarily in a position of weakness as we near the September IMF meeting, for it is within our discretionary power under article IV, section 4(b) to so advise the Fund that the United States no longer feels obliged to purchase all gold offered for sale at $35 per ounce. It is my understanding that the United States would be perfectly within its rights to advise the Fund that it would purchase gold only at its option until such time as the members of the Fund conform to the principles established in the March 17th Agreement.

"Meanwhile, it would elect to fulfill its obligations under the articles of the Fund for maintaining the value of the dollar in the same manner as other members of the Fund, simply through purchase and sale of exchange. In this way, the United States for its part would advise the Fund that if a $35-per-ounce floor for newly mined gold (and in effect free market gold) is to be maintained, that such an undertaking will have to be an obligation and burden of the resources of the Fund itself.

"I don't believe those who have spoken out for re-creation of a floor price for newly mined gold have fully taken into account the options available to the United States under the Fund's Articles of Agreement. Indeed, we are not without a strong bargaining position.

"I am well aware that this is a highly technical and difficult area and for that reason I will be anxious to hear the comments on this proposal from the expert witnesses appearing before us this morning.

"My comments are made with the firm personal conviction that the two-tier system created by the March 17th Agreement already have proved highly successful; that its primary architects fully realized and took into account the possibility that the free market price for gold not only could fluctuate above the monetary price but also below. I also hold the conviction that the March 16th Agreement enabled an evolutionary process toward demonetization of gold to take place in an orderly fashion, and that any move toward reimposition of a floor price on newly mined as well as free market gold would be entirely incompatible with that goal."

(End of statement by Representative Widnall.)

Chairman REUSS. I am now going to ask the panel to proceed. First, without objection, there will be received into the record the paper prepared for this hearing by Mr. Edward Bernstein, and the paper prepared especially for this hearing by Mr. Mundell, and in addition three or four recent related papers by Mr. Mundell. Mr. Mundell, would you give the dates and places of those? They are all within the last month or so.

Mr. MUNDELL. Yes; the major paper I am presenting here is called "A Plan for World Currency" which is also being presented this coming Friday at a conference at Ditchley Park, England.

The three supplementary papers are called "The Future of Gold" which is a paper given last June in Geneva, Switzerland. The second paper is called "The Collapse of the Gold Exchange Standard" which was given to the American Farm Economics Association in August, a couple of weeks ago, and the third paper called "Should the U.S. Devalue the Dollar?" is paper given to the Western Economics Association meetings, also a couple of weeks ago.

Chairman REUSS. Without objection they will be received.

(The following paper was received from Mr. Bernstein for inclusion in the record:)

(Papers referred to above follow:)

INTERNATIONAL MONETARY RESERVES AND THE COMPOSITE GOLD STANDARD

GOLD RESERVES IN THE POSTWAR PERIOD

Great wars are inevitably destructive of the gold standard in its traditional form. The war and postwar inflation exhausts the money creating power of gold standard countries with fixed reserve requirements. The uneven inflation results in the overvaluation of currencies at the historic gold parties where inflation has been large relative to that in other countries. And the large rise in prices and costs inhibits the growth of reserves by discouraging gold production and diverting more of the gold output to private uses instead of monetary reserves. Under these conditions, the traditional gold standard could be restored and maintained after a great war only through a deep and prolonged deflation, such as that of the 1930's.

The Second World War is unique in having escaped a destructive postwar deflation, but only because the gold standard itself has been gradually freed from the rigorous restraints it imposed in the past. Countries no longer regard the amount of their gold reserves as an acceptable measure of the appropriate money supply. When gold reserves are not adequate to permit the growth of the money supply required by the economy, the reserve requirements are changed. Countries no longer regard the maintenance of the historical gold parities of their currencies as the primary objective of economic policy. When a country cannot correct its balance of payments at the existing parity, it no longer deflates the economy, it changes the parity with the approval of the International Monetary Fund. But gold still remains the most important form of international monetary reserves, and countries are only now beginning to make a rational adjustment to the effects of war on the growth of reserves.

The Second World War had the usual effect on gold production and gold reserves. In 1940, the gold production of all countries, excluding the Communist countries, was $1,283 million. Gold production fell sharply during the war, and although it recovered after 1945, the prewar level of output was not reached again until 1962. There was a modest increase of gold production between 1962 and 1965, when it was at a peak of $1,440 million, but production fell in the two following years, although it may rise slightly in 1968. Thus, gold production this year will be only 12 percent higher than it was 28 years ago. In every country except South Africa, production is substantially lower than it was before the war. In South Africa, production has increased because of the opening of new mines with high grade ore. But operating costs are rising, and there is no assurance that gold production in South Africa will continue to increase. At best, the growth of gold production hereafter will be very slow and it may, in fact, stay on a plateau or possibly decline.

Furthermore, as gold became cheaper relative to goods, and as money incomes rose sharply, more of the newly-mined gold was absorbed in industrial uses and private hoards instead of going into monetary reserves. In the 30 years since the end of 1938, the monetary gold stock of the world, excluding the Communist countries, increased from just under $26 billion to just over $40 billion, including the gold holdings of the IMF and other international monetary institutions. This is equivalent to an average annual increase of less than 1.5 per cent. Most important, the rate of increase has declined sharply. From 1938 to 1948, the monetary gold stock increased at an average rate of 3 per cent a year. From 1948 to 1958, it increased at an average rate of 1.4 per cent a year. In 1968, the monetary gold stock was virtually the same as at the end of 1958, although this was mainly because of the large sales by the monetary authorities of the gold pool countries to private holders in 1967 and 1968. In any case, as the members of the IMF will no longer sell monetary gold to the private market and as little or none of the newly-mined gold will be sold to the monetary authorities in the future, the monetary gold stock may be expected to remain frozen at about the present level of $40 billion.

Foreign exchange reserves and reserve credit

A system of fixed parities, defined in terms of gold, cannot function satisfactorily unless there is an adequate growth of monetary reserves. In fact, international trade and payments have expanded at an unprecedented rate in the postwar period and the world economy has prospered, despite the very small increase in gold reserves. The international monetary system, although based on the gold standard, was able to adapt itself to a minimal growth of gold reserves because the need for additional monetary reserves was met in other ways—primarily through a steady increase of foreign exchange reserves and secondarily through the development of very large facilities for reserve credit.

Foreign exchange.—The enormous growth of foreign exchange reserves during and after the war was a once-for-all phenomenon that cannot be repeated. In 1938, the foreign exchange reserves held by all countries amounted to about $1.8 billion. During the war, the United Kingdom financed a considerable part of its overseas military expenditures by the sale of sterling for local currencies to the monetary authorities—mainly in the Far East and the Middle East, but also in Europe and other regions. After the devaluation of sterling in 1949, foreign exchange reserves in the form of sterling amounted to about $8 billion. Since 1950, the sterling reserves of the monetary authorities have declined. The recent rise in official holdings of sterling, as reported at the end of March 1968, is the counterpart of swap operations and should be regarded as reserve credit to the United Kingdom rather than true holdings of sterling reserves. There is no practical possibility of a further growth of sterling as reserves. The more urgent problem is to avoid a flight from sterling reserves by sterling area countries.

The growth of reserves since 1950 has been primarily in the form of dollars. In the past 19 years, the dollar reserves of foreign monetary authorities have increased from $3 billion at the beginning of 1950 to over $17 billion in mid-1968, including non-marketable Treasury obligations. Without this steady rise in dollar reserves, it would not have been possible to provide for the reserve needs of the world economy. Since the beginning of 1950, the gold and foreign exchange reserves of all countries, excluding the Communist countries, have increased from just over $45 billion to about $67 billion. Excluding the recent increase in holdings of sterling acquired in swaps, the growth of gold and foreign exchange reserves since the beginning of 1950 has been at an average annual rate of less than 2 per cent. About four-fifths of the increase in reserves has been in the form of foreign exchange, and about 85 per cent of the foreign exchange has been in dollars.

This vast creation of foreign exchange reserves was the result of the U.S. balance of payments deficit, which has been particularly large since 1958. Obviously, it is not possible for the United States to continue a payments deficit, on a reserve transactions basis, on the scale of the past 10 years. There is an understandable reluctance on the part of some countries to underwrite a large and continuing U.S. payments deficit by acquiring all the dollars that would accrue to their monetary authorities. Under extreme conditions, this would mean that other countries would be severely limited in managing their own monetary policy. Nor is the creation of dollar reserves in indefinite amount in the interests of the United States, particularly if its gold reserves cannot increase. The steady building up of reserve liabilities to foreign monetary authorities exposes the United States to the danger of massive conversions of dollars into gold in a period of economic or political crisis.

Reserve credit.—The need for reserves in the postwar period has also been met by an enormous increase in reserve credit facilities. The IMF makes resources available to its members under prescribed conditions. The total quotas of the IMF, which are an indication although not a true measure of the resources it has for extending reserve credit, amounted to just over $9 billion at the end of 1958. The total exchange transactions of the IMF to the end of 1958, which is the gross reserve credit extended by the IMF in the first 12 years of its operations, amounted to $3.2 billion.

Since the end of 1958, the quotas of the IMF have been increased twice and now amount to over $21 billion. To assure the liquidity of the IMF—its capacity to extend reserve credit in the currencies of the surplus countries—it has entered into General Arrangements to Borrow up to an aggregate of $6 billion in the currencies of the 10 large industrial countries (the Group of Ten). In the past ten years, the IMF has engaged in exchange transactions amounting to $11.5 billion. The access of its members to the resources of the IMF has made it possible to expand the use of other forms of reserve credit because of the assurance that such credits could be repaid by drawings from the IMF.

The other important form of reserve credit was the creation of a network of reciprocal currency arrangements among the large central banks and with the Bank for International Settlements. The United States, which is the center of these arrangements, has swap facilities amounting to $10 billion with 14 countries and the BIS. These swap facilities have been extensively used by the United States and other countries to meet sudden pressures in the exchange market. Apart from the reciprocal currency arrangements, reserve credits have been extended by central banks to each other, notably to the United Kingdom, on an *ad hoc* basis. As already noted, drawings on the IMF have been used from time to time to repay reserve credits extended through swaps and on an *ad hoc* basis.

The enormous use of reserve credit facilities in recent years is an indication of their importance to the international monetary system. Nevertheless, reserve credit can be only a limited substitute for reserves. The swaps are actually short-period credits, and although they can be renewed, their usefulness depends upon reversing them in a relatively short period, so that they may be available again when required. Drawings on the IMF are intermediate-term credits, as they must ordinarily be repaid (except super-gold-tranche drawings) in three years, with an outside limit of five years. Although the IMF has immense resources for extending reserve credit, very large drawings by a great trading country may be regarded as a sign of weakness. In any case, countries cannot become more and more dependent on larger and larger use of reserve credit, with an obligatory schedule of repayments, without losing the comparative freedom in policy making provided by their own reserves.

Quantitative and qualitative reserve problems

Although it has hitherto been possible to secure the necessary growth of monetary reserves through a steady increase in the dollar component of reserves, this method cannot be continued much longer. This is not entirely because of a lack of confidence in the dollar, although the continued U.S. payments deficit has been a disturbing element in the international monetary system in recent years. The fact is that no national currency, including the dollar, can provide for an adequate growth of reserves over an indefinite period. That is because at present only gold is a final reserve asset. The strength and stability of the international monetary system depends not only on having adequate reserves, but on having a large proportion of them in the form of final reserve assets.

The nature of the gold problem is evident in the steadily declining proportion of gold in aggregate monetary reserves. The ratio of gold to the gold and foreign exchange reserves of all countries, excluding the Communist countries, was 94 per cent in 1938, 71 per cent in 1948, and is about 57 per cent at present. The sharp decline in the ratio of gold to total monetary reserves reflects the relatively small increase of gold reserves and the very large increase of foreign exchange reserves. The reserve position of the United States has deteriorated with the decrease in U.S. gold reserves and the concomitant increase in U.S. reserve liabilities. Confidence in the dollar probably depends more on the underlying strength of the U.S. balance of payments than on the U.S. reserve position. Nevertheless, without the creation of new reserve assets, the reserve position of the United States cannot be improved except by raiding the gold and dollar reserves of other countries.

The ratification of the Amendment authorizing the establishment of the Special Drawing Account and the activation of the plan for SDRs will solve some of the reserve problems. Their issue at regular intervals in accordance with the trend need for reserves will assure a steady and adequate growth in reserves. Their allocation to all members of the IMF will enable them to increase their reserves without forcing a reduction in the reserves of other countries. The SDRs will be defined in terms of gold, and within the holding and use limitations they will be a final reserve asset. They will not, however, deal with the gold aspect of the reserve problem. In brief, even after the activation of SDRs, the international monetary system will remain exposed to the disruptive effects of the preference that the monetary authorities have for gold relative to other reserve assets.

The preference for gold as a reserve asset did not arise from the burst of speculation that preceded and followed the devaluation of sterling. It has grown steadily with the declining growth of gold reserves and the rising growth of dollar reserves. The preference for gold is indicated by the fact that the proportion of the U.S. payments deficit settled in gold became progressively larger in the 1950's and 1960's. From 1950 to 1957, the U.S. deficit on a reserve transactions basis was about $7.6 billion. As the U.S. gold tranche position increased by $500 million in this period, the United States transferred $8.1 billion of reserves to other countries, of which $2.3 billion was gold and $5.8 billion was dollars. Thus, the gold settlements in this period were 32 per cent of U.S. reserve transfers to other countries.[1] From 1958 to 1965, the U.S. deficit was about $21.6 billion. As $1.4 billion was financed by drawing on the U.S. gold tranche, the United States transferred $20.2 billion of reserves to other countries, of which $9.4 billion was in gold and $10.8 billion was in dollars. Thus, the gold settlements in this period were 46 per cent of U.S. reserve transfers to other countries. The preference for gold was reflected in the larger proportion of gold to foreign exchange that nine continental European countries added to their reserves.[2]

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[1] The gold transfers to other countries are calculated by the decline in U.S. gold reserves after adjustment for gold acquired from IMF investment in U.S. Treasury bills. The gold transfers are overstated to the extent that domestic consumption of gold exceeded gold production in the United States.

[2] Austria, Belgium, France, Germany, Italy, Netherlands, Portugal, Spain, and Switzerland.

From the beginning of 1950 to the end of 1957 these nine countries increased their gold and foreign exchange reserves by about $7.8 billion, of which 53 per cent ($4.1 billion) was in gold. From 1958 to 1965, they increased their gold and foreign exchange reserves by about $14.0 billion of which 89 per cent ($12.4 billion) was in gold.

The creation of a two-tier gold market with a premium price in private transactions will dramatize and heighten the preference of the monetary authorities for gold. The premium may come down in the short run as the private market adjusts to a steady flow of newly-mined gold, as the speculative overhang is gradually liquidated, and, most important, if confidence in currencies is restored. In the long run, however, the supply and demand situation would seem to indicate that the price of gold in the private market will remain at a premium. The gold preference problem cannot be dealt with by driving down the premium. In fact, it is a mistake for the monetary authorities to stake the prestige of their currencies on the private price of gold. The monetary authorities cannot reduce the preference for gold; but they can cooperate to prevent it from disrupting the international monetary system.

A monetary system with multiple reserve assets

An international monetary system with multiple reserve assets consisting of gold, dollars and other foreign exchange, and SDRs can function properly only if all of the reserve assets are used without distinction and discrimination in international settlements. Otherwise, the monetary authorities will hoard gold and make their settlements in foreign exchange and SDRs. If the preference for gold becomes too great, it will disrupt the international monetary system. Conceivably, the monetary authorities would use gold in international settlements only under extreme conditions, so that the mere transfer of gold by a country would be regarded as an indication of a monetary crisis. At best, the hoarded gold would become an inactive part of reserves, thus diminishing the amount of effective reserves. At worst, the preference for gold would lead to gradual conversion of foreign exchange holdings, so that the growth of aggregate reserves would be inhibited, despite the regular issue of SDRs.

The restoration of a U.S. payments surplus on a reserve transaction basis would moderate, but not end, the preference for gold. The fact is that the preference for gold is only in part due to the payments difficulties of the United States. The real basis for the preference is the diminishing proportion of gold in international monetary reserves. The more difficult it becomes for countries to add gold to their reserves—and that will now be impossible for any country without cannibalizing the gold reserves of other countries—the greater will be the urge to hoard gold reserves, regardless of the effect on the international monetary system. Unless positive steps are taken to prevent it, we may see a modern version of the rush from silver to gold in the 1870's that ended in the demonetization of silver and the 25-year scarcity of reserves. Alfred Marshall's description of what happened in the 1870's seems to be relevant today: "Each Government has thought first of the interests of the nation which it represents, and has endeavoured to secure for it a good supply of gold with but little reference to international interests." [8]

The international monetary system can function very well with a two-tier gold market, provided the monetary authorities cooperate to assure the appropriate use of gold and other reserve assets in international settlements. The best way to achieve this is through linking them together in a composite gold standard. In 1962, I proposed the creation of a reserve unit based on the currencies of the Group of Ten and Switzerland. Under my proposal, these countries would have been required to maintain the convertibility of their currencies in gold and reserve units in a fixed ratio of 60 per cent gold and 40 per cent reserve units. This would have been practical for a small group of countries holding over 80 per cent of total gold reserves and including the principal countries with a high preference for gold. With all of the 109 members of the IMF participating in the Special Drawing Account, and with many of these countries holding their reserves predominantly in dollars and sterling, a composite gold standard now would have to be based on gold, foreign exchange, and SDRs in a ratio different for each country. The two basic principles for operating a composite gold standard with multiple reserve assets held in different proportions can be summarized as follows:

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[8] *Official Papers*, London, 1926, p. 24.

1. Each deficit country should use its different reserve assets in settlement of its deficit in precisely the same ratios as it holds these reserves—gold, foreign exchange, and SDRs.

2. Each surplus country should acquire the different reserve assets in settlement of its surplus in the average ratios of gold, foreign exchange, and SDRs used by the deficit countries, so that all surplus countries would acquire the different reserve assets in precisely the same ratios.

These principles would have to be applied to cumulative deficits and surpluses, otherwise a country might have to pay a high ratio of gold when it is in deficit and receive a small ratio of gold when it is in surplus. Even if a country had a balanced payments position over a period of years, the composition of its reserves could change. However, if settlements were made on a cumulative basis, the composition of a country's reserves would be unchanged, apart from new allocations of SDRs, whenever its previous surpluses equal its previous deficits. There is another practical difficulty in operating a composite gold standard with multiple reserve assets. It would be cumbersome for a deficit country to transfer to a surplus country a mixed bag of reserves consisting of X amount of gold, Y amount of dollars, Y' amount of other foreign exchange, and Z amount of SDRs. For convenience, a single bookkeeping entry should suffice to transfer the desired amount of reserves in the ratios required by the composite gold standard.

These difficulties could be obviated by establishing a Reserve Settlement Account as an independent administrative department of the IMF in which countries would hold their reserve assets—gold, foreign exchange, and SDRs—denominated in a composite reserve unit (CRU), defined as one gold dollar of the present weight and fineness, and consisting of the different reserve assets in appropriate ratios. A transfer of reserves from a deficit country to a surplus country would be recorded as a decrease of CRUs in the account of the former and an increase of CRUs in the account of the latter. At any given time, a country whose balance of CRUs is less than the total of the various reserve assets it placed in the Reserve Settlement Account would be in cumulative deficit, and it would have implicitly settled this deficit *pro rata* in the same ratios as the reserve assets it placed in the Reserve Settlement Account. A country whose balance of CRUs is more than the total of the various reserve assets it placed in the Reserve Settlement Account would be in cumulative surplus. This surplus would have been implicitly settled in the different reserve assets in the average ratios that all cumulative deficit countries placed such reserves in the Reserve Settlement Account. An actual transfer of gold, foreign exchange, and SDRs in connection with these implicit settlements, however, would be made only when a country withdraws from the Reserve Settlement Account.

Some aspects of the Reserve Settlement Account

The basic feature of the Reserve Settlement Account is that participating countries would hold all of their reserves on earmark with that account—gold, dollars and other foreign exchange, and SDRs. The amount of reserves each country earmarked with the Reserve Settlement Account would be shown in its initial balance of CRUs. Gold tranche positions in the IMF, although properly regarded as reserves of individual countries, would not be placed in the Reserve Settlement Account as the aggregate amount of gold tranche positions fluctuates constantly with drawings and repurchases. The General Account of the IMF, which extends reserve credit, would however, acquire, hold and transfer CRUs.

Gold.—Every participating country would place its gold reserves on earmark with the Reserve Settlement Account and would be credited with an equivalent amount in CRUs. The earmarked gold could be held in the country's own central bank, at another central bank, or at a Fund depository of the country's choice. Title to the gold reserves would be retained by the participating country, as the earmarking with the Reserve Settlement Account would be solely for the purpose of recording the gold component of a country's CRUs. No actual transfers would be made from the earmarked gold except at the time of final settlement, when a member withdraws. At that time, the earmarking of the gold would be trerminated, and all of the gold would be terminated, and all of the gold would be returned to the withdrawing country, subject to the obligation to settle its cumulative deficit, if it has one, *pro rata* in gold and other reserve assets.

With member countries using CRUs exclusively in the transfer of reserves, there would be no need for the IMF to hold gold. Instead, it would place its gold holdings on earmark with the Reserve Settlement Account and would be credited with an equivalent amount in CRUs. Ordinary quota drawings on the IMF (the

General Account) would continue to be in the currencies of member countries. Thus, a member in need of reserve credit from the IMF could secure it by drawing dollars, sterling, marks, francs, lire, guilders or other currencies, as it does now. Repurchases would also be made as now, in any currencies which the IMF holds in an amount less than 75 percent of the quota. Repurchases would be made in CRUs, however, in those instances in which they would otherwise be made in gold. Similarly, charges which are now paid in gold would be paid in CRUs. When the IMF finds it necessary to replenish its holdings of any currency in the General Account, it would acquire that currency by the transfer of CRUs, in much the same way as it now does through the sale of gold.

Foreign exchange.—Every participating country would agree with the IMF what currency holdings should be included in its foreign exchange reserves. These reserves would be divided into two categories—foreign exchange retained as working balances and foreign exchange placed on earmark with the Reserve Settlement Account for which they would be credited with an equivalent amount in CRUs. The foreign exchange placed on earmark would become fixed fiduciary reserves that could not be increased in the future. The working balances would be retained by the member's central bank. While changes in such holdings would occur in connection with the operations of the monetary authorities, accumulations in excess of appropriate working balances would have to be converted into CRUs. Similarly, countries that run down their working balances could restore them by acquiring the needed currency through transfers of CRUs. No actual transfers would be made from the earmarked foreign exchange reserves except at the time of final settlement, when a member withdraws. At that time, all of the foreign exchange would be returned to the withdrawing country, in the same currencies as it earmarked, subject to the obligation to settle its cumulative deficit, if it has one, *pro rata* in each type of foreign exchange and other reserve assets.

In order to avoid disturbances in the money and capital markets of the reserve centers, the participating countries would earmark their foreign exchange reserves in precisely the form in which they are held. The Reserve Settlement Account would transfer these deposits and securities to the country whose liability they are, receiving in return a non-negotiable interest-bearing obligation of that country with an exchange value guarantee at the present gold parity. The reserve centers would have to make some arrangements to prevent a deflation of their banking system through the withdrawal of foreign official deposits. For example, in the United States, the Federal Reserve could make the same amount of banking reserves available to the same banks in which the foreign official deposits were held, on terms that would permit the same access to bank credit by foreign countries as they now have.

There are a number of questions in connection with the foreign exchange to be earmarked with the Reserve Settlement Account. It would not be desirable to treat as eligible foreign exchange reserves the balances in bilateral payments agreements. Similarly, foreign exchange balances acquired through reciprocal currency arrangements are reserve credit and should not be earmarked with the Reserve Settlement Account. On the other hand, special issues of securities held by the monetary authorities, whether denominated in dollars or their own currencies, are reserves and should be included in foreign exchange earmarked with the Reserve Settlement Account. The U.S. Treasury bills held by the IMF as a gold investment involve special problems. They should be earmarked with the Reserve Settlement Account, the IMF retaining the right to buy this amount of gold from the U.S. Treasury in the future. The IMF would receive CRUs for these Treasury bills.

The foreign exchange earmarked with the Reserve Settlement Account would be fixed fiduciary reserves, the amount of which could not be increased in the future. Thus, aggregate reserves would no longer be affected by the surplus or deficit of the reserve centers, as they would settle their payments in the same way as other countries, through transfers of CRUs or the conversion of their currencies in CRUs. Of course, the limitation on the holding of dollars and other currencies would apply only to official holdings, and would not affect present private balances or their future increase.

Provision could be made for the retirement of a part of the foreign exchange reserves earmarked with the Reserve Settlement Account and their replacement by SDRs whenever this would help strengthen the international monetary system. For example, if the United States should have a large and persistent surplus at some time in the future, so that there would be a threat of a renewed shortage of dollars, the IMF could request the United States to retire some of the dollars held in the Reserve Settlement Account by debiting its balance of CRUs. The IMF could replace the dollars with an extraordinary issue of SDRs in the same amount, allocating them to all members in the same way as regular issues of SDRs. Aggregate reserves would be unaffected by the replacement of dollars with SDRs and other countries would be helped in meeting their deficits. Such a provision would contribute to the flexibility of the composite gold standard, while continuing the appropriate trend growth of reserves, without regard to the balance of payments of any country.

Special Drawing Rights.—The SDRs that each country receives from regular and extraordinary issues would be placed on earmark with the Reserve Settlement Account, precisely as with reserves in other forms. There would be one major difference, however, between SDRs and other reserve assets. While the amount of gold earmarked initially by a participating country would remain unchanged, and the amount of foreign exchange earmarked by a country would remain the same unless some of the foreign exchange were retired, the amount of SDRs in a country's earmarked account would be increased at regular intervals through the issue of SDRs. Thus, the one earmarked account of participating countries with the Reserve Settlement Account that would continue to grow would be the SDRs.

Whenever a country is allocated SDRs, the amount of its allocation would be placed in its earmarked account and it would be credited with an equivalent amount in CRUs. No transfers would be made in SDRs, as all settlements would be in CRUs. When a country withdraws from the Reserve Settlement Account, the SDRs as well as its other earmarked reserve assets, would be returned to the withdrawing country, subject to final settlement for any cumulative deficit it might have. The IMF would arrange the orderly liquidation of any deficiency or excess of SDRs below or above the cumulative allocations of a country in accordance with the provisions governing the Special Drawing Account.

Transfers and settlements.—As all of the reserves of a country would be earmarked with the Reserve Settlement Account, there could no longer be transfers of reserves directly in the form of gold, foreign exchange, or SDRs. Actual transfers of reserves between the monetary authorities of participating countries would be solely in the form of CRUs and would be made by debits and credits in their accounts. In such a system, all of the reserve assets earmarked by a country would comprise a composite supply of reserves, represented by CRUs, and these reserves could be used only jointly by transfers of CRUs. Of course, each transfer of CRUs would involve an implicit transfer of the different reserve assets earmarked with the Reserve Settlement Account, but no actual transfer of the specific reserves would be made except in connection with a final settlement.

There would be no great difficulty in calculating the rights and obligations of participating countries when a country withdraws from the Reserve Settlement Account. Suppose, for example, a country with a cumulative deficit withdraws. Its cumulative deficit position would be shown by the amount by which its balance of CRUs is less than the total of the different reserve assets it earmarked with the Reserve Settlement Account. Suppose that the withdrawing country had a balance of 800 million CRUs and that the reserves it earmarked with the Reserve Settlement Account amounted to $1 billion, so that it had a cumulative deficit of $200 million. The withdrawing country would then be entitled to the return of 80 per cent of its earmarked gold, 80 per cent of its earmarked foreign exchange, and 80 per cent of its earmarked SDRs. Twenty per cent of the different reserves that had been placed on earmark by the withdrawing country would be retained by the Reserve Settlement Account for settlement of the cumulative surplus of the remaining members.

Suppose instead that the withdrawing country had a balance of 1.2 billion CRUs and had earmarked $1 billion of different reserve assets, so that it had a cumulative surplus of $200 million. The withdrawing country would be returned all of the reserve assets it earmarked with the Reserve Settlement Account. The remaining $200 million would be settled in gold, foreign exchange and SDRs, in the same ratios as these were earmarked by the deficit countries. Suppose that the cumulative deficit of all deficit countries amounted to $2 billion and that this would have had to be settled by these deficit countries with $500 million of gold, $600 million of dollars, $200 million of other foreign exchange, and $700 million of SDRs. Then the withdrawing country would receive settlement for its $200 million surplus in one-tenth of the amount of each of these reserve assets implicitly used by all the deficit countries—$50 million of gold,

$60 million of dollars, $20 million of other foreign exchange, and $70 million of SDRs. The Reserve Settlement Account would debit each deficit country's earmarked account with the amount of reserves it would implicitly have used in settling its cumulative deficit.

Interest.—The CRU would be a composite reserve asset consisting partly of gold and partly of fiduciary reserves—that is, foreign exchange and SDR's. It is characteristic of fiduciary reserves that such holdings earn interest. There is every reason for continuing this practice, as fiduciary reserves are acquired through a net transfer of real resources—goods, services, and capital assets. The plan for Special Drawing Rights provides for the payment of interest at a rate of 1½ per cent per annum on average net holdings of SDRs in excess of a country's cumulative allocations and the charging of interest at the same rate to countries on their average net use of allocations of SDRs. In the case of foreign exchange reserves, the interest paid or earned differs according to the currency and the form in which the reserves are held or invested. No such distinctions are necessary for foreign exchange earmarked with the Reserve Settlement Account. All of the earmarked foreign exchange reserves have the same exchange value guarantee and they are all held in the same form of non-negotiable interest-bearing obligations. For these reasons, the interest charged on earmarked foreign exchange should be uniform for all currencies. The rate could be the same as on SDRs or ½ per cent per annum higher. The small differential could be justified by the non-reciprocal character of foreign exchange as fiduciary reserves.

The Reserve Settlement Account would collect 1½ per cent per annum from all countries on their cumulative allocations of SDRs. It would collect 2 per cent per annum from the countries whose currencies were placed on earmark with the Reserve Settlement Account. The practical problem is not in connection with the collection of interest, but with its payment. The simplest method would be to pay interest at a relatively low but uniform rate on the average balances of each country's CRUs during the financial year. This might seem inequitable to countries whose CRUs were acquired by earmarking foreign exchange and SDRs rather than gold. The argument in favor of this basis for paying interest is that it would emphasize the fundamental equivalence of all CRUs, regardless of their imputed composition, whether mainly gold or mainly foreign exchange and SDRs. The alternative method would be to pay interest at the rate of 2 per cent per annum on the foreign exchange component and 1½ per cent per annum on the SDR component of a country's average holdings of CRUs. This would not be a difficult calculation to make—in fact, no more difficult than that required for computing net interest on SDRs.

Alternatives to the composite gold standard

The functioning of an international monetary system with multiple reserve assets depends on assuring the appropriate use of all reserve assets in international settlements. A preference by the monetary authorities for holding gold rather than dollars or sterling has already emerged, and this preference will become more marked in the future as the monetary gold stock becomes frozen at about its present level. The activation of the plan for issuing SDRs may make it more difficult to maintain the equivalence of all reserve assets. The addition of a new fiduciary reserve asset (SDRs) with characteristics of its own—particularly the gold value guarantee and interest on net acquisitions—may give countries a further inducement to alter the composition of their reserves.

The need for some rules regarding the use of different reserve assets, particularly after the plan for SDRs is activated, is now generally recognized. The practical question is whether this should be done automatically through a composite gold standard or whether it should be done *ad hoc* through guidance by the IMF. The Amendment authorizing the Special Drawing Account in the IMF contains a number of provisions designed to make sure that the new reserve asset is not used by members to alter the composition of reserves and that it is used by deficit countries and acquired by surplus countries in an appropriate relationship with other reserve assets. The basic principle set forth in Article XXV, Section 3 of the Fund Agreement as amended states:

". . . [A] participant will be expected to use its Special Drawing Rights only to meet balance of payments needs or in light of developments in its official holdings of gold, foreign exchange, and SDRs, and its reserve position in the Fund, and not for the sole purpose of changing the composition of the foregoing as between SDRs and the total of gold, foreign exchange, and reserve position in the Fund."

In order to make sure that surplus countries with large reserves of gold and foreign exchange acquire and hold SDRs in an equitable way related to their surplus and their reserve position, the IMF is empowered to designate the countries to which SDRs will be transferred for convertible currencies. Article XXV, Section 5(a)(i) of the Fund Agreement as amended states:

"A participant shall be subject to designation [to provide a convertible currency for SDRs] if its balance of payments and gross reserve position is sufficiently strong, but this will not preclude the possibility that a participant with a strong reserve position will be designated even though it has a moderate balance of payments deficit. Participants shall be designated in such a manner as will promote over time a balanced distribution of holdings of SDRs among them."

On the other hand, to make sure that deficit countries use their other reserve assets as well as SDRs, particularly if they have a relatively large cumulative deficit, Article XXV, Section 6(a) of the Fund Agreement as amended requires participants that use their SDRs to reconstitute their holdings in accordance with the rules for reconstitution. The initial rule for reconstitution as stated in Schedule G of the Fund Agreement as amended is as follows:

"A participant shall so use and reconstitute its holdings of SDRs hat, five years after the first allocation and at the end of each calendar quarter thereafter, the average of its total daily holdings of SDRs over the most recent five-year period will not be less than thirty per cent of the average of its daily net cumulative allocation of SDRs over the same period."

When a cumulative deficit country has used a considerable amount of the SDRs allocated to it, and particularly if its holdings of SDRs are less than the minimum amount determined by the reconstitution provision, the IMF may require the country to transfer convertible currency to another country for SDRs. Article XXV, Section 5(a)(ii) of the Fund Agreement as amended states:

"Participants shall be subject to designation [to provide a convertible currency for SDRs] in order to promote reconstitution under . . . this Article; [or] to reduce negative balances in holdings of SDRs."

An alternative method of reconstitution is provided in Schedule G, 1(a)(iv) of the Fund Agreement as amended, particularly when no other countries are transferring SDRs for currency. The provision states:

"A participant that needs to acquire SDRs to fulfill this obligation [of reconstitution] shall be obligated and entitled to obtain them, at its option for gold or currency acceptable to the Fund, in a transaction with the Fund conducted through the General Account. If sufficient SDRs cannot be obtained in this way, the participant shall be obligated and entitled to obtain them with currency convertible in fact from a participant which the Fund shall specify."

Finally, to avoid excessive reliance on SDRs rather than other reserve assets, the reconstitution provision, Schedule G, 1(b), states: "Participants shall also pay due regard to the desirability of pursuing over time a balanced relationship between their holdings to SDRs and their holdings of gold and foreign exchange and their reserve positions in the Fund."

Some rules governing the use of reserves are necessary in an international monetary system with multiple reserve assets. It may be questioned, however, whether the rules set out in the Articles and Schedules in the Amendment authorizing the Special Drawing Account are the best way of achieving the appropriate use of all reserve assets. The limitation on the amount of SDRs that surplus countries are required to accept and hold (three times their cumulative allocations) and on the amount of SDRs that deficit countries may use (an average of 70 per cent of their average cumulative allocations over the preceding five years) indicates that participants are very much concerned with the reserve assets they transfer or that are transferred to them in balance of payments settlements.

A requirement for the balance used of all reserve assets cannot be dispensed with so long as countries have a preference for gold rather than other reserve assets. But the rules can be made simple and automatic, so that they will not require constant guidance, designation, specification and reconstitution—a process which underlines the preference for different reserve assets and serves to intensify it. Most important, the rules in the Amendment to the Fund Agreement deal only with the preference for other reserve assets relative to SDRs, a minor problem in the international monetary system. They do not deal with the most disruptive preference of all, the preference for gold over foreign exchange, a preference that may become greater after the SDRs are activated.

The great advantage of a composite gold standard is that it can be applied automatically on a cumulative basis to all countries regardless of the composition of their reserves. There is no more equitable way of assuring the balanced use of reserves than to require countries to use all of their reserve assets in the same ratios in which they hold them. Moreover, once the composite gold standard is adopted there is no need for any supervision of reserve transactions. The establishment of a Reserve Settlement Account with transfers of reserves made only in the form of CRUs would prevent constant maneuvering to change the composition of reserves. The final settlement on the withdrawal of a participating country from the Reserve Settlement Account could give effect to any agreed principles regarding the use of different reserve assets, including those in Schedules F and G of the Amendment to the Fund Agreement.

The adoption of a composite gold standard is a natural evolution of the gold standard. It is the only way to assure the continued use of gold as reserves, in distinction to its hoarding by the monetary authorities. The attempt to operate a gold standard without the use of gold reserves in international settlements, except in emergencies, could ultimately lead to the complete demonetization of gold. The adoption of the composite gold standard requires no new international machinery. The establishment of the Reserve Settlement Account requires no amendment to the Fund Agreement. It can be administered by the IMF as an independent department to carry out the provisions for the use of SDRs and other reserves. All that the IMF would have to do would be to require that implicit transfers through the Reserve Settlement Account should be in accordance with the present rules for designation and reconstitution as stated in the Amendment until new rules can be adopted under the authority of Article XXV, Sections 5(c) and 6(b).

20-156—68——2

A Plan For a World Currency[1]

(By Robert A. Mundell)

CONTENTS

I. CURRENT TENSIONS

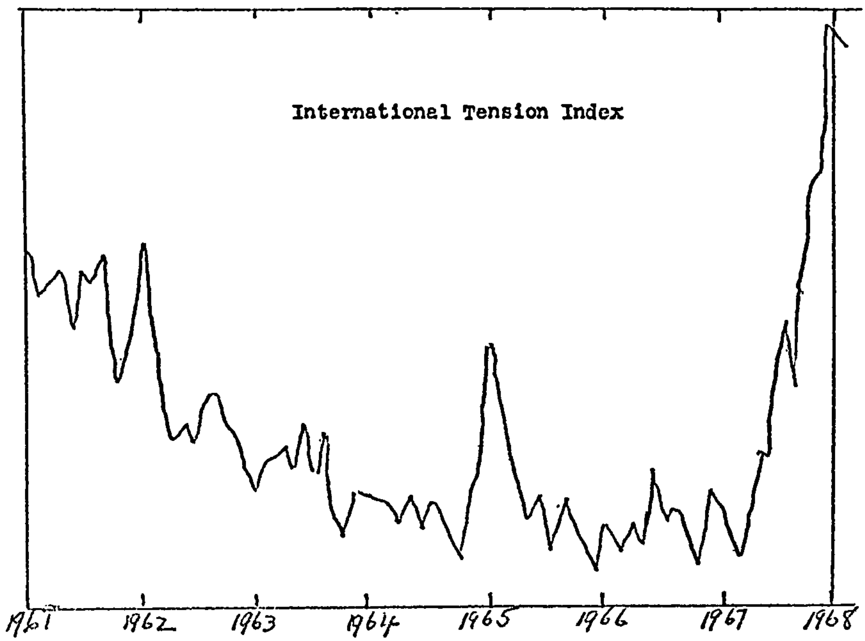
The primary problem with which the financial authorities in the industrial countries have to deal at the present time is the problem of restoring world monetary order and ending inflation without bringing on a depression. The difficulty of attaining these objectives would be great enough in a stable world environment. But it is compounded today by the March breakdown in the international monetary system and by the fact that there is hardly any financial leadership left in the world. The March collapse of the gold exchange standard represents the culmination of the sordid scramble for gold of the preceding months and the dreary, incompetent financial leadership the world had had for at least ten years, and perhaps much longer.

We are, indeed, currently in the throes of another crisis. France has instituted a rather all-embracing system of controls, either in preparation for a new devaluation or to give its economy time to recover from the May uprisings, while the exchange markets are rife with rumors of an upvaluation of the Deutschmark. Although the dollar has, throughout the spring, been a bastion of stability against other currencies, there is a widespread belief that, in the final analysis, the U.S. may settle for a higher price of gold after the elections. This is particularly so now that the new amendments to the Articles of Agreement of the IMF have been accepted by the Board of Governors and have established a new reserve asset to replace the dollar, pending legislative ratification. This belief, unfounded though it may be, is going to make it very hard, during an election campaign and an interregnum, to keep the two-tier gold system in operation along the lines laid down in the March 17 Washington communique.

In the face of these tensions, it may be questioned whether now is the appropriate time to advance new ideas for removing obstructions in the path of international economic stability and inter-governmental co-operation, and moving toward a more efficient and stable international monetary system. The obstructions are, unfortunately, human in nature, and therefore particularly slow to adapt. The recognition, decisions and implementation lags in understanding and accepting innovations in the field of international finance have been notoriously long, and imaginative leadership has been wanting. We shall go into some of the reasons for that in this paper. For the moment, it is useful to dwell on the fact that international crises do not typically come upon us suddenly, like a bolt from the blue. They build up gradually, and usually give the authorities ample time in which to take positive steps to avert them. This was the case in 1914, and throughout the inter-war years. It was true during the 1931 crises. And it was true during the crises of 1967 and 1968. I have had a chart prepared for presentation to the Joint Economic Committee that reflects one way of measuring the stress or tension in the financial system. It shows how the build-up of tension signalled, well in advance, the threatening crisis, giving the authorities

[1] Analysis prepared for the hearings before the Subcommittee on International Exchange and Payments of the Joint Economic Committee, September 9, 1968, Washington, D.C., and paper prepared for the American Bankers Association Conference of University Professors at Ditchley Park, England, September 10–13, 1968.

ample warning to prepare both for the run on sterling and the run on gold. I offer it here as sufficient proof of my contention that there is a great gap in the financial leadership of the Western world.



FIGURE

Appendix: The International Tension Index

The International Tension Index is a measure of disequilibrium in international financial markets. It is based on a weighted average of conditions of financial disequilibrium in eight countries: the U.S., U.K., Germany, France, Canada, Switzerland, the Netherlands, and Belgium. It is computed on the basis of the following formula:

$$\Theta=\sum_{i=1}^{7}\sigma_i\left[\left(\frac{r_i-r_a}{1+r_a}\right)^2+\left(\frac{FR_i-SR_i}{SR_i}\right)^2\right]^{1/2}$$

where

σ_i = weight of country i
r_i = interest rate in country i
r_a = U.S. interest rate
FR_i = Forward rate
SR_i = Spot rate

The weights, σ_i, are based on proportions of trade, and reduce to:

U.K.	=	.23
Belgium	=	.09
France	=	.15
Germany	=	.25
Netherlands	=	.10
Switzerland	=	.05
Canada	=	.13
		1.00

for the years 1961–67. The index was prepared, at my suggestion, by Mr. Houston Stokes, using monthly averages of Treasury bill rates and forward premiums.

II. THE PROBLEM OF FINANCIAL LEADERSHIP

When something goes seriously wrong in the field of private endeavor, the responsible people are usually fired. This is not so in government because ultimate responsibility rests with politicians, and their interests are usually tied up with protecting the reputation of the officials they choose. This is true of most departments in government; but nowhere is it more true than in the Treasury offices and Central Banks, with the possible exception of the foreign offices. In matters of money and foreign affairs, the competence of officials has to be shielded. To protect these sensitive areas from the prying eyes of public criticism, a mystique, based on secrecy and intrique, is usually formed out of tacitly recognized self-interest or bureaucratic regulation. The major instrument of the mystique is the two-tier information system founded on esprit de corps and synthetically developed gaps between inside- and outside-knowledge. The British developed this system masterfully in the days of the Empire, and it was only the complete bungling of foreign affairs in Europe since 1914 that exposed international politics to public scrutiny and disdain, and weakened the lese majeste aura shielding foreign offices from honest reporting of the mistakes perpetrated inside them.

International economic policy over the past fifty years has been hardly more rational than international diplomacy, but it has been much slower in receving the criticism it deserves. This is partly because of the technical character of international financial arrangements, the complexity and confidentiality of the subject matter, and the slower or more distant connection between action and public recognition of the consequences of that action. It is also due to the greater ease with which the citadel can be protected against outside criticism: an occupational hazard of critics on the outside is the time-intensive process of acquiring the relevant information, the need for access to quasi-privileged sources, and the tendency toward intellectual corrupation that results once outsides are flattered by being drawn into the select circles of the citadel and made a party to the decisions reached. As often as not, those who know can't talk, while those who do fulfill their responsibility to their profession can be penalized all too easily by deprivation of further information. This, in my opinion, accounts for the low level of public understanding of the great issues involved in the subject of international financial reform.

The best illustration of this syndrome is probably provided by the memories and biographies of central bankers that have been published in recent years. For twenty years, Montagu Norman could play a game with Benjamin Strong and Continental bankers, hiding behind the authority of his Vandyke and the cultivated mystique with which he terrorized the public, a pathological eccentricity he inveigled the public into confusing with genius. Time, habit, and native intelligence cemented his mastery over the intricacies of high finance and established his intellectual supremacy over financial details and personalities, while developing policies that were dead wrong on fundamentals. It is only in retrospect that we can see how important his own personality was in whittling away the enormous reputation which the Bank of England had when he inherited the Governorship.

It is really questionable whether the quality of thinking in the international financial sphere has improved much since Norman's heyday. There is no question, of course, that recent economic performance has been better. The past twenty years has been a period of stability, judged in comparison with the miserable performance of the preceding two decades. Nevertheless, the tools at the command of present experts are so great that standards have to be elevated to a far higher tolerance threshold of incompetence. The mounting disorder of the 1960's has been higher recently than at any time since convertibility (as the Tension Index shows), and it raises the issue: How much entropy can the system tolerate? And, more important, how much stress, tension, and disorder can the monetary authorities stand without becoming convinced that basic adjustments in the world currency system are needed?

Ten years ago, officials were warned of the twin horns of the Triffin dilemma. When the lesson had finally sunk in, they decided, at the Vienna meetings of the IMF in 1961, to supplement the Fund's resources with resources drawn from the countries signing the General Agreement to Borrow (GAB). This fund of convertible currencies ($6 billion) was necessary to offset the inconvertible currencies the IMF had accumulated from many of the less developed countries, and to enable the U.S. to draw useful currencies at a time when it had become clear that the U.S. was shifting from the status of creditor to debtor country in the IMF. Perhaps more important, in the long run, the GAB resulted in a new forum, the Group of Ten, in which the major financial countries could talk about matters of particular concern to themselves. Analytically, the GAB could be looked upon as a means of solving, at least temporarily, the Confidence Problem, at a time when the officials placed their hopes in the ability of the system to make basic adjustments in the U.S. balance of payments.

By 1963, however, a split had developed on the issue of the liquidity problem versus the adjustment problem, two problems with which the GAB were not designed to cope. Because adjustment at this time meant correction of the U.S. balance of payments, the Americans began to stress the importance of the liquidity problem, while the Continental countries stressed the adjustment problem. The U.S. was saying, "Prevent a liquidity shortage," and the Europeans, "Correct the U.S. deficit." This was *real politique* at its best, since more liquidity meant more inflation and more adjustment in Europe, while more adjustment would imply tougher balance of payments measures in the U.S. and less world inflation. Each continent wanted to thrust more of the burden on the other.

After four years of arguing about it, the authorities settled on the SDR plan last September. This could not prevent the breakdown that took place last year when the facade of harmonious co-operation was stripped off the Spirit of Rio. What is even more remarkable, the SDR plan was not even designed to preserve the system. It was designed to look after long-run needs. No events in recent monetary history have been more dreaded—or more expected—than the devaluation of sterling and the breakdown of the gold arrangements prevailing since 1954.

The authorities had ample warning and enough research help to combat a hundred crises. What broke down was the will to preserve the system.

There had been many good suggestions made at the Hearings of the Joint Economic Committee over the past decade by dozens of economists. Perhaps I might summarize here my own offerings. At the November 15, 1953 Hearing of the Joint Economic Committee, I suggested widening the gold margins to, say, ±7.5 per cent on either side of parity (e.g., selling gold at $37.50, and buying it at $32.50), and argued in a letter to Senator Douglas a week later that the IMF might be able to permit this change within the framework of the existing Articles of Agreement. The purpose was to allow gold speculators to make losses as well as gains, to make gold different from dollars, and to allow more exchange rate adjustment in the system. I repeated this proposal in my July 28, 1965, testimony, and further suggested an expansion of the gold pool and a new policy by which countries using the dollar as the intervention currency should centralize their gold holdings in the U.S. or in the pool. In my September 9, 1966, testimony, I suggested further that, as an interim solution, the U.S. monetary policy should take account of world needs for liquidity, while Europeans would ensure that the U.S. is left with enough gold to accomplish this undertaking without breaking down the system that then existed. In retrospect, any or all of these proposals would have been sufficient to preserve the present system.

The international monetary officials are not to be blamed just for watching the system collapse, for indecision in the face of crisis, and for reacting to events rather than anticipating and guiding them. They are also to be faulted for building into the system the need for a fundamental deceit. This is objectionable, but not just on grounds of piety; the world has conditioned itself to the contrast between private virtues and public vices. It is objectionable also because it is self-destructive and self-defeating.

The deceit is, of course, the adoption of the ethnic that devaluation should be preceded by a lie stating that devaluation will not occur. Its purpose is to ease the forward and spot positions against a currency, and shift exchange losses away from domestic monetary authorities onto the private market or foreign governments.

The problem is not just that monetary officials are placed in a position where they have to involve themselves in a two-tier sinship cultivated as an instrument for the management of uncertainty in the exchange markets. It is almost a kind of status symbol to be important enough to have to lie about events like devaluation and invasions. This kind of prevarication was even built up by Per Jacobbsen into a kind of personal heroism.

The problem is that a credibility gap quickly makes itself felt. Like anything that becomes systematized, it suffers diminishing returns; the length of the lag between denial of devaluation and actual devaluation might even become stable enough to use for forecasting purposes! Of course the authorities can proceed then to the "double-think" and program the public to an "*in*credibility gap" by suggesting the need for devaluation when it is not necessary, a type of psychological manipulation that could be especially profitable if the exchange margins were wider.

The problem, however, is that the public has grown tired of that kind of nonsense. It was more fitting to the morality of an age past than to the present; it is not only distasteful, but self-defeating. The chairman of the Swiss Bank Corporation, Dr. S. Schweizer, expressed this sentiment last December in a circulated letter to Mr. McChesney Martin:

"The declaration that the Dollar will be defended up to the last ounce of gold is no longer being taken seriously by anybody and *had better not be repeated*, since it implies the possibility of developments which, if they should materialize, would be bound to shake the confidence in the Dollar still more."

and,

". . . millions of people all over the world feel very strongly that the greatest hazard of all is the uncontrolled amount of promises and undertakings which governments all over the world can, and do in fact, create, at no other cost than the paper on which they are printed."

This was written just after the U.S. in December had promised not to alter their support policy for the private gold market, two months before the Washington communique which announced the abandonment of support for the private market. The statements of monetary officials, and even heads of state, on this subject have been justly derided as so much hot air.

Unfortunately, the problem goes beyond mere deceit and immorality. Monetary officials live a day-to-day existence reacting to, rather than grasping, events; and they are beginning to lose touch with the real world. They seldom get time to see how the monetary system fits into the wider world about them. It is the greatest of illusions now to imagine that central bankers are "practical" men; the world looks flat inside the restricted intellectual boxes they inhabit. Consequently, when, over the past decade, they have been confronted with the pressures of a gold exchange standard, bent on self-destruction, and their own verbal commitment to save it, with imaginary weapons, they have increasingly lost touch with reality, succumbing to belief in the twaddle they once put out for the common public or for academic scribblers as mere propaganda. Meanwhile, the academic scientists has increasingly moved out of the ivory towers of learning that an obsolete tradition had accustomed him to inhabit, in order to bring himself into closer contact with a world crying out for reform. But monetary officials have been moving in the opposite direction. Just as in the middle ages, "academic" had become a synonym for "useless," so bureaucratic officialdom is pre-empting the purely ornamental function that used to be the sole prerogative of professors. If officials are to anticipate the needs of the future, it is not enough for them to officiate: they need to come out of their marble palaces and see their own activities in the perspective of the changes that have been taking place in the real world.

Perhaps one could find no better illustration of the impractical streak that officials have developed than the experience of creating Special Drawing Rights (SDRs). This was the sole output of years of study and negotiation by the most adept experts in the Treasuries, Central Banks, the BIS, the Group of Ten, and the IMF. The working parties had been told not to study the gold problem, because that was too sensitive a subject, while the research department of the IMF had been put out to graze on "safe" subjects. The outcome was such a complicated masterpiece of irrelevance that the heaviest guns of exuberance had to be fired last fall to distract the public from the nerve-wracking uncertainties of the exchange market. Claims of the "greatest thing since Bretton Woods," a "milestone in world co-operation," and one of the "great days in the history of financial co-operation," were needed to distract the public's attention, even temporarily, from the more exciting things that were going on in the exchange markets. These statements were made just a few months before the system broke down. It all fitted into what Robert Triffin refers to as the garbage-can complex.

How else should one describe the living bouillabaisse that currently passes for an international monetary system? We have—as assets—gold, dollars, sterling, Roosa bonds, swaps, drawing rights, and special drawing rights, not to speak of the minor reserve currencies like the franc and escudo. The vast intellectual and diplomatic effort poured another asset into the garbage—following E. M. Bernstein's principle of "add, never take away." The theory is a subtle one, however, presumably grounded on the idea that enough clutter will make the need for rationalization of the several assets obvious.

I should not want, however, to disparage the significance of the new amendments to the IMF involved in the establishment of the SDRs. The new amendments are of fundamental importance, both with respect to the new asset they provide for, and the changes in the modus operandi and power structure of the Fund. Nor do I wish to denigrate the skill required to have negotiated such an agreement. The new amendments are incredibly subtle and complex in their real meaning. Some hint of their complexity is indicated by the fact that the Executive Directors were requested at Rio to submit reports to the Governors by March 31, 1968, but were unable to meet the deadline, despite "all levels (of the staff) . . . working under intense pressure, sustained for more than six months."[2] It is clear that the issues that had to be resolved were exceedingly complex, and not at all inconsequential.

My initial readings of the amendments have convinced me that they will fundamentally alter the character of the Fund, shifting the power to the creditors and vitally affecting Fund operations with the U.S. I cannot go into that question at any length here, except to point out what must by now be evident, that the U.S. has effectively given a gold-value guarantee on Fund holdings of its currency, even in the event of a uniform reduction of par values. As a practical matter, the U.S. will now have to be extremely reluctant to make any use whatsoever of the Fund's resources. On these grounds alone, the new amendments cannot be considered of minor importance.

III. THE NEED FOR AN INTERNATIONAL MONEY

It is in the light of the expected finalization of the new amendments that one is asked whether any new recommendations might be made to the Governors of the IMF at the Washington meetings. It is my view that the coming meetings offer a great opportunity. For, while the creation of the Special Account in the Fund did not prevent a breakdown of the existing gold arrangements, it did demonstrate a general willingness to make substantial improvements in the system. The Governors proved less conservative than the experts. The satisfaction with which the Outline was greeted reflected not just the concern for a new means of creating liquidity, not just the hope of the less developed countries that when the short-run monetary problems of the developed countries are solved, the latter will be able to turn their energies to the more basic question of long-run development finance.

There was a new ingredient. The new ingredient was the excitement engendered by a new experiment in world sovereignty. The concept of world money is a breathtaking step, and one could sense a belief that a new era had dawned in financial relations between nations.[3]

It would seem to me to be very unfortunate if the momentum toward financial integration developed at these meetings, and by the lengthy negotiations over the Special Drawing Rights that preceded them, should be cut short by the disillusion over the breakdown of the gold exchange standard in March or by a failure of imagination at the present time.

It is clear in what direction we need to move. We need to construct, out of all the assets currently used by the monetary authorities, a new world currency. This was recognized years ago by that eminently practical central banker, the late Charles Rist:

"What international commerce needs is a common and unquestioned money to which all the international prices can be pegged."[4]

I do not believe this to be a radical proposal. It is, rather, an evolution of trends that have been going on for a long time.

The American people recognized the need for a common money when, nearly two hundred years ago, they created (by the Act of 1792) a national money, the U.S. dollar, to replace the separate monies of each of the states. The French have also taken a lead in the movement to a world money; in 1867 Napoleon III convoked in Paris an international monetary conference for the purpose of building an international monetary system (based on the Latin Monetary Union). And his idea, at that time, received considerable support in the U.S. The U.S. mint in fact prepared in 1874 a sample for an international gold coin carrying the inscription, "Dollars 10/Sterling £2. 1. 1/Marken 41.99/Kronen 37.33/Gulden

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[2] *Proposed Amendment of the Articles of Agreement* (IMF, April 1968).

[3] "The International Monetary Fund" in *International Financial Organization*, 1968.

[4] Rist believed, at the time he wrote, that the only practical international money was gold. But technological advances have created better alternatives. The above excerpt was written in 1952. See C. Rist, *The Triumph of Gold* (New York, 1961, p. 205).

20.73/Francs 51.81." The U.S was also instrumental in convening the centennial conferences of 1878, 1881, and 1892 to explore further the problems of bimetallism and world money, although nothing much came of them.

My proposal, therefore, is not new; it is even, in a sense, in the tradition of U.S. international economic policy.

It must be realized that, in the nineteenth century, the existence of national currencies was regarded as an enormous defect. John Stuart Mill, for example, expressed his dislike of the nineteenth century system as follows:

"So much of barbarism, however, still remains in the transactions of the most civilized nations, that almost all independent countries choose to assert their nationality by having, to their own inconvenience and that of their neighbours, a peculiar currency of their own."

A fortiori, we do need in the twentieth century to reduce the scope of "barbarism," for by most standards the nineteenth century system was more cohesive and stable, from the standpoint of international relations, than that prevailing in the twentieth century.

But the idea of an international money is not even the exclusive monopoly of the modern age. It goes back to the Middle Ages. One can cite, for example, the writings of Gaspara Scaruffi, who, in his *Alitononfo* ("true light") published in 1852, advocated a uniform money throughout Europe, as did also Jean Bodin, Juan Marquez, and various other writers of the sixteenth and seventeenth centuries. I mention these historical precedents not because they are worth current study, but only as a reminder of how out of date much current thinking on the subject is.

One may hope, however, that thinking in official quarters has been impressed by the dislocations that have occurred and are expected in the exchange markets. Some indication of a new, forward-looking trend toward imaginative leadership is suggested by the following statement:

"In the international monetary field we are on the threshold of a new evolution which will similarly lead towards a deliberate control and management of international reserves in the interest of international stability."

This was written by Dr. Emminger, just a few months ago.[5] It is in that spirit that I suggest a new initiative be taken by the world monetary authorities toward creating a world currency. In the absence of such an initiative, the world will be confronted with more instability in the near future.

IV. OBJECTIONS TO THREE ALTERNATIVES

There are really only three possibilities. One is the so-called "Roman Solution." This means formally adopting, or acquiescing to, the dollar standard. The solution has an arrogant ring to it, and no doubt its name was contrived by an opponent of it. It is not nearly as bad as it sounds. I have to confess that I advocated a dollar standard to a Canadian audience in 1964[6] and, again, to a meeting of bankers in Geneva in the following year.[7] I lost my enthusiasm for it, however, as a system that could be made viable in the long run. The political objections to it are substantial since it places the central bank of one country in a supra-national role.

A decade ago, it would have been more feasible; but it would not work today, except temporarily. Let me quote again from Dr. Schweizer's letter to Mr. Martin:

"Allow me . . . to revert to the possibility of further large gold losses of the U.S. before the curtain would be rung down on our present Monetary System. The generally accepted idea is that this would introduce a new area of a purely Dollar-based monetary order. This is a cliché, based on wishful thinking, to which many of your countrymen apparently are looking forward with great unconcern if not with direct hope and cheerful expectations.

"For my part, I am afraid that things would not be as simple as this and that there is a very serious danger that in such an eventuality the other big world power, namely Russia, still in possession of large holdings of monetary gold, and enjoying the benefits of an important annual production, would emerge as a pillar of monetary solidity and stability to which a large part of the world,

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[5] Otmar Emminger, "The Role of Gold in our Monetary System," (Address before the National Industrial Conference Board's Financial Conference, February 14–15, 1968, New York).

[6] "A Dollar Standard and All That," (Remarks delivered to a meeting of the Private Planning Association of Canada in Montreal on December 12, 1964).

[7] "Conflict and Reform in the International Monetary System," (Presented to the Banker's Club of Geneva, June 30, 1965).

including some Western countries, might be attracted and become definitely attached.

"Some serious thought, in my opinion, ought to be given to these wider, not only financial but political aspects, before such a situation is allowed to materialize."

The fact is, however, that for practical purposes, the world has moved, since the March communique,[8] onto a dollar standard.[9]

Although the objections to a dollar standard are primarily of a political nature, there is also a purely economic objection. The U.S. would, unlike other countries, have no balance of payments constraint. It would be in the same position as any country that ignored its foreign exchange rate, except for the fact that other countries would accumulate dollar balances as reserves. Whereas other countries would have to allocate their monetary policies to preserve balance of payments equilibrium, the U.S. could direct its monetary instruments solely to the achievement of domestic stability. This is consistent, of course, with the fact that in an n-country world, there are only n–1 exchange rates, and only n–1 countries need to pursue independent balance of payments policies, leaving monetary policy in one country free to pursue domestic objectives. At the 1964 Christmas meetings of the American Economic Association, I argued this point as follows:

"Remember that only n–1 countries in an n-country world need adapt to balance of payments disequilibrium. If there is a dominant country in the world economy, that country can and should govern its policies according to the needs of internal stability, and smaller countries can and should adjust to it. There is no more socially useful service a very large country like the U.S. can perform for the entire world than to perserve price stability and full employment for itself, and the instruments needed to attain these goals need not and should not be unnecessarily hamstrung by balance of payments considerations."

While I still believe this to be true, I now feel that it does not leave other countries with satisfactory protection in case the U.S. does pursue an excessively inflationary policy, as it did in 1965–66 and more recently. Kindleberger's suggestion, that Europeans be represented on the U.S. Open Market Committee, makes economic sense, but it may be unrealistic from the standpoint of European and American politics. For these reasons, I believe a dollar standard would not be acceptable in the long run, although it may be necessary as a transitional system. The U.S. may still have to use its monetary policy primarily for the sake of domestic objectives,[10] (erring, when in doubt, on the side of international objectives) ; but it has some international responsibility for helping the other countries to find a satisfactory alternative to the political disadvantages of such a system, and to the economic disadvantages when the U.S. is not able to maintain stability.

The U.S. can, of course, stand pat on the current arrangements, and leave it up to other countries to see its wisdom; this means going along with the two-tier system and accepting a dollar that is, in fact, no longer convertible into gold. But other countries are not likely to accept it in the long run. I think one could expect this to result, eventually, in a coalition against the dollar and the emergence of a Continental currency based on gold or some new asset of their own. (Giscard d'Estaing has suggested a European currency called the Euron.) A two-bloc, or perhaps three-bloc, system would be a likely outcome, with a very large group of countries based on the dollar, another based on a gold-centered European currency, and perhaps another group based around sterling.[11]

This solution is not one that can be ruled out hastily; it may, indeed, turn out to be the most practical one, failing the ability of authorities to agree on a wider international system. But the means by which it would be brought about if the U.S. attempted to impose a dollar standard could invoke bitterness and frustration against the U.S. without any compensating advantages. In true Roman fashion, of course, the U.S. might in fact be able to splinter any coalition

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[8] Switzerland does not have a par value because it is not a member of the IMF, but the Swiss franc is defined in terms of gold (0.20322 grams per franc). From a formal, legal point of view, therefore, the Swiss franc alone among the world's currencies was devalued by the March communique, since Switzerland maintained her dollar-franc exchange rate. The subject is a sensitive one in Switzerland.

[9] I have developed this point at greater length in "The Collapse of the Gold Exchange Standard," (Address before the Annual Meetings of the American Farm Economics Association at Montana State University, Bozeman, Montana, August 18, 1968, mimeo).

[10] For the mathematics of the dollar standard and the gold exchange standard, see my *International Economics* (Macmillan, 1968). Chapter 13 and Appendix.

[11] I analyzed this system in my *International Monetary System: Conflict and Reform* (Private Planning Association of Canada, Montreal, 1965), discussing a three- or four-bloc system (the fourth was based on the ruble).

organized against the dollar; there are certainly enough latent conflicts in the rest of the world to exploit *divide et impera*. But pouring oil on troubled waters is not the American way; there is surely too much of that in other parts of the world. Surely there is a beter way. Both the policy of do-nothing and *divide et impera* would be abrupt changes from the historical positive role that the U.S. has played in international co-operation since the war.

There is, of course, another possibility: flexible exchange rates. After all, why not use the price mechanism to ensure balance between the supply and demand of each currency? Theoretically, such a policy is not, of course, optimal because an efficient system of payments is furthered by a single money as a medium of exchange and unit of contract. This is why, within most countries, the liabilities of one bank are convertible at a fixed price into legal tender. Indeed, if we follow Sir John Hicks' idea that each individual ought to be analyzed as a bank,[12] the idea of flexible exchange rates would be carried to its *reductio ad absurdum* since it would mean S–1 exchange rates, where S is the world's population! Of course, it is silly to carry logic that far. We live in a rather inefficient world, and as a practical approach under some circumstances, a flexible exchange rate may not only work, but be the only alternative to comprehensive controls. It is not hard to understand Friedman, Meade, and Lutz, living in a world of noxious controls and advocating, back in the 1950's, a regime of flexible exchange rates. But the world of the late 1960's is completely different; and we have a right to expect higher standards. In our present world, a system of national currencies fluctuating in terms of one another would tend to break down into a world of optimum currency areas.[13] My own view is that we need fewer, rather than more, currencies, even though we may need more, rather than fewer, currency areas. Currency blocs have to be large if they are to make any sense at all.[14] But even though some countries may want to let their exchange rates float (and there are circumstances under which they should want to), we still need an international currency for those countries who choose to remain in the international system.

This brings us back to co-operative solutions involving a common international money. With a dollar standard ruled out, and leaving aside a multiple-currency flexible exchange rate system, we are reduced to going back to gold or finding a new international currency. Going back to gold has serious disadvantages. There is insufficient gold to go around in the world at its current price, and to base a world solution on gold would mean increasing its price substantially. I have elsewhere gone into my detailed reasons for opposing an increase in the price of gold.[15] I would not oppose it if there were no better alternatives. But I believe my present plan is a far better solution. But even if it were feasible or efficient to raise the price of gold, some institutions would have to be created to handle the problem of sporadic shifts in technology, discovery, and Russian gold policy, and volatile shifts between foreign exchange assets, gold, and Special Drawing Rights.[16] But if an increase in the price of gold is ruled out, we are reduced to the need for a new currency. What about Special Drawing Rights?

Special Drawing Rights at the IMF have been looked upon as a form of world money. The new SDRs represent the hopes of those who believe that the world already has a new international money. But SDR units are not really money; their value is linked to gold. Even if they were true money, they have several disadvantages as an international money. I shall be going into this question in more detail elsewhere. Let it suffice for me to say that there are sins of omission

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[12] J. R. Hicks, "A Suggestion for Simplifying the Theory of Money," *Economica* (February, 1935).

[13] Some suggestions are included in my "A Theory of Optimum Currency Areas," *AER* (September, 1960), reprinted in *International Economics* (Macmillan, 1968), Chapter 12; R. McKinnon, "Optimum Currency Areas," *AER* (September, 1963); and P. Kenen, "Optimum Currency Areas, An Eclectic Approach," Chapter 2 in Mundell and Swoboda (ed.), *Monetary Problems of the International Economy* (University of Chicago Press, forthcoming).

[14] I am aware that this does not dispose of the many arguments in favor of flexible exchange rates, but I do not have time to go into that question now (I intend to treat it in detail at a later date). Let me just assert that the arguments for flexible exchange rates have not progressed much beyond the primitive state in which they were put by Friedman, Meade, and Lutz. The arguments opposing them, as exemplified by the IMF *Annual Reports* of 1951 and 1962, and the Board of Governors of the Federal Reserve System in 1962, are at an even lower intellectual state, and are hardly worth discussing. The reason for the primitive state of the case on both sides is the polemical nature in which the subject has been treated, and the unfortunate tendency of protagonists on both sides to argue for victory, rather than truth.

[15] "Should the U.S. Devalue the Dollar?" (Paper presented to the Western Economic Association Meetings, August 21, 1968, in Corvallis, Oregon, mimeo).

[16] For example, Robert Triffin's Gold Conversion Account.

and commission involved in the creation of SDRs. The sin of omission is that it does not offer a solution to the so-called co-existence problems. The sins of commission are its gold-value guarantee (which may ultimately make them an albatross around the neck of the U.S.), its veto provisions, and its absence of "backing." I do not wish at this point to go into the delicate, most important question of the gold-value guarantee. I would like to say something, however, about an international money with zero backing. I have always regarded it as the culminating point of mutual trust,[17] the end of a long, evolutionary process in which confidence in the workability of an arrangement and the acceptability of a new currency is gradually built up. In the case of the SDRs, it has been made the beginning point of the arrangement, and I believe that will have deleterious consequences for their growth in the future. I do not believe that the authorities will place sufficient faith in the new drawing rights to create the quantity of new assets that will be needed. If I am right, it means that the quantity of reserves, based on 100 per cent trust, as the SDRs are, will be allowed to rise only gradually. You can get 100 per cent trust invested in only a small fraction of reserves at the present stage of international collaboration. I would prefer 80 per cent trust applied to all reserves, because that would produce a better spreading of the risk, even if, as one would hope, the risk is purely psychological.

Because this point is of great importance, it is worth showing how the question of backing and trust are related to the issue of the gold-value guarantee. There was, initially at least, a difference of opinion among the Group of Ten as to whether the SDRs had a gold guarantee. But the issue was resolved in the amendment to the Articles. The "unit of value" of the SDR units is .888671 grams of gold (the equivalent of a dollar at the official price). If any currency is devalued by a given proportion, an SDR unit will buy a proportionately larger amount of that currency. If all currencies are devalued, say in half, by an official reduction in the par values of all currencies, an SDR unit will buy twice the number of currency units as before (the same amount of gold) *unless* an 85 per cent majority of votes in the Fund waives this provision. It would be extremely unlikely, therefore, that this majority could be obtained, particularly since an 85 per cent majority is (now) also required to effect a uniform reduction in par value. This is because the constellation of countries whose interests would be furthered by a reduction in par values is likely to differ from those whose interests would be furthered by an exception to the maintenance-of-gold-value clause. For example, surplus countries with large (non-guaranteed) dollar holdings would tend to oppose a uniform reduction of par value, but would want to make an exception of the maintenance of gold value, while countries with large SDR holdings may or may not want a uniform reduction of par values, but they would be extremely unlikely to vote for it unless it *had* a maintenance-of-gold-value clause.

If, for example, the EEC countries wanted an increase in the price of gold with the maintenance of gold value (because they held strong general and special account positions at the IMF) and the rest of the world wanted an increase in the price of gold, but the U.S. would agree only if there was a waiver of the maintenance-of-gold-value clause, there would be no agreement to increase the price of gold. Effectively, therefore, the probability of an increase in the price of gold without the application of the maintenance of gold value is practically nil. It follows, therefore, that gold and SDRs will be very close substitutes, and should engender on this ground alone (assuming inviolability of contract) the substitution of SDRs for dollars, particularly since SDR holders will receive interest, as between gold and SDRs abroad, since the U.S. continues to be the residual holder. But as between dollars on the one hand, and gold plus SDRs on the other, the movement will depend on the probability of a change in the par value of the dollar—first, vis-a-vis other currencies, and then vis-a-vis gold and SDRs. However, if, as I have argued elsewhere,[18] the possibility of dollar devaluation *vis-a-vis other currencies* is unlikely at the present time (with the possible exception being a couple of European countries) whereas a uniform reduction in the par value of all currencies is unlikely *after SDRs become substantial elements in the balance sheet* (because of conflicting interests of the U.S. and Europe with respect to the maintenance of gold value), uniform devaluation becomes feasible, in view of the voting arrangements recently adopted, only if it takes place in the near future.

[17] I discussed the relation between "trust" and reserve ratios in my "The Optimum Structure of a Central Bank" (Frank Graham Memorial Lecture delivered at Princeton University, May 1968, mimeo).

[18] "Should the U.S. Devalue the Dollar?" (*loc. cit.*).

The question of trust, however, turns on a different way of looking at the problem. Trust involves the integrity of the contractual agreement made and the political environment in which it is immersed. Since the SDRs have no "backing" and are of no intrinsic worth, the agreement to honor them is contingent on the interest a country has in honoring them in exchange for other assets. As an asset, they have fiat character that has a value only as good as the agreements to honor them are kept. We assume they will be honored, because as economists we assume a given legal environment. But history has shown alternative possibilities, as exemplified, for example, by existing debts arising from World War I that are not recognized by one party, nor cancelled (written off) by the other.

This is not to say that the SDRs cannot function as international money. My purpose is to emphasize that their properties are affected in an important way by the fact that they are unbacked.[19]

In view of these considerations, we must conclude that the Special Drawing Rights cannot be sufficiently relied upon as a genuine international money. This consideration, combined with the problems created by the new amendments to the Articles, which severely restrict the Fund's traditional operations and shift power to the creditor countries, makes the danger of a potential liquidity problem as acute as ever.

We must, therefore, conclude that the new Fund Agreement does not meet the problems of the international monetary system. At the same time, the new two-tier gold arrangements have immobilized gold reserves and made most gold-holding countries illiquid. There is still a huge gap in our international financial arrangements.

V. A NEW INITIATIVE

It is in recognition of that gap that I propose the creation of an international currency. The time for creating one has, I believe, arrived. Its scientific foundation, based on sound banking practice, is, I believe, secure. Although it accomplishes much more than the SDR plan, it is less radical in principle. The major barrier in past years would have been the international financial bureaucracy. But new light has appeared. The experts who created the Special Drawing Rights have developed an understanding of the international system superior to that of any international financial delegation in human history. After having created an instrument as subtle and complicated as the SDR unit, the proposal here advanced is child's play to understand and implement.

If the attached plan for an international monetary pool merits sympathetic consideration, it could be offered as a recommendation to be considered at the IMF meetings by the U.S. But the initiative does not, in fact, have to come from the U.S. If the U.S. is not interested in it, the initiative could come from Britain, Germany, France, Japan, Italy, or India. Since the proposal is not tied to existing treaty arrangements (to facilitate co-operation with non-members of the Fund), there is no reason why universal agreement is necessary; a few countries could go it alone. *Universality* is not necessary. The proposal presents a minimum conflict with existing institutional arrangements. All it requires is a bit more imagination than has been shown on these matters in the past year. Public opinion itself may be necessary to jog the monetary authorities from their lethargy, if the current disruptions of the exchange markets of the past year have not already done so.

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[19] My position on this issue appears to differ rather fundamentally from Professor Machlup's. In his *Remaking the International Monetary System: The Rio Agreement and Beyond* (Baltimore, 1968, pp. 64–68), he applauds officials for their courage in not succumbing to the old "myth of backing," and suggests they be given honorary degrees by the great universities I agree with him that the officials deserve honorary degrees, but not with his dithyramb about the absence of backing in the SDR scheme. His economic argument is, of course, valid if the legal system is held constant and there is complete trust that when and if a member withdraws from the Agreement or if the Account, for one reason or another, breaks down, all commitments will be honored. But that is precisely what, in my opinion, the whole issue of "backing" is about. I do not believe the authorities will be as willing to stake as much confidence in unbacked liabilities as they will in backed liabilities, and that consequently, an approach to world money creation through this route is more limited than Machlup appears to suggest.

VI. THE PLAN

A. WHY?

The objectives of the proposal are seven-fold:

1. To restore control of the private gold market to the monetary authorities and implement a coordinated gold policy for the major countries.
2. To neutralize destabilizing shifts from one reserve asset to another and prevent the destruction of international currency reserves.
3. To provide a systematic means to create new purchasing power in the event of a world depression, or absorb excessive purchasing power generated by abnormal fluctation in gold supplies or Russian policy.
4. To rationalize the present proliferation of reserve assets into a single world currency.
5. To provide the rest of the world with an alternative intervention asset to the dollar or to gold in case the need arises.
6. To develop a centralized management of the international monetary system and coordinate guidelines for world monetary policy.
7. To provide a forum in which the debt and balance of payments problems of the less developed countries can be coordinated with development aid policies as the need for this coordination appears.

I submit that our present arrangements do not fulfill these functions.

B. HOW?

These objectives can be fulfilled by the creation of a common international currency, initially for use by central banks alone, but eventually available to traders, travellers and lenders as the need arose. The currency would be backed by gold and reserve currencies and would represent a form of international paper gold certificate or receipt (the intor). The intor would be freely usable in payment of all international debts and, in itself, be a final unit of measure and contract for international obligations. It would be a hard international money, superior to gold or dollars and capable of being expanded or contracted according to the needs of the world economy.

Intors would be established by the centralization of existing gold, dollars, and sterling reserves in an international Monetary Pool (IMP) Countries would place part or all of their reserves in the IMP and would get intors in exchange. Members would agree to accept intors freely in exchange for their own currencies. As the plan for special drawing rights is activated, the IMP would also be authorized to acquire SDR units and issue intors in exchange. The IMP would be owned by its members who would be the beneficiaries of the internalization of the externalities involved in the saving of resources through the use of a common money.

The quantity of intors would be adjusted over time by the purchase or sale of IMP assets just as currency is issued today by any of the banks of issue Authorized assets would include gold, interest-bearing reserve currencies, gold tranche IMF positions, SDR instruments, IBRD bonds, and such other commodity or financial assets as authorized by the directors. In addition they would include a specified quantity of "founding instruments" to be specified in the next section. Interest received on earning assets would be paid (after deduction of expenses and a reserve fund) as dividends on intor holdings.[20]

Founding members would be those who committed reserves at the inception of the IMP. They would have the privilege of depositing founding instruments (a sum of their own currency) with their reserves, receiving an equivalent value of intors in exchange. These founding assets would become dormant (non-interest-bearing) assets of the IMP, used only in the event of the withdrawal of a member. Founding members thus receive a bonus premium for early membership.[21]

The scheme would be open to any country in the world.

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[20] Subject to the discretion of the directors, the dividends would be paid either in the form of additional intors or in the currency in which interest is received.

[21] It is unnecessary at this stage to develop the details of the premium that would be provided to the founding member; a flat 20 per cent of the contribution of reserves might be a rough rule of thumb, but adjustments would have to be made to avoid penalties to countries which, like France, Britain and India are financially prostrate. I have worked out a tentative weighting system, but this is not the time to elaborate on details.

C. THE IMP: AN EXAMPLE

A sponsoring party (e. g., the U.S., Germany, the gold pool or the Group of Ten) invites other countries to deposit some or all of their reserves in a central pool along with specified sums of founding assets (FA). In exchange for these reserves the countries would acquire receipts or certificates, in the form of intors. The plan would come into operation within (say) a month of the invitation.

An example will illustrate how it would work. Think for the moment of an intor as being worth a dollar or .888671 grams of gold at current prices. Suppose $30 billions worth of gold and $20 billions worth of other reserves (dollars, sterling, Roosa bonds) are deposited in the pool, and that each founding member is given the right to submit one intor's worth of his own currency for every four intors' worth of exchange reserves. Then the accounts of the IMP could be deposited as follows (IOU's are used to stand for the founding assets):

Assets:	
Gold	$30.0b.
Dollars and other currencies	20.0
FA	12.5
Total	62.5b.
Liabilities: Intors	62.5b.

Individual countries would have obtained an asset, intors, that represent generalized purchasing power, an unconditional means of payment acceptable at all participating central banks. Any country wishing to do so could use it as an intervention currency or as a unit of contract.

The IMP would have the authority to engage in gold transactions in the private market to further the gold policy of the members, and to exchange intors for the major intervention currency in order to integrate the operation of the pool with the exchange market policies of the members. Other countries would therefore have the choice of using the dollar or the intor as the intervention asset.

Let us consider some of its operations. Suppose the Russians have a bad harvest and offer for sale $500 million in gold. This would drive down the Zurich or London price to perhaps $32 or $30 an ounce under present arrangements, depending on how quickly it was fed into the market. Under our present arrangements dollar-holding central banks—especially the smaller ones—would be tempted to buy up the gold and sell it to the IMF, as under existing arrangements the Fund is obligated to buy gold. To prevent this, the IMF could buy up the total at a price of, say, $33, paying for it in intors (or dollars), and then neutralize the inflationary impact of the purchases, if necessary, by sales of other assets as far as it was judged to be necessary.[22]

It must be recognized that the mere existence of the pool would have a huge impact on the system. Control over the gold market would induce private gold to be released from hoards and sold to the authorities (probably about $6 billions worth). No country would be able to dominate it. Erratic political behavior by any one country could be quickly punished. And if certain eventualities, perhaps unpleasant to speculate upon but nevertheless worth analyzing, occur, protection would exist for the remaining countries. I shall mention one or two of these possibilities not because I consider them likely, but because a system that provides some insurance against unpleasant big upheavals can readily handle the modest changes that are more likely to occur, but against which the present monetary authorities have felt helpless to cope.

Let us start off with some really dramatic changes so that we can see the kind of protection the IMP would provide and its superiority over the alternatives open at the present time. Suppose that the U.S. demonetizes gold by ending all transactions with central banks and offering to auction off some or all of its remaining gold reserves. The price of gold would fall. We cannot say by how much, because it would depend on whether the Fund felt legally obligated to accept gold at the official price. In the absence of gold hoarding by private or official users, the free market price would probably be below $25 an ounce. But the overhanging liquid stocks in private hands and the offer of the U.S. to sell would create great problems. In any case gold-holding countries would be deprived of much of the security now provided by their gold stocks.[23] If they

[22] The IMP could use either the Bank of England as its agent, as the gold pool did, or establish direct connection with the London gold market or the Zurich pool.

[23] I have gone into this issue in somewhat greater detail in a paper delivered in Geneva "The Future of Gold" (June, 1968).

abandoned the dollar as an intervention currency and switched to gold they would, on the other hand, be confronted with the threat of an inflation not unlike that which threatened silver countries after the U.S. demonetized silver in the last century. The IMP could protect them against this eventuality because they could switch to intors as the intervention currency and let the dollar depreciate in terms of *intors* without altering the fixed exchange rate relations they may want to preserve with each other.

Suppose next that the U.S. doubled the price of gold. This would benefit gold-holding countries compared to dollar holding countries and apparently dishonor the U.S. government because of its previous pledges. It would also be very expensive in view of the gold-value guarantee of Fund obligations. But the option of reducing or increasing the par value of all currencies (raising or lowering the price of gold) was built into the IMF articles and the door to such a possibility should be left open in case there arose a sudden need for a drastic upward or downward adjustment in liquidity (e.g., in case of a world depression or important new gold discoveries). The IMP would make it far easier to adjust the price of gold because it has the effect of distributing the gains or losses from a change evenly distributed among gold-holding countries. It contains, in this respect, the virtues of the Profuma plan, and does not unfairly penalize gold-holding or dollar-holding countries.

As a final example, suppose the U.S. embarks on a course of accelerated inflation. Europe has no feasible protection against U.S. inflation under the present system. Under a properly working system gold conversions would warn the U.S. of the dangers of this policy. But under the present system the countries cannot convert excess dollars into gold because they know the U.S. Treasury will simply close off that option.

It is true that the U.S. has said it will "defend the dollar up to the last ounce of gold," but this is hardly credible. It would be more correct to say that the U.S. will defend the dollar up to the last ounce of gold the Treasury will sell! Faced with this threat the other countries could pin their currencies to gold, but gold might have an unstable purchasing power even compared to an inflating U.S. currency; clearly intors would be better because their contract domain extends over all the (other) convertible currencies. Alternatively, they could let their exchange rates float, but not without allowing intra-European rates to fluctuate or adopting a European currency as an intervention currency. (Neither Germany nor France however are enthusiastic about choosing, respectively, francs or marks as the intervention currency.) Moreover, flexible rates would disrupt institutional arrangements in the Common Market; in any case flexible exchange rates are only a transitional system. With the IMP countries could latch onto intors and preserve their exchange rates among themselves without all exchange rate strings passing through the trading desks of the New York Federal Reserve Bank.

In these cases the IMP will provide central banks with a protection against the vagaries of Russian sales, South African monopolistic practices, U.S. inflation, a bouncing gold standard, or the political disadvantages of the Roman solution. It will provide a hedge against the grave uncertainties that are presently facing Central Banks as well as more freedom for the U.S. to opt out of those responsibilities that have led officials in Washington to adopt a system of controls. The present scheme shows that the rest of the world is not as hopelessly at the mercy of erratic policies in either Washington, Paris, Moscow, Johannesburg or Zurich.

The scheme would not, however, be useful only in its role of taking command over the gold market and providing central banks with a conservative and safe international currency reserve. The pool also represents a depository for SDR instruments held by its members. When a country that is a participant in the pool receives SDR instruments, it can dump them in the pool and get intors in exchange. The central banks have a residue of district in the Rio scheme, and will distrust it even more as the implications of the gold-guarantee provisions come to be better understood; the intor system gets them off the hook. It makes a virtue out of some of the defects of the SDR scheme.

D. SOME DETAILS

We have now developed the main outlines of the agreement and some of the major advantages that can be expected from its successful implementation. There are a number of details that are worth considering, even though it would be premature to engage in an overspecific discussion until the main principles are conceded. I list below a few of the specific features that may be worth discussing:

1. Dollars and sterling deposited with the pool are debts of the U.S. and U.K. governments, and would earn interests for IMP members. With respect to the rate of interest charged to the U.S. and U.K., a distinction could be made between (a) existing balances and (b) new balances. Existing balances need to be funded, and a modest rate of interest, of perhaps 3½ per cent, would be appropriate. But new balances acquired through current surpluses would yield for the pool penalty rates of, say, 5½ per cent or even 6 per cent. The U.S. and U.K. would have the option of exchanging excess holdings of intors for U.S. liabilities in the pool.

2. The IMP will earn profits from (a) interest on sterling and dollar balances and (b) gold transactions. The profits will be used to pay expenses of the operation, to establish a reserve fund, and to pay dividends to holders of intors.

3. Pool members will be protected against a change in the exchange rate between sterling and dollars on the one hand, and intors on the other. If the pound is devalued in terms of intors by, say, 10 per cent, the U.K. would be required to supply the pool with an additional quantity of interest-bearing pounds equal to 10 per cent of the IMP's holdings of sterling. The same holds for the dollar. In other words, dollars and sterling assets of the IMP would be intor-guaranteed.

4. If the price of gold is altered through Article IV (7) of the Fund, i.e. through a uniform change in par values, IMP members would receive additional quantities of intors equal to the ratio of gold holdings to the quantity of intors outstanding multiplied by the proportionate change in par value, subject to the discretion of the directors.

5. Membership in the International Monetary Fund would not be a prerequisite for membership in IMP. To be eligible for the bonus involved in founding membership, a country could give notice of its intention to join pending legislative approval.

6. Although the U.S. alone, or the U.S. and U.K. jointly, could promote the scheme on their own, its success and universality would be enhanced by the inclusion of three of the following countries: Germany, France, Italy, Japan, Canada, Switzerland, the Netherlands, Belgium and perhaps Sweden, India or Mexico.

7. In the event that the U.S. is reluctant to sponsor a new initiative in this field, financial leadership could originate elsewhere. The U.K., Germany, Italy, France, Japan or India could sponsor the scheme to create an alternative to the dollar.

8. On a more limited scale, the device would be used for regional currency arrangements to create a Euror or Laor or Asor or Afor or Sterlor, making use of the same principles. But there would be a distinct advantage if the U.S. took the initiative because it would establish the intor at the outset as a potentially universal arrangement, and it would be expensive to stay out of it.

SHOULD THE UNITED STATES DEVALUE THE DOLLAR?*

By Robert A. Mundell

Somewhere in his *Journals*, Kierkegaard remarks that the master of a fishing craft knows his whole cruise before sailing, whereas a man-of-war gets its sailing orders only out at sea. In some respects we are more in the position of the man-of-war than the fishing craft, for while I was given this topic some months ago my answer has to be conditioned by the state of the sea. The sea has been rough in the past few months, and the course we set has to be altered accordingly. I am not just speaking of the new dispensation arranged in the March 17 Communique or the French uprisings. The day before yesterday Russia invaded Czechoslovakia and that itself could affect the choice of policies that are now appropriate. I shall, however, not go into those connections here; it is enough to keep them at the back of one's mind. Besides, it is not so much in the question posed or my answer to it that I hope to make my contribution, but in the way the question is approached. It is the chase rather than the catch one should look at. I shall, nevertheless, give an answer to the question at the end.

It is remarkable, in a sense, that the question can now be posed openly and discussed freely. The new gold market arrangements enable it to be discussed even by officials with a new candor. There is no longer a conspiracy of silence on the issue, although there are still billions of dollars at stake in connection with the valuation of gold stocks and the capitalized value of gold production. But the private market at least no longer has a one-way option and the market in Europe now has an escape valve. And we have a new barometer.

I. The Legal System

What does devaluation of the dollar mean? There is some ambiguity in this question that even confuses the people who can be expected to understand the exchange system. It could have one of three meanings:

(a) An increase in the official price of gold in terms of the dollar and all other currencies; technically this is a uniform *reduction* in the par value of all currencies.

(b) A *reduction* in the par value of the dollar as established at the IMF, all other par values remaining constant.

(c) An *increase* in the par value of all (or some) other currencies relative to the par value of the U.S. dollar.

It could also mean—to people over 70 at any rate—a rise in the price of commodities. I have ruled that out of the discussion since no one is advocating that kind of devaluation and it would not be helpful to encourage the disguised policies involved in speaking of a 25 cents dollar or a five cents dollar; we have enough terminological inexactitudes to put up with as it is.

It is a rather amusing commentary on the division of knowledge within social sciences that lawyers tend to think that there is no economic differences between the three types of devaluation while some economists think there is no legal difference. But it is important to keep both the legal and economic distinctions in mind, as we shall soon see.

These three possibilities are illustrated in Figure 1. On the ordinate we place the price of dollars expressed in terms of gold, and on the abscissa the price of the pound sterling in terms of gold. I shall use the price of the pound sterling for the moment as representative of the price of all foreign currencies.[1] Each point in the graph indicates three price ratios: the gold price of the dollar, the gold price of sterling and, implicitly, the dollar price of the pound (the reciprocal of the slope of a ray connecting the origin and the point, such as the line OQ).

*Plenary Session of the Western Economic Association at Corvallis, Oregon, on Thursday, August 22, 1968.

[1] This is legitimate because we are assuming implicitly that the price of all foreign currencies are constant relative to each other and can therefore utilize the Hicks-Leontief theorem on the composition of "commodities."

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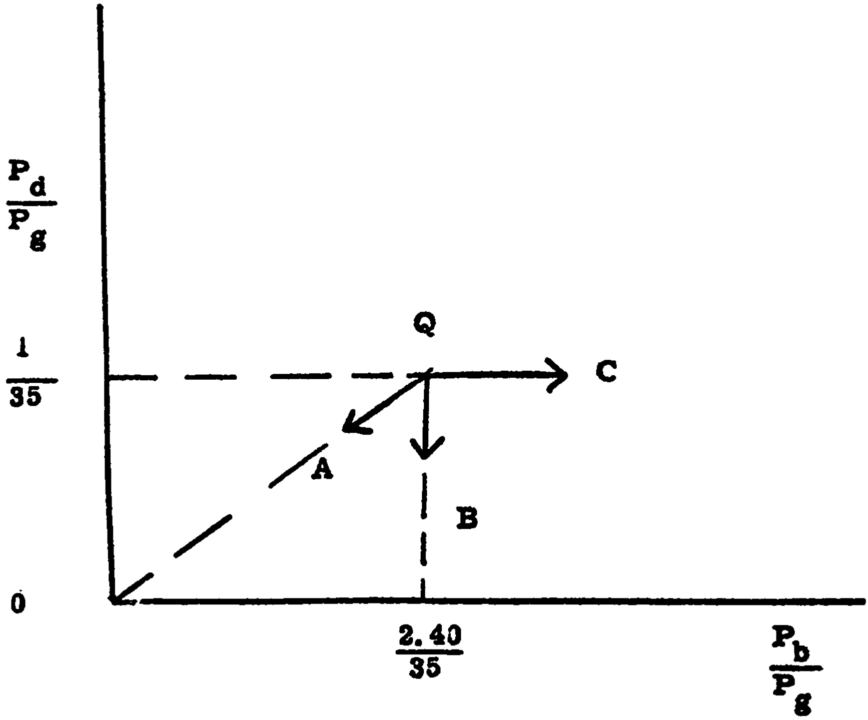
Figure 1



Let us consider now "devaluation" of the dollar. This could mean a reduction in the price of the dollar in terms of gold, the gold price of the pound being constant; this means a movement in the direction B. It could mean an increase in the price of gold in terms of both the dollar and the pound; this means a movement in the direction A. Or it could mean a reduction in the price of the dollar in terms of the pound, the dollar price of gold remaining constant (an appreciation of the pound); this means a movement in the direction C. What considerations are involved in selecting one or the other?

First, we should clarify the legal system. The unit of account in the IMF system is gold, not dollars; par values are defined in gold or "1944 gold dollars." The term "gold dollars" sometimes gives rise to confusion. This results from the failure to distinguish between two meanings of a unit of account: a unit of *quotation* and a unit of *contract*. In domestic monetary systems these are invariably the same. But in the international monetary system the *dollar* is the unit of quotation but *gold* is the unit of contractual obligations. This means that if the U.S. alone lowered the par value of the dollar the dollar price of gold would be raised and, legally, so would the dollar price of all foreign currencies; we would move in the direction B. Thus, when we consider devaluation of the dollar in the same sense that we consider devaluation of any other currency, we mean by this an increase in the dollar price of gold *and* an increase in the dollar price of every other currency. This is because gold is the legal unit of contractual obligation in the IMF Agreement.

To change exchange rates it is not enough, however, for the U.S. to change the par value of the dollar. It is necessary also that the par values of some of the other members of the Fund stay constant or are reduced to a smaller proportion. A change in exchange rates involves a change in the slope of the ray OQ, but the U.S. acting alone within the framework of the Articles, can only determine (in consultation with the IMF) its vertical position in the graph. Because other countries have control over horizontal positions, they can cancel any change in the slope the U.S. may wish to make. This is why exchange rate changes have to be made (or at least are most effectively made) in consultation with an international body.

To change the price of gold in terms of all currencies requires a majority of the weighted votes in the IMF, subject to veto by any member who has over 10 per cent of the voting power.[2] A uniform reduction in par values is not, therefore, within the control of the U.S. alone, although the U.S. has a veto power over such a change.

The only independent option for the U.S. is to change its par value, although, as I have said, the exercise of the option does not imply that other countries would allow the devaluation to permit a change in exchange rates. The U.S. has not exercised its 10 per cent option so it could still change its par value up to 10 per cent after notifying the Fund, and getting the approval of Congress.

Prior to the new amendments to the Articles of Agreement, the Executive Board could waive the maintenance-of-gold value clause of Fund assets with a simple majority vote. Now this decision will be reserved for the Board of Governors and requires an 85 per cent majority; this change was instituted to give the E.E.C. a veto, and it means, effectively, that a world-wide doubling of the price of gold would be associated with a doubling of the size of the Fund, and that the Fund provides an escape through which other countries can acquire a gold-value guarantee on a position of their foreign exchange reserves.

So much for legal complications. Legally, gold is the unit of contract. We can say that gold is the *de jure* numeraire. But the "economic numeraire" is the dollar. The dollar is the *intervention currency*, the currency that is used in the exchange markets by foreign central banks to stabilize exchange rates. Countries are required by the Articles of Agreement to keep exchange rates of other member currencies against their own within a margin of one per cent on either side of parity.[3] Formally this would mean that each country would have to concern itself with n-1 exchange rates, where n is the number of members. The n countries collectively would be involved in n (n-1) price commitments altogether of which, of course, only ½n (n-1) would be effective since either country can perform the stabilization function. If the division of labor on this were shared, with each country protecting, say, its lower bound, there would be again n (n-1) "desks" needed to fix rates.

Obviously, multilateral intervention of this kind would lead to a very complicated system. A centralized pegging system is clearly more efficient. Thus early in the Fund's history, it was agreed that fixing rates in terms of the dollar within the margins would fulfill the legal requirements. This was the origin of the dollar's role as an intervention currency.

II. The Market System

In the market system, by contrast with the legal system, the emphasis is on the *dollar price of gold* and the *dollar price of other currencies* rather than the gold prices of currencies. The dollar is the numeraire and it is more natural to transform the coordinates of the graph to reflect this fact. The same information is contained in Figure 2 as in Figure 1 and the vectors corresponding to A, B and C in Figure 1 are A′, B′ and C′ in Figure 2. All we have done is to change the frame of reference.

Now consider again the meaning of devaluation. Suppose the U.S. "devalues" in the legal sense and we say that other countries do "nothing." Nothing here can mean nothing in the *jurisphere*, or nothing in the *ecosphere*. If exchange market operators stand pat so that exchange rates remain fixed to the dollar, all countries except the U.S. would be in violation of the Fund's rules. If, on the other hand, countries continue to comply with Fund rules, they have to appreciate their exchange rates with respect to the dollar. Ceteris paribus "juris" means something different from ceteris paribus "ecos!"

I have raised these various meanings of the term devaluation not because they are important in themselves, but primarily to show why it is that people get confused about the meaning of dollar devaluation. It is hard not to get confused about it. The difficulty arises from the role of gold as the unit of contract and measure, and the role of the dollar as the unit of quotation and intervention.

But enough of technicalities. Let us turn to the economics of the subject.

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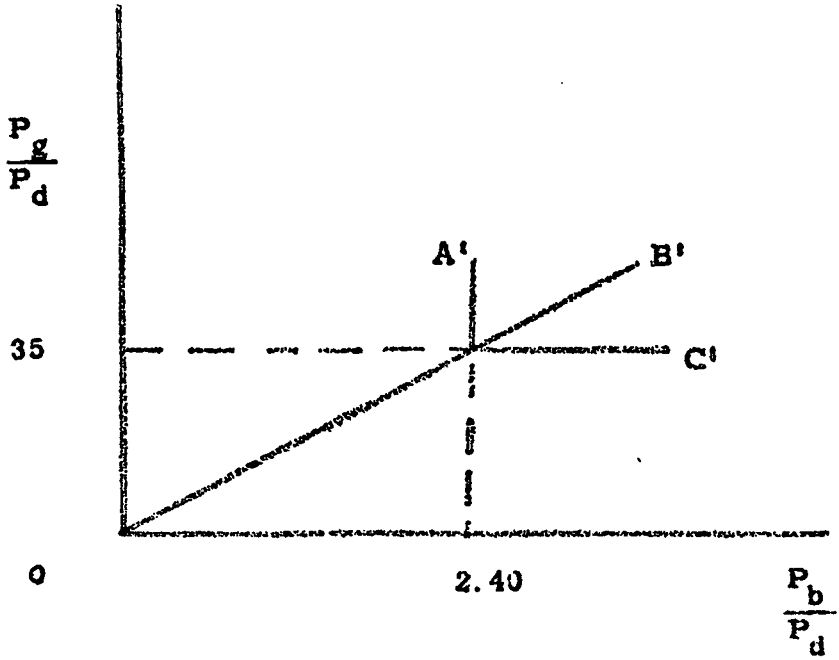
[2] The new amendments have altered this provision in order to withdraw the veto privilege from the U.K., and to give it to the European Economic Community; a uniform change in par values will require an 85 per cent majority.

[3] Actually, somewhat wider margins are permitted to allow for the wider spreads that result when the major countries peg their rates to the dollar, while some other countries peg their exchange rates to the pound sterling, the French franc or the Portugese escudo; the Fund Regulations permit wider spread (up to about two per cent) as a "multiple-currency practice."

Figure 2



III. The Economics of Devaluation

Let us conceive of a world of three goods, called dollars, gold and pounds. Forget about their roles as money; for the moment they are just any three goods. Equilibrium prices are established by market balance equations. If P_d, P_g and P_b denote the abstract prices [4] of these three goods, expressed in terms of an abstract unit of account, we can write three excess demand equations,

(1) $X'_d\ (P_d, P_g, P_b) = 0$
(2) $X'_g\ (P_d, P_g, P_b) = 0$
(3) $X'_b\ (P_d, P_g, P_b) = 0$

to determine the three unknown, P_d, P_g, and P_b.

We have, however, a problem with such a system. The system of real excess demands is linear and homogeneous of degree zero in the three abstract prices. So we can "normalize" them by taking one good, say, gold, as the numeraire. Then we get three equations in two relative prices.

(4) $X_d\ (p_d, p_b) = 0$
(5) $X_g\ (p_d, p_b) = 0$
(6) $X_b\ (p_d, p_b) = 0$

We would be in trouble now if the three equations were independent. But if the system is closed the markets are connected by Walras' Law

$$p_dX_d + X_g + p_cX_c = 0.$$

so that any two of the equations will give us equilibrium gold prices and the other equation must be compatible with that equilibrium.

Let us assume that the three goods are substitutes. Then the system can be presented diagrammatically as in Figure 3. Each of the lines graph one of the equations, (B for pounds, D for dollars, G for gold) and the six zones reflect potential positions of disequilibrium. But the apparatus gvies us a general equilibrium framework for analysis.

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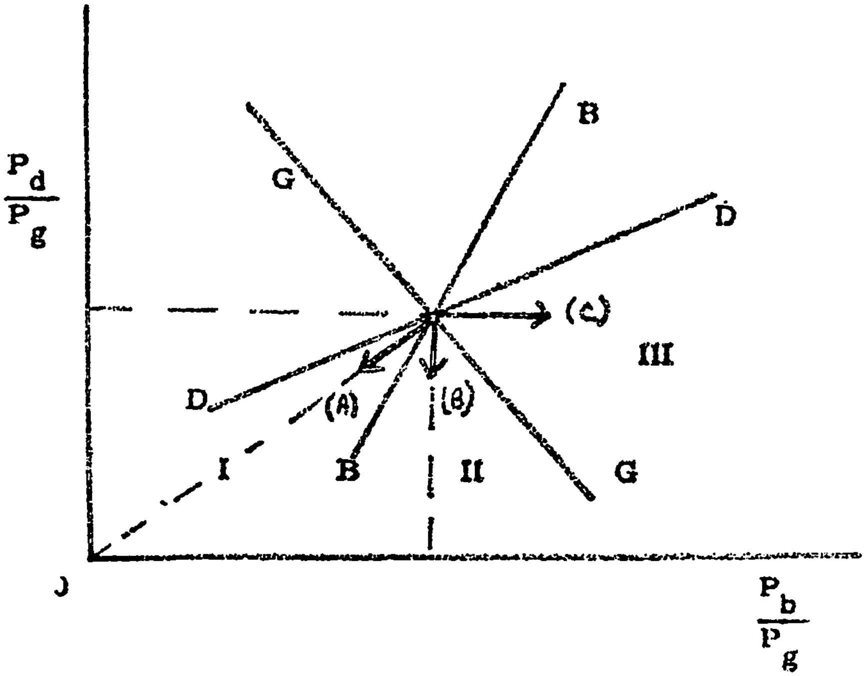
[4] An "abstract price" has a single dimension Q^{-1}.

Figure 3



A country does not devalue unless it is in disequilibrium. Our concern is, ultimately, to find the circumstances of disequilibrium that justify devaluation. But to do so we need to know the effects of devaluation. So we satrt at the equilibrium Q and ask: What will be the consequences of devaluation?

We are thus back to the question posed in the beginning. What kind of devaluation are we talking about? Let us proceed systematically.

Devaluation in the sense (A) (a uniform reduction of par values) will move us to Zone I, where there is an excess supply of gold and an excess demand for dollars and sterling.

Devaluation in the sense (B) (a reduction in the par value of the dollar alone), will move us to Zone II where there is an excess demand for dollars and an excess supply of gold and sterling.

Devaluation in the sense (C) (an appreciation of other currencies) will move us to Zone III where there is an excess supply of pounds and an excess demand for gold and other currencies.

In all three cases the devaluation increases the excess demand for dollars, though by different amounts. In case (A) the pound is strengthened while in cases (B) and (C) it is weakened. In case (C) the excess demand for gold is increased while in cases (A) and (B) it is reduced. The choice of policies depends, therefore, on which of the different side effects are beneficial. We have to know the current state of basic forces in the market.

I have now slipped into the habit of speaking as if I am indeed talking about balance of payments and exchange rates, whereas I initially said that gold, dollars and sterling were any three goods. There are many complications that need to be taken into account when making the transition from the model to the real world. The problem has to do with the multiplicity of currencies, and other markets; another problem concerns balance of stocks in relation to flows. Actually, these problems are readily handled by general equilibrium methods but the above analysis suffices for an introduction to the problem.

THE CURRENT POSITION

What, then, is the current state of disequilibrium in the world that suggests the need for any exchange rate changes?

I believe the following basic disequilibrium patterns would be conceded by most observers of the international financial scene as of August 1968:

1. The French franc is overvalued with respect to the dollar.

2. The Deutschemark is undervalued with respect to the dollar. The Germans have recognized that they have to expand or else upvalue the mark; they have apparently chosen expansion. The French have said they would resist devaluation, but they have imposed controls of such a comprehensive scope that devaluation in the future may be necessary to remove them.

3. The U.K. position is less clear. The overhang of sterling liabilities is a mortgage on their resources and many countries now want to leave the sterling area. U.K. vulnerability is reflected in their high interest rates, the discount on forward sterling, and the exceedingly weak reserve position. But British labor is not overvalued. Britain would be competitive if she could restore confidence in her capital position and an increase in reserves at the going exchange rate.

4. The U.S. position is governed primarily by the *system itself*. For ten years we have heard much discussion of the U.S. balance of payments. The issue is sometimes posed in terms of whether the U.S. has a deficit or surplus. But these terms have rather little meaning for the U.S. Since the change in the system last March the world has effectively moved onto a dollar standard. Access to U.S. gold stocks has been denied the private market, and it is effectively, if not formally, denied other central bankers. The primary question for the U.S., therefore, is whether U.S. financial policy is too expansionary or too restrictive, not whether there is a deficit or surplus in the U.S. balance of payments.

Looked at in this way we have to ask whether the U.S. policy is excessively inflationary. That it was a few months ago was certain. But it is not so certain today.

Upvaluation of the mark and devaluation of the franc would be a step toward equilibrium; that much I believe is certain. Alternatively, deflation of the money stock in France and inflation of the money stock in Germany, would help restore balance. But there is no compelling reason for a change in the price of the U.S. dollar in terms of foreign currencies. No country in the world wants to compete against a devalued dollar, with the possible exception of Germany.

The U.S. is, to be sure, committed to a social and economic policy that will lead to a higher price level than currently prevails over the next two or three years. It would not be possible to end the inflation quickly without bringing on a depression and it would be disastrous for the U.S. to try to do so. But the case for devaluation has to rest on the need for a change in the system and not on the need to make any drastic corrections for overvalued labor in the U.S.

In short, except for Germany, and perhaps Holland, Switzerland and Italy, I see no country that would welcome an exchange rate change. It follows, I believe, that if the U.S. were to lower its par value at the I.M.F., every other member of the Fund would follow, with the possible exception of Germany, Holland, Switzerland and perhaps Italy. But these countries already have the option of appreciation, and, so far, they have rejected it. Therefore, I doubt whether even those countries would resist the *de jure* devaluation of their currencies. In short, there is simply no point to U.S. devaluation to change exchange rates because the devaluation would be followed by the rest of the world. To put it another way the U.S. cannot devalue against other currencies unless the other countries will allow the U.S. to do so. There would be little or no point, therefore to a devaluation of, say, 10 per cent.

IV. Devaluation and the System

A far more respectable case can be made for devaluation to restore the gold exchange standard. The prerequisite for such a system to operate effectively is for gold to be worth less as money than as a commodity. There are three ways of bringing this about. One is to wait until South African supplies to the market are resumed. At such a time gold would then be used as a money along the lines expressed by Gresham's law.

A second method would be a new strategy of intervention in the gold market by the central banks. Collectively or individually, they could flood the market with existing gold stocks and determine whatever price they want.

But the central bankers are today too nervous to follow such a bold policy, and I am extremely doubtful they would do so; they have not yet lost their hunger for gold. At least they would not do so outside of an organization, with wide participation. There is also the legal difficulty that the I.M.F. is required to buy gold offered to it at the current price.

The third method is to raise the official price of gold. Provided it was a substantial increase, so that speculation about a future increase is ruled out for some time, gold would flow out of hoards and we would reestablish the gold exchange standard. Reserves would be centralized in the U.S. to an increasing extent and the system would become similar to that which developed in the 1950's. How long it would last would depend on how high the price was raised. My own judgment is that if the price of gold were doubled the system might last for perhaps 15 years after which troubles similar to those experienced in the 1960's would reassert themselves.

DEFECTS OF THIS SOLUTION

The solution to halve the par value of all currencies (double the price of gold in terms of all currencies) cannot be rejected out of hand as a senseless solution to current problems. To solve problems of the system for fifteen years is not unattractive because it gives the monetary authorities fifteen more years in which to design a modern system. It, is indeed, the arrangement foreseen at Bretton Woods and embodied in the I.M.F. Articles of Agreement. Despite some attractive features, it has serious drawbacks:

1. Expectation of a second increase later on confers on gold a rate of return competitive with time deposits or other short term assets. Unless this expectation were dispelled there would be a stock shift in the demand for gold (equal to the product of the interest rate implicit in the expectation of the higher price and the interest elasticity of demand for gold as a store of value). While this amount may be negligible for the first few years it would rapidly increase over time. The "gain" from the increase could well be dissipated within a few years.

For this reason alone an increase in the price of gold would be foolish unless it were associated with a resolve of the central banks to replace gold after the increase had taken place. As things presently stand, the SDR's are looked upon as a replacement for gold. The question then is whether these will become important enough in time to convince the market that the price of gold will not have to be raised again in the future.

Given success of the SDR's this argument against an increase in the price of gold falls to the ground. But the need for an increase has to rest also on the argument that there are no better ways of achieving the same objective.

2. A second objection to an increase in the price of gold is that it is potentially inflationary. It doubles the currency value of the gold component of reserves. Now a curious argument has got about that doubling the price of gold is *not* inflationary because central banks do not have to use these reserves. The logic of the argument is extremely weak. Unless central banks are very short of reserves today they will not hold a much larger amount; if central banks were not responsive to reserve holdings most of the argument for and against increasing liquidity would fall to the ground. What has the whole liquidity issue been about if it has not assumed some connection between actual reserves and the incentive to use these reserves?

Now, of course, central banks can write the new value of reserves down on their books in whatever form they want; and they can neutralize them in various ways. But will they? Will the Bundesbank act the same way with $12 billion of reserves as with $7 billion? Will Holland with $4 billion as with $2 billion. Will the U.S. with $24 billion? I very much doubt it.

But I will grant, temporarily, for the sake of argument, what I consider to be absurd: that they would be willing to hold them. Even then an increase in the price of gold is inflationary; South African exports double in price, so that even if other prices stayed constant, some prices would rise in some countries.[5] At least the theory is clear. An increase in the price of gold is inflationary both because it increases world reserves and because it raises the value of South African exports.

The argument for raising the price of gold must then evaluate the need for an inflationary policy. In a state of world depression it would make sense. If the world moved into a state of serious depression an increase in the price of gold

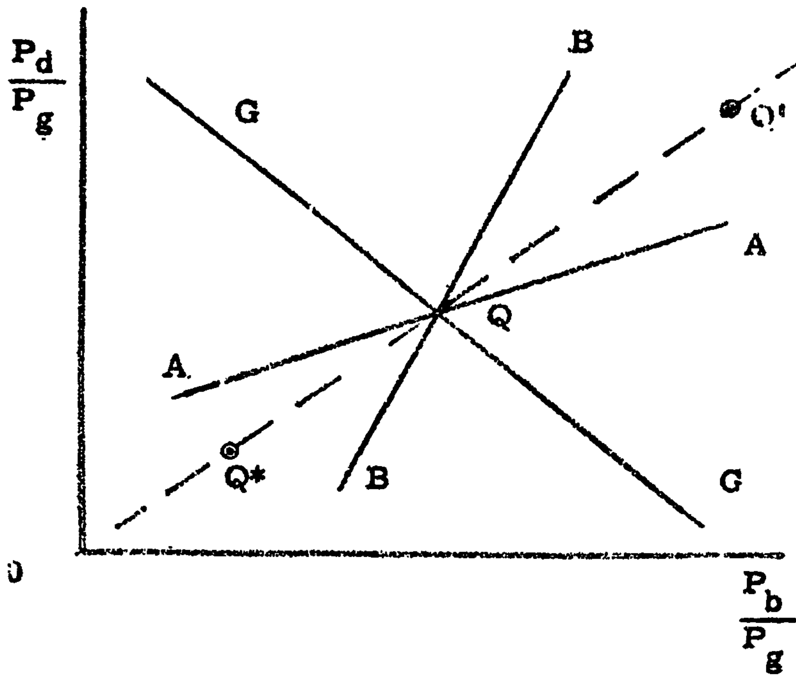
[5] Of course South Africa could appreciate the Rand, or impose deflationary export taxes.

might be the best way of increasing world reserves quickly, since we do not have, at the present time, any better way of managing a drastic increase in reserves.

But we are not in a state of depression today; the problem over the past three years has been excess demand and inflation. So on these grounds I do not believe an argument for increasing the price of gold can be sustained.

Perhaps a reference to the diagram may help to make the point clear. If we double the prices of gold in terms of all currencies we move, in Figure 4, from the point Q to a point Q* half-way along the ray OQ extended. Those who argue that an increase in the price of gold would not be inflationary are suggesting that there are no inflationary forces at the point Q*. This is obviously untrue if the three schedules remain in their original position.

Figure 4



But I do not want to accuse proponents of the view that an increase in the price of gold is not inflationary of logical error for there is a set of premises that can rescue their argument. They would presumably say that the three schedules shift downward, presumably to intersect at the point Q*. But what forces could produce a new position precisely at Q*?

Q* could remain an equilibrium only if the demand for gold simultaneously doubled with the increase in its price. It might be argued, for example, that the central banks want to double the ratio of gold backing their monetary liabilities. I very much doubt that this is the case, but even if it were it would alter the flow supplies of gold and in this way affect the rate at which money supplies and prices were rising.[6]

3. The distribution effects of an increase in the price of gold are extremely arbitrary. (a) South Africa's terms of trade would experience a great improvement; they would get a supplement to natural income of at least $1 billion a year; worth $20 billion capitalized at five per cent. (b) French private boards of gold are estimated at over 5,000 tons, so private gold hoarders in France would get a capital gain of over $5 billion (c) owners of gold shares would benefit by fantastic amounts. (d) Russia would reap substantial gains and (e) those central banks who converted dollars to gold would profit at the expense of those who kept dollars. Included among the latter countries are many countries who deliberately held on to dollars to help make the system work.

I take no position qua economist on whether these redistributions of income and capital values are beneficial or not, but they are certainly not high on my list of needy foreign aid recipients. Hardly anyone would deny that the list is capricious and arbitrary.

This does not mean that devaluation should be discarded on grounds of redistribution effects alone. If there were other compelling reasons for raising the price it would be silly to give up this option solely on grounds that one doesn't like the people who would gain from it. But none of the other arguments for it make economic sense.

This leads me to the question that is the topic of this session: "Should the U.S. devalue the Dollar?"

My answer is, No.

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[6] The most consistent argument for increasing the price of gold is that advanced by the late Charles Rist, which, in terms of my Figure 3, would argue that inflation has pushed on to the disequilibrium point Q/, and that failing an increase in the price of gold we are headed for a deflation to bring us back to equilibrium Q. I hope to take up some of the subtleties of this argument at a later date.

THE COLLAPSE OF THE GOLD EXCHANGE STANDARD*

By Robert A. Mundell

I can think of few places in the world where the subject of my remarks would appear to have less relevance. The "Big Sky" country reminds one of the vast Continental dimensions of the United States and how closed the United States economy really is compared to other countries, except for Russia and China. At Billings airport there is a prominently displayed quotation by Herbert Hoover which says that the metal resources of Montana exceed those of all the known resources in the Soviet Union. If that were true (and I very much doubt it!) Montana itself would have to be a very open economy in order to profit from them. One can easily imagine the problems this state would have if the financial apparatus in the United States broke down. But the position of Montana vis-a-vis the U.S. is not very different from the position of many nations in the world confronted with the threat of international financial breakdown. So, on second thought, Montana is not such an impossible place to speak about international monetary disorder.

I. The Exchange Market Collapse

The financial problems with which the world economy is confronted have their roots in obsolete intellectual attitudes. When change outpaces understanding we become the victims rather than the master of governing historical forces and get inveigled into wrong interpretation and prognosis. It is to improve such interpretations that this paper is devoted.

Only a couple of years ago the world monetary system looked very different from the way it appears today. This is because of the devaluation of sterling and the breakdown of the gold exchange standard in the form we used to know it. But the real problems of the system have not changed as much as they appear. Had you asked central bankers in 1966 to specify the major problems facing the world monetary system they would probably have said: Restoring the strength of the pound and the dollar, which means ensuring the ability of Britain to maintain her exchange rate and of the U.S. to continue convertibility of the dollar into gold at $35 an ounce. And had you asked, how should Britain and the United States go about this, they would have answered: By correcting their balances of payments through less inflationary politics or whatever other means were available. But they would say something similar today, although it would be tempered by greater caution and less dogma.

Only a year ago events had altered attitudes. The U.S. had braked the inflationary boom of 1965–66 by dear money; this occurred between June and November, 1966. Soon after, interest rates fell and the Federal Reserve was faced with the threat of recession. The U.S. authorities reversed policies and expanded, a move which coincided both with the needs of the U.S. economy and with the recessions in Germany and France. The U.S. monetary ease was bad for her balance of payments, but good for the U.S. and the world economy. Criticism of U.S. inflationary policy was much more muted in 1967, and the time became ripe for reform.

On March 17, 1967 Secretary Fowler issued at Pebble Beach, California, what was widely interpreted as an ultimatum to the Group of Ten to create a substitute for the dollar in the form of a new international reserve or else face the prospect of a reconsideration of the U.S. commitment to her current gold policy. The London agreements reached at the end of August, 1967, owed much to the hard intellectual work of the Group of Ten, but their timing was hastened by pressure from the U.S. Treasury. The outcome was an agreement to propose at the IMF Governor's Conference later in September, a new international asset called "Special Drawing Rights." The barbaric name for them was due to the need to compromise between the French officials who considered them as a credit instrument and the U.S. who considered them money.

*Opening address before the Annual Meetings of the American Farm Economics Association at Montana State University in Bozeman, Montana, on August 18, 1968.

Official reaction to the agreement was enthusiastic. They were heralded at the time as a "milestone in international monetary cooperation," "the most important step since Bretton Woods," and other wildly enthusiastic examples of over-salesmanship. This was to be expected since the agreement was the outcome of official policy. The general reaction of economists was much less exuberant, and a few economists, including myself, and perhaps Sir Roy Harrod, regarded them as positively harmful. One argument was that they would distract attention from the more fundamental problems facing the world system and that, while their long-run potential was substantial, the major hurdle was to get beyond the immediate short-run. Solution of the short-run problem would involve substantial changes in the structure of the system and the long-run creation of a new international money should be integrated into or evolve out of this short-run reconstruction of the system.

The official answer to this was that the public should not expect the SDR's to perform a function they were not intended to perform; and that the planting of a seed today would generate greater confidence in the stability of the system; the SDR's could, indeed, be used as a substitute for gold and thus reduce the speculative demand for it.

The IMF Rio meetings (September, 1967) reflected the optimism of the U.S. Treasury and the euphoria generated by belief in the gigantic new step that the birth of the infant SDR's was expected to involve. It was, indeed, a remarkable event with the leaders of the financial world assembled and engaging in mutual criticism and self-criticism of one another's economic policies. It was a development no one could have conceived of 30 years ago, and even 10 years ago the attitude would have been far different.

Nevertheless, despite the excitement of a great new experiment, there was a cloud overhanging the meeting. The plight of sterling was a great unspoken issue. It was common knowledge that the Bank of England had accumulated massive short term debts and assumed substantial commitments in the forward market, although not many could form an accurate assessment of their size. The questions facing British authorities (and the other central banks) were (a) *can* Britain hold the sterling rate (b) *should* Britain hold the sterling rate (c) *will* Britain hold the sterling rate and (d) what, if any, international steps can or should other members of the Group of Ten or the Fund take to assist Britain, either by consolidating her debts through a long term loan, or by placing them in an international account.

These questions were all resolved in the third week in November. By Tuesday night the British had apparently decided upon devaluation and dutifully notified a restricted group of the international community. Internal activity immediately began on the exchange markets, leading to rumors of a leak, and by Friday Britain had lost vast sums (perhaps over $1 billion) forcing the market to close before normal closing hours. The rate change was announced over the weekend, a devaluation of 14.3 per cent (from $2.80 to $2.40). In the wake of sterling devaluation most of the sterling area countries followed, although this was much smaller than it was in 1949.

Australia, significantly enough, did not devalue. She was looked upon as a key country from the standpoint of preventing a proliferation of devaluation. A phone call from the U.S. President to the Australian Prime Minister made clear her importance; in particular the U.S. was afraid that the Australians might be the straw that broke the camel's back. For example, it might prompt devaluation of the Japanese yen, which in turn would influence rate decisions by Canada, France and other countries. But if Australia was the marginal country, as appeared to be the case, she is paying a price for it in the form of current weakness in her international accounts.

Just another devaluation? Hardly. It coincided with the British decision to dismantle military positions east of Suez, so historians, with their fondness for dates, might well pick November 18 as the most convenient date to set for the fall of the British Empire, as they picked the Treaty of Adrianople (378) for the fall of the Roman Empire.

Seriously though, the British devaluation showed that coordinated action by a major currency, in a world in which at least one of the powers (France) is trying to rock the boat, is impossible. Britain had scrupulously abided by the rules of international commitments in her handling of the devaluation, but I very much doubt that the British would act so virtuously in a subsequent devaluation. Nor would France, Germany or the United States. Virtue is too expensive! The next rate change may well be a unilateral move.

France bears some share of the blame for the embarrassment of the British authorities in November. In the year leading up to devaluation the world could witness the unprecedented event of a major country calling openly for devaluation of the pound. This was part of a package deal necessary if France was to withdraw her veto of British membership in the Common Market.[1] The position of Sterling might have been shaky enough in any event. The British had never made the major readjustment that was required to set sterling on a sound footing throughout the 1960's, and (at least this is my view) still conducted her monetary policy as though she had a flexible exchange system.[2] But the French attack was, nonetheless, outrageous.

The cleaning up process was (not unexpectedly) disorderly. In the aftermath the U.S. lost hundred of millions of gold. The last quarter's gold losses were so alarming that President Johnson felt compelled to preempt the bad announcement effect by introducting "strong measures to put the balance of payments in order," including special taxes on travel and further prohibitions on foreign investment.

The depressing aftermath is well known. A well organized union of interests of France, South Africa, the gold lobby and (so it was rumored) Russia, colluded to establish a bullish market for gold, both by stimulating private speculation and by an arrangement through which South Africa (and perhaps Russia) would withhold gold from the market. At the same time discussion in the U.S. Senate about changing the U.S. commitment to gold created alarm abroad. The gold pool (which France had abandoned in June 1967) faced mounting losses. A run started and the gold drain reached crisis proportions by the third week in March, until in a communique issued on March 18, the authorities announced that they would no longer supply the private market. Gold was to circulate among central banks at $35 an ounce, but central banks were not to buy or sell in the private market.

Thus ended the Gold Exchange Standard, the system in force since 1934 The warning that Triffin had sounded back in 1959 had found its mark.

II. The Struggle To Save the System

It is worth pausing a moment to reflect on this episode. Triffin had posed in 1959 the dilemma of the gold exchange standard: If the U.S. cured its balance of payments the world would run short of liquidity, but if it did not cure its balance of payments the gold exchange standard would break down. The seeds of destruction are contained within the system itself.

We have seen how Triffin's prediction was vindicated. It is really quite remarkable. For ten years the U.S. Treasury and the IMF first denied the Triffin dilemma; then wrestled with it, and finally sought a way out of it. But the remorseless logic of the system did not pay any attention.

Think of it. There, on the one hand, is the evolutionary logic of the system intent on its inexorable suicide. Against it is arrayed the most capable forces in the financial chancelleries of the world, fighting against the tide.

It does not matter much when we date the opening shot in the struggle. Eight years ago is as good as any. October 1960 was the month of the gold bubble, the pre-election month in which communications broke down between the Bank of England and the Federal Reserve System and the price of gold shot up in London to $40 an ounce. At that time the matter was settled when President-elect Kennedy gave his pledge that the dollar would not be devalued, a pledge that announced the opening of the Great Struggle.

The first real battle was waged a few months later. Speculative capital movements had aggravated bad policies in Britain and Germany; and in March 1961, the Germans raised the price of the mark by 5 per cent. This took place while the governor of the Dutch Central Bank was in South Africa, and it created considerable confusion and delay until the Dutch followed the Bundesbank by raising the price of the florin. But the significant fact was that the up-valuation of two of the strongest currencies on the Continent brought speculative capital *to* Germany and Holland; it aggravated the speculative capital flow because the market thought up-valuation, if it was to take place at all, was inadequate. There was little point to such a small rate change; it only served to excite the market

[1] The other provisions were that Britain withdraw from east of Suez positions; that she abandon her Commonwealth connection; and that she give up her special relationship to the United States. As far as I am aware, Britain was to be allowed to keep her language.

[2] See my *International Economics*, Macmillan 1968, Ch. 19.

and remind the financial world that the exchange system is an adjustable peg system and not a fixed exchange system.

There followed, in the years 1960–68, a number of fascinating battles fought to hold the system together. Notable crises concerned—sterling in 1961; the Canadian dollar in 1962; the lire in 1963; sterling in 1964, 1965, 1966 and 1967; the Canadian dollar in January, 1968. There is, as you probably know, currently going on a battle to save the franc (or else prepare the franc for its devaluation), to strengthen the pound, and to weaken the mark.

It is more interesting, in any case, to sketch in perspective the elaborate system of defenses set up to protect the dollar. These were based, unfortunately, on two faulty principles: (a) that foreign aid should be based on balance of payments considerations; (b) that the balance of payments should be looked at piece by piece, not as an integral part of a general equilibrium system. These two principles are two major fallacies on which every beginning economics student has to cut his teeth. According to the first one, Portugal, Peru and Thailand should provide foreign aid to the U.S.; the second leads to a game of musical chairs in which the plugging of one hole only pushes more gold out of the other. Based on these faulty principles the U.S. authorities tied U.S. aid (1960), controlled the spending of troops in Europe, put a "temporary" tax on foreign securities (1963), put quotas on bank lending abroad (1965), and instituted a system of controls over direct foreign investment.

These measures did not correct the U.S. deficit, as theory suggests they would not; they merely permit a higher price level in the U.S. They do, however, have real effects and help to accomplish other objectives. This raises the interesting sociological question as to whether the measures were *intended* to correct the U.S. deficit, or whether the deficit was only an excuse used to conceal their real purpose. Most of these measures turn out to have significant effects in improving the U.S. terms of trade on capital account.

Some support for this interpretation can be got from statements President Kennedy apparently made to his economic advisers even before assuming the presidential duties. Early in his administration he had, furthermore, warned that, while the U.S. would work to correct the balance of payments, it would not use deflationary policy, impose controls on exchange, raise tariffs, or devalue the dollar—i.e., would not undertake any effective balance of payments policies.

III. International Remedies

With remedies at home ruled out, attention had to be directed to international solutions. By 1961 there developed an intensive movement toward monetary cooperation. The Roosa era began with the U.S. activity in the foreign exchange markets, the introduction of foreign-currency-denominated dollar assets (Roosa bonds), and the beginning of discussion about the need for international monetary reform.

The two horns of the Triffin dilemma were now clearly visible. Continental Europe (especially France) grabbed hold of the one that said: Correct the U.S. deficit. The U.S. and Great Britain grabbed the other that said: Prevent the liquidity shortage that correction of the deficit would create. The Europeans said to the U.S.: If you correct the deficit, and then the need for liquidity is felt, we could then go ahead with reforms. But the U.S. responded that it was silly to correct the deficit before a substitute for the flow of liquidity it provided was found. A compromise was reached when it was agreed to work out a contingency plan if it become apparent that more liquidity would be needed.

But the U.S. authorities got the better of the argument as events turned out, not because their logic was better, but because they could not employ effective means of correcting the deficit.

Some hope had been placed in the monetary-fiscal policy mix after the tax reduction was put into effect in 1963–64. The economy accelerated, and the way was cleared for higher interest rates more in keeping with the needs of international equilibrium. But now the push was too far. With mounting defense expenditures due to the Viet Nam War, and aggravated pressure on the capital market, interest rates began to rise past levels tolerable to the Federal Reserve System, which then opened up with an acceleration of monetary expansion, nullifying the external benefits of the policy mix, apparently sacrificing both internal and external objectives as the U.S. moved from the unemployment-deficit phase to the inflation-deficit phase. Both fiscal and monetary restraint were now in order.

But there were other factors involved. The U.S. deficit has its counterpart in foreign surpluses. Foreign countries, with the possible exception of Germany, *wanted* surpluses and pursued policies to obtain them. As long as their policies succeeded the U.S. could not correct the balance of payments deficit no matter what actions were taken. If U.S. monetary policy tightened, foreign monetary policies would tighten to protect their surpluses. It was becoming increasingly clear that the effect of U.S. monetary policy was *not* to correct the U.S. balance of payments, but to affect monetary policy all over the world.

Shades of the sterling standard. Recent studies had recognized that the credit policy of the Bank of England in the nineteenth century did not operate as the Cunliffe Committee report asserted it would, and that it was not a matter of deflating when there was a deficit, and inflating when there was a surplus. Gold flows were rather directed toward Britain when there was a boom and away from Britain when there was a recession; and the policy of the Bank of England exerted its influence primarily on the money markets throughout the world. The new view of the nineteenth century gold standard is a system dominated by sterling; and that domination was essential to the smooth operation of the system.

IV. The New View of the System

This reinterpretation was of enormous importance, for if it applied to Britain in the nineteenth century, why should it not apply to the U.S., the country that had replaced Britain as the center of the system, in the post-1945 system. If true it meant that American financial policy, instead of worrying about its gold stock or its balance of payments, over which *other countries* have primary control, should be addressed to the need for non-inflationary, non-recessive pressures in the world as a whole. The world, or at least the Atlantic countries, should be looked at as a single monetary system, and the U.S. Federal Reserve authorities should, in short, act as if it were the world central bank that it was in fact becoming.

The U.S. deficit then acquired a quite different interpretation. It is not something to be corrected; it is rather a variable that determines the rate of expansion of foreign-held world money. Dollars are the world money and they are held both by U.S. residents and by foreigners. The dollar supply then should be increased or reduced according to whether it is desirable to introduce monetary ease or tightness in the world economy. The deficit is merely that part of U.S. monetary expansion that the rest of the world uses to add to its reserves.

How large the deficit is is not within the control of the U.S. The U.S. authorities determine the rate at which monetary liabilities of the Federal Reserve expand, but not that fraction of it that is taken up by central banks and commercial banks in the rest of the world.

Let us check this interpretation against the facts to see to what extent the U.S. was fulfilling the duties thrust upon her. In 1966 the world economy was inflating excessively. The Federal Reserve stepped on the brakes and reduced the rate of expansion of world money.

By December, 1966, weaknesses had appeared in the world economy, and the Fed reversed its tight money policy. This reversal, while harmful to the U.S. balance of payments, was needed because the three largest economies, the U.S., the U.K. and Germany, showed signs of recessive tendencies, while France, whose current account balance had become unfavorable, was beginning to contract. Monetary ease was, therefore, the appropriate policy for the world economy and the Federal Reserve authorities "obliged." The system, by 1967, was now beginning, perhaps for the first time, to work well, looking at it in this new light. The Federal Reserve authorities showed signs, by their actions if not their words, that they were reacting to the signals.

For the monetary mechanism can, indeed, be looked on as an information system, supplying signals for policies. The signals from abroad came from the gold conversions. When a European country converts dollars into gold it is telling the U.S. "It is in our interest if you contract." And when they convert gold into dollars, as France did last month, they are saying, "It is in our interest if you expand."

Of course central bankers have not exactly looked upon the system in just this way. Their gold-dollar policies may appear to be motivated by entirely different considerations. Each central bank may be acting in its own selfish interest, while still fulfilling the hidden designs of the world system. They are, of course, not so hard to see as Adam Smith's invisible hand; it is more like Ariadne's thread!

What concerns us, however, is the transition from one system to another and the subtle revision of thinking about world monetary policy in the transition phase.

With hardly anybody noticing it, the gold exchange standard in its old form was dead, and the dollar exchange standard had taken its place. All this occurred perhaps years before the formal breakdown of the old system. It was during 1966–67 that the Federal Reserve System completed a full cycle of tight money and easy money consistent with the requirements of the world economy.

I have now told you why I think the system evolved as it did into a dollar-exchange standard, a system in which the U.S. took on a new role and began to adapt its policies to the role of world banker, not just as a key currency center, not just the provider of a reserve money and the intervention currency, but as a world banker in the more comprehensive sense of guiding the monetary policy of the world.

V. The French Attack

It is in this light, I submit, that we have to see the devaluation of the pound, the abandonment of the private gold market, and the situation we now face. More particularly, it is in this light that we have to see the awkward and apparently intransigent policies of the French government.

France was responsible, in part, for the weakness of sterling and the run on gold in February and March of this year. It is my view that these policies were the consequence, not of French ignorance of the way the system had begun to work; it was rather that the French authorities understood it before anyone else! They anticipated what was going to happen, didn't like what they saw, and attempted to change it.

Every economic system evolves to create a dominant money asset. Concede me the point if you will, although I could easily develop the theoretical case for it if I had more time. Then it is clear that for the French to resist the evolution to a dollar standard, they have to find an alternative. A common European currency was not yet in existence, so gold was the only contender, and so it was to gold that the French government had to turn. If the wings of the dollar were to be clipped, it was necessary to build up gold. That was the intention of M. Giscard d'Estaing when he was Minister of Finance, and his policy was backed by de Gaulle and further implemented by d'Estaing's successors.

Now we could go on to develop a plot here. To weaken the dollar it would at first be convenient to weaken sterling, for the dollar would be hurt by a substantial devaluation of sterling. This is consistent with the open advocacy of sterling devaluation by France in the months preceding November, 1967. But I don't want to go too far and attribute entirely malicious motives to the French. There were other reasons besides. I take the French refusal to come to British aid in 1966 and 1967, at a time when the other members of the Group of Ten were helping sterling, at its face value. The French were right. Further assistance to Britain was not only not in the Continent's interest, it was not even in British interest. The British merely piled up more debts and had to devalue anyway. The French were right on this point, and the other members of the Group of Ten were wrong. This much, I believe, should be frankly conceded.

The British devaluation, if it should have been contemplated at all, was insufficient. From the point of view of the trade balance it was more than adequate: but it did not make the necessary allowance for the confidence factor when a reserve currency devalues. Because it was insufficient to restore confidence, it weakened sterling as a reserve currency without restoring equilibrium in the British balance of payments. The British devaluation was (a) more than adequate from the standpoint of improving the flow of the U.K. balance of trade: (b) grossly inadequate from the standpoint of restoring confidence in sterling; but (c) just right from the standpoint of a straddling action that would be consistent with preserving the strength of the dollar.

But the French did achieve their aim of weakening sterling as a reserve currency.

The next step was to weaken the dollar by strengthening gold.

In the gold crisis of March, 1968, there was considerable speculation that the U.S. might close off supplies to the London market, and might even raise the price of gold. (This would involve the clause in the Fund dealing with a uniform reduction in the par value of all currencies. For the U.S. to consent requires an Act of Congress, but it is not out of the question that Congress could act quickly if it were pressed to do so.)

But the gold forces underestimated the resolve of the U.S. Treasury and the other members of the Group of Ten to hold the official price. They adopted Governor Carli's plan for a two-tier system. The crucial provisions of this plan are that the central banks would not buy nor sell gold in the private market. (It is hoped that, at the IMF governor's meeting next month, this agreement will be generalized beyond those countries that signed the Washington communique.)

When we look at events in this way, we arrive at a somewhat different interpretation of the sterling and gold crises. The formal breakdown of the system was not the important thing. It merely recognized fundamental changes that *had already taken place.* A palace insurrection. The revolution had already been won. The system would not collapse with the increase in the price of gold because it had already evolved into a new system over a year earlier. Fear of the consequences of the change in the gold market for the system were misplaced. Because now, in August, 1968, the cards are on the table for all to see. An ounce of gold is worth about $40 in the private market—provided South African supplies are kept away from the market. Everybody knows the price will go down when South African sales are resumed in full force, bearing in mind that there are perhaps about 18,000 tons of gold in liquid hoards in private hands. What holds the price where it is is the gamble that the monetary authorities might yet raise the price; hope springs eternal.

VI. Where We Now Stand

The monetary facts, however, are that the world has virtually moved onto a dollar standard. Of course the U.S. may claim that it buys and sells gold freely; but everybody knows it does not. The dollar has become effectively inconvertible into gold, even for foreign central banks. All the big central banks know that if they try to cash dollars for gold in large amounts, the U.S. would simply stop selling it.

This means that other countries have to hold dollars or adjust. Their only alternative is to eliminate their balance of payments surpluses. But if they want surpluses because they want their external reserves to grow, they have to hold dollars or a new international asset.

One might ask, however, "Does not the higher price of gold symbolize the weakness of the dollar, rather than its strength?"

The answer is a paradoxical one: "Yes, but weakness is an essential attribute of an international money."

Gresham's Law states: Bad money drives out good—if they both exchange for the same price. If gold is worth more as a commodity than as a money, it will not be used as a money.

If a central banker knew he could always get $40 for an ounce of gold he would never settle a monetary transaction with gold valued in official stocks at $35 an ounce. This means that if gold was always worth at least $40 as a commodity, central bank holdings would become completely illiquid. To the extent that this is true—to the extent that gold on private markets *is* worth $40—gold would cease to be an international monetary reserve. Usable reserve assets of the gold-holding central banks would be reduced to the dollar component of reserves.

It is on this basis that the two-tier system should *increase* the demand for dollars, which, to the extent that dollars are softer than gold, become the only usable reserve asset, as well as the only important international currency. The rise in the price of gold in the private market illiquifies or "demonetizes" it.

Now in fact this is an exaggeration. Gold is not really worth $40 as a commodity. Every central bankers knows that if he dumps gold onto the private market to get dollars, the price will go down—and fast. So the argument I am making is only partly true. Some central banks will sell gold to others at $35 an ounce, as France has been forced to do. To this extent gold has not been completely demonetized.

VII. The Future

Our system has now evolved, therefore, into a dollar standard, for good or bad. This system has some great advantages, but I would not want to claim that it is an ideal system, nor that it is permanent. Indeed, there are strong objections to it, from an international point of view, on both political and social grounds. Even in the U.S. there are objections to the system. Some of these objections are very strong indeed. But the question lies with alternatives. There are very few open.

Let me close by listing some of the major alternatives. I believe the basic ones to be: (a) adoption of the gold standard; (b) introduction of a system of flexible exchange rates; (c) a return to the gold exchange standard by raising the price of gold; (d) a new world currency.

A discussion of the merits of these systems lies far beyond by theme today. Let it suffice for me to say that I do not regard (a) or (b) as feasible, and while (c) is intellectually respectable and institutionally stable, it is very expensive. The plan for a new world currency, on the other hand, is no longer far-fetched. It is more practical than the alternatives, and I consider it within our grasp, perhaps within the next decade or even sooner.

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THE FUTURE OF GOLD*

By Robert A. Mundell

Let me begin with some platitudes. Gold is a metal. It has many uses. It is used as jewelry, in dentistry, and in industry. It is used as a store of value. It used to be used as money. The price of gold is determined by demand and supply. To predict its price sometime in the future requires nothing more than to predict demand and supply at that time.

So much is universally agreed; what I have said about the price of gold applies to nearly any commodity. But that, of course, is only the beginning. Both demand and supply are complicated by the problems of gold as relics of money; by its characteristics as an exhaustible resource; by speculation and hoarding; by the psychology of the market; by technological change affecting its use and supply; by the attitudes of the monetary authorities in various countries; by cold-war politics; and even by professors! Some of these problems gold has in common with other commodities; others are unique.

Opinions differ about how the monetary system works. It may sound strange to hear that specialists in the field of money—practitioners, theorists or government representatives—could have different ideas about how the monetary system works. But that is the case, and it is not, upon reflection, so strange. World monetary organization is one of the most complicated scientific subjects. It requires, in a sense, a combination of all our theoretical and practical knowledge of economics. It is only in recent years that a comprehensive grasp of all its complications has been acquired by experts or theorists.

Economists, of course, have always had notions about how the system works. But these notions have sometimes bordered on the simpliste. We have had to abandon many of the notions that continue, even today, to be prominently displayed in many leading textbooks in the field.

I do not want to dwell on this unduly. But it is always worth recalling that "science" exists in the mind only; its purpose is not just to reveal "truth," but to make people feel comfortable! Of course, we may choose to say that fact is fact and that is all there is to it. But it is also necessary to recognize that our conceptions of fact undergo quite drastic transformations.

It may give you an idea of what I have in mind if I ask you to think about some of the controversies that raged in astronomy during the Renaissance. Two thousand years before that, the Greeks debated between competing cosmological systems: a heliocentric theory and a geocentric theory. The geocentric theory won out. It became "truth" for over 1500 years, even though it was wrong. But to preserve the geocentric theory, it was necessary to encumber it with complications until it completely lost its elegant simplicity. Scientists gave up talking about it, and the time ripened for a new theory to fill the void. The Copernican theory fitted the facts better and could be formalized, by Kepler, into new laws of planetary motion, which in turn prepared the way for a theorist like Newton to build Galilean and Copernican mechanics into a grand generalization.

Newton is an appropriate point of departure for my discussion today because he was a gold and silver expert, who, in fact, probably spent more time on the problems of gold and silver and monetary systems than he did on physics. He was Warden, and then Master of the Mint from 1696 until his death in 1727, which included the period of recoinage (1696–99). He advocated devaluation (an increase in the official price of silver), but that did not take place. As a consquence, silver was driven out of circulation, and Britain got onto the gold standard. Later, Newton accommodated himself to the official view that once you set a standard, you should stick with it.

Perhaps more interesting, Newton calculated gold-silver ratios with great accuracy; it was on the basis of these calculations that he set the course of the gold standard as it was to operate for two centuries. In the last quarter of the nineteenth century, of course, silver depreciated with its demonetization but it is

*Paper presented in Geneva, June, 1968.

interesting to note that the gold-silver ratio is coming back to that calculated by Newton since the price of silver was set free a couple of years ago.

But it is not the details of Newton's monetary interests that concern us at present (though I think the subtleties of his economics have been under-rated). It is more the monetary analogies to the changes in the views of the universe at the time he was writing about the latter. We have been witnessing over the past few years a change in our conception of the world monetary system that rivals, on a minor scale, the shift from geocentric to heliocentric notions of the cosmology.

Prior to the Napoleonic Wars, the world monetary system was definitely aurocentric. Hume's eighteenth century description of the price-specie flow mechanism was accurate enough, as a first approximation, both because gold was the major financial asset and because England was only one country among many in international commerce. A view of the system with each nation fixing its currency to gold and gold circulating between countries to find its natural resting place, equilibrating the balance of payments in the process through relative price or expenditure changes, was then apropos.

The pace of monetary evolution, however, has been rapid since the eighteenth century. The evolution of credit and banking made gold increasingly costly for internal payments; credit money drives out gold because it is a cheaper and better instrument of payment. Gresham's law works because credit money is not only cheaper than gold, but can perform even better many of its monetary functions. Gold continued to circulate internationally in the nineteenth century, but even that use was gradually reduced as institutions and private businesses developed to profit from the reduction in the cost of shipping gold back and forth between countries. Information systems improved and were trustworthy as long as there was a reasonable amount of peace between nations. The Pax Britannica of the nineteenth century provided the background in which Britain, as the first nation to industrialize and the most successful imperial power, could become the center of a vast and complicated financial apparatus going far beyond a mere gold standard. The *form* of the gold standard was preserved, but the substance of its operation was based on sterling financial contracts. The monetary system moved from a gold-centered system to a sterling-centered system.[1]

I will not go into the details of the operation of that system, nor any discussion of the abortive attempts to restore it in the 1920's. Suffice it to say that the system failed in the inter-war period because the financial environment had altered. The gold standard of the inter-war period was more of a gold standard than the system prevailing in the pre-war period! British financial power had weakened and, for all practical purposes, the center of finance was shifting to the United States. So powerful, however, is the hold that a traditional money, used as a unit of contract, has in financial matters that the prestige and the power of the pound sterling outlived the British Empire even when there were other claimants to power on the horizon. The inter-war period was a transitional period in which the financial size and strength of the United States was beginning to assume a commanding lead. A few could see emerging a new financial dispensation, including Montagu Norman, but it was not reflected in a shift of intellectual leadership. It was as if we were shifting from an Earth-centered cosmology to a Jupiter-centered one, with a reluctant Earth being unwilling to cut the strings, and with Jupiter taking scant notice of the whole issue. It is more obvious to us now, in retrospect, but events are harder to disentangle when we are caught up in them.

It is probably fair to say that not many—if indeed any—economists recognized how the IMF Articles of Agreement, signed in July 1944, accepted the fact of a dollar-centered system and how subsequent developments were made amenable to it. Probably most experts would have said that the system restored a version of the gold standard, while recognizing the importance of the great financial size of the United States (and, possibly Britain) implicit in the voting provisions of the IMF. Gold remained the unit of account in the system as the unit of contract. But gold was not a circulating medium and, if gold did not circulate freely among members, how were exchange rates to be maintained?

You are aware, I am sure, that under the gold standard each nation would keep its currency convertible into gold at a fixed price so that, except for costs

[1] Lay readers are often confused by the designation of the English currency as the pound "sterling." Since the recoinage of 1696–99, Britain has been "on" the gold standard; and, because Newton's recommendation for a higher official silver price was not taken, the pound sterling now has nothing to do with silver, except for its use in coins.

of transport and insurance, exchange rates would be fixed within gold import- and export-points. But, after WWII, currencies were not convertible into gold. Formerly, when the gold standard was functioning properly, it was convertibility and private arbitrage that enabled exchange rates to be kept within the required limits. The IMF Articles required that each member prevent other members' currencies from moving outside 1 per cent limits on either side of parity; but the mechanism for achieving this no longer existed. In nearly all countries, gold was on the prohibition list for importing and exporting.

How, then, were exchange rates to be fixed? By central bank intervention. Suppose there are n currencies. Then each nation would, in principle, have to intervene to establish n-1 exchange rates. Multiplied by the number of countries, this means n(n-1) intervention activities; but, since the price of one currency in terms of another involves a reciprocal pair elsewhere, the total would involve only (1/2)n(n-1) interventions. But this is an extremely inefficient way of fixing exchange rates, and it could result in countries intervening at cross purposes.

To get around this technical problem, the Fund established regulations that permitted each country to intervene against one other currency only. It was thus that the dollar became he intervention currency. Meanwhile, the dollar itself was pegged to gold, making use of Article IV–4–b of the IMF Articles, which said that a country freely buying and selling gold was deemed to be satisfying its obligations regarding the 1 per cent exchange margin.

The importance of Article IV lay in the special role it created for the U.S. (a "key" currency role separate from that of a "reserve" currency) and in the difficulties involved when the U.S. itself wanted to devalue or when a number of individual countries, such as the EEC, wanted to allow their currencies to fluctuate vis-a-vis the U.S. dollar, but not against one another.

The dollar-centered system that emerged after the war, therefore, was unique in its technical respects. It was not simply a replacement of sterling's role in the nineteenth century by the dollar's in the twentieth century. It was a radical departure from the old gold-standard regime, even in form. Gold had been booted upstairs and was no longer money, although it was still held by many central banks as a reserve asset.

It is important to underline this point. Gold serves as a secondary reserve asset for all foreign countries. It is a secondary reserve asset not just because gold is slightly better as a store of value, but because the dollar is also usable on the exchange markets. If all assets exchange for the same price, the safest asset will be the last one used, other things being equal, according to Gresham's law.[2] But the dollar, though weaker, is more useful. This is because, prior to March 1968, the U.S. dollar was the only currency pegged to gold; all other currencies were pegged to the dollar—directly or, indirectly, through the pound sterling, the French franc, the Portugese escudo, or one of the minor reserve currencies. Thus gold only becomes an actively useful asset for countries other than the United States as a means of acquiring dollars. In this respect, a central bank could hold tin or platinum or any other metal. The only feature that made gold more attractive was historical tradition and the fact that the U.S. Treasury had a floor price of $34.91925. This floor price got transferred, of course, to the free London market; under no circumstances could the price go below $34.9125 an ounce, less a few pennies (about 12) per ounce for shipping charges.

After about 1958, however, speculation developed about an increase in the price of gold as the U.S. payments deficit increased from a desirable level of about $1.5 billion to about $3 billion. Foreign central banks had to buy up dollars, and they converted a good part of their holdings into gold. This threatened exhaustion of the U.S. reserves, and it presented the possibility of even larger gains from holding gold rather than dollars as reserves. Gold got dumped at the bottom of the reserve pile; the more so, the greater the weakness of the dollar. But dollars became even more international money, while gold became a ghost of the dollar. The floor price ensured that gold *as an asset* was at least as good as the dollar, and because of the possibility of an increase in its price, much better.

By last November, the time of the sterling devaluation, the U.S. gold stock

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[2] In this connection, it is amusing that Chancellor Callaghan said of the Special Drawing Rights:

"I should like to make it clear that the United Kingdom intends to include the new drawing rights, when they are created, in their front-line reserves. We hope that other countries will do likewise. When the new drawing rights are treated in this way, it will be manifest that they are a supplement to existing reserve assets." [Quoted in F. Machlup's *Remaking the International Monetary System: The Rio Agreement and Beyond* (The Johns Hopkins Press, Baltimore, 1968), p. 38.]

But this is not an expression of *faith* in the new instruments.

was down to less than $12 billion—considerably less if one subtracts gold commitments to the IMF and borrowed gold. And, at that point, the French, in alliance with other interests, sparked a campaign against the U.S. dollar, the Canadian dollar, and the pound sterling. The upshot was an accelerated drain of gold into private hoards, a drain which came out of the gold pool. Confronted by an accelerating drain, the U.S., in consultation with other central banks and the IMF, issued the Washington communique that broke the link between the private market and the central bank hoards. The private market price then went up to about $40 per ounce, around which it has fluctuated for three months.

So much for the background. What conclusions can we draw for the future of gold? Let us consider the empirical magnitudes involved. First, who holds the gold, and how much is there? Here we have to go back to the platitudes of supply and demand with which I began.

Gold is a storable good, and the demand and supply position is complicated by the interaction between stocks held in hoards, both in and out of banks, and the regular supplies that normally feed current demand. We have reasonably accurate figures on current demands and supplies, but our estimates of stocks held outside central banks is subject to a wide margin of error.

There are two ways of finding out the size and distribution of current gold holdings. One is to ask people what they hold; this method has obvious limitations in a world of 3 billion people. The other method is to add up world production from the beginning of time, subtract what central banks now hold, and then make an allowance for losses. This method, too, has huge drawbacks: we do not have good historical figures on production, and who can find out what happened to the gold in Achilles armor or Nefertiti's jewels?

There is a set of figures that purport to estimate world production since the European discovery of America (published by the U.S. Bureau of the Mint). But the figures have to be taken with a ton of salt. They are just guesses, and the fact that the source is used over and over again does not make them more accurate; it just makes them more *respectable!*

Fortunately, an understanding of the gold market does not require an accurate calculation of gold hoardings or fine distinctions between gold embodied in art objects or teeth or free bullion. It suffices to get the right order of magnitude. I will take as my figure 18,000 tons for the quantity of gold held in private hoards and potentially marketable. My selection of this figure is not entirely arbitrary; it takes into account as much of the information as I have seen, including detailed IMF studies of gold production. But I will not quarrel with anyone who argues that the figure is too high or too low by 2,000 or 3,000 tons. It is higher than many previous estimates, but I am inclined, if anything, to think it errs on the low side. It is generally believed, for example, that the French alone hold over 5,000 tons in private hoards.

Central bank gold stocks amount to about 35,000 tons. The world stock of gold is, therefore, very approximately, 53,000 tons. (At $35 an ounce, this quantity has a value around $53 billion.)

We can thus summarize these thoughts. Bear in mind that the figures are rough estimates only, and that a ton of gold is worth about $1.1 million at $35 an ounce.

(1) Central bank stocks, about 35,000 tons.
(2) Private hoards, about 15,000 tons.
(3) Current annual production, about 1.000 tons.
(4) Regular industrial and jewelry demand, about 500 tons.

These figures make it plain that *stocks* of gold, rather than current production and use, dominate the scene. A good part of the private hoards would be released if central banks raised the price of gold substantially. But it is important to note that regular industrial use of gold is enough to absorb only about half of current production.

Let us look at the distribution of world gold produced between 1946 and 1966. The 732 million ounces (about 23 tons) produced during this period (worth $25.6 billion at the current price) were distributed in the way indicated by the table which follows. This table shows how heavily, since 1946, the private market price has been dependent on central bank hoarding.

Apart from all this, we have to consider the huge overhang of private stocks. The market is poised for a gold scare. It has not been made clear whether the central banks will any longer provide a floor at $35 an ounce.

WORLD GOLD DISTRIBUTION, 1946-66

[In millions of ounces]

	Distribution	Percent
1. To official monetary reserves	290	40
2. To industry, jewelry, and the arts	156	21
3. To traditional hoarding centers	173	24
4. To other private gold holders	113	15
Total	732	100

Source: M. Spieler in "Monetary Reform and the Price of Gold," edited by R. Hinshaw, The Johns Hopkins Press, 1967.

There are two things to consider. On the one hand, there is the willingness of central banks to buy it at $35 an ounce. Central banks are not *required* to buy gold at prices below the official parity and may, by general consent, abstain from doing so; the U.S. may, for example, be able to discourage other countries from private market purchase transactions below $35 an ounce by not agreeing to buy it from them at that price. This could raise the question as to whether the U.S. is fulfilling its obligations under Article IV–4–b, under which the U.S. has undertaken to buy and sell gold freely "within the margins prescribed by the Fund." I have argued for several years that these margins should be widened.

The second issue concerns the IMF's obligation to buy gold. Members of the Fund have the right to buy gold (but not to sell it) below a price of $35 an ounce on the private market (but, of course, not to each other); and the IMF apparently, has the obligation (Article V–6) to buy gold from members in exchange for currencies, making a "reasonable handling charge" (Article V–8–b), so that if the free market price dropped below $35, any member could profit by buying it at bargain rates and selling it to the Fund. This kind of arbitrage obviously would keep the free market price from going much below $35. The question is going to turn on how the Articles are interpreted. The interpretation on this point has not, so far as I know, been made.

As I mentioned above, however, the IMF can prescribe the gold margins; and it seems to me that it may be inclined to widen them now, even though it has resisted this change in the past. In that case, the floor would be taken away from the gold price, and even central banks, fearful of the liquidity of their gold holdings, could dump gold and acquire dollars, leading to a lower price in the private market.

There are two important points to recognize, however. One is that, if the separation of the official and private markets can be maintained, the market is potentially in *severe disequilibrium*. This is because of the two factors we have already mentioned, namely: an excess of regular current supply over normal demand, and an excess of actual over desired stocks once (or if) belief in a doubling of the central bank price founders. But how can the price remain near $40 an ounce if the market is in disequilibrium?

The answer, of course, is that South Africa has been withholding supplies from the market. The forces feeding gold speculation apparently believed that, in the sequence of actions leading up to the March crisis, they could exert enough pressure to panic the central banks into increasing the price of gold. When, instead, the two-tier system was introduced, they continued to withhold supply to keep the private market price well above $35 an ounce.

This tactic was based on a miscalculation of psychological attitudes: a belief that the central banks could not agree to stay out of the market long enough to retain the two-price system; and/or a belief that the election campaign in the U.S. or a new administration will result in a basic change in U.S. gold policy.

The validity of the first premise seems less likely now than it did before the March crisis. The French uprising has weakened the French position, possibly irreparably, as far as French ability to exert a controlling voice over the price of gold; and the French may have to sell gold in the months ahead if they do not devalue. To be sure, a very substantial French devaluation would be encouraging to gold bulls. But the question is, how many tons of gold would this add to demand? I seriously doubt that the French authorities will be able to accumulate much more gold, given existing social commitments; and it may well be that the French public, to the extent that it anticipates devaluation of the franc, would flee from the franc into dollars.

The election campaign in the United States could make a difference. A number of people in New York believe an increase in the price of gold is necessary or desirable or inevitable. There is room for a difference of opinion here. There is a sense in which an increase in the price of gold is everyone's third choice. It depends on the options which the authorities are willing to create.

I would be negligent in my analysis if I did not mention a new factor working against an increase in gold price. Public opinion has never been enthusiastic about a gold policy that would have such beneficial effects for South Africa and Russia as an increase in the price of gold would involve. Public opinion has recently become less favorable to France. I do believe it would be politically difficult to persuade Congress to adopt a policy that would so clearly favor these countries. Perhaps this is not the appropriate criterion for the U.S. gold policy, but I have no doubt that it will be an important desideratum. As long as there are other alternatives, they will be explored.

So my conclusion is that the strategy of the gold forces will not pay off. If I am right, South Africa will have to choose between selling her supplies in the London or Swiss markets, forcing the price down toward $35 or below; or else financing gold accumulation by external borrowing or domestic austerity. South Africa has limited ability to do this; and, since the French crisis, one of her potential allies in the game is financially prostrate, even if only temporarily.

All factors, therefore, converge to my conclusion that gold is over-bought. My reading of the current turnover in Zurich and London is that the professionals are gradually unloading and that, sooner or later, the price will have to come down.

Let me conclude by saying a few words in summary fashion about central bank holdings. *First*, those central banks who hold primarily gold in their reserves feel illiquid; dollars are money, gold is not. Countries like France, Switzerland, and the Netherlands *appear* to have made a capital gain on their gold holdings. But it is unusable and very risky paper profits. It will be very hard to realize these capital gains; and if they do so in the private market (subject to an interpretation of Fund rules), they undercut their right to sell it at $35.

Second, the lower the U.S. gold stock becomes, the greater is the chance the U.S. will not buy it back. Gold is not important to the U.S. economy except, in the final analysis, as a useful commodity reserve. In this respect, the U.S. is unique; because of its size, the U.S. can always let other countries adapt to it if it finds international constraints too restricting. The more speculation about an increase in the price of gold and the greater the drain on the U.S. Treasury, the greater is the chance that gold will be demonetized. I need hardly tell you that there are strong forces in the U.S. pressing for demonetization, based both on the benefits of spending the existing gold stock of the U.S. and on resentment against the Republic of South Africa.

Third, the two-price system is unlikely to be a permanent system. A change in U.S. policy is possible, even likely, after the SDRs are established as a substitute for gold. There are several directions which policy may take. One major possibility is, of course, an increase in the official price of gold. I regard this as *possible, but not likely*. Politically, it is a losing game. It has been said that Lyndon Johnson does not want to be remembered in history as a president who devalued the dollar. And a substantial increase in the gold price would mean that the U.S. would have to accumulate large gold stocks at a time when the pressure of competing use of the resources for the cities, for fighting poverty, for education, and for defense is very high.

Another possibility is much more imaginative. It involves a centralization of central bank holdings in the U.S., or in a newly formed gold pool, with the U.S. or the pool issuing, in exchange, dollars or gold-pool certificates. This would quench speculation altogether and establish a new reserve asset with more attractive properties than the SDRs. There is need today for a world currency usable both by travelers and by central banks. The main question is not *whether* it can be brought about, but *when* it will be brought about. I do not wish to go into this question now. I shall have more to say about it elsewhere.

To summarize the future, then, I am bearish as far as gold is concerned, compared to most people. I cannot, of course, predict U.S. policy, or the policy of central banks, and the possibility is always open that the official price could be raised. A market thrives on differences of opinion, and if everyone believed as I do, the price would be well below the $42 an ounce it has been in Zurich this week. But I believe the price will go down, not up, in the future.

Chairman REUSS. Mr. Machlup does not have a written paper but will give his ideas orally, and then I and other members of the subcommittee who will be here later would like to engage in discussion with the members of the panel.

Mr. Mundell, would you proceed now orally to either summarize your papers or give any additional views which you think should be placed before this subcommittee as a basis for further discussion?

STATEMENT OF ROBERT A. MUNDELL, PROFESSOR OF ECONOMICS, UNIVERSITY OF CHICAGO

Mr. MUNDELL. Thank you.

I don't think it would be useful if I summarized my plan for world currency at the present time except to point out that I believe that now, with the implied expression of willingness on the part of IMF member countries to go ahead with the SDR's is an appropriate time to pursue a more imaginative plan for reform and to complete the process which it has, by implication, already begun.

I would like instead to mention today two other factors that are of even greater urgency. My first point relates to the problem of the exchange markets; my second point deals with gold. There is currently a state of disequilibrium in the exchange markets and in particular a general belief that the Deutsche mark is severely undervalued, and that the French franc is overvalued.

The market is in large part a victim of a great deal of speculative rumor based on policy statements by various authorities. These rumors themselves, even if they are not founded on fact, can have a fundamental effect on the system. Funds are currently moving into the Deutsche Mark out of the French franc—and to a certain extent out of the pound sterling—and the speculative movements can induce later on basic changes in exchange rates which we may or may not want.

It is with that in mind that I think the steam should be taken out of the speculative rush to the mark. The IMF could do this if it permitted the Bundesbank to widen the exchange margins on the mark. I would suggest a spread from DM 3.7 to DM 4.3 to the dollar in order to allow the mark to appreciate temporarily. Eventually it can be allowed to, as I think it will, come back closer to its current parity after sufficient time has lapsed for internal adjustments to take place.

I think it is important that a widening of the exchange margins, if it is to take place, should take place not all at once with all currencies at once, but allowing for the special circumstances currently involved with the mark and, perhaps, the franc, and that this should be done in sequence, with the mark being allowed to appreciate somewhat temporarily through these widened margins. The widened margins from 3.7 to 4.3 would give ample room for the amount of underevaluation that does exist, and allow the German authorities, to reduce the value of the mark toward parity through internal adjustments as that becomes necessary.

Later, if it seemed desirable, these margins could again be closed. There is no need to keep the margins that wide, but during the present state of rumor in the markets, it would be useful to hold them open at the present time.

This measure should be consistent with the Fund's articles because while the Fund's articles explicitly state that a member is required to keep its exchange rate within 1 percent on either side of parity, one of the basic purposes of the Fund is to promote exchange stability. It is a question of which measure is to be sacrificed: If keeping the margins where they are now is going to mean an ultimate upvaluation of the mark, that upvaluation may be far greater than would be required through a temporary widening of the margins now. The more important goal of the Fund—the promotion of exchange stability—should override the technical detail which was inserted into article IV, section 2, dealing with day-to-day pegging operations.

That is all I have to say on problems of the exchange markets at the present time.

The second problem I want to bring up is a related one dealing with the price of gold. It seems to me that the Fund, as I read the articles, is in fact committed to accept gold at parity, at $35 an ounce and, therefore, to provide effectively a floor to the market. I am aware that final agreement on that has not been made, but any casual reading of the articles would suggest that interpretation.

However, the Fund is permitted to widen the gold margins itself, and the avenue that the Fund could take would be to widen the gold margins to, perhaps, $2, $3 or $4 and not just at $35 an ounce, and that would permit the price of gold to go below $35 as well as above it, and in my view that is the avenue that the Fund should take if it is to move in the direction of removing the floor price of $35 an ounce. It should take that direction explicitly rather than strain unduly the interpretation of the articles of agreement.

Thank you.

Chairman Reuss. Just to be sure that I caught your last point, do you favor or disfavor the Fund's standing ready to purchase newly mined gold or existing gold that is offered, at $35 an ounce?

Mr. Mundell. I am oppose to it, but as the articles stand it seems to me that the Fund is committed to it except or unless they widen the gold margins which they have the authority to determine. So I would support a means by which the Fund will not buy gold at $35 an ounce, but that I think that should be done through an explicit widening of the gold points.

Chairman Reuss. Thank you, Professor Mundell.

Mr. Bernstein?

STATEMENT OF EDWARD M. BERNSTEIN, EDWARD BERNSTEIN CONSULTANTS, LTD., FORMER DIRECTOR OF RESEARCH AND STATISTICS, INTERNATIONAL MONETARY FUND

Mr. Bernstein. I think the only way to understand the gold standard and the international monetary problems we have today is to think of the gold standard as having evolved gradually and particularly rapidly since 1933.

The gold standard of today is far different from the traditional gold standard. We can see that in looking at the unique features of the old gold standard. No country any longer regards its gold reserves as an objective measure of the proper money supply. Countries don't deflate their money supply because their reserves are below some fixed ratio that at one time was thought to be appropriate.

Countries no longer regard the historical gold parities as the sole objective of economic policy. If the currency is overvalued or undervalued, they are expected and entitled to request the International Monetary Fund to approve of a change in parity instead of deflating the economy or in exceptional cases inflating it.

Even in the provision of reserves the old gold standard has moved a good deal but much less than in these other aspects of the gold standard. Countries have not yet—they are only beginning—to agree on a rational means of providing for the growth of reserves, and gold still remains the most important reserve asset, in some respects a unique reserve asset, because it is the only final reserve asset.

It is quite true that we have developed on an enormous scale the use of foreign exchange, especially dollars, to supplement gold as reserves, but only gold is the final reserve asset. And in a period of crisis there remains the risk that dollars and sterling will be presented on a massive scale for conversion into gold.

We have also developed on a very big scale the use of reserve credit—through the International Monetary Fund itself, the swap arrangements, and the ad hoc credits made from time to time by central bankers through Basle.

All this, of course, is great progress in the further evolution of the international gold standard. It does seem to me, however, that there remain some important difficulties especially on the reserve side, and it is these difficulties that we ought to be concerned with in the near future. I am not suggesting, of course, that we don't have other problems.

The plan for special drawing rights, SDR's, which will be ratified by the end of this year or early next year, will give us an orderly system for the growth of reserves according to trend needs, without regard to the balance-of-payments position of any country. It will not deal, however, with the problem of gold as the only final reserve asset, and we are confronted with the fact that there is a very strong preference for gold relative to other reserve assets.

It seems to me that an international monetary sysem operating with multiple reserve assets—gold, dollars and sterling, other foreign exchange, and SDR's—must have some means of assuring the appropriate use of all of the reserve assets if it is to function properly. Otherwise, there will be a tendency to move away from some reserve assets and to hoard other reserve assets, and this can be very disruptive to the international monetary system.

It seems to me that this danger of a disruptive preference for gold may become greater when the plan for SDR's is activated. The SDR's are, after all, a reserve asset with a gold guarantee, and they pay interest, too.

The danger that there will be a preference for other reserve assets rather than for SDR's is recognized in the plan for SDR's, and elaborate provisions are made for assuring the appropriate use of other reserve assets, gold and foreign exchange, along with SDR's in international settlement.

It seems to me that while this is quite proper, it doesn't really go far enough because it deals with a possible preference of other reserve assets for SDR's, but it doesn't deal with the most dangerous of all preferences, the preference for gold, say, instead of foreign exchange, dollars and sterling.

To my mind this international monetary system into which the gold standard is evolving with its multiple reserve assets, can function properly only if it is based on the nondiscriminatory use of all reserve assets.

I would say it must be based on two principles of reserve use. The first is that deficit countries should use all of their different reserve assets in international settlements in the same proportions in which they hold them and, on the other side, all surplus countries should receive settlement through accepting reserve assets in the average proportions that all the deficit countries are paying them.

In this way all surplus countries would get the same collection of reserves when they have a surplus. There would be no distinction between one surplus country and another. There would be a distinction between one deficit country and another because they don't hold the same reserve assets.

Furthermore, it seems to me that such a system has to be on a cumulative basis. Otherwise it is quite possible that a country with a high reserve ratio, say, of gold, which has a deficit in one year, and a surplus in another year settled with a very low ratio of gold, will find the composiiton of its reserves changed, even though it has a balanced payments position over a 2- or a 3-year period. And I think we have to recognize, too, that it is very difficult to have a rule that countries must use all of their reserve assets pro rata unless you have administrative facilities for making that almost automatic.

It would be very peculiar if country A tried to transfer \$50 million of reserves \$12½ million of gold, \$13½ million of sterling, \$11 million of dollars and the rest in SDR's. It would make every transfer of reserves a burdensome problem, if only from the point of view of supervision.

My suggestion for dealing with this is to set up a reserve settlement account. In this reserve settlement account, administered by the International Monetary Fund, each country would earmark all of the different reserve assets it has, but it would retain title to them. If it puts in \$10 million of gold, \$20 million of dollars, \$5 million of SDR's, it would be credited in a composite reserve unit for bookkeeping purposes with \$35 million. It would have that much in the composite reserve unit on balance with the reserve settlement account.

If it has a deficit and has to transfer \$5 million it would transfer \$5 million of the composite reserve unit. That would mean implicitly that it has transferred one-seventh of all the different reserve assets it has earmarked with the reserve settlement account.

There would be no actual transfers of the different reserves it earmarked because the reserve settlement account would be on a cumulative basis. The transfer, if any is needed, of these reserve assets would take place when the country withdraws or some other country withdraws from the reserve settlement account.

Suppose that a country wants to withdraw from the reserve settlement account. When that happens, you can easily see whether it is in a cumulative surplus or a cumulative deficit position. If its composite reserve balance is less than all of its earmarked reserves, it is in deficit to the amount of the shortfall. If its deficit is equal to 5 percent of all its earmarked reserves, it gets back 95 percent of the gold, the dollars, and SDR's it earmarked. If its composite reserve balance is more than all of its earmarked reserves, it is in surplus to the extent of the excess. It gets back all of its earmarked reserves, in form in which it earmarked them, and the surplus is settled in gold, dollars, and SDR's proportionately with the holdings of these reserves by the deficit countries.

Now, I think such a system has many advantages. First, it would assure the use of all of the reserve assets in an equitable way. Second, it would remove the danger of disruption through a preference for gold which may become greater in the future. Third, it would assure the reserve currency countries against a run through massive conversions of balances of their currency into gold in a time of crisis.

Incidentally, I can see that the reserve settlement account could apply the very principles for balanced use of reserves that are in the fund amendment for the SDR's. They would simply be generalized. There is no reason why the reserve settlement account could not be set up without any amendment to the fund agreement. Its operation would be a way of applying the rules for balanced use of reserves that are already in the fund amendment on SDR's.

Chairman REUSS. Thank you, Mr. Bernstein.

Professor Machlup?

STATEMENT OF FRITZ MACHLUP, PROFESSOR OF ECONOMICS, PRINCETON UNIVERSITY

Mr. MACHLUP. Thank you, sir.

Since I was unable to bring a prepared statement for submission to the record, permit me, please, to refer to a few recent publications of mine. A few weeks ago, in July, the Committee for Economic Development and the Johns Hopkins Press published a short booklet of mine called *Remaking the International Monetary System*. In this booklet I discussed not only the new system of special drawing rights, but in the last chapter, called "Unfinished Business," I discussed the next steps that we should take, and by——

Chairman REUSS. Mr. Machlup, I have had the pleasure of reading your book which is, among other things, a model of English prose, and without objection your last chapter entitled "Unfinished Business" will be made a part of the record of proceedings here because in a sense that last chapter is a contribution like that of Mr. Bernstein and Mr. Mundell in their written statements.

(The following chapter, excerpted from the book referred to by Professor Machlup, is included in the record at this point, with the understanding that permission to reprint any portion of its content must be secured from the publishers.)

6.

Unfinished Business

Two or three times in this essay I have warned that the agenda for negotiations on international monetary problems includes an item "unfinished business" that promises or threatens to be more demanding than anything accomplished thus far. The most urgent problems are those of adjustment to restore balance in international payments and of confidence to avoid destruction of existing currency reserves. Both these problems are closely connected with the gnawing question of gold.

I shall first present brief descriptions of the apparently intractable problems: the persistent imbalance of payments of the United States, the precarious "overhang" of dollars in private and official possession abroad, and the massive speculation in gold. I shall then proceed to a discussion of the alternatives that actually or seemingly offer themselves for dealing with what will clearly manifest itself as a frightful predicament.

The Payments Deficit of the United States

The United States has been running a deficit in its balance of payments since 1950, that is, for 18 years, except in 1957, the year following the Suez crisis. (Even for that year a deficit would be shown if "errors and omissions," carrying a positive sign at the time, were not included as receipts.) The computation of a deficit is, of course, a matter of statistical convention, and by the conventions of the 1950's one would still be speaking of American "surpluses," as was done when additional dollar balances were in heavy demand by almost all foreign nations. But by the definitions now most widely adopted,[1] the United States ran deficits in the 1950's as well as in the 1960's. The hard fact behind all statistical calculations is that the United States, between 1949 and 1967, has seen its monetary gold

[1] See footnote on the following page.

stock decline from $24.6 billion to $12 billion and its liquid liabilities to foreign monetary authorities increase from $3.2 billion to $15 billion. (By the middle of March 1968 the gold reserves were down to $10.5 billion and the official liabilities were up to nearly $16 billion.)

No one was worried about these deficits between 1950 and 1958. Indeed, most commentators were pleased about the redistribution of gold and about the increase in dollar reserves of the non-dollar countries during these years of "dollar shortage." Later, however, the appetite for official dollar reserves had been fully satisfied and misgivings about a "dollar glut," a supply of more dollars than were wanted, began to be voiced. As a matter of fact, the supply of dollars increased, instead of declining, and many of the unwanted dollars were returned to the United States for conversion into gold. From December 1957 to December 1961, the monetary gold stock of the United States fell from $22.9 billion to $16.9 billion.

Beginning in 1960 the United States adopted a series of measures designed to reduce or remove the payments deficit. These measures were of two kinds: (1) selective correctives, that is, measures supposed to operate on particular types of transactions and to improve selected items in the balance of payments, and (2) general adjustment policies, that is, policies to affect the general level of incomes and prices in ways that would through market forces improve the balance on goods and services.

The adjustment process seemed to work satisfactorily for a number of years, thanks chiefly to the fact that price levels were kept relatively stable in the United States but rose substantially in many other countries, especially in the large industrial countries of Europe. This allowed the American export balance of goods and services to increase from $2.2 billion in 1958 to $8.5 billion in 1964. However, a sharp increase in capital outflows canceled out much of the

(footnote referred to on page 96.)

[1] At present the United States calculates two official figures: the deficit on the "liquidity basis," and the deficit on the "official-settlements basis." Two other significant concepts are the deficit in the "basic balance" and the decline in "net foreign reserves." Although these four balances are drastically different, the deficit has persisted no matter which of the four concepts is used.

improvement of the current account: from 1959 to 1965 the outflow of private long-term capital increased from $1.6 billion to $4.4 billion. (One must not assume, however, that these changes are independent of one another; it is quite likely that the increase in capital outflow stimulated foreign demand and thus helped increase commodity exports from the United States.)

After 1964, the adjustment process came to a halt, probably because of an updrift of incomes and prices in the United States and a simultaneous attenuation of wage-and-price inflations in Europe.[2] The American export balance of goods and services began to decline: from the $8.5 billion in 1964 it fell to $5.1 billion in 1966.

To record that the adjustment process came to a halt is not to say that adjustment policies will not work. They will, if consistently pursued. Nor is it to condemn the United States for not pursuing them consistently. The government evidently believed that policies of restraining the increase in effective demand were too costly in terms of employment and national product. It was a conscious decision to give prime consideration to the objective of achieving greater employment through stepping up aggregate demand. An economist may have his own value judgments about which ought to be more important to the nation: more employment or a smaller payments deficit. But the decisions are made by governments.[3] In any case, the expansion of aggregate demand in the

[2] Wholesale prices in the United States, which had been virtually unchanged for six years – from 1958 to 1964 – rose from March 1965 to August 1966 at an annual rate of 3.8 per cent.

[3] The economist should not be silent, however, when faulty arguments are presented by the government. When a reduction of income taxes was proposed by the government and legislated by the Congress in 1964, economists outside Washington expected that the resulting increase in domestic consumption and investment would increase imports and reduce the export surplus. Yet, President Johnson, in his *Economic Report* of January 1964, predicted that

> With the tax cut, our *balance of payments* will benefit from basic improvements – in our ability to compete in world markets as costs are cut directly through lower taxes and indirectly through modernization; – and in our ability to retain and attract capital as returns on domestic investment rise with higher volume and lower unit costs [p. 9].

This argument was specious, to put it mildly.

United States halted and reversed the improvement in the current balance and did not prevent a drastic deterioration of the capital balance.

The corrective measures, recommended by those who believe that you can correct a deficit by picking particular items in the balance of payments and working on them by means of selective restrictions and controls, have had only the success expected by (allegedly "unrealistic") economic theorists: if a chosen item was improved and the dollar outflow reduced under that particular heading, trouble quickly arose for another item, leaving the over-all payments deficit just about where it was. More will be said later on the question of "item-picking" and on the effectiveness of selective controls. One point, however, calls for reflection now. The deficit in the balance of payments has been between one and four billion dollars during the past 18 years. With a gross national product of over $800 billion at the end of 1967, and between $500 and $750 billion in the past seven years, why should it be so difficult to improve the balance of goods and services by just another two billion dollars? With all controls and restraints, the payments deficit has refused to budge and the balance of international transactions has not done us the favor of improving by as little as one-half of 1 per cent of the gross national product. This, I believe, is most impressive. It impresses me chiefly as an indication of the great strength of market forces and an indication of the humbling weakness of governmental controls.

The upshot of it all is that after 18 years the payments deficit of the United States is worse than ever and shows no signs of improvement.

In the past, the deficits have been financed partly by increases in liquid liabilities to foreign holders of dollars and partly by drains on the monetary gold stock. It now looks as if in the future our deficits may have to be financed increasingly, and perhaps mainly, by the surrender of gold. If so, the United States will have spent all its gold within four or five years — provided it has not surrendered it even earlier through conversions of dollars which foreign holders have accumulated in previous years.

The Dollar Overhang from Earlier Years

On September 30, 1967, the national monetary authorities of the noncommunist countries held a total of 14.4 billion of United States dollars; private foreign holdings of dollars totaled 15.1 billion. The combined total of $29.5 billion,[4] had been accumulated chiefly in the years between 1950 and 1965.

The division of foreign dollar holdings into official and private is significant on several grounds, although it is well known that central banks on occasion "place" some of their dollar holdings with commercial banks.[5] As a consequence, published figures do not tell the complete story in that they do not reveal how many private holdings are actually hidden monetary reserves of the central bank. But to the extent that the statistics tell the correct story, the division is important, especially because of the different motives for holding dollars.

Private foreign dollar balances are held almost entirely for transactions purposes. The "transactions demand" for dollar balances on the part of commercial banks and traders abroad is determined by daily, weekly, monthly, and seasonal variations in receipts and expenditures, by interest-rate differentials, by the cost of foreign-exchange operations, and by expected changes in exchange rates. Official dollar holdings, on the other hand, are determined largely by political considerations. The central banker of a large industrial country does not look in the first place at the alternative costs and earnings of his asset-mix, but rather on the advantages or necessities of international financial cooperation or noncooperation. These differences in motivation bear on the problem of the large liquid liabilities of the United States to foreign

[4] Total liquid dollar liabilities were $31.2 billion, if the debts to the International Monetary Fund ($1.0 billion) and to other international organizations ($0.7 billion) are included.

[5] The central bank does this by way of swap or repurchase agreements that make it attractive for commercial banks to use their excess reserves for acquiring the dollar assets, which yield interest and a small gain in the resale price. The main purpose of the central bank is to syphon off some excessive lending capacity, or excess liquidity, of the banking system; in this fashion dollar assets take the place of government securities in open-market operations.

holders and of the danger that these dollar holdings may be drastically reduced.

Not all "asset switching" has the same effects. If there is a massive flight into gold, it need not be a flight from the dollar; and if there is a massive flight from the dollar, it need not be into gold. Private foreign holders of dollars who wish to get rid of their dollars may prefer to hold other currencies which they regard as safer. And foreign hoarders or speculators who wish to buy gold may intend to reduce their holdings, not of dollars, but of other currencies, especially their own. To equate an increase in the demand for gold hoards with a decrease in the demand for dollar balances may therefore be wrong. Of the non-dollar-holder's flight into gold I shall talk later; let us first concentrate on the danger of a flight from the dollar, either into gold or into other currencies.

The decision of a private foreign holder of dollars to exchange them into gold can be regarded as exceptional. Ordinarily, he needs his working balance for day-to-day transactions and, if he can spare some of it, it will not be much and he will sacrifice his liquidity only in consideration of a large and immediate gain — say, if he expects that the price of gold will be raised over the week-end. A decision to exchange dollars into other currencies is much more likely, because the cost of in-and-out trading is much smaller and the liquidity of other currencies not much lower even if only dollars were usable for the regular foreign transactions of the particular firm or bank.

Yet, under the arrangements in effect until March 17, 1968, both kinds of switch affected the gold stocks of the United States in a rather similar way. This resulted from a combination of two practices: (1) the arrangements of the Gold Pool provided for sales of monetary gold to private buyers whenever the demand in the London gold market was not fully met by supplies from private stocks and new production; 59 per cent of the wanted gold was supplied by the United States, the other 41 per cent by Germany, Italy, Belgium, Netherland, United Kingdom, and Switzerland. (2) Several of these countries had set upper limits to their holdings of dollars; as the proceeds of their sales of gold increased their dollar holdings, the collected dollars would sooner or later be presented to the authorities of the United States for conversion into gold.

Now, what effects can be expected if private dollar holders switch from dollars into francs, DM, lire, or other strong currencies? The central banks issuing these currencies and acquiring the dollars may again find their dollar holdings increased beyond the limit and may seek their conversion into gold. Thus it seems that in both cases of private foreigners reducing their dollar balances, whether they want to replace them with another currency or with gold, the end-effect would be a loss of gold by the United States.

In March 1968, the seven countries of the Gold Pool agreed on a new policy. They will no longer supply gold to the London market, even if the market price of gold should rise as a result. Moreover, the six countries may allow their dollar holdings to increase; that is, they will not present surplus dollars for prompt conversion into gold. There is probably no commitment to this effect and certainly there is nothing that would commit other countries to refrain from asking the United States to surrender gold for dollars. A brief review of the past behavior of foreign monetary authorities regarding their holdings of gold and foreign exchange may be helpful in an appraisal of official attitudes.

Taking all noncommunist countries together, their official holdings of dollars increased steadily until the end of 1965, when they reached a peak of $15.9 billion. The decline that followed was quite modest: to $14.4 billion in September 1967. Focusing, however, on the industrial countries of Europe, we notice that they began earlier to reduce the foreign-exchange portion of their monetary reserves: at the end of 1964 they held $9.2 billion, a year later only $7.5 billion. In the same year they increased their gold holdings from $16.9 billion to $18.9 billion. France and Germany were leading in this switch of their monetary reserves. Germany had started a year ahead of all others, reducing her foreign-exchange holdings from $3.3 billion at the end of 1963 to $2.7 billion in 1964 and to $1.7 billion in March 1965, while increasing gold stocks from $3.8 billion to $4.4 billion in the same period. France reduced her foreign-exchange reserves from $1.4 billion at the end of 1964 to $0.8 billion in 1965 and $0.5 billion in 1966, building up her gold holdings from $3.7 billion at the end of 1964 to $4.7 billion a year later and $5.2 billion at the end of 1966. All these switches cut into the gold reserves of the United States, reducing them from $15.5 billion at the end of 1964 to $14.1 billion in 1965 and to $13.2 billion in 1966.

The reductions in dollar holdings by monetary authorities were halted when the situation became critical. Several countries, indeed, agreed to reverse the direction of change in the composition of their reserves. Leading among those that have increased their holdings of dollars are Germany and Italy. But this does not mean that the official holders of dollars have forever foresworn conversions into gold. One may assume that the authorities in practically all countries wish to avoid a crisis, the outcome of which cannot be predicted but is apt to be deleterious to most. Yet, if in some countries, in a moment of stress, the men in charge of international monetary affairs were to lose their heads, and a threat of a stampede for gold seemed imminent, official demands for conversions could become large enough for the United States to realize that the sale of gold cannot be continued.

In any case the double threat of the "dollar overhang" accumulated over many years and of the current "dollar overflow" from continuing payments deficits of the United States makes it difficult to be sanguine about the ability of this country to satisfy all potential official requests for gold.

The Gold Rush

Having talked about the dangers of gold hoarding by nervous dollar holders, I must now proceed to discuss private gold purchases by holders of other currencies.

Purchases of gold in the London market are paid in dollars. If those for whose accounts the gold is bought have no dollar balances, they first have to acquire dollars with whatever currencies they may have been holding – pounds, Swiss francs, rupees, kyats, bahts, wons, kips, piastres, or any other.[6] The results of an increased private demand for gold will differ according to whether it is met out of new production of gold; or is met out of monetary reserves under the arrangements of the Gold Pool (rescinded in March 1968); or results in a higher gold price in the free market.

Assume that the final buyers are Thais, paying in bahts, and that the sellers are South Africans, who want their proceeds in rands, to pay for the production cost of gold. There will therefore be a supply of bahts in search of dollars, a payment of dollars for gold, and a supply of dollars in search of rands. If both the baht and the rand are pegged in terms of dollars and, hence, the authorities of Thailand and South Africa intervene in the foreign-exchange markets, the dollar holdings of Bangkok will decrease and those of Johannesburg increase. If the adjustment process works, the balances of goods and services of the two countries will eventually adjust and show larger exports from Thailand and larger imports (matching the exports of commercial gold) into South Africa. The dollar, having served in the process as transactions currency, will not be affected either way.

Let us now see what happens if the new demand for gold cannot be met out of new production but, under gold-pool arrangements designed to stabilize the gold price in the free market, is met out of official reserves sold by monetary authorities. Assume that the final buyers are Indians, paying in rupees, and the sellers are the monetary authorities participating in the Gold Pool. I shall not go into the delicate question whether the Reserve Bank of India will furnish dollars to the rupee owners (whose demand for foreign exchange may come in a disguise that appears quite legitimate) or in what other ways dollars become available to them. The relevant part of the process is the loss of monetary gold. Under the old arrangements, the seven countries joined in the Gold Pool had shared the loss. The European central banks in this case would not necessarily have acquired additional dollars in exchange for their gold, since the private demand for dollar balances had not declined:

[6]The last five are the currencies of Burma, Thailand, Korea, Laos, and Vietnam.

it was the demand for rupee holdings that declined. If the Indian authorities stayed out of the picture, the rupees may have been offered at a price attractive enough for some people to buy them with dollars or other currencies, either to make purchases in India or even to hold the rupees temporarily for speculative reasons. The central banks supplying the gold might find their note circulation or demand deposits reduced or their dollar holdings increased. And eventually they would return such dollars to New York for gold. Thus, at least in part, the Indians' gold hoarding would have encroached on American gold stocks.

If enough statistical information were at hand, we could establish to what extent major scrambles for gold were associated with reductions in private foreign holdings of dollars. It would be important to know whether the tidal wave of private gold purchases in December 1967, which took $900 million from the American gold stocks within four weeks, left private foreign dollar holdings more or less unchanged or reduced by a similar amount. There had been earlier gold rushes, besides the gradual increases in private hoards. Thus, in 1960 additions to private gold stocks jumped by $311 million, or 68 per cent of the 1959 purchases, and in 1965, by $449 million, or 67 per cent of the 1964 purchases.[7] But we do not know whether private dollar holdings in those years reflected any "movements out of dollars."

One conclusion of these reflections is that, under the old gold-pool arrangements, private gold purchases could encroach upon the gold reserves of the United States even if the purchases were made by foreigners not holding dollars but using their own currencies to pay for the gold. Regardless of whether the gold rushes between December 1967 and March 1968 were associated with reductions in the demand for dollar balances or were financed with other currencies, the depletion of American gold holdings was too rapid for the authorities to stand by inactively. More than $2.4 billion worth

[7]These large jumps clearly refute the hypothesis, advanced by official and unofficial experts, that the increase in private purchases of gold is a nonspeculative, "structural" development. Nothing but speculation can explain the sudden leaps in 1960, 1965, and 1967.

of gold was lost within the three months, reducing the stocks to $10.5 billion. The decision by the members of the Gold Pool, on March 17, 1968, to halt sales to private parties and no longer to intervene in the London gold market was a sensible reaction. But what will now be the effects of private excess demand for gold?

Assume that speculators want to acquire more gold than is available from new production after the requirements of industrial and artistic users and traditional hoarders are satisfied. Without any sales out of monetary stocks, the sole source of supply for bullish speculators is gold relinquished by less bullish speculators. That is to say, the eager buyers will bid up the market price to a point at which less eager holders are willing to part with enough of their gold to meet the demand. Although dollars are used in the transactions, the position of the dollar in the exchange markets will not be affected if neither buyers nor sellers of the gold reduce or increase their dollar balances in the end. If the buyers have, at the outset, had currencies other than dollars, and had to buy dollars in order to buy gold, whereas the sellers, at the increased price of gold, hold on to the dollar proceeds, the dollar will be strengthened in the process and some central banks may have to sell dollars against their own currencies. Conversely, if the buyers have held dollars whereas the sellers want to hold their proceeds in other currencies, the dollar will be weakened and some central banks may have to acquire dollars under our system of fixed exchange rates.

It would be difficult to predict which of these three possibilities is the most likely to materialize – were it not for the continuing supply of additional dollars originating from the payments deficit of the United States. With this continuing deficit, one may expect that dollars, both from the current overflow and from the amassed overhang, will land in the hands of foreign monetary authorities and, through conversion, contribute to the further erosion of the gold position of the United States.

Cheap Advice

If the predicament is due chiefly to the deficits in the balance of payments and to a lack of confidence in the United States dollar, it requires no great wisdom to conclude that all will be well if balance and confidence are restored. The cheapest advice is to say that restoring balance will restore confidence and that therefore no more is needed than to remove the continuous overspending, overlending, and overinvesting by the United States.

External balance does not guarantee confidence in the sense of maintenance of a given volume of foreign dollar holdings. The foreign demand for dollar balances depends chiefly on the volume of dollar transactions for which working balances are needed. Any measures or policies that reduce the volume of foreign trade and payments may well reduce the foreign demand for private dollar holdings, and thus lead to further conversions and to American gold losses, even if the payments deficit (on liquidity basis) is reduced or removed. Moreover, "overspending, overlending, and overinvesting" are relative magnitudes, and absolute reductions in foreign spending, lending, and investing need not reduce, and may even increase, the relative oversize of the particular items in the balance of payments.

What can really be done to achieve a cure of the chronic imbalance of payments and to safeguard against crises of confidence?

Restoring Balance: Direct Controls

There are several ways of dealing with a deficit in the balance of payments: to finance it, suppress it through restrictions, try to remove it through real or financial correctives, or restore balance through real adjustment.

After 18 years of financing the deficit, the time has come to end it. Picking some conspicuous deficit items in the balance of payments, the United States has decided to "take action" against these items, partly by means of direct controls and prohibitions. The government hopes the country will save at least $1 billion by a "mandatory program" to restrain direct investment abroad and to bring home larger portions of foreign earnings from past investments; another $500 million by a "tightened program" to restrain foreign lending by banks and other financial institutions; another $500 million by reducing "nonessential travel outside the Western

Hemisphere"; and again another $500 million by reducing the foreign-exchange cost of keeping troops in Europe.

Even if the new program succeeded in improving the balance of payments by $2.5 billion, it would still not *restore balance.* It would only *suppress imbalance,* and probably only temporarily. When the controls and restrictions are lifted, the deficit is apt to reappear in its full size. At best the reduction of the cost of keeping troops in Europe may turn out to be a continuing saving – either by bringing some of the troops home or by receiving compensatory payments from the NATO allies. All the other items, however, have to be regarded as regular flows, determined by underlying conditions such as levels of incomes and prices and rates of profit and capital formation. Such flows can be restricted or suppressed for a time but, if the underlying conditions are not altered, they will resume at the same or even increased strength as soon as the restrictions and prohibitions are taken off.

That the suppression of a deficit by use of police power does not restore "equilibrium" but merely conceals the symptoms of "disequilibrium," is relatively easy to grasp (though many manage to forget it). It is less easy to understand that the suppression of deficit items in amounts equal to the present deficit may yet fail to remove the deficit. The naive observer of the statistic of international transactions is inclined to assume that each reduction of a deficit item will be fully reflected in a reduction of the "over-all deficit." It takes hard intellectual work to comprehend the interdependence between the various items, to see, for example, why a reduction in the expenditures of American tourists abroad or a reduction in American direct investment abroad will to some extent result in increased imports and reduced exports of goods and services. These "feedbacks" may be large or small, but will rarely be zero. They can be zero only if the reduction in the flow of funds does not affect the use of funds either in the domestic or in the foreign market. Assume that an American, A, is prevented from lending his money to a foreigner, F; only if A then decides to sit on his money and not to spend, lend, or invest any part of it, and if F manages to disburse abroad exactly the same amount of money that he could have disbursed thanks to the receipt of A's funds, only then will imports and exports be unaffected by the financial corrective. In all probability, A will use some of his funds at home and F will have less to spend abroad, and the United States will have larger imports and smaller exports as a result.[8]

Restoring Balance: Partial Devaluation

Besides direct controls, various measures have been introduced to alter the ratios between selected domestic and foreign values. These measures are designed, by changing the basis of economic calculation, to divert purchases from foreign to domestic markets. They can most conveniently be regarded as disguised, partial devaluations of the dollar.

First, the dollar used for military expenditures abroad was devalued when the officials in charge were instructed to "buy American" whenever the cost was not more than 50 per cent above the cost in foreign currency calculated at the official exchange rate. Next came the concealed devaluation of the dollar used by recipients of foreign aid; they were forced to buy in the United States, even if they could have bought elsewhere at lower prices. As a result of the tied purchases the worth of the aid-dollar was reduced by about 25 per cent. The third partial devaluation was that of the dollar used for purchases of foreign securities: the so-called interest-equalization tax was equivalent to an increase in the price of foreign currencies by 15 per cent. The proposals made early in 1968 include a devaluation of the tourist's dollar by means of special taxes on travel expenditures outside the Western Hemisphere.

All such selective correctives through partial devaluation are inequitable, discriminatory, and inefficient, although they are superior to direct controls in that they work by means of price incentives and disincentives and leave the market essentially free.

[8]Feedbacks and other offsetting repercussions will also prevent the end of the war in Vietnam from ending the deficit in foreign payments. Military spending abroad may be replaced by foreign aid — as has been promised — or exports from the United States will decline. Military spending at home may be replaced by other domestic expenditures — many outlays in the war against poverty having been postponed — and if so imports will fail to decline.

They all invite substitution, evasion, and circumvention; they discriminate against some sectors and in favor of others, distort the structure of prices, and induce misallocation of productive resources. Usually, they are also incapable of effecting their purpose. For, while they improve particular items in the balance of payments, they worsen others, partly because of the substitution of purchases for which the dollar is not devalued, partly because of foreign and domestic repercussions from the reduction of purchases for which the value of the dollar is reduced.

If the disguised devaluations of the dollar were uniform — for example, by means of proportional taxes on all imports and subsidies on all exports of goods, services, and securities — they might work indiscriminately; but the administrative difficulties would be serious. While theoretically taxes and subsidies could be used in lieu of a uniform alteration of exchange rates, in practice they would amount to a system of multiple exchange rates with plenty of bureaucratic bungling and high rewards for cheating and bribing.

I conclude that selective measures to remove the deficit, whether they are real correctives (designed to affect the flow of goods and services) or financial correctives (operating on the flow of capital funds) are not likely to achieve sustainable balance. Only real adjustment is likely to accomplish that.

Restoring Balance: Real Adjustment

In the process of real adjustment relative prices and incomes are changed in such a way that the allocation of real resources and the international flows of goods and services are altered sufficiently to improve the current account so as to make it match the balance on capital account and unilateral payments. I distinguish three approaches: aggregate-demand adjustment, cost-and-price adjustment, and exchange-rate adjustment. The first two are practically inseparable, because demand adjustment works largely through changes in costs and prices, and cost-and-price adjustments cannot, as a rule, be achieved without demand adjustment.

Aggregate-demand adjustment implies income deflation and less employment in the deficit country and/or income-and-price inflation in the surplus country. Since excessive expansion of demand in the deficit country has often contributed to the emergence or persistence of the payments deficit, stopping the inflation is, in such instances, the first and most urgent recommendation. But merely disinflationary policies cannot accomplish full adjustment when the surplus countries likewise desist from inflating aggregate demand. Only if these countries allowed their income and price levels to rise would the prevention of income-and-price inflation in the deficit country initiate a process of real adjustment, leading gradually to restoration of external balance as the "demand pull" in foreign countries washed their surpluses away.

While halting or containing the inflation in the deficit country is not yet a sufficient condition for real adjustment, it is a necessary condition for preventing the deficit from getting bigger. Thus, fiscal and monetary restraint — higher taxes, reduced expenditures, tighter credit — are imperative, simply to keep the imbalance of payments from getting worse. Yet, to prescribe the same orthodox medicine in doses large enough to induce full adjustment would mean to expose the country to great risks. Stopping an inflation is one thing; forcing a deflation is another. In the absence of inflation abroad, real adjustment of the existing imbalance would require net deflation in the deficit country, at a probably exorbitant social and economic cost, which no government is willing to impose on the country.

The third approach to real adjustment — exchange-rate adjustment — is also resisted by governments. The United States regards it as practically impossible, partly because of some past promises and commitments, partly because of the role of its currency in international affairs. The trading partners of the United States regard this kind of adjustment as undesirable, and perhaps intolerable, chiefly because it would weaken the competitive position of their industries. Exchange-rate adjustment may, nevertheless, prove to be the only practicable way out. However, it can become practicable only by courses of action not yet sufficiently examined. Some of them will be considered here, but only after an analysis of the problem of confidence.

Restoring Confidence: Five Approaches

Confidence in a currency, or any liquid asset, is always relative, namely, compared with some alternative asset; the problem is the likelihood of massive switches between alternative assets held. Economists have long known that a currency system with two moneys, such as gold and silver coins, with fixed rates of conversion is very unstable and should not be tolerated (Gresham's law).

The problem of increased or reduced confidence in the dollar lies in its convertibility into gold. Changes in expectations regarding the relative scarcity of the two assets lead to massive switches, which in turn may result in major disturbances of world monetary affairs. Switches from dollars to gold may, if convertibility is maintained, destroy large amounts of monetary reserves and induce deflation and unemployment in several countries. Switches from gold into dollars would increase monetary reserves, as the disgorging of private gold hoards creates additional reserves of commercial banks as well as additional cash balances of individuals and firms, which induces inflation of prices and incomes everywhere.

Traditionalists are fond of repeating that confidence is lost only when governments have misbehaved, and that convertibility into gold enforces discipline. Both statements are, to put it mildly, exaggerated. Expectations of lower production and rising industrial use of gold may lead to a large speculative demand for gold even if the creation of dollars has not been excessive by any traditional standards. And the fear of losing reserves of gold has rarely in modern times kept monetary authorities from engaging in monetary expansion when they wanted to promote employment and growth. The allegiance to gold exerts no discipline, it merely creates guilt feelings.

The traditional advice to the monetary authorities anxious to restore confidence in the dollar is that they make the dollar scarce. However, when popular belief in a future scarcity of gold is widespread, it would take severe deflationary measures by the United States to achieve a matching scarcity of the dollar. It would be downright madness to accept the prescription of a stiff dose of deflation.

The most strongly advocated recommendation is to increase the official price of gold to take account of the expected relative scarcities.[9] A sharp increase in the official dollar price of gold could restore confidence in the devalued dollar for a few years, but only at a very high cost. One of the noneconomic cost factors would be the humiliation of the nation which, breaching the solemn promises of its three last presidents – Eisenhower, Kennedy, and Johnson – would "cheat" its best friends (who have believed the assurances and continued to hold dollars) and reward those who have been least friendly. The economic cost would mainly come from the world inflation induced by the monetization of gold profits. For even if the official profits from a revaluation of gold were to be safely sterilized, the profits of private hoarders and speculators would be monetized, their sales creating new bank reserves and new cash – perhaps to the tune of some twenty billion dollars – with no chance for any monetary policies that could offset this outpouring of new money. The point is that speculators in the last eight or ten years have purchased between \$10 billion and \$15 billion worth of gold at \$35 an ounce and are waiting for the price to be increased. If the price were doubled, their treasure would be worth at least \$20 billion (to use the lower estimate) and this would be the amount of national currencies which central banks would have to create in payment for the dishoarded gold. The reserves of commercial banks would rise

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[9] The expectations of speculators are based on the assumption that the monetary gold stocks will never be released. If speculators realized that these reserves could eventually be employed as a "buffer stock" to fill gaps between production and private demand, they would sell gold, rather than buy. A sober estimate looks like this: industrial and artistic uses of gold absorbed about \$500 million worth in 1967, and purchases by traditional hoarders about the same amount. Production (not counting the output in communist countries) was roughly \$1,500 million, the surplus of \$500 million being bought by speculators. If this surplus were purchased neither by speculators nor by monetary authorities, the resulting glut would depress the market price far below the present level. One may reckon, however, that purchases by industrial and artistic users and by traditional hoarders will increase from year to year, and production will fall, so that the excess supply may vanish and eventually give way to an excess demand. Still, since the present stocks held by speculators plus the buffer stocks of the authorities are at least \$55 billion, they could cover 55 years of the present private use, even if production fell to zero!

by the same amount and would create additional lending power of some $100 billion, a truly frightening inflationary potential. The inconsistency of the gold-price boosters is amazing: they praise the gold standard for its alleged disciplinary anti-inflationary effects, but are willing to subject the world to a huge inflation in the process of restoring gold to its long-lost importance in the monetary system.

Besides these two recipes – one to make the dollar scarcer by deflationary policies, the other to make gold more abundant by doubling its price – several other proposals have been made, mainly for schemes to prevent official switching from dollars to gold. Three approaches can be distinguished: (1) "locking in" the dollars in the official reserves of the nations under so-called harmonization agreements, (2) taking out the dollars from official reserves by having them turned in to an international conversion account in exchange for deposits that are generally recognized as reserves, and (3) terminating both the convertibility of official dollar holdings into gold and the convertibility of gold into dollars. All these approaches would face strong political resistance, but this is true for every measure that might do the job.

Restoring Confidence: Locking-In and Pooling Agreements

Harmonization agreements would bind countries to hold a minimum ratio of their total reserves in the form of dollar assets. Alternatively, since a fixed ratio would imply annual increases in official dollar holdings (which may be unacceptable to some countries), the minimum holdings could be stipulated in absolute amounts. As a consideration for the promise to hold the balances, an exchange-value or gold-value guarantee may have to be given for official holdings. Such an agreement, unless it included additional provisions, would fail to guard against massive sales of dollars to central banks in the case of private asset switching (dollars into gold or into other currencies) and in the case of continuing deficits in the payments balance of the United States. Moreover, the scheme fails to provide for the possibility of a continuing excess demand for gold by processors, hoarders, and speculators. One way of dealing with this problem is the separation of official transactions at an official price from private transactions at a free-market price — the system introduced in March 1968. Another way would be to maintain a uniform price of gold, which would require a combination of a gold-selling agreement with a dollar-holding agreement among monetary authorities.

To remove reserve currencies from national monetary reserves by having them deposited with an international reserve pool has been part of several proposals, including the Keynes Plan of 1943 and the various plans by Triffin, Bernstein, and Maudling. These plans have differed in their generality, for example, on whether all of the existing overhang of dollars and pounds should be turned in or only amounts that the holders consider excessive, and whether the national authorities, having gotten rid of their existing holdings or excess holdings, should be allowed to acquire new dollars or pounds. To deal with the existing overhang but allow new accumulations of reserve currencies would seem inconsistent. A "final solution" of the problem of confidence would have to exclude future accumulations of reserve currencies after funding the accumulations of the past.

The removal of reserve currencies from national reserves to an international agency would leave the gold problem unsettled. To have a two-ring circus with private gold acrobatics in one ring and official gold clownery in the other, with the official gold dispersed among a hundred reserve-holding countries, all of whom would also hold presumably gold-value-guaranteed deposits in the international agency — this would hardly be a definitive solution of international monetary affairs. If the private price of gold differed substantially from the official price, leaks would be likely to develop from one circulation to the other. The ratio between exchange-pool deposits and gold in the monetary reserves would differ from country to country and problems of differential confidence in these two reserve assets might arise. Nothing, therefore, would be more sensible than to call for a central gold pool; but rather than setting up a separate gold pool, it would seem much more logical to have the same international agency corral all the monetary gold as well as all the existing reserve-currency holdings.

Since one of the predicaments in the present situation is the danger that dollars are converted into gold and thereby disappear as monetary reserves, this solution — that both the dollars and the gold are deposited in the same pool and that the deposit liabilities (or certificates) of the pool become the major reserve asset of the national authorities — is so rational, so cogent, that to me it seems compelling. The two problems — of safeguarding against official switches between dollars and gold and of providing for future developments in the supply and demand for gold — could hardly be solved in a neater way than by pooling all, or almost all, official holdings of both types of reserve assets. Gold and national reserve currencies would simultaneously disappear from the reserves of national monetary authorities, replaced by deposits with a conversion account (reserve-settlement account) of the International Monetary Fund.

One may wonder whether countries could be persuaded to accept such a comprehensive solution. The United States could free itself of persistent conversion headaches by transferring its entire gold stock (about $10.5 billion in March 1968) to the IMF and then using the resulting deposits as its major reserve. Germany, Italy, and other countries holding both dollars and gold could avoid awkward external and internal political pressures regarding the most appropriate division of their reserves between non-interest-earning gold and non-value-guaranteed dollars by exchanging both for interest-bearing and exchange-value-guaranteed deposit claims against the Fund. France, now holding chiefly gold, might find the solution acceptable if the Fund agreed to keep some of its gold in vaults on French soil, if no credits, investments, loans, or overdrafts were to be extended in connection with the scheme — the SDR-facility alone taking care of the provision of additional reserves — and if all participants agreed not to acquire any national currencies as part of their official reserves beyond working balances of strictly limited size.[10]

[10] To make it quite clear: only those dollars and pounds that are held in national monetary reserves when the conversion account is established are eligible for exchange into the new reserve asset. There can be no later additions, either from present private holdings or from later payments deficits of the United States or United Kingdom.

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The new conversion account (or reserve-settlement account) of the Fund could also assume the function of dealing with the problem of nonmonetary gold. In principle it would be possible to leave the gold market completely free, the Fund neither selling nor buying, no matter what price gold would fetch in the free market. In this case one might expect the price of gold, perhaps after a few months with higher quotations, to fall considerably below the present price of $35 an ounce. For there would probably be substantial dishoarding of gold by disappointed speculators, and industrial demand would still be far below the volume of new gold production. After a few years industrial uses of gold would increase enough to exceed the private supply, and then the price could go above $35. By that time even the most conservative central bankers and financial authorities would have learned that the large monetary gold stock kept buried by the international agency was serving absolutely no purpose. The question would then be asked why one should allow gold permanently to be withheld from productive uses and whether it was not more intelligent to release it from the monetary concentration camp.

Instead of letting the price of gold in the free market first fall far below and later rise far above the present official price, the Fund could operate a buffer stock, taking over the task which national monetary authorities have carried out for so long. (This collective buffer stock accumulated gold for hundreds of years and began selling only in 1965.) If the Fund is to buy and sell gold, it should perhaps maintain a pair of prices — buying, say, at $34 or below and selling at $36 or above — so that it would have a source of income besides the interest earned on the dollar and sterling assets taken over from national monetary authorities. Gold-mining interests would surely plead for higher prices or for postponement of any sales from the pooled reserves. The decision would not be of great consequence once it is settled that there can be no purchases for monetary reserves at any increased price.

Still another function could be assigned to the conversion account (reserve-settlement account) of the Fund: to devise a quasi-automatic adjustment of the exchange rates for the currencies of the participating countries. The parities of all currencies might be stated in terms of Fund Units. Any country losing reserves at a fast rate over an extended period might have the exchange value of its currency lowered in small steps, and any country gaining reserves at a fast rate over an extended period might have the exchange value of its currency raised in small steps, not exceeding 3 per cent per year. Alternatively, the Fund might adopt the device of "band flexibility" of exchange rates, that is, a widening of the permissible margin of rate fluctuations from the present 1 per cent to 3 or 4 per cent above and below par. The best solution, however, would combine the "crawling peg" with the "wider band" and allow the use of a "movable band" of exchange rates. It need not apply to all currencies, but only to those of countries or blocs of countries that do not choose to coordinate their fiscal and monetary policies with those of other countries (or blocs) and thus to subordinate their domestic objectives to that of maintaining external balance. The technique of the movable band could furnish the international monetary system with the only reliable and economical adjustment mechanism for countries in which adjustments of incomes and prices are not tolerated.

However, it would not be necessary to burden international negotiations at this time with such controversial questions: the men in the seats of power at present seem unwilling to consider proposals of this sort. Their successors in a few years may be more open-minded. It may be wiser, therefore, to confine the agenda for immediate negotiations to the most urgent points. The most urgent is to avert the danger of having several billion dollars of existing monetary reserves destroyed through the exchange of official dollar holdings for official gold holdings.

Restoring Confidence: Cutting the Link

Some of the experts in international monetary affairs tell us that nothing is negotiable at the moment. The governments, so we are told, will not, after the years of negotiating the SDR facility, sit down again to negotiate additional reforms, least of all, reforms as radical as the removal of gold and reserve currencies from national reserves. If this warning is correct, the next alternative may have to be considered, though it is a less desirable one, because, as a unilateral action, it offends the spirit of international cooperation.

The conversion of official dollar holdings into gold leaves the reserves of the switchers unchanged – they will have gold in place of the dollars – but reduces the gross reserves of the United States – the loss of gold being compensated merely by a reduction of dollar liabilities. This destruction of gross reserves is harmful if it induces deflation and/or restrictions on the flow of goods and capital; it would not be so harmful if the losers of gold – the United States – did not take restrictive measures.

Equanimity or indifference vis-à-vis the loss of gold can be created if gold reserves are no longer needed for anything – neither to meet internal legal requirements or external moral obligations nor to safeguard the maintenance of fixed exchange rates. These changes in the role of gold in the United States can be produced by cutting the link between the dollar and gold, that is, by terminating the rule that the United States will purchase gold whenever offered and will sell gold to monetary authorities that hold dollars.

In view of promises made and expectations fostered by frequent declarations of the United States government, it would be decent if the United States offered to give up all its gold to monetary authorities that wanted to reduce their holdings of dollars. In order to assure a fair distribution, it could first invite each of them to state the amount of dollars for which they wanted gold. Would the gold stock of the United States – of less than $11 billion – be large enough to meet the official demand? The foreign monetary authorities hold almost $16 billion, but surely they would not want to invest all their dollars in gold. All of them need dollars as working balances and as intervention balances; many of them are anxious to have interest-earning assets in their monetary reserves; and several of them need dollars as compensating balances against American bank loans. The desire to keep dollars would be increased if it were understood that the United States would in the future not purchase any new gold and not repurchase any of the gold now sold. The point of these considerations is not that we should care how much gold the United States would retain, but rather whether the present stock would suffice to meet the demands.

After the United States made the great decision to terminate convertibility between dollar and gold, all further decisions about the relations among currencies would be left to other countries. It would be for them, and not for the United States, to decide the value of the dollar in their foreign exchange markets. One can imagine four types of decisions.

1. Some countries may decide to keep the present exchange rates between their currencies and the dollar unchanged; in this case, they would have to purchase all dollars offered in the market and to increase their dollar holdings if the dollar should continue to be in excess supply.

2. Some countries may decide not to increase their holdings of dollars and, instead, to reduce the price they pay for dollars offered to them; in other words, they may decide to raise the dollar value of their own currencies.

3. Some countries, unwilling to increase their dollar holdings and uncertain about the right price to pay for the dollar, may decide to let their exchange rate float, against the dollar and other currencies that remain linked with the dollar; in other words, they may let exchange rates be determined by supply and demand in a free market.

4. Some countries may be anxious not to allow the dollar to be devalued or depreciated, because this could hurt some of their industries; they might therefore continue to purchase dollars at the present exchange rate whenever an excess supply arises from transactions in goods and services, but they might refuse dollars that originate from imports of capital. This would amount to multiple exchange rates, a system workable only in connection with foreign-exchange controls.

The United States should gladly accept any of the first three possibilities. The first one would amount to the willingness of other countries to help finance its payments deficit. The second and third would greatly aid in the process of adjustment; indeed, it might be the only practicable approach to adjustment. Only the fourth possibility would be deplorable, but not more so than the restrictions which the United States itself has been imposing. If there are to be restrictions on the movement of capital, they had better be imposed by the countries unwilling to receive capital than by the country able to supply it.

The termination of gold convertibility would not change the role of the dollar as international transactions currency. The dollar may even continue as reserve currency for, while some monetary authorities may decide to sell their dollars, others may prefer to increase their dollar holdings. The present threat to stability, the possibility of massive switches at a fixed conversion rate, would no longer exist. The use of the dollar as international trade currency would not be affected at all. The dollar remains the most stable of all currencies and the most useful of all currencies (in the sense that it can draw on the largest reservoir of goods). As long as its purchasing power over goods and services is secure, the dollar will serve international trade and finance; its convertibility in gold is immaterial for this function.

One may ask what advantage this drastic action at this time may have over a policy of temporizing. The chief difference, from a realistic point of view, is between taking the step now or two or three years from now. To defer it, is to live under restrictions and under the constant threat of crises of confidence, each crisis bringing new and more stringent restrictions.

The Relation to the SDR Scheme

The most disconcerting thought is that unilateral action by the United States may so seriously offend the spirit of international cooperation that the pretty solution that was found for the liquidity problem might be ruined, or at least tabled for an indefinite period. If this were to happen, it would clearly show the mistake we have made in giving priority to the problem of liquidity and disregarding the problems of confidence and adjustment. It would be most unfortunate to have the hard work of several years come to nought.

Such a course of events is by no means inevitable. Responsible governments may reflect on the possible developments and realize that a failure to negotiate collective actions solving the problems of confidence and adjustment might jeopardize the successful solution of the liquidity problem. With this prospect in mind, they may overcome their disinclination to resume their efforts toward a cooperative completion of the entire agenda.

Now that the United States has imposed mandatory restrictions on capital movements and proposes to impose restriction on purchases of foreign services, the blessings of a scheme to create liquidity seem less promising. The main justification — perhaps the only one that really counts — of the creation of international reserves is the avoidance of restrictions. If it takes restrictions to activate a plan for the creation of reserves, the whole idea is defiled.

How sad that intelligent people work hard to find suitable means for achieving desirable ends, then promote the means as if they were ends in themselves, and begin pursuing them with instruments that negate the original ends.

Mr. MACHLUP. I have only one question, sir, how that goes with the copyrights of the Committee for Economic Development and the Johns Hopkins Press.

Mr. BERNSTEIN. Congress has all copyrights.

Chairman REUSS. Our lawyers will defend me.

[Laughter.]

Mr. MACHLUP. Splendid.

There are two other publications I should refer to. Both appear this September. One is an article in the British journal, the Banker, and it is entitled "The Price of Gold." The other appears also this month in the Banca del Lavoro Quarterly Review in English, and it is entitled "The Transfer Gap of the United States." Both these articles will be available at the International Finance Section of Princeton University and anyone who is interested can write for them.

Now, today we ought to discuss the proposals that should be considered as our next steps, and that might be addressed through the Treasury to the International Monetary Fund. The first one relates to the speedy ratification and early activation of the scheme for the creation of special drawing rights. The second relates to the policy regarding gold and its price and the role the International Monetary Fund ought to have in this business. The third proposal relates to the reserve currencies now held by many countries, sometimes with reluctance.

With regard to both gold and reserve currencies, plans have been submitted for pooling the reserves in a central pool maintained either by the International Monetary Fund or by another agency. At least four such pooling plans are under consideration, at least by the academic community. One is the Bernstein plan, of which we have just heard; another is the Triffin plan; a third is the plan submitted today by Professor Mundell; and there is the Machlup plan, submitted last February to the Joint Economic Committee and also discussed in my little booklet.

The four proponents do not use the same words. Bernstein calls it the Reserve Settlement Account. Triffin calls it the Conversion Account. Mundell calls it the International Monetary Pool. I refrained from proposing a new name, because the name is unimportant. The basic idea of all these plans is essentially the same: pooling the reserves. The plans differ in many details but, after all, we ought to discuss the principle, not the details.

The fourth proposal for consideration and study relates to widening the existing band for exchange-rate fluctuations, that is for permissible deviations of exchange rates from the official par values.

Widening this band is important, because the pooling arrangements just mentioned do not provide any aid in the adjustment process, and we need something for this purpose. Improving the adjustment process may be the most vital of our tasks.

Before I say more about the four proposals, I have two things on my mind. First, I am afraid that we may be confused by certain words. For example, the term "gold standard." Gold standards means something different to practically every man who talks about it. By the most widely used definitions, we have not had a gold standard for a long time and, hence, to call the present system a gold standard is quite misleading. Perhaps we could do without these words and just say what we mean.

There is also the term "gold demonetization." I shall not take your time to show that there are eleven different meanings of gold demonetization. In some of these meanings gold has been demonetized long ago, and in some other meanings gold may not be demonetized in another hundred years. So, again, a word without a definite meaning.

Finally, the words "flexible exchange rates." Even my dear colleague, Professor Mundell, uses this term in an entirely different way from how I would use it. Perhaps we should give up using it. It is highly confusing if we debate whether something is good or bad while what we so judge are really entirely different things.

The other point that I want to raise before I come to the discussion of the four proposals is not semantic but political: it concerns the gold lobby.

Mr. Chairman, I believe this point ought to be raised, because the gold lobby gets more irresponsible, more impertinent every day, spreading misinformation all around the world, getting paid and unpaid agents, many of whom have little understanding of the issues, to distribute misleading literature practically every week.

Let me first say that I have no quarrel with anyone hankering after higher prices for his product or services. Anyone may want what he wants, and anyone may express his wishes. I am certainly not against free speech. The farm lobby may want higher prices for agricultural products, and the trade unions may want higher prices for the services of labor, and the gold lobby may want higher prices for gold. But they should not feed us with lies.

There are, for example, the sob stories about the increased cost and vanishing profits of gold producers. It is true that there are gold deposits in the United States and elsewhere that cannot be profitably mined and processed at present wages with present techniques. But gold in the United States is largely a byproduct, and there is no economic reason for wanting to increase or maintain domestic gold output, just as there is no reason for producing our own bananas or our own cocoa or coffee.

If anybody feels sorry for the gold-mining firms in South Africa, he will perhaps be reassured if he learns of their profit-and-loss statements. We should distinguish between the new mines, which produce the bulk of the total output, and the old mines, which produce only a small and declining portion. The profit margin in 1967 was 47 percent of sales in the new mines and less than 10 percent of sales in the old mines. The cash flows were much larger, because costs included ample depletion allowances. Thus, production costs can go on increasing for quite a while before profits vanish at a selling price of $35 an ounce.

The owners of shares of gold-mining companies may complain that they earn very small dividends relative to the stock-market prices of these shares. The reason, however, is not a decline in the earnings of the companies, but the crazy climb of mining-share prices over the last years, induced by the predictions of the gold lobby that the United States will be forced to double or triple the present price of gold.

If speculators have believed these predictions and have paid 40 and 60 times annual earnings for gold-mining shares, they will have to pay dearly for their lesson in financial analysis.

Chairman REUSS. May I interrupt you at this point?

Mr. MACHLUP. Yes, sir.

Chairman REUSS. Do you have any advice to give to those who have, in reliance on these representations, purchased the shares of gold-mining companies?

Mr. MACHLUP. I am sorry, you will have to ask the financial analysts in New York, for I do not have any advice. If someone has bought stock at a high price, well he had better sell while the price is still high but—if many try to do so—the price will come down fast. Some people will have to take losses, sir.

Chairman REUSS. But as to those who are now contemplating purchase at these high prices would you have any advice?

Mr. MACHLUP. Yes, to stay out of it. The prices are just crazy. Anybody who has bought the stock of mining companies recently has made a mistake, and others who have not purchased had better not be suckers.

Mr. BERNSTEIN. Fritz is a model of a man who has inside information and makes it public generally instead of whispering it to some people.

[Laughter.]

Mr. MACHLUP. Well, let me say more about the gold-mining deceptions. There has never been a good reason in recent years for this speculative investment in gold or in gold-mining shares. To be sure, consumption of gold for jewelry, dentistry and industrial uses has been rising fast, but it used to absorb only a very small portion of world output. Thus in 1967, after years of rapid increase, the consumption of gold was still only about one-half of the output of the free world. The excess gold supply has always had a secure outlet into monetary gold reserves, but the gold-mining interests were not satisfied with the official support price. Thus, by means of stories continuously fed to the press and to investment analysts, they developed a huge demand for gold for private stockpiling. Private purchases for stockpiling increased from year to year, taking eventually not only the excess of gold output over gold consumption but several billion dollars worth of gold from monetary reserves.

In 1967, private purchases of gold for stockpiling were almost three times private purchases for actual use. It is estimated that private holdings of gold are about $20 billion worth, at $35 an ounce, although much of it was actually bought at higher prices.

These private stocks are enough to supply actual gold consumption for jewelry, dentistry, and industry at the current rate for more than 20 years. But much of this gold has been purchased, not with the intention of holding it for resale to consumers, but rather for resale to monetary authorities when they finally do what the gold interests want and predict; namely, double or triple the buying price of gold.

Yet, if this hope does not come true, the private stockpiles become available for actual consumption of gold and, I repeat, there is enough on stock, at the present rate of consumption, for the next 20 years. And what then with the new output of gold? And what if technical progress takes place and brings down the cost of producing gold instead of raising it? There are possibilities of such technological developments.

One of the purposes of my words here is to warn people of the risk in continuing their stockpiling. If they can, they should get rid of their stocks at the present prices.

One more thing comes to my mind. I have mentioned the gold lobby. We ought to find out who that is. It consists partly, of course, of the representatives of the mining companies. But they are joined by a large number of people who hold gold. Anyone who holds gold—and this includes large banks, especially on the continent of Europe—has, of course, an interest in the price of gold, and in a rising price of gold. Understandably, the holders of gold and of mining shares join in the chorus of the predicters of an increase in the price of gold.

There is still a third group: the bankers, brokers, and financial analysts who have advised their clients to purchase gold and gold-mining shares. They are part of the gold lobby, they must continue to say what they have said, because otherwise they would have to confess the blunder made by their past advice. They would have to say "excuse me, my dear client, I have given you wrong advice over the last 10 or more years." But since they are not going to say that, they are joining the gold lobby trying to persuade the world of the "inevitability" of the increase in the price of gold.

Chairman REUSS. Senator Proxmire has just been most successful in getting through Congress a bill called the truth in lending law, which requires lenders to tell the truth about the cost of their loan. Would you suggest a truth in gold puffing legislation which requires those who give advice about gold to state if they own gold shares or have a vested interest in that advice or otherwise have a conflict of interest?

Mr. MACHLUP. I am not in favor of too much legislation. Many objectives can be achieved by simply speaking out, and if the press is willing to disseminate what I have just said, this may do the job. Perhaps the clients will then ask their advisers for conflict-of-interest statements. They may ask their financial advisers "tell me, since you advise me to buy gold or to buy gold-mining shares, tell me how much gold do you have and how many gold-mining shares do you have?" That alone might do some good.

We in the United States could certainly not force the bankers in Zurich, Switzerland, to announce their holdings of gold and gold-mining shares, and that is where much of the propaganda comes from. So I don't think a special law of this Congress can tackle the problem.

Chairman REUSS. But you think this is a case where enterprising journalism should try to dig out the possible reasons why people are singing the song that they do?

Mr. MACHLUP. Absolutely. That is a case for enterprising journalists, exactly.

Mr. BERNSTEIN. I should like to commend Fritz on his excellent statement. We must thank the South Africans, incidentally, for telling us precisely what the profits are in the old mines and the new. But I want to disagree with him on only one figure. This is a question of figures, not analysis.

It isn't quite correct to say that $20 billion of gold is being held by people expecting a higher price for the purpose of selling it to the monetary authorities when and if the price is changed. That would not be quite correct. An enormous amount of gold, at least as much as Professor Machlup has mentioned, is held by private holders but, in my opinion, it is being held as a form of savings by Indians, by peasants, Middle Easterners and so on, in much the same way as Americans hold common stocks.

These people may sell some of it when the price rises. In fact it is quite possible that in India today silver is being replaced with gold in hoards because of the high price of silver.

These are investors, savers in an old-fashioned sense. I don't think that their gold holdings are available for sale to the monetary authorities with any minimal change in the price of gold. This is their type of investments.

Now, we do have a group who have bought large quantities of gold in recent years and do intend to sell it off. Their buying has been mainly since 1965, and in this period they have accumulated— I would call this speculators' holdings—over $3 billion. These are the men who are waiting for a change in price. It is not the Indian hoarder, it is not even the Middle Eastern hoarder, or the French peasant. It is the big speculators. They include, of course, as you suggested, some banks.

Mr. MACHLUP. I am very grateful to my friend Bernstein to give me a chance to clarify what I have said. Of course, many holders of gold have not bought it merely for a rise in price. Many have bought it for traditional reasons or as safe investments, partly because gold is so much easier to hide from the tax collector and from a confiscating government, and so on. But the assertion that they will continue to hold it for eternity, regardless of what happens to its price is, I believe, questionable.

Let me quote Professor Mossé, a Frenchman, who said the following thing this last Friday at the Congress of the International Economic Association in Montreal. Professor Mossé estimated the holdings of gold by private Frenchmen to be between $4 and $5 billion, and he believed that these $4 and $5 billion may come to the market for sale as soon as the price drops below $35 and threatens to decline further. In other words, these are not permanent holdings. This gold is held chiefly in order to avoid losses from the depreciation of the currency. But if the gold depreciates faster than the currency, holding gold is not a good investment. When people discover this, they try to get rid of it.

The same thing is true of the gold holdings in the Near and Middle East. These are merely the holdings of rich sheiks. These sheiks are very intelligent men with good advisers, and they would not dream of holding gold if they expected the price to conform to supply and private demand and, hence, to come down. If they knew for certain that the price could more likely fall than rise, their gold would come back to the market for resale.

However, I agree there is one group of permanent holders of gold. There are certain Indian maharajahs and also poorer Indians who hold gold, and also in the Far East there are traditional hoarders. But I do not expect these holdings to be more than $3 or $4 billion out of the $20 billion that I have mentioned.

So, my mentioning of $20 billion of gold available for final uses may be vulnerable, and can reasonably be questioned. On the other hand, private gold holdings may be more than $20 billion. After all, we do not know for sure, maybe they are $24 billion, and then the error may be in the other direction.

Now, Mr. Chairman, I have taken much time for my disgressions. If you want me to come quickly to the four proposals I will be glad to do so.

Chairman REUSS. Please.

Mr. MACHLUP. I shall comment first on the price of gold. I believe that the central bankers and monetary authorities will not want the price of gold to come down to what gold might really be worth if none is bought for monetary reserves, and some perhaps is sold out of monetary reserves—that is, they will not want the price to come down to $25, or $20, or $15. They have an interest in not having their reserves become worth less and less and less.

We cannot, therefore, expect them to sit by and let the price of gold decline without doing anything about it. So we must allow them to do something to maintain the price of gold at some level. I don't even know whether you can talk them into letting the price of gold drop to $30 an ounce. Their balance sheets would look bad: they would carry gold at a higher price than it sells in the market, and they might not like that.

Hence, you either have to educate them and talk them into taking that loss or you will have to accept some plan of preventing the price of gold from dropping below some limit that they will tolerate. Whether you can persuade them to let the price come down to $30 or $32 or $33, I do not know. They certainly should accept $34, for that would not be too much of a spread. My personal taste would be for a price lower than $34. But we would have to leave that to negotiations.

So I endorse the plan of Professor Mundell that there ought to be a spread between the buying and selling price of the International Monetary Fund. If that spread can be wider, all the better. My preference would be for a spread of $10 an ounce, that is, a price of $30 for buying, $40 for selling. But I am afraid the central bankers of many countries will rebel, and we shall finally have to settle for a smaller spread, perhaps $33–$37 or $34–$36, or something of that sort.

The pooling of reserve currencies is one of the most urgent things that we have on our agenda. Some scheme is now being discussed about the pound sterling, and the sooner we can get the discussions widened to include the dollar the better.

Now, if one visualizes some gold pool activities, or IMF activities concerning gold, and also recognizes the need for doing something about the reserve currencies, one had better combine both in the type of pool that Bernstein, Mundell, Triffin, and myself have proposed.

So let us get going and discuss the principles of reserve pooling, but we cannot here discuss the details of pooling. That should be done by a committee of experts appointed by either the Group of Ten or the International Monetary Fund. As you recall, the Ossola report was a committee of the Group of Ten, but I think nowadays it might be better to have a committee of the International Monetary Fund do this.

I, therefore, am very happy that you, Mr. Chairman, and Congressman Widnall are willing to propose that the joint committee ask the Treasury that this idea be made subject of a study and report by the IMF.

Finally, we have to get something done about widening the band for exchange-rate deviations from the par values.

In the article published this month by the Banca del Lavoro I am trying to show that the President's program for correcting our payments deficit is for the birds. It is absolutely useless, or worse than useless.

I am also trying to make clear that practically all other balance-of-payments programs that have been discussed will not achieve their purpose, and that the only policy that would achieve the purpose, deflation, would be intolerable. We must not take the deflationary route to adjustment of the balance of payments. Hence, I submit that a plan that includes a widening of the present band for exchange-rate deviations from parity would do a very important service to the whole world—not just to Germany, which could avoid some inflation, not just to France, which could avoid some deflation, not just to the United States, which could avoid some embarrassment, but to the whole world, which at last would get an adjustment mechanism that can work tolerably well.

Mr. Chairman, I apologize for having taken more time than I had expected to take.

Chairman REUSS. Thank you, Mr. Machlup.

(The following letter and accompanying statement are included in the record at the request of Chairman Reuss:)

[The following statement, inserted at the suggestion of Professor Machlup, was reproduced in the New York Times with the by-line of Edwin Dale, under the date of Feb. 21, 1966]

FEBRUARY 1966.

The discussion of possible reform of the present system of international payments has been largely focused on the problem of "international liquidity." More specifically expressed, the discussion has been focused on the temporary financing of imbalances through providing additional reserves and borrowing facilities and on promoting the adjustment process through monetary and fiscal policies. The no less important issue of exchange rates has received little attention in official circles. The fact that, as the present statement shows, many professional economists can agree on a minimum program in that respect, would seem to demonstrate that there is a promising opportunity here for improving the international payments system.

Whatever the system of reserves, we believe that more exchange-rate flexibility is needed than exists under the IMF rules now in effect. It has proved impossible, under the present rules, for many countries to maintain stable prices and high employment levels and at the same time to avoid the imposition of more and more controls on international payments. To achieve these domestic economic goals simultaneously with equilibrium in external payments requires more leeway for variations in exchange rates than exists now. This is why we favor two modifications in the IMF rules.

Our first proposal is to widen the limits within which countries are obliged to keep the gold value of their currencies. This value should be allowed to vary up to four or five percent on either side of parity, instead of the present one percent. A spread of eight or ten percent would thus be provided betwoen the upper and the lower support points. This first reform would render possible day-to-day fluctuations in exchange rates sufficient to absorb many balance-of-payments disturbances without disrupting foreign trade and investment. The proposed system need not be applied to every country without exception; some could be permitted to peg their currency to another country, or groups of countries could agree to keep the currencies of members of the group fixed in relation to one another.

The second modification we advocate is to allow countries unilaterally to change the par value of their currencies by no more than one or two percent of the previous year's par value. This seems at first more restrictive than present rules, which allow changes up to ten percent without prior approval by the IMF; yet since the present permissible changes are based not on last year's but on the originally announced par values which in many cases are now hopelessly out-of-date, our proposal is, in effect more permissive.

Our two proposals—to widen the range between the support points and to allow gradual adjustments of par values—do not go beyond what most proponents of the Bretton Woods Agreements had in mind. The need for this limited flexibility of exchange rates was generally recognized at the time, but the provisions that were formulated have proved impractical and therefore have not been used by countries even when their exchange rates had become clearly unrealistic.

The undersigned now join in advocating these reforms. While we differ among ourselves on what each of us considers the ideal set of rules and institutions, all of us hold that the alterations we propose would constitute a great improvement over the present situation. We submit that the increased flexibility of exchange rates under these rules would go far in solving the prolem of adjusting future imbalances of payments. In addition, some of us believe that this flexibility might also reduce the demand for foreign reserves and would in this way contribute to solving the problem of international liquidity.

The alterations of rules which we propose are designed to deal with the long-run problem of preventing future disequilibria among the industrial countries. They are not suited for the elimination of large imbalances already in existence, nor for the problems of many less developed countries which need stronger medicine:

Wilhelm Bauer, Chairman, Council of Economic Experts, German Federal Republic.
Professor Richard E. Caves, Harvard University, Cambridge, Mass.
Professor Alan C. L. Day, London School of Economics and Political Science, London.
Professor William Fellner, Yale University, New Haven, Conn.
Professor Milton Friedman, University of Chicago, Chicago, Ill.
Professor Herbert Giersch, University of the Saarland, Saarbrücken.
Professor Gottfried Haberler, Harvard University, Cambridge, Mass.
Dr. L. Albert Hahn, Paris.
Professor George N. Halm, Tufts University, Medford, Mass.
Professor Alvin H. Hansen, Harvard University, Cambridge, Mass.
Professor Arnold C. Harberger, University of Chicago, Chicago, Ill.
Professor Hendrik S. Houthakker, Harvard University, Cambridge, Mass.
Bertrand de Jouvenel, S.E.D.E.I.S., Paris.
Professor Harry G. Johnson, University of Chicago, Chicago, Ill.
Professor Friedrich A. Lutz, University of Zurich, Zurich.
Professor Fritz Machlup, Princeton University, Princeton, N.J.
Professor James E. Meade, Christ's College, Cambridge, England.
Professor Allan H. Meltzer, Carnegie Institute of Technology, Pittsburgh, Pa.
Professor Lloyd A. Metzler, University of Chicago, Chicago, Ill.
Professor Fritz W. Meyer, University of Bonn, Bonn.
Professor Tibor Scitovsky, University of California, Berkeley, Calif.
Professor Arthur Smithies, Harvard University, Cambridge, Mass.
Professor Egon Sohmen, University of the Saarland, Saarbrücken.
Professor Ingvar Svennilson, University of Stockholm, Stockholm.
Professor Jan Tinbergen, Netherlands School of Economics, The Hague.
Professor Jaroslav Vanek, Cornell University, Ithaca, N.Y.
Professor Michel Woitrin, University of Louvain, Louvain.

Chairman Reuss. The Joint Economic Committee has at many times in the past made bold to give some advice. Some of it has been taken, some of it has not. The annual meeting of the International Monetary Fund offers a real opportunity for the treasurers and central bankers of the world to do something about the remaining critical problems of the international monetary system, problems which all of the witnesses in their statements have designated as relating to the question of adjustments and the question of confidence.

I would like to put to the members of the panel the following scenario. Suppose that the Board of Governors of the International Monetary Fund, duly convened in Washington later this month, take the following action. Suppose, first, they by resolution take note of the fact that only 10 of the 109 member countries have so far ratified the special drawing rights proviso, and call on members to accelerate their ratification procedures, with the goal of at least completing ratification by the end of this year, 1968.

Suppose, second, that the Board of Governors by resolution commit all of the IMF members and the IMF itself to abide by the March 17 two-tier gold price system. In conjunction with continued application of the March Washington agreement, suppose that the Governors also provide in the immediate future—say before the end of 1968—some sort of voluntary facility within the IMF whereby member countries that wanted to could turn in their gold to the Fund at $35 an ounce if the market price, in the judgment of the Managing Director, was about to go below that level. Such a provision, it seems to me, would only represent fairplay. If you are going to ask members to avoid the profitmaking opportunities of selling gold in the present market at over $35 an ounce, you perhaps also have to do something for them to prevent losses in the event of a price decline.

Third, suppose that the International Monetary Fund's Board of Governors by resolution set up a special commission, to work in conjunction with the Executive Directors and the Managing Director, to propose the kind of reserve pool which has been discussed by all of you gentlemen. Such a pool would consolidate the present variety of international monetary reserves—gold, dollars, and sterling—and replace them with a single IMF guaranteed reserve unit, whether this be called a reserve settlement agreement, an international monetary pool or some other name. The Commission, I suggest, would report back to the Board of Governors in a year at its next annual meeting in September 1969.

And, fourth, suppose that the Board of Governors set up a similar commission with a similar timetable, that is, to report back at the next annual meeting in September 1969, to consider whether the existing relatively inflexible exchange rate system should not be modestly modified so as to provide a band in which exchange rates might fluctuate, let us say, up to 3 percentage points on either side of parity.

In suggesting these four possible resolutions, I have attempted to concentrate on those immediate problems which, if ignored, might in the judgment of many of the members of this subcommittee, expose the world to further crises of the kind that we so narrowly weathered within recent months.

I now would like to ask each of you gentlemen in turn for your reaction to and comments on this proposal for action by the IMF, both in terms of whether you agree that initiatives of this type would be in the interest of world monetary stability and whether you think that perhaps the agenda needs to be augmented.

Who would like to react first?

Mr. MUNDELL. Let me begin. I think it is important to keep clear the distinction between the gold margins and the exchange margins. The gold marings have to do with the fluctuations in the price of a basic international asset. But as our exchange system operates, the dollar is the intervention currency and other countries operate in the exchange markets relative to the dollar. So we are really dealing with two separate problems when we are dealing with the gold margins and the exchange margins.

As long as the dollar remains the major intervention currency I think they should be kept completely distinct.

With respect to the gold margins, I do think that it would be a great contribution, if there was a committee that investigated that, and, in fact, permitted, as a general system, a widening of these gold margins.

With respect to the exchange margins, I think here a lot of technical problems can arise, and in this respect it may be necessary not to adopt a general system valid for all countries but to move on a more pragmatic basis with respect to individual countries.

Now, there are a great many details that are tied up with the exchange margins. When I suggested a widening of the Deutsche mark I am aware of the complications that exist within the Common Market, and in particular in connection with their agricultural policy. I have been told, however, that the agricultural policy may break down anyway and will have to be adjusted one way or the other. If that is so it makes some approach in the direction of wider margins in the exchange market easier.

But a great many countries will want to have and maintain almost zero exchange margins. This is a problem that has not been dealt with sufficiently at the theoretical level; we have not found adequate criteria for optional exchange margins in the scientific world. It hasn't been solved, either, by officials. Of course, there is a general feeling that is held by many people that we should move to an overall system of freely flexible exchange rates and that implies no support points at all. But, some of the bastic theoretical problems associated with a system of flexible exchange rates have never been solved either and we don't have a basic theory that tells us in enough detail which countries should have their exchange rates fluctuating and which countries should keep their currencies fixed. You could have a system which resulted in chaos if you allowed countries willy-nilly to adopt their own policies with respect to exchange rates.

Chairman REUSS. Of course, the suggestion made, if I may repeat it, is, was, simply that the IMF Board of Governors appoint a high level commission and give it a mandate to come back in a year with its best judgment not as to whether a system of totally flexible exchange rates be adopted, but whether the band should be widened over the existing 2 percent. Presumably such a high level commission could report back that everything was simply splendid with the present system and not a comma should be changed, or they could come up with a different system which allowed for exchange rate variations between various blocks of countries, or they could come out with a recommendation for a broadened band.

I take it that your disposition on the difficulties involved is not a disagreement with the suggestion that it is time that a high level body of an official nature be mandated to see if there is not a solution.

Mr. MUNDELL. I think the problems of the gold margins are inevitably solved but the problems of exchange problems are not.

But with respect to a committee for study of these things it does not seem to me appropriate that one should become a victim of the year-to-year process of the meeting of the Board of Governors. Within the next year there is probably going to be some exchange rate changes that take place in the system. I think that is inevitable. You can see that in the exchange markets and in what I have called in my presentation here, the international tension index, it plots this out very clearly. And there are the short-run problems and the long-run problems and one should probably have one committee that has to come back 1 or 2 years from now, and then another one perhaps 3 years from now, to disentangle the long-run movement toward a world central bank from the shortrun problems of the problems connected with the gold margins, and the intermediate run problems connected with the revision of the exchange rate system. It may well be that you need a longrun committee looking at longrun problems, and a shortrun committee looking at short-run problems. Intellectual research is far behind in this field.

Chairman REUSS. Mr. Bernstein?

Mr. BERNSTEIN. I wouldn't want my silence on the statements made by my colleagues to indicate that I agree with them in their analysis. They generally have the facts right but these are questions of opinion as to what is going on and what will happen. I would like to emphasize that.

Now, first, on your suggestions, Mr. Chairman: I think we ought to take them in their order of importance. I think the most important single step now is the rapid ratification of the early activation of the plan for special drawing rights. I don't think that the lag in ratification is greater than we had expected. I think we have made inquiries, I mean our Government has made inquiries, as to the status of ratification, and I think we are satisfied that the progress is about as rapid as you can get, and that it indicates that early next year the ratification will be completed. Nevertheless, it might help to stir the members of the Fund to do that. I regard that as the most important question.

Now, the second most important question, in my opinion, is the development of some plan along the lines of the reserve settlement account. I am not sure that all plans are the same. I doubt they are, but they may all have the same purpose and they may even have much the same effect.

The reserve settlement account is now very familiar to the Group of Ten. They have received many papers on this question, with all sorts of theoretical analyses, practical analyses, and even with accounting analyses.

My own guess is that about half of the countries in the Group of Ten are not only familiar with it, but are in favor of it. I think something like this will be discussed informally at the next annual meeting. But I see no objection to making it clear to the rest of the world that we regard the maintenance of the balanced use of all the different reserve assets, gold, dollars, sterling, and SDR's, too, when they come out, as essential for the proper functioning of the international monetary system.

Now, on gold, we have several different proposals and some which aren't proposals at all, but analyses. Let me see if I can help get this very realistically.

It becomes realistic the minute you talk about what the IMF can do and can't do. Unlike Mr. Mundell, but maybe because I have had more experience with the writing of the Fund agreement, I don't find casual reading of the Fund agreement as clarifying as he does. I find that it takes a little more than casual reading.

Without having the articles of agreement before me, therefore, I would say the following: It is possible for the International Monetary Fund without amendment to the articles of agreement, to set a band for the buying and selling of gold by its members. The articles of agreement say the Fund shall set the margin above and below $35 an ounce which members shall deal in gold and it has changed. It establishes the actual margin in its rules, and it has changed that rule at various times. I don't think there is any legal provision that would prevent the Fund from setting a wider band for gold dealings by members.

The problem of what the Fund itself can do is much more complex. The Fund itself is mentioned as a dealer in gold in connection with a half dozen different types of transaction with members. There is a provision that the Fund may buy, if it wishes, newly mined gold from a member when it is offered to it.

There is no obligation, in my opinion, on the Fund to buy it. I am not passing on the question of whether it would be desirable or not. There is no obligation, in my opinion. It wasn't intended to be an obligation, as such. Therefore, no price is stated at which the Fund should buy newly mined gold from a member. It merely says a member shall offer it to the Fund when it can with equal advantage.

Chairman REUSS. May I interrupt you at this point because I think you are making a very crucial point. It is your testimony, Mr. Bernstein, that in your judgment the International Monetary Fund is not legally obligated to buy newly mined gold from any member country?

Mr. BERNSTEIN. Not under the provision which says a member shall offer newly mined gold to the Fund when it can do so with equal advantage. The Fund could quote any price it wants for the gold or even say it doesn't need the gold. This provision, which was just put in as a sop to the Fund by Keynes, doesn't have any real economic significance. As a matter of fact the Fund once told a member "stop offering us gold for sale," in New York in the late 1940's, "because we can't really offer you a better price than you can get by selling it to the United States."

If there were a legal obligation on the part of the United States to buy gold when offered to it by a member, not in connection with the transactions I am going to mention later, the Fund wouldn't have said "don't offer it to us." It would have had a standing price quoted which would have been lower than the New York price of the Federal Reserve Bank of New York. But it actually told members to stop offering gold to the Fund because it could not quote a better price than the Federal Reserve Bank of New York was paying as agent for the U.S. Treasury.

I think we can set that aside. We can't speak with the same assurance on other gold transactions of the Fund.

The Fund has certain transactions with a member in gold which are obligatory. It is not a question whether a member shall offer gold to the Fund, it is obligatory to pay in gold. A member must pay a certain proportion of any increase in its quota in gold. A member must repurchase, repay, reserve credit it got from the Fund in gold and other eligible currencies. A member of the Fund must pay charges in gold, unless it is exempt because it has little or no gold holdings. Now, these transactions must be at \$35 an ounce because one of the first principles of the Fund agreement—and this is explicit—states that transactions with members shall be at parity. I don't think the Fund can say "we will only take gold in repurchases at \$33 an ounce."

Members have an obligation to take gold from the Fund also, and that includes the United States, when the Fund needs their currencies for its operations. Whenever the International Monetary Fund finds that its holdings of a member's currency are inadequate for its needs, for extending reserve credit, it can require a member to sell its currency for gold, and that would be at $35 an ounce.

While I think there would be certain advantages at some time in the future in our accepting the option of managing the behavior of the exchange markets in New York to keep exchange rates within whatever limit the Fund sets, I think we must not exaggerate what this would mean in excluding the United States from being a buyer of gold. It it quite true the United States can, if it wishes, accept the principle of that article IV about keeping stability of the exchange rates in its own market and not permitting transactions outside these limits.

The principal method of doing that would be for the United States to sell foreign exchange when the dollar reaches the lower limit and to buy foreign exchange when it reaches the upper limit of the range set by the Fund. Unless the United States is prepared to hold this foreign exchange indefinitely it must present it for conversion.

Now, I don't think this problem would arise with us now because our payments deficit is providing foreign central banks with an enormous quantity of dollars. But we could have the problem if we had a surplus and acquired various currencies, and that might include some we don't really want, through the management of our exchange market to prevent transactions outside the limits set by the Fund.

Under article VIII the other country must convert these balances held by our monetary authorities. They can convert them in dollars or in gold at their option, and I don't see how we could refuse to take the gold under article VIII if we gave them the currency, whether it is francs or lire—which we might want to hold—or Brazilian cruzeiros which we might not want to hold.

I come down to this proposition: In the order of importance of the gold question, the two-tier system does not seem to me to be of overwhelming urgency.

I don't believe that the world is going to be swamped, the monetary authorities are going to be swamped, with offers of gold at $35 an ounce. Unlike Professor Machlup, I don't believe that the output of gold compared to the private consumption has been so large in recent years.

In 1966 and 1967, but not in 1968, there was a slight decline in South African output, but that was because new mines weren't opened and the old ones did produce less. Since 1965, private absorption of gold, ex what was acquired by speculators—that means normal industrial uses, including jewelry, and traditional hoarding—absorbed all of the output of gold. It is true that in 1967 and 1968 the acquisition of gold from the monetary authorities created a stock of $3 billion acquired by the speculators, but in my opinion the speculators are holding much less now.

We have data on the industrial consumption of gold. These data are reported by 11 countries, collected by their central banks. According to the Swiss banks, and two of them spoke to me about this, these figures on the industrial absorption of gold are underestimated. I asked then how the central banks made this error, and they said: "They didn't ask us." I then asked how they knew what the industrial consumption of gold really was. And they answered: "It is not because we are agents acting for the speculative buyers and sellers of gold, but because we operate big smelting firms on the continent that sell gold to jewelers in jewelers bars." And they said their estimate is that industry absorbed close to $1,100 million a year in newly mined gold in 1966–67.

Furthermore, they said: "It is not merely our experience. The same figures, the same estimates, will come to you if you ask the smelters in Germany and Italy who provide gold to jewelers." I am not going to argue whether they are right or wrong about the present consumption of gold but what I am going to say is this: In a world in which money incomes are rising at 5 percent or more a year in dollar equivalent, in a world in which prices of precious metals are rising, it is my opinion that the private demand for gold at $35 an ounce will rise steadily and will certainly exceed the production we can expect.

Chairman REUSS. Mr. Bernstein, if I could just interrupt you at that point.

Mr. BERNSTEIN. Yes.

Chairman REUSS. There seems to be a feeling on the part of central bankers that if the private price of gold gets too high, heaven knows where that is, $50, $60 an ounce, wherever it is, the temptation on the part of central banks to cheat will be irresistible, that they will want to get in and make a profit. Therefore, it is felt by some, including myself, that the removal of monetary gold demand from the demand side of the gold equation is a benevolent thing and will keep the price of gold from going as high as it otherwise would if there were a monetary demand. Therefore, it isn't a very good idea to backtrack on the March 17 Washington Agreement which, by and large, signaled the speculators of the world and the hoarders and the legitimate gold users—everybody—that the demand of the authorities for monetary gold could no longer be counted on as an ingredient in the total demand. Irrespective of who is right on how much industrial demand there is and how much demand by jewelers, and I can't make a guess at that, isn't it true that we are a little safer if we keep monetary demand out of the picture?

Mr. BERNSTEIN. I am in favor of the March 17 statement, in favor of the statements issued by the International Monetary Fund on two occasions, which is that central banks shall not deal in premium markets at all.

I think the two-tier system can work very well. I have discussed this in the paper I submit for the record on the Gold Crisis and the New Gold Standard. We had a premium price for gold in private markets as late as 1953, before the London market was opened, and as high as $50 an ounce at one time. It dropped down to close to $35 an ounce before the London market was opened.

(The following material was submitted by Mr. Bernstein:)

QUARTERLY REVIEW

AND

INVESTMENT SURVEY

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FIRST HALF, 1968

THE GOLD CRISIS AND THE NEW GOLD STANDARD

By Edward M. Bernstein

I. FURTHER EVOLUTION OF THE GOLD STANDARD

Crisis and Progress

The international monetary system established at Bretton Woods in 1944 has been under almost constant pressure during the past twelve months. The difficulties had their immediate origin in the inability of the United Kingdom to restore its balance of payments without a change in the parity of sterling. The difficulties were intensified by the large and persistent deficit in the U.S. balance of payments. The devaluation of sterling on November 18, 1967, was followed by massive speculation in gold in the London gold market—the gold crisis. The seven countries in the gold pool undertook to contain this speculation by providing gold out of their reserves at the ceiling price of $35.20 an ounce. Repeated statements of the gold pool could not remove doubts of their willingness and ability to continue to supply gold from their reserves on the large scale and for the indefinite period that would have been necessary to quench the speculative demand. The gold speculation gathered momentum, and after having supplied about $3 billion to the London market from mid-November to mid-March, the central bank governors representing the gold pool decided to terminate their intervention in the London gold market and other gold markets. The London gold market was closed on March 15, 1968, not to be reopened until April 1. This, in brief, is the chronicle of the gold crisis which has at last come to an end.

In the midst of these uncertainties, far-reaching measures were taken to assure the continued strength and stability of the world economy. The devaluation of sterling, although it had unfortunate short-run consequences, has made it possible to restore the U.K. balance of payments. The prospects for the rehabilitation of sterling have been much improved by the new budget which will help to eliminate excess demand, stabilize prices and costs, and free the real resources necessary for a payments surplus. In the United States, new measures to limit U.S. foreign direct investment and to reduce outstanding bank credits to foreigners were put into effect on January 1, 1968. These emergency measures are an essential part of a comprehensive program to secure a substantial reduction in the U.S. payments deficit this year. The possibility of slowing down the fighting in Vietnam, as a consequence of the initiative of President Johnson, provides additional hope that the strain on U.S. resources, which is the basic cause of the payments deficit, will be gradually relieved. The most important step that the United States can take now to strengthen the dollar is to reduce the budget deficit by raising taxes as requested by the Administration.

The leading industrial countries and the International Monetary Fund have agreed on major steps that will provide a strong foundation for a new gold standard. The most important of these measures is the proposal for creating a new reserve asset, Special Drawing Rights (SDRs), to supplement gold and foreign exchange. At a meeting in Stockholm, March 29-30, 1968, the Group of Ten gave their approval (with France dissenting) for the immediate presentation of such an amendment to the Fund charter. In the meantime, at a meeting in Washington, March 16-17, 1968, the central bank governors representing the gold pool agreed on a new gold policy isolating private gold markets from the international monetary system. In essence, the monetary gold stock will remain at its present level. Thus, the growth of monetary reserves in the future will have to come entirely from the issue of SDRs.

Despite the crisis through which the international monetary system has passed, it has been a year of progress. The great industrial countries have accepted greater responsibility for maintaining an orderly international monetary system. They have made it possible to have an adequate growth of monetary reserves in the future through the creation of a new reserve asset, SDRs. The logical corollary to SDRs is the policy of isolating private gold markets from the international monetary system. Together, these measures have accelerated the evolution of a new gold standard better suited to the needs of the world economy.

Co-operation on a New Gold Standard

The gold crisis revealed the extent to which the stability of the international monetary system could be disturbed by the vagaries of gold speculators. In the United States, the Gold Reserve Act of 1934 recognized the danger of permitting domestic hoarders to deplete the gold reserves of the monetary system. The danger is even greater that in a period of temporary weakness of a major currency, the Bretton Woods system of fixed parities could be undermined by speculative raids on the gold reserves of the international monetary system in the hope of forcing a change in the monetary price of gold. To prevent this, the gold pool terminated its intervention in the London market and adopted a new policy that will protect the international monetary system from gold speculation. At a meeting in Washington on March 16-17, 1968, the governors of the central banks of the United States, the United Kingdom, Belgium, Germany, Italy, the Netherlands, and Switzerland (representing the gold pool) stated the new policy, as follows:

> "The Governors believe that henceforth officially held gold should be used only to effect transfers among monetary authorities, and, therefore, they decided no longer to supply gold to the London gold market or any other gold market. Moreover, as the existing stock of monetary gold is sufficient in view of the prospective establishment of the facility for Special Drawing Rights, they no longer feel it necessary to buy gold from the market. Finally, they agreed that henceforth they will not sell gold to monetary authorities to replace gold sold in private markets."

This new policy will freeze the stock of monetary gold at about the present level; that is, the gold reserves of all countries outside the Communist group and the gold holdings of the IMF, the BIS, and the European Fund. The new gold policy will assure a solid foundation of $40 billion of gold to serve as the principal reserve in the new gold standard that is now evolving. With the monetary gold stock frozen at about the present level, the necessary growth of monetary reserves for an expanding world economy will have to be met in another way. The great industrial countries (the Group of Ten) and the IMF decided that the best way to assure an adequate but not excessive growth of monetary reserves is through the creation of a new reserve asset.

A plan for SDRs was submitted to the annual meeting of the Board of Governors of the IMF at Rio de Janeiro in September 1967 (see our *Review* for fourth quarter, 1967). In accordance with a resolution of the Board of Governors, the Executive Directors of the IMF prepared an amendment to the Fund charter which will authorize the issue of SDRs and their allocation among the 107 member countries. The amendment will also change the voting requirements for some of the decisions of the IMF in order to give greater voice to the European surplus countries and to make sure that drawings on the IMF in excess of a country's net creditor position (the gold tranche) will be treated as reserve credit and submitted to appropriate tests for reserve credit.

The ministers and central bank governors of the Group of Ten met in Stockholm on March 29-30, 1968, to consider a tentative draft of the amendment to the Fund charter. They reaffirmed their determination to co-operate in the maintenance of exchange stability and orderly exchange arrangements based on the present $35 official price of gold and they agreed that the plan to establish SDRs will make a very substantial contribution to the strengthening of the international monetary system. In the next few days, the final text of the amendment will be mailed to the governors of the IMF for their approval. When this approval is given by correspondence, the amendment will be submitted to member countries for ratification. The ratification may be completed in 10 to 12 months. Some further time will be necessary before a decision is taken to activate the new reserve facility. The French delegation did not associate itself with the parts of the Stockholm communique on the maintenance of the present price of gold and the agreement on SDRs and changes in the rules and practices of the IMF.

The French Government stated that it wants fundamental changes in the international monetary system. In the opinion of the French Government, the recent difficulties have their origin in the gold exchange standard; that is, the use of dollars and sterling as reserves. The privileged position of dollars and sterling as reserve currencies, in the French view, tends to encourage persistent deficits in the payments of the United States and the United Kingdom. The French propose, therefore, that the monetary price of gold be raised substantially, doubled or more, and that dollars and sterling no longer be used as reserves, so that monetary reserves hereafter would consist exclusively of gold valued at the higher price. Facilities for reserve credit would be available through the IMF, but under rigorous conditions.

The French position has no support in the Group of Ten. An international monetary system cannot be based on gold if the price of gold is to be responsive to the same market influences as other metals. The very essence of the gold standard is that the monetary price of gold should remain a fixed reference point for the value of currencies. As for dollars and sterling, it is not possible to reverse the historical process by which large amounts of these currencies came to be held as reserves. Nevertheless, it is not desirable to have any further growth in the foreign exchange component of monetary reserves. Thus, with the stock of monetary gold frozen and foreign exchange reserves fixed at about the present level, the only source of further growth of international monetary reserves would be SDRs. This would greatly simplify the problem of assuring an adequate growth of aggregate monetary reserves.

The plan for the new reserve facility contains a provision under which a member of the IMF may refuse an allocation of SDRs (opting out). When the plan is ratified and activated, it will be possible for France to decide to opt out of an issue of SDRs. It is doubtful whether it would be in the interest of France to refuse an allocation of SDRs in order to insist on gold settlements exclusively when all other great trading countries will be using SDRs and foreign exchange, as well as gold, to settle their payments surpluses and deficits. While it would be unfortunate if France were to dissociate itself from the operations of the new reserve facility (SDRs), the international monetary system could function reasonably well despite its abstention.

While France did not associate itself with some parts of the Stockholm communique, it did subscribe to Paragraph 6 in which the ministers and governors of the Group of Ten and Switzerland said that "they intend to strengthen the close co-operation between governments as well as between central banks to stabilize world monetary conditions." The common interest in the successful functioning of the international monetary system far outweighs any temporary advantage that could be achieved in a clash of national policies. That is why France will undoubtedly decide to play its full part in the new gold standard.

The basic principles of this new gold standard are clear. The Bretton Woods system of fixed parities will continue unchanged, with the par values of all currencies defined in terms of gold at the present official price of $35 an ounce. The private markets for gold will be isolated from the monetary gold stock. The amount of gold and foreign exchange reserves will remain fixed at about their present level, and the growth of monetary reserves will take place through the issue of SDRs. Currencies will remain convertible, as they now are, with gold, foreign exchange, and SDRs all used together in balance-of-payments settlements. Such a gold standard is a natural evolution of the international monetary system in response to the needs of the world economy. Some of the problems that could arise because of a difference between the monetary price and the private market price of gold or because of a preference by some countries for gold rather than SDRs and dollars are discussed below.

II. PRIVATE GOLD MARKETS UNDER THE NEW GOLD STANDARD

Premium Gold Prices and the Gold Standard

Under the classical gold standard as it existed prior to 1914, national currencies were redeemable in gold coin. As people were free to use gold coin for any purpose—to export it, hoard it, or melt it—there was complete equivalence of gold and money at the mint price. Such an equivalence is not essential under a modern gold standard. It is true that except for a brief period, the price of gold in the leading private markets was about $35 an ounce from November 1953 to March 1968. But this 15-year stability in private gold markets was exceptional. From 1940 to 1953, the price of gold in private markets was always at a premium—sometimes at a very high premium. Furthermore, from 1961 to 1968, the price of gold in private markets was kept close to $35 an ounce only by large-scale intervention of the gold pool.

On October 20, 1960, a brief burst of speculation in gold was touched off by rumors, during the U.S. presidential campaign, of a possible change in U.S. gold policy. As a consequence, the price of gold in the London market rose to $40.60 an ounce and then quickly subsided. Some central banks regarded the premium price for gold as a serious reflection on the stability of currencies and therefore a strong encouragement to gold speculation. In February 1961, the gold pool was formed by the central banks of eight countries (France was in the pool until June 1967) to keep the price in the London market at not more than $35.20 an ounce. While sales of the gold pool did not ordinarily exceed purchases, except for brief periods, the gold pool had to support the market almost steadily during the past two years. On March 15, 1968, the London gold market was closed and the remaining members of the gold pool agreed to isolate the private market entirely from the monetary gold stock. This, in effect, means a two-price system—a fixed monetary price of $35 an ounce and a fluctuating price in private gold markets.

There are some who hold the view that a two-price system for gold is inherently unstable. They fear that some central banks will sell gold from their reserves at premium prices. They even see a possibility that some central banks will act as arbitrageurs, selling gold for dollars at premium prices and using the proceeds to buy gold from the U.S. Treasury at $35 an ounce. These fears are unfounded. A two-price system for gold is not a novelty. It existed all through World War II and for eight years after the war. The London market was not reopened (March 1954) until the premium on gold had been eliminated several months before.

It may be helpful to analyze the factors that determine gold prices in private markets. There is a steady demand for gold for industrial purposes and for hoarding in those areas in which gold is a customary form of investment for savings. In addition, there is a highly volatile speculative demand for gold that reflects the state of confidence in currencies. Until the formation of the gold pool, changes in the speculative demand for gold were manifested mainly in higher or lower prices, subject to the limitation that the price could not fall much below the monetary value of $35 an ounce. As would be expected, the price of gold (in U.S. dollars) was close to the postwar peak in July and August 1949, just before the devaluation of sterling and other European currencies. At that time, American smelting companies quoted an export price of about $50 an ounce, FOB New York, for foreign gold sold by them on consignment. Once the European currencies were devalued, the dollar price of gold for export to private markets began to fall and by April 1950 it was down to $38 an ounce, FOB New York. Except for a brief period at the start of the Korean war, prices continued to fall and by November 1953 the premium in private gold markets, except in the Far East, had virtually disappeared (Table I). Prices fell and remained at $35 an ounce from 1953 to 1960 because of the greater confidence in currencies, particularly the European currencies.

I. PRICES OF GOLD IN LEADING PRIVATE MARKETS, 1947-58

(U.S. Dollars per Ounce for Bar Gold)

End of Year or Month	London*	Zurich*	Paris†	Milan†	Tangiers‡	Beirut†	Hong Kong†
1947				43.38			52.06
1948			49.54	47.67			48.76
1949			46.30	45.04	42.89	41.63	40.18
1950			43.05	41.37	40.00	40.13	44.47
1951		38.62	41.38	40.29	38.85	39.00	42.71
1952		37.31	38.95	38.52	37.50	37.81	40.48
1953–March		37.00	38.20	37.65	37.25	37.53	39.51
June		36.38	37.55	37.04	36.45	36.74	39.20
Sept.		36.10	37.09	36.92	36.25	36.50	38.04
Dec.		35.26	35.62	35.83	35.25	35.57	37.25
1954–March	34.99	34.87	35.69	35.46	35.00	35.18	36.97
June	35.09	35.06	35.76	35.42	35.00	35.32	38.25
Sept.	35.08	35.10	35.81	35.52	35.05	35.20	38.20
Dec.	35.04	35.02	35.52	35.69	35.00	35.27	38.22
1955–March	35.07	35.08	36.02	35.54	35.05	35.26	38.02
June	35.06	35.05	35.88	35.42	35.00	35.19	38.00
Sept.	34.97	34.99	36.07	35.27	35.00	35.23	38.02
Dec.	34.98	34.99	35.95	35.49	34.92	35.44	38.04
1956–March	34.98	34.99	36.08	35.13	34.92	35.16	38.29
June	34.99	34.99	35.04	35.55		35.17	38.05
Sept.	35.03	35.04	36.35	35,87		35.28	38.02
Dec.	34.92	34.95	36.17	35.76		35.23	37.90
1957–March	34.93	34.91	36.00	35.28		35.11	38.28
June	34.99	35.01	36.25	35.28		35.28	38.32
Sept.	34.95	34.98	36.46	35.63		—	38.42
Dec.	35.02	34.98	36.29	35.32		35.05	38.35
1958–March	35.11	35.11	36.32	35.25		35.29	38.33
June	35.09	35.11	36.42	35.34		35.18	38.16
Sept.	35.13	35.12	36.51	35.33		35.32	38.34
Dec.	35.10	35.11	35.39	35.57		35.27§	38.29§

* Dollar prices computed at the rate of exchange in the official market.
† Dollar prices computed at the rate of exchange in the free (sometimes black) market.
‡ Prices quoted directly in U.S. dollars.
§ Price at the end of November 1958.
Source: *International Financial Statistics*, various issues. Data last published in issue of February 1959, p. 18.

After the establishment of the gold pool in February 1961, changes in the private demand for gold were manifested only in larger or smaller quantities of gold absorbed by hoarders and speculators. The principal factor affecting changes in the demand for gold was still confidence in currencies, although after 1960 it was confidence in dollars and sterling that was of primary importance. The private absorption of gold rose to a higher plateau averaging over $1 billion a year from 1960 to 1964 (Table II). The large U.K. payments deficit brought another rise in the private absorption of gold to an average of about $1.6 billion in 1965 and 1966. In the last quarter of 1967 and the first quarter of 1968, speculation was on such a scale that about $3 billion must have gone into private uses and holdings in 1967 and a similar amount may go into private hands this year. Some of the gold sold in the London market from mid-November 1967 to mid-March 1968 probably went to central banks. By far the larger part went into speculative holdings which are now enormous.

II. PRODUCTION, SOVIET SALES AND PRIVATE ABSORPTION OF GOLD, 1958-67

(Million Dollars at $35 an Ounce)

Year or Quarter	Gold Production	Russian Sales	Increase in Monetary Stock*	Difference Attributed to Private Absorption†
1958	1,051	220	683	588
1959	1,127	250	746	631
1960	1,178	200	310	1,068
1961	1,215	300	617	898
1962	1,300	215	357	1,158
1963	1,356	550	825	1,081
1964	1,406	450	717	1,139
1965	1,440	550	208	1,782
1966, year	1,445	—	-51	1,496
Q-I	360	—	29	331
Q-II	365	—	28	337
Q-III	360	—	-56	416
Q-IV	360	—	-52	412
1967, year	1,416	—	-1,630	3,046
Q-I	355	—	-63	418
Q-II	360	—	-142	502
Q-III	357	—	-13	370
Q-IV	344	—	-1,412	1,756

* Includes gold holdings of IMF, BIS and European Fund, as well as gold reserves of countries not in the Communist group.

† Estimate of private absorption made from gold production plus reported gold sales of Soviet Union less increase in monetary gold stock. The estimate of private absorption includes some gold acquired by monetary authorities but not reported in official holdings compiled by the IMF. In 1966 and 1967, the estimate of private absorption should be revised upward for unreported sales of gold, if any, by the Soviet Union.

Source: *International Financial Statistics*, April 1968, p. 15.

Isolation of Private Gold Markets

Premium prices for gold in private markets would disrupt orderly exchange arrangements and deplete the gold reserves of the international monetary system if central banks were permitted to sell gold at premium prices. In the early postwar period, a number of countries did sell gold at premium prices in private markets. This was in violation of the IMF rule that monetary authorities should not engage in gold transactions that depart from the official price of $35 an ounce by more than the prescribed margin. In June 1947, the IMF issued a formal statement deprecating premium transactions in gold in these terms:

> "A primary purpose of the Fund is world exchange stability and it is the considered opinion of the Fund that exchange stability may be undermined by continued and increasing external purchases and sales of gold at prices which directly or indirectly produce exchange transactions at depreciated rates. From information at its disposal, the Fund believes that unless discouraged this practice is likely to become extensive, which would fundamentally disturb the exchange relationships among the members of the Fund. Moreover, these transactions involve a loss to monetary reserves, since much of the gold goes into private hoards rather than central holdings. For these reasons, the Fund strongly deprecates international transactions in gold at premium prices and recommends that all of its members take effective action to prevent such transactions in gold with other countries or with the nationals of other countries."

After the 1949 devaluations and the remarkable improvement in the European payments position, the price of gold in private markets fell considerably, so that there was much less inducement to undertake sales at premium prices. In September 1951, the IMF terminated its supervision of the gold transactions of its members but reiterated the principle that sales of gold at premium prices are contrary to the obligations of members under the charter of the IMF. The new statement said:

"Despite the improvement in the payments position of many members, sound gold and exchange policy of members continues to require that to the maximum extent practicable, gold should be held in official reserves rather than go into private hoards. . . . Accordingly, while the Fund reaffirms its belief in the economic principles involved and urges the members to support them, the Fund leaves to its members the practical operating decisions involved in their implementation, subject to the provisions of Article IV, Section 2 [on gold transactions based on par values] and other relevant articles [of the IMF charter]."

The action taken by the gold pool on March 17, 1968, is in harmony with the principles of the IMF. The members of the gold pool decided not to sell gold to private markets, regardless of price. This includes domestic as well as foreign gold markets, and it applies to the sale of monetary gold for use in the arts and industry as well as sales for hoarding and speculating. The gold pool added a new sanction to make this policy effective. If any country sells gold to the private market, it will not be able to replace it by buying gold from the seven countries in the gold pool. The withdrawal of the gold pool from the London market has greatly strengthened the international monetary system. That is why the IMF endorsed this action in the following statement:

"During their meeting in Washington over the past two days, the active members of the gold pool have decided to stop supplying gold from monetary reserves to the London gold market or any other gold market. This decision is readily understandable as a means of conserving the stock of monetary gold which has recently been subject to heavy drains through such operations in the London market. The decision, of course, involves no departure from the obligation of these countries to maintain the par values of their currencies established with the International Monetary Fund.

"Countries adhering to the Articles of Agreement of the Fund undertake to collaborate with the Fund to promote exchange stability and to maintain orderly exchange arrangements with each other. It is most important that monetary authorities of all member countries should continue to conduct gold transactions consistently with this undertaking, and that they should cooperate fully to conserve the stock of monetary gold. Such action will be an important contribution to the functioning of the international monetary system."

The members of the gold pool also stated that as the existing stock of monetary gold is sufficient, in view of the prospective establishment of the new reserve facility (SDRs), they no longer feel it necessary to buy gold from the market. It will, in fact, be generally helpful to isolate the private market for gold from the monetary stock of gold. Sudden decreases or increases in the monetary stock of gold, because of official sales to speculators or purchases from speculators, cannot be conducive to the orderly growth of monetary reserves at a regular rate. The logic of the new gold standard is that the growth of monetary reserves should come exclusively from the issue of SDRs.

Price Prospects in Private Gold Markets

With the isolation of private gold markets, changes in the demand for gold will again manifest themselves mainly in price. Large and sudden changes in the demand for gold can come only from speculators anticipating a change in the monetary price. The prospects have become much less favorable for a change in the present $35 price of gold. With the termination of sales to private markets, gold reserves will be conserved for settlements between monetary authorities. When the plan for SDRs is activated, adequate monetary reserves will be available without changing the present monetary price of gold. The $3 billion of gold sold in the London market between November 1967 and March 1968 has created an enormous abnormal supply. These are some of the factors that have kept the price of gold between $37 and $38 an ounce since the reopening of the London gold market on April 1.

Another factor that will affect the price of gold in the next few months is the policy of South Africa on gold sales. South Africa may decide to sell all of its output in the London market at the best price obtainable. Alternatively, South Africa may decide to sell part of its output in the higher-price London market and part to such monetary authorities as are willing to buy it at $35 an ounce. If South Africa were in a truly monopolistic position in supplying gold to the London market, it could maximize its revenues by selling a substantial part of its output to the monetary authorities—in fact, about half of its output, assuming regularity in the demand curve. Actually, South Africa is not in a monopolistic position in suppling gold under present conditions. Not only are there other important gold producers, including the Soviet Union, but speculators may sell off some of their large gold holding if the price is kept high. South Africa's policy on gold sales may be determined more with a view to retaining the monetary status of newly-mined gold than to managing the price in private markets.

For the intermediate period, say 1969 and 1970, the price in private gold markets will be dominated by confidence in the dollar. If the United States is successful in strengthening its balance of payments, the price of gold may tend to decline during the next year or two. If, in the meantime, the plan for issuing SDRs is activated and works reasonably well, speculators may unload their holdings and force a decline in the price to $35 an ounce, or possibly less. On the other hand, if the U.S. payments deficit remains large, so that the danger of devaluation is not entirely eliminated, speculators may bid up the price to $40 or more. In short, despite the present technical position, with a large overhang of gold in the hands of speculators, it is possible to have renewed speculation and a rise in the London gold price if confidence in the dollar is not restored within the next twelve months.

Three or four years from now, assuming that the international monetary system is working well, the price of gold in private markets will be determined by supply and demand conditions, without being much affected by speculative expectations regarding a change in the monetary price of gold. Most of the speculative overhang will have been absorbed and the price in private markets may be down to $35 an ounce or possibly less. By then, a growing private demand for gold for industrial use and for hoarding, stimulated by higher incomes, together with a slower growth of gold production, due to higher costs, will gradually change the balance of supply and demand and may bring about a slow rise in the price of gold in private markets—say, about 2 per cent a year, depending on the general price level. Such a moderate upward trend in the price of gold would not induce speculation because of the very high cost of maintaining a speculative position. As the international monetary system would no longer be dependent on additions of gold to monetary reserves, it would be unaffected by the slowly rising price of gold in private markets.

III. GOLD, DOLLARS, AND SPECIAL DRAWING RIGHTS

Equivalence of All Reserve Assets

The new gold standard will have as monetary reserves an unchanging amount of gold, about $40 billion, a fixed fiduciary issue of about $24 billion of foreign exchange (mainly dollars and sterling), and a steadily increasing proportion of SDRs. With only SDRs being added to reserves, growing at a rate of about $2 billion a year in the initial 5-year period, it will be possible to have an assured growth of aggregate monetary reserves at a trend rate suited to an expanding world economy. There is a danger, however, that a traditional preference for gold as reserves, perhaps intensified by higher prices in private gold markets, could disrupt the smooth functioning of the new gold standard.

An international monetary system based on multiple reserve assets cannot operate effectively unless the different reserve assets are equally attractive to hold and to use. Otherwise, there is a danger that central banks will hoard the preferred reserve asset (gold) and use the other reserve assets (dollars and SDRs) in international settlements. If such an attitude should emerge, transfers of SDRs would not have the disciplinary effect in inducing balance-of-payments adjustments that is essential for the proper functioning of the international monetary system. On the other hand, transfers of gold, after using up less preferred reserve assets, could have the effect of signaling an impending reserve crisis. The only way to avoid such disruptive behavior is to require countries to use all of their reserve assets indiscriminately in international settlements.

This problem has been in the forefront of all discussions on the creation of a new reserve asset. One method of avoiding a disruptive preference for gold would be to link gold and the new reserve asset at a fixed ratio in all settlements—say, $1 of gold and $1 of the new reserve asset. Such a composite gold standard could work reasonably well among a limited number of countries such as the Group of Ten. It could not be applied effectively when all of the 107 members of the IMF hold and use the new reserve asset, as many of the members have a major part of their reserves in dollars and sterling. The basic principles for the indiscriminate use of all reserve assets were stated by a distinguished French expert in November 1965, when the French Ministry of Finance was urging the adoption of a new reserve asset in the form of the CRU (the collective reserve unit). The two principles can be summarized as follows:

(a) Each deficit country should use its different reserve assets for settling its deficit in precisely the same proportions as it holds these reserves—gold, dollars or sterling, and the new reserve asset (SDRs).

(b) Each surplus country should acquire the different reserve assets for settling its surplus in the average ratios of gold, dollars or sterling, and the new reserve asset (SDRs) used by all deficit countries, so that all surplus countries would acquire the different reserve assets in the same ratios.

Despite their simplicity, these principles would not be easy to apply equitably. A country that has a deficit in Year I and offsets it by an equivalent surplus in Year II should have no change in the composition of its reserves. This would not be true with the application of the principles stated above. Thus, a deficit country having a high proportion of gold and a small proportion of dollars and SDRs would settle its deficit with a large proportion of gold. The following year, when the same country has an equivalent surplus, it would receive the different reserve assets in the ratios in which they are used by all deficit countries. This could involve a much smaller proportion of gold than it paid out in the previous year. Similarly, countries that have a surplus in the earlier years, when the amount of SDRs outstanding is small, would normally receive a larger part of their settlement in gold. Countries that have a surplus in the later years, when the amount of SDRs outstanding is large, would normally receive a smaller part of their settlement in gold. These fortuitous changes in the composition of a country's reserves could be avoided by having settlements adjusted to a cumulative surplus and deficit basis.

Settlements in the SDR Plan

The outline of the plan for Special Drawing Rights, as given in the Rio resolution, recognizes that countries do not in fact regard all reserve assets as equally attractive and it therefore requires participating countries to use and to hold SDRs and other reserve assets on an equitable basis. The provision that participating countries will not be required to hold SDRs in excess of three times their cumulative allocations (i.e., net acquisition of twice their allocations) recognizes that there will be a preference for gold and possibly other reserve assets instead of SDRs, at least in the earlier years of the operation of the plan. A number of specific provisions of the plan are designed to make sure that participating countries use other reserve assets along with SDRs in an appropriate manner.

The outline of the plan for Special Drawing Rights states that except under the guidance of the IMF, "a participant will be expected to use its SDRs only for balance-of-payments needs or in the light of developments in its total reserves and not for the sole purpose of changing the composition of its reserves." Without such a provision, countries would be able to use their SDRs, directly or indirectly, to acquire dollars and then use the dollars for conversion into gold. They could do this, for example, by paying out SDRs when they have a deficit and by acquiring dollars (and gold) when they have a surplus. The right to use SDRs, as well as gold, to maintain the convertibility of the dollar is an important safeguard against such practices.

To prevent one-sided use of SDRs in the settlement of deficits, participating countries will be required to reconstitute their position in SDRs in accordance with rules and regulations that will be prescribed by the IMF. At the end of the first five years of the operation of the plan, the average net use of SDRs by a participant is not to exceed 70 per cent of its average net cumulative allocations during this period. If a participating country has used a larger average proportion of SDRs, it can be required to reconstitute its holdings of SDRs by transfers of other reserves for SDRs under the guidance of the IMF. Participating countries will have to "pay due regard to the desirability of pursuing over time a balanced relationship between their holdings of SDRs and other reserves," presumably by using them together in appropriate ratios in balance-of-payments settlements.

The principal means that the IMF will have to assure the use of all reserve assets in appropriate ratios for balance-of-payments settlements is through the selection of the countries to which SDRs will be offered in exchange for a currency that is convertible in fact. Normally, currencies will be acquired for SDRs from countries that have a strong payments and reserve position. It would be possible, however, for the IMF to guide SDRs to a country with a strong reserve position, even if it has a moderate payments deficit, provided it had surpluses in the past. In selecting countries to which SDRs should be transferred, the "primary criterion will be to seek to approach over time equality among the participants [with a cumulative balance-of-payments surplus or a strong reserve position] . . . in the ratios of their holdings of SDRs, or such holdings in excess of net cumulative allocations thereof, to total reserves."

These two tests are not the same. By one test, equality in the ratios of holdings of SDRs to total reserves, all countries in a strong reserve position would harmonize the composition of their reserves, or at least the ratio of SDRs (whether allocated or earned) to their other reserves. By the other test, all countries with a cumulative surplus would apparently acquire SDRs in excess of their cumulative allocations in the same proportion to their total reserves. It would probably be better to require all surplus countries to acquire the same proportion of SDRs and other reserve assets in settlement of their cumulative balance-of-payments surpluses. This would result in the *pro rata* accumulation of all reserve assets by surplus countries in the ratios in which they are used by deficit countries.

Whatever the precise criteria the IMF will ultimately apply on the use and holding of SDRs, it will be difficult to assure appropriate use of all reserve assets, so as to avoid a disruptive preference for gold over dollars and SDRs. The changes that would occur in the composition of the reserves of surplus and deficit countries through international settlements could not, in the first instance, be in accord with the criteria of the IMF, except under the most fortuitous circumstances. The attempt to establish the appropriate composition of reserves through guided transfers would require endless shuffling of SDRs and other reserve assets among surplus and deficit countries. Such guided transfers would underline the strong preference of central banks for some reserve assets; that is, gold.

Reserve Settlement Account

The transfer of reserves by deficit countries and their acquisition by surplus countries must be based on principles that define the appropriate use of all reserve assets in international settlements. It is unnecessary, however, to establish an elaborate system of guidance, adjustment, or reconstitution for this purpose. The objectives could be achieved very simply if the participating countries were tc place all of their reserve assets in a single account with the IMF. When this account is drawn down by deficit countries, it would involve the proportionate use of their different reserve assets *pro rata* on a cumulative basis. And when this account is built up by surplus countries, it would involve the acquisition of different reserve assets in the same proportions by all surplus countries on a cumulative basis.

The countries participating in the plan would deposit their gold, dollars and other foreign exchange reserves, and SDRs (at each successive allocation) in a Reserve Settlement Account in the IMF. The deposits would be denominated in a Reserve Unit (RU) equal to one U.S. dollar with a guaranteed gold value. A country depositing $500 million of gold, $200 million of U.S. dollars, and $100 million of SDRs (in successive allocations) would receive a deposit credit of 800 million RUs. And a country depositing $200 million of gold, $500 million of U.S. dollars, and $100 million of SDRs would also receive a deposit credit of 800 million RUs. Thus, in setting up the Reserve Settlement Account, no distinction would be made between the different reserve assets that members deposit.

The gold deposited by a participating country with the Reserve Settlement Account in return for RUs would not have to be transferred physically from its present place of safekeeping. Instead, it would be earmarked in the name of the Reserve Settlement Account. This would not only save the cost of physical movement of the gold, but it would have the additional convenience of retaining the gold at centers convenient to the depositing country which, in fact, would have a reversionary right to the gold.

The dollars, sterling, and other foreign exchange deposited with the Reserve Settlement Account would have to be transferred to the account, although a country would retain a reversionary right to the foreign exchange it deposited. In general, a member would deposit all of its foreign exchange reserves, except agreed working balances. In order to avoid a growth of foreign exchange reserves outside the Reserve Settlement Account, members would not be permitted to accumulate excessive working balances. Thus, further acquisition of dollars or sterling by a member would have to be presented for conversion in Reserve Units. In effect, the present amount of foreign exchange reserves woud become a fixed fiduciary issue that could not be increased in the future. Provision could be made, however, for retirement of some of the dollars and sterling from time to time and their replacement with special issues of SDRs when the United States or the United Kingdom has a large surplus in its balance of payments. The foreign exchange deposited in the Reserve Settlement Account would be guaranteed in terms of gold and invested in special securities paying a moderate rate of interest—say, 3 per cent a year.

Similarly, when the new plan is activated and SDRs are issued, the successive allocations to members will be made by crediting them with an equivalent deposit in the Reserve Settlement Account. The growth of aggregate monetary reserves at a steady but moderate rate hereafter would come from the regular issues of

SDRs. This is so because there would be no further increase in the monetary gold stock and the amount of foreign exchange reserves would be fixed when the Reserve Settlement Account is established.

A deficit country requiring a currency for intervention in the exchange market would acquire it by converting RUs into that currency. And a surplus country acquiring a currency through intervention in the exchange market would have that currency converted into RUs. In practice, only RUs would be used in international settlements. The drawing down of its RU account by a deficit country would thus involve the *pro rata* use of its reserve assets (gold, dollars or sterling, and SDRs) in the proportions in which they were deposited by that country in the Reserve Settlement Account. Similarly, the building up of its RU account by a surplus country would involve the acquisition of a claim on gold, dollars or sterling, and SDRs in the proportions that they compose of the deposits of the deficit countries, so that all surplus countries would acquire the same proportion of these different reserve assets. Furthermore, settlements in RUs would involve automatic adjustments on a cumulative basis.

The operation of such a system can be seen by calculating the final settlement when a country withdraws from the Reserve Settlement Account. Suppose that a deficit country withdraws. Its cumulative deficit is shown by the difference between its balance in Reserve Units and the sum of its deposits—the original gold deposit, the original foreign exchange deposit, and the sum of its successive allotments of SDRs deposited in the Reserve Settlement Account (Table III).

The cumulative deficit of this country is $100 million —20 per cent of its deposits. On withdrawal from the Reserve Settlement Account, the country would be entitled to the return of 80 per cent of its original deposit of gold ($120 million), foreign exchange ($200 million), and successive allocations of SDRs ($80 million). Thus, its cumulative deficit of $100 million would be settled *pro rata* in the different reserve assets it deposited in the Reserve Settlement Account; that is, by $30 million of gold, $50 million of foreign exchange, and $20 million of SDRs. The liquidation of the SDRs would be governed by the amendment setting up the Special Drawing Account and is not of particular concern for this problem.

The settlement with a surplus country would involve a somewhat different calculation. Suppose that a country that withdraws has a cumulative surplus of $200 million. It is then entitled to the return of its original deposit of gold, foreign exchange, and successive allocations of SDRs. In addition, it would receive $200 million in gold, foreign exchange, and SDRs in the proportions that these reserve assets would have had to be used by the cumulative deficit countries, calculated as shown in Table IV. At the time of the withdrawal of the surplus country, the deficit countries are assumed to have cumulative deficits totaling $1 billion for which they would be obligated to settle with $480 million of gold, $335 million of foreign exchange, and $185 million of SDRs. The withdrawing country with a surplus of $200 million would receive in settlement one fifth of the reserve assets that the deficit countries would have had to use in settlement.

Advantages of a Reserve Settlement Account

A Reserve Settlement Account would facilitate the functioning of the international monetary system with its multiple reserve assets. It would concentrate the gold reserves of all participating countries, thus assuring the isolation of the monetary gold stock from private

III. CUMULATIVE DEFICIT OF A PARTICIPATING COUNTRY IN RESERVE SETTLEMENT ACCOUNT

(Million Dollars or RUs)

Balance		Deposits	
From deposits	500	Gold	150
Transfers to the country	120	Foreign exchange	250
Transfers from the country	—220	SDRs (1st allocation)	25
		(2nd allocation)	25
		(3rd allocation)	25
Final balance	400	(4th allocation)	25
Cumulative deficit	100	Total deposits	500

IV. SETTLEMENT WITH A CUMULATIVE SURPLUS COUNTRY IN RESERVE SETTLEMENT ACCOUNT

(Million Dollars)

Deposits of Deficit Countries

Country A:	*Deposits*	*500*
	Gold	250
	Foreign exchange	150
	SDRs	100
Country B:	*Deposits*	*1,000*
	Gold	400
	Foreign exchange	400
	SDRs	200
Country C:	*Deposits*	*1,200*
	Gold	800
	Foreign exchange	100
	SDRs	300
Country D:	*Deposits*	*800*
	Gold	300
	Foreign exchange	400
	SDRs	100

Imputed Settlements of Deficit Countries

Country A:	*Deficit*	*100*
	Gold	50
	Foreign exchange	30
	SDRs	20
Country B:	*Deficit*	*200*
	Gold	80
	Foreign exchange	80
	SDRs	40
Country C:	*Deficit*	*300*
	Gold	200
	Foreign exchange	25
	SDRs	75
Country D:	*Deficit*	*400*
	Gold	150
	Foreign exchange	200
	SDRs	50

Settlement of Surplus *

Country S:	*Surplus*	*200*
	Gold	96
	Foreign exchange	67
	SDRs	37

All Deficit Countries *

Total deficits	*1,000*
Gold	480
Foreign exchange	335
SDRs	185

* Settlement with surplus country is one fifth of the gold, foreign exchange, and SDRs in imputed settlements of all deficit countries.

gold markets. The deposit of dollars and sterling in the Reserve Settlement Account would prevent the continued accumulation of reserves in this form, obviate the risk of massive conversion of these currencies into gold in a time of crisis, and facilitate their gradual liquidation and replacement by SDRs under appropriate conditions. The present foreign exchange reserves would thus become a fixed fiduciary issue in the international monetary system. The assets held by the Reserve Settlement Account would be either gold or gold-guaranteed (foreign exchange and SDRs). The Reserve Settlement Account would earn interest on its foreign exchange holdings and on SDRs. It would, therefore, be in a position to pay interest to participating countries on their imputed holdings of foreign exchange and SDRs.

The operations of a Reserve Settlement Account would be in complete harmony with the principles stated in the outline of the plan for Special Drawing Rights. It would assure the use of all reserve assets in international settlements in a manner equitable to all countries, whether they have a surplus or deficit. The Reserve Settlement Account would obviate the need for guidance, adjustments, and reconstitution of holdings in the administration of the Special Drawing Account. With such a system, no participating country would have any reason for limiting its acquisition of SDRs to any multiple of its cumulative allocations. Thus, the SDRs would, in fact, be a reserve asset without qualifications of any kind as to their use in international settlements—on precisely the same basis as gold, dollars, and sterling. This is of basic importance in an international monetary system in which the growth of reserves in the future will come exclusively from new issues of SDRs. For this reason, the establishment of a Reserve Settlement Account is an essential step in the evolution of the new gold standard.

Mr. BERNSTEIN. We had no great trouble at the International Monetary Fund in excluding central banks from selling in that market, the exception of course being the South Africans, acting as an agent for their Chamber of Mines.

But the two-tier system did not disrupt the international monetary system or cause any difficulty. I don't believe the price of gold is going to go much higher than it is now at any time in the next few years. I don't believe it is going to fall to $35 an ounce but I may be 100 percent mistaken.

The reason I don't believe the price is going to go above $40 an ounce is the big overhang in the market. This overhang amounted to maybe $3 billion, and there may be something more than this $3 billion. The Swiss commercial banks, as you know, are legally entitled to hold gold in their reserves, and they were very large holders of gold before the great speculation began in 1967. They are entitled under their own laws, to replace this gold with Swiss francs in their reserves. So they have a large amount of gold that could be sold.

The South African Reserve Bank hasn't been selling all of its output in the market, in the private market, since the beginning of the year. They accumulated more gold in the first quarter even than in the second. That proves to me that the overhang has not been very much diminshed, but that it has shifted from the hands of the speculators to the Chamber of Mines. The South Africans cannot continue to build up their holdings of gold this way. They will have to sell them to meet their own international payments. It is their most important export product. They have had a good balance of payments from capital flows. They have been selling gold shares to the rest of the world at prices that quite properly have been categorized by Fritz Machlup as unbelievably excessive.

This capital flow will stop; the South Africans will have to use their gold. But in the meantime what has happened is this: The private market, including the industrial users, have been getting the gold they need, they have been getting it because there have been speculators satisfied with the short period profit, and they have been selling it off, so that the private speculative holdings have been reduced this year, but the newly mined gold has been going into what I would call an official overhang held by the Chamber of Mines.

I have done my own analysis of the prospects for gold supply in the future, and I do not believe that the official estimates of the Chamber of Mines of South Africa are realistic. They conclude that if they don't open new mines, the output will drop by about one-third in the next 7 years. That may be true about production from existing mines; but I believe they are going to open new mines. They opened two new mines this year and gold production in South Africa will rise in 1968. It is true that gold production outside of South Africa is very much less than it was before the war. But I expect South African production to increase, as it has, with occasional interruption, since 1947. The increase in world production of gold outside the Soviet Union, however, will probably not be at a great rate, maybe on the order of 1 or 2 percent a year.

I have said I do not expect to see much change in the price of gold in private markets. Prices are not likely to fall, because new supply will increase less than demand if incomes keep rising by 5 percent or more a year. Nor do I expect the gold price to fall when South Africa starts marketing its gold, as it will have to.

The sophisticated speculators know that the overhang of gold has merely shifted from them to South Africa. If they thought the sale by South Africa would bring the price down, the sophisticated ones would have been out of the market by now.

Of course, some may have gone out. As I indicated, I think that private speculative holdings may have dropped by about $400 million so far this year, matched by the increase in the holdings of South Africa which will have to be sold at some stage. If the speculators thought that at some time South Africa's sale would bring this price way down you could be sure they would be out by now. They don't buy gold without an eye to what the price of gold will be.

My own feeling is that we are really in a period of stability within the present range of the private price of gold, somewhere between $37 and $42 an ounce.

The only thing that could raise the price above $42 an ounce in the next 5 years is a continued fear about the future of the dollar. I think that if our balance of payments gets better, if the SDR's are activated, if the reserve settlement account especially is set up, the price could go down. I think the chances of the price going below $37 are slim but there is a chance. I wouldn't rule it out.

On the other hand, I know of nothing except a complete loss of confidence in the dollar that is going to bring the price of gold in private markets in the next 2 years above this $42 price. But if you think of the long run, then I am afraid we are going to have a slow but steady rise in the price of gold simply because incomes will keep rising, the price of gold will continue to look cheap relative to other metals, and it does seem to me that even the hoarding demand will go up rather than down with silver being displaced by gold in India and other places. I don't have this great confidence that the price of gold would fall to $30 an ounce.

I will tell you a little incident. In January 1967 the Chamber of Mines of South Africa financed a conference of economists in Bologna, sponsored by the Johns Hopkins University.

I took part in this conference with a number of American and foreign economists. Triffin was there and Milton Gilbert of the BIS. Milton Gilbert and I had a little discussion, this was in January 1967, on what we thought the price of gold would be then on the assumption that the central banks stopped buying gold but didn't sell gold. If the central banks decide to dishoard their gold as they dishoarded silver, say, in the 1870's, there is no telling what would happen. But on the assumption that all of the new production would have been absorbed by private demand, Milton Gilbert thought at that time that the price might settle at about $30 an ounce.

My feeling is that in the meantime we have learned more about the private demand for gold. It is much greater than I had thought then. And while I haven't changed my mind about the slow but continued growth of output of gold, despite what the South Africans said at this meeting, I am of the opinion that private demand will outrun supply at $35 an ounce. That is why I believe that the price is not likely to go below $37.

Now, we can do an awful lot of fussing with central banks and with the International Monetary Fund about what to do about gold. In my opinion this is a secondary question, and I would deal with all gold questions primarily to make sure that gold policies do not interfere with the evolution of the international monetary system into a composite gold standard operated through a reserve settlement account.

I don't care whether a half billion of gold is sold to the International Monetary Fund in the next year or two by South Africa. It doesn't make much difference one way or the other. But I care a lot whether the European central banks are willing to see a system in which their gold, their dollars, their sterling, and their special drawing rights, when they are issued, are put into a single account in return for composite reserve units which would then be the sole transferable reserve.

Now, I come to the question that Fritz and Bob Mundell mentioned, the widening of the band around parities in which exchange rates would be allowed to move.

First, the International Monetary Fund staff is, of course, studying this question. It is studying this question with the complete approval of the monetary authorities including those who say they will never have wider bands.

So that while you might want to ask the Board of Governors to ask the International Monetary Fund to make a study and even appoint a high-level working committee equivalent to the Ossola Committee, I think that, in fact, the day-to-day work is being done right now.

It is possible that a wider band would help minimize fluctuations in the balance of payments. I don't altogether like the way Fritz Machlup speaks of the need for a wider band in order to avoid deflation in correcting our balance of payments as it is now. I myself feel that if we just stopped inflating, the balance of payments would improve a good deal.

I don't believe that the adjustment process has really worked badly in the postwar period. I personally believe that Germany, Italy, and the United States, from 1959 to 1964, achieved an unbelievable improvement in our trade balance. This without deflation.

But it does seem to me that if you are going to inflate relative to the others your trade balance will go down.

Now, inflation which is chronic for everybody is going to be uneven. So the question is how do you in fact under such a system perhaps moderate the imbalances of payments that might come, and there I can see how a somewhat wider band might be useful for dealing with short-period fluctuations, while retaining the basic principle of fixed parities that can be changed from time to time.

My feeling is if I were setting up such a system, I would follow Fritz instead of Bob, but I am going to give Bob a consolation prize. I would set up the rule that any country's currency may move within 5 percent of the agreed parity. But any country that wishes could limit the exchange rate fluctuation within a narrower range, say, 1 percent of parity, where it thinks the wider range would lead to speculation that could move the exchange rate to the 5-percent limit, even if the payments position did not require it. I would be perfectly willing to let these countries keep the range for their exchange at

1 percent. But I would not forbid any country from accepting the rule that its currency could go to 6 percent of the parity on either side.

We could even do something more with the band, but it would require some further thinking through. I would make the dollar unique in this system. And here is how I would make it unique, not by exempting it, but I would permit the range to be measured as not more than 5 percent from an agreed currency announced by the member. So that any country could say it will allow its exchange rate to move within a range of 5 percent from its dollar parity. This would, in fact, allow a little more freedom, because if the mark can appreciate by 5 percent from the dollar, and sterling or the franc can depreciate by 5 percent from the dollar, we might have a little broader range for fluctuations of rates for currencies, other than the dollar, relative to each other.

Chairman REUSS. You are talking about 5 percent either way, a total of 10 percent?

Mr. BERNSTEIN. Yes, 5 percent either way from parity with the provision that a country can announce that its test for this movement shall be the exchange rate with some currency they will specify. Most countries, if not all, would specify the dollar.

Now, I am not trying to argue in favor of this at all. As I have already said, I disagree with the proposition that the adjustment process hasn't worked. It hasn't worked well enough to offset the inflation in the United States. But then the plain fact of the matter is that there is no way to offset inflation, steady inflation, if you have fixed exchange rates; and beyond that, a steady inflation in the United States must either tend to become the inflation for the world or we can't have a system of fixed exchange rates. This is a very unhappy conclusion but it is one I came to some years ago. I submit for the record a paper I wrote 2 years ago, "The Bases for International Monetary Stability."

(The paper referred to follows:)

THE BASES FOR INTERNATIONAL MONETARY STABILITY

(By Edward M. Bernstein)

Monetary stability and economic policy

This generation has seen a revolution in the objectives of economic policy. Until 1931, it could reasonably be said that the primary objective of economic policy, at least among the large trading countries, was the maintenance of the gold value of the currency. The monetary authorities were also concerned with minimizing cyclical fluctuations in production and employment, and this had the effect of moderating short-term movements in prices. But this aspect of monetary policy was distinctly subordinate to the primary objective of maintaining the gold value of the currency. The great depression shifted the emphasis to the use of all instruments of economic policy, fiscal as well as monetary, to attain a high level of employment. The postwar period has added another dimension to the objectives of economic policy—accelerated economic growth.

This is not to say that most countries are indifferent to the importance of monetary stability. It is universally recognized that inflation is a serious social and economic evil. Nevertheless, when there is said to be a conflict between monetary stability and other objectives of economic policy, the choice is in favor of maintaining high levels of employment and economic growth, although even on this there have been some notable exceptions. In most instances, the supposed conflict is imaginary. If economic policy were properly conceived and promptly implemented, there would seldom be a conflict between monetary stability and other objectives of economic policy, for monetary stability is conducive to high levels of employment and to sustained economic growth.

Perhaps the best evidence of the revolutionary change that has taken place in the objectives of economic policy can be found in the stated purposes of the two most important pieces of legislation affecting U.S. economic policy in the postwar period. The purpose of the Employment Act of 1946 is "to promote maximum employment, production, and purchasing power." These goals are to be attained within the framework of a free competitive enterprise system and by means consistent with other national needs, obligations, and objectives. Nowhere is there explicit reference to the problem of inflation. The Council of Economic Advisers has repeatedly emphasized that stability of prices and costs is essential to the achievement of a high level of employment and to the restoration of the balance of payments. But monetary stability is, for all this, a means and not an ultimate objective of economic policy.

The purposes of the International Monetary Fund show the same pointed omission of monetary stability, at least in the sense of price stability. Article I(ii) of the statutes of the IMF states that one of its purposes is "to facilitate the expansion and balanced growth of international trade, and to contribute thereby to the promotion and maintenance of high levels of employment and real income and to the development of the productive resources of all members as primary objectives of economic policy." The IMF is also intended "to promote exchange stability, to maintain orderly exchange arrangements among members, and to avoid competitive exchange depreciation." The IMF is, of course, aware of the strategic importance of prices and costs in maintaining stability of exchange rates. Nevertheless, the omission of specific reference to stability of prices and costs in the Articles of Agreement is a reminder of its subordinate position in the objective of the IMF as conceived by its founding fathers.

Gold standard and monetary stability

There are some people who believe that the only way to have monetary stability is through the gold standard; and they argue that the inflationary drift characteristic of our times is the result of abandoning the old-fashioned gold standard. In fact, the gold standard evolved as the basis for national monetary systems in the 19th century without particular consideration for its suitability for maintaining price stability. It is true that the shift from bimetalism to gold after the 1870's was partly due to the fear that the sudden increase in the supply of silver would result in an inflation of prices. But the more practical consideration was that in a world with a growing preference for gold over silver, the bimetallic countries would find themselves drained of gold and swamped with silver. This would have undermined the system of fixed exchange rates which was accepted by the great trading countries as of preeminent importance.

Whatever the reasons for the universal adoption of the gold standard, it necessitated a pattern of economic behavior that could be rationalized as conducive to monetary stability. The concept of monetary stability is generally regarded as embracing stability of exchange rates and stability of prices. Obviously, if all countries buy and sell gold at a fixed price, exchange rates cannot fluctuate by more than the cost of shipping gold from one country to another. But the gold standard was regarded not only as a means of assuring stability in the external value of the currency (i.e., exchange rates), but in its internal value (prices) as well. It is in this latter respect that the gold standard failed to meet the needs of the modern world, particularly as any conflict between the external and internal stability of the value of money was necessarily and invariably resolved in favor of the former.

The classical gold standard involved a close tie between the supply of money and gold. In its purest sense (say, as embodied in the Bank Act of 1844 in England), the gold standard was intended to compel a change in the supply of money, when there was an inflow or outflow of gold, precisely equivalent to what would have occurred if the currency consisted exclusively of gold coin. This was to be accomplished by having a fixed fiduciary issue of bank notes, any amount above the fixed fiduciary issue requiring backing of 100 per cent gold. In other countries, the link between the money supply and gold was somewhat more flexible, the usual method being to require a gold reserve of stated proportions—35, 40, or 50 per cent—against the issue of notes and in some instances against other liabilities (deposits) of the central bank. This did result in a close, although not necessarily rigid, tie between the supply of money and the gold reserves of central banks.

Such a system was believed to give short-period stability in the internal value of money (prices) through the operations of the international payments mechanism. For example, in a country in which incomes expanded and prices rose, there would be a resultant increase in imports relative to exports, the balance of payments would become adverse, the exchange rate for the currency would fall, and gold would flow out to the countries with a payments surplus. The outflow of gold would necessitate a contraction of the money supply and in business activity in the countries with a payments deficit, and the inflow of gold would result in an expansion of the money supply and in business activity in the countries with a payments surplus. If the response of the money supply to the balance of payments, and of the economy to the money supply, were prompt in the deficit and surplus countries, a moderate rise or fall of prices and income would quickly restore the balance of payments. Thus, the alternation of balance of payments surpluses and deficits would prevent an excessive expansion or contraction of the money supply in any country and a large rise or fall in prices, at least relative to the general level of prices that prevailed in other large trading countries.

Whatever may be said about the effectiveness of gold flows in adjusting the balance of payments and in limiting short-period fluctuations in prices, it could not prevent long-sustained inflationary and deflationary trends in the price level, and it gave no assurance against occasional breakdowns that resulted in monetary crises. Furthermore, the gold standard could not and did not prevent an enormous inflation in time of war or the destructive deflation that inevitably came after a great war. The view that the old-fashioned gold standard brought an era of monetary stability, in the sense of price stability, is an illusion resulting from the distorted perspective of distance and a natural reaction to the ineffectiveness of the present international monetary system in preventing a steady and seemingly endless inflationary drift.

If we may believe the data, the U.S. wholesale price index was about the same in 1796 and in 1926, the terminal years of a period of 130 years. But within this period, prices rose and fell considerably for many years at a stretch, with intermittent monetary crises that brought the economy close to disaster. For example, from 1896 to 1920, U.S. wholesale prices rose more than threefold; and from 1920 to 1932, U.S. wholesale prices fell by more than half. And even then, the fall in prices and the world-wide depression were terminated only by breaking the existing tie between gold and money in every country in the world. It may be said that the more extreme movements in prices were the result of war inflation and postwar deflation; but there were long periods of peace in which prices rose and fell by 25 to 50 percent in the course of 20 or 25 years. The rise in prices from 1897 to 1913 (50 percent) was at about the same rate as the inflationary drift in most countries since 1950.

The gold standard could not provide a mechanism that would avoid an upward or downward drift of prices for relatively long periods. Under the gold standard, the growth of the money supply was dependent on the production of gold, its world-wide distribution through international payments, and its absorption in national monetary systems. By its nature, the production of gold each year could not precisely match the needs of the world economy. At times, with new gold discoveries, the growth in monetary gold stocks, and in the money supply of the great trading countries, was far greater than was required for maintaining stability of prices. And at times, when gold production rose too slowly, the growth in monetary gold stocks, and in the money supply of the great trading countries, was far less than was required for maintaining stability of prices. The inflation and deflation from 1815 to 1914, a century of relative peace in Europe, were not the result of monetary policy, but of the accidents of gold discoveries and gold production.

The view that we can somehow solve the problem of inflation by returning to the old-fashioned gold standard—that is, through the rigorous limitation of the money supply by the amount of gold reserves—is no more than a wish. The average rate of growth in the world's stock of monetary gold in recent years would not be enough to provide a token gold base for even a nominal increase in the money supply of the Group of Ten, even without adding to the gold reserves of other countries. To restore the old-fashioned gold standard today would be to invite a drastic deflation. And to those who fear inflation so much as to regard deflation as a welcome change, it should be pointed out that in this age of scientific miracles there can be no assurance that the production of gold may not increase to inflationary levels within a decade or two. Those who advocate the restoration of the gold standard want this to be preceded by a rise of 50 per cent or 100 per cent in the price of gold. But such a large and sudden increase in the value of existing gold stocks would compound the risks of inflation.

If we are to have monetary stability in the world economy, it will not come from a return to the gold standard, but from cooperative efforts on the part of the great trading countries to establish an international monetary system that would exert strong pressures to avoid inflation and deflation. The bases for such an international monetary system already exist, although it is necessary to recognize them and to make them effective. The conditions for international monetary stability may be summarized as follows:

(a) A strong and well-balanced pattern of international payments;

(b) Stability in the U.S. index of wholesale prices;

(c) Balance of payments adjustment without inflationary or deflationary bias;

(d) An adequate but not excessive growth of monetary reserves.

Pattern of international payments

It is a remarkable fact that the monetary authorities are much more alert to the threat of instability of the exchange rate than to price and cost inflation. In the 20 years since the end of the war, there has been an almost uninterrupted inflationary drift in Europe and North America. The monetary authorities of these large industrial countries have been disturbed by the steady rise of prices and costs. But they have not been disturbed enough to take forceful measures to stop the steady erosion in the value of money. On the other hand, the danger to sterling implicit in the serious balance of payments deficit has finally led to determined measures to halt the inflation in the United Kingdom. The stability of prices and costs in the United States from 1958 to 1964 was due at least as much to concern about the balance of payments and the international position of the dollar as to the more basic problem of stability of prices.

The emphasis on stability of the exchange rate rather than on stability of prices and costs is difficult to explain. In part, it is a holdover from gold standard concepts. Somehow, people believe that if the exchange rate is maintained, if the gold parity remains unchanged, the currency can be regarded as stable. In fact, of course, stability of the exchange rate may mean no more than that the rate of inflation in one country is about the same as the average rate of inflation in other large trading countries. The monetary authorities may console themselves that their country is doing no worse than other countries in holding down the inflation of prices and costs if it does not have a balance of payments problem. Unfortunately, that is not enough to assure stability of the price level, even if it is enough to maintain the foreign exchange value of the currency.

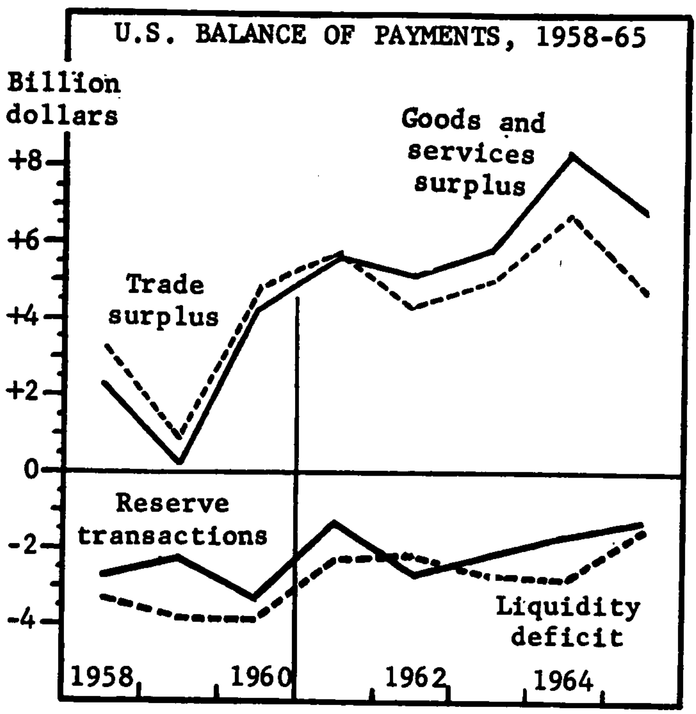
The importance that is still attached to stability of exchange rates can be a powerful force for inducing countries to avoid an inflation of prices and costs, at least at such a rate as to impair their competitive position in world trade. Thus, if all of the great trading countries were to maintain a well-balanced pattern of international payments, they would exert at least a limited degree of mutual discipline to compel each other to stay in step on prices and costs. Obviously, in such a system, the behavior of the balance of payments of the United States is of preeminent importance. This is partly because of the magnitude of the U.S. economy, partly because of the role of the dollar as the pragmatic standard for all currencies. For most countries, the test of the success of their monetary policy is the achievement of stability in their exchange rates with respect to the dollar.

The role of the dollar in the world economy is so great that no country can find an acceptable alternative to maintaining a close link to it, that is, an exchange rate that is stable in terms of the dollar. There have been a very few instances—only three in recent years—in which countries have appreciated the value of their currencies relative to the dollar in order to minimize the inflationary effect of rising prices in the United States or the expansionary effect of a payments surplus arising from the U.S. deficit. The appreciation of a currency in terms of the dollar inevitably creates competitive difficulties for their exports that countries would prefer to avoid. In the absence of very critical conditions few countries would decide to appreciate their currencies in terms of the dollar. Between the choice of stable exchange rates, relative to the dollar, and stable prices, nearly all countries would ordinarily feel impelled to choose stable exchange rates.

This does not mean that countries would be willing to accumulate dollars as reserves to an indefinite extent or to submit to constant inflationary pressures merely to retain an historical parity with the dollar. Some countries, no doubt, would opt to remain with the dollar under any conditions. But others, and they include some of the largest trading countries, might decide that they cannot risk the subordination of the management of their monetary policy so completely to the uncertainties created by a U.S. balance of payments that remains indefinitely in deficit. A chronic deficit in the U.S. balance of payments, particularly if it were accompanied by price inflation, would be one of the very critical conditions that could undermine the role of the dollar as a reserve currency and as the pragmatic standard for stable exchange rates. That is why the world monetary environment depends so much on the success of the United States in maintaining a strong balance of payments and stable prices and costs.

The United States is aware of the importance of eliminating its payments deficit. In this, it made remarkable progress between 1959 and 1964. This adjustment was halted by the tremendous increase in domestic expenditures resulting from the Vietnam war and the investment boom. It is unfortunate that because of inflated home demand, the U.S. surplus on goods and services fell from $8.5 billion in 1964 to $7.0 billion in 1965 and has been running at an annual rate of about $6.3 billion in the first half of 1966. But while the U.S. surplus on goods and services declined drastically, U.S. private capital outflow was very much reduced from $6.5 billion in 1964 to $3.7 billion in 1965 through a tight credit policy and through guidelines on bank lending and private investment. There is no doubt that if effective measures were taken to eliminate the excess demand and to halt the rise in prices, the U.S. trade position would be quickly restored and with it the U.S. balance of payments.

Despite the large and prolonged deficit, the U.S. balance of payments is not as bad as is generally assumed. Unfortunately, the usual method of presenting the U.S. balance of payments grossly exaggerates the deficit. The liquidity definition of the U.S. deficit includes as part of the settlement items the increase in foreign private holdings of dollars without offsetting them by the increase in U.S. banking claims against foreign governments, foreign banks and foreign companies. By this definition, the deficit of the United States averaged $2.3 billion a year from 1963 to 1965. The alternative definition, which means the deficit by official reserve transactions (the change in gold and foreign exchange assets, dollar liabilities to foreign central banks, and net position in the IMF) shows an average of $1.6 billion a year during the past three years. The reserve transactions definition of the deficit recognizes that foreign private holdings of dollars are necessary for the business of the world economy, just as U.S. banking



claims and other credits are necessary for international trade and finance. Because private claims and credits are treated symmetrically, net reserve transactions are a better method of measuring the U.S. payments deficit. In fact, the monetary expansion in other countries caused by the U.S. payments deficit is equal to the reserves that foreign central banks acquire, including their net claims on the IMF. The investments that their banks and companies make in liquid dollar assets actually prevent an expansion in their domestic money supply.

The only means of creating an environment of international monetary stability is a strong pattern of international payments. That is one in which all of the great trading countries would balance their payments on an average of good and bad years, with cyclical fluctuations in surpluses and deficits limited to that level which assures a return to balance when the conjuncture changes. For the United States that would mean a zero deficit, on a reserve transactions basis, measured by a moving average of four or five years, and a surplus or deficit within this period ranging from about plus $1.5 billion to about minus $1.5 billion. Such a balance of payments for the United States would require monetary discipline in this country and it would compel monetary discipline in other countries that want to maintain the dollar exchange rate for their currencies.

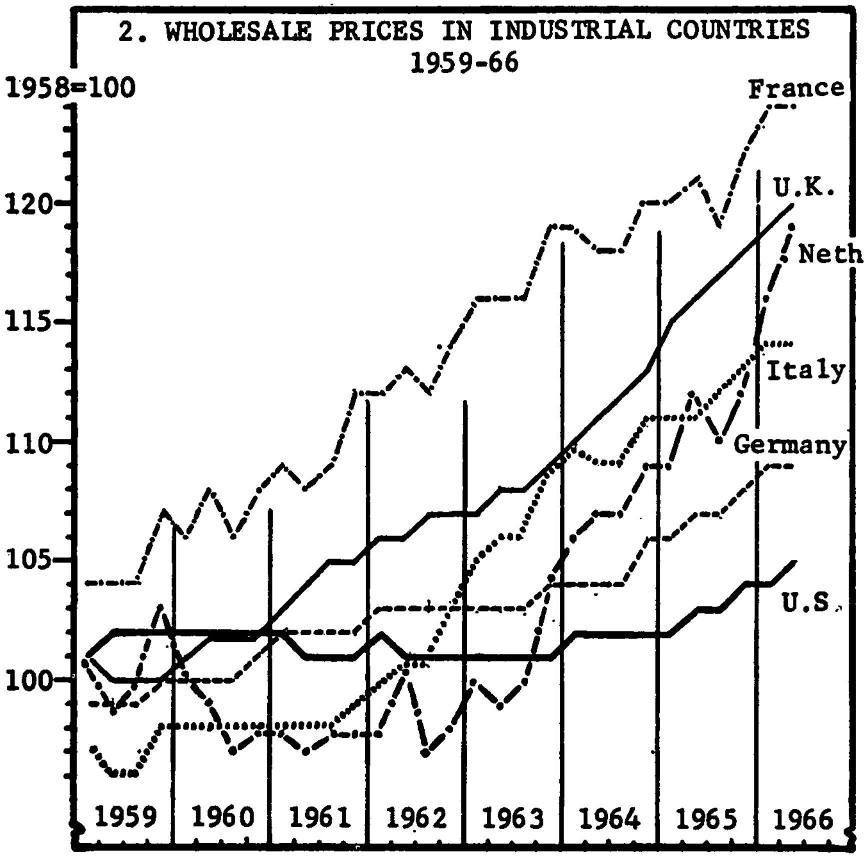
Price and cost stability in the United States

While a strong balance of payments in the United States is the *sine qua non* of an orderly international monetary system, it is not of itself sufficient to assure international monetary stability. Even a well-balanced pattern of international payments may be accompanied by creeping inflation all over the world. If there is to be international monetary stability, it is also necessary to have stability of the index of wholesale prices in all of the great trading countries. Although it may be difficult for governors of central banks and for ministers of finance to follow rigorous fiscal and credit policies solely on the grounds that it is necessary to avoid inflation, they may succeed in getting support for preventing a rise in prices and costs on the grounds that this is essential for maintaining stable exchange rates. But this will be true only if the United States, whose currency provides the pragmatic standard for exchange rate stability, succeeds in avoiding inflation. The blunt fact is that inflation in the United States will mean world-wide inflation; and price stability in the United States is indispensable to international monetary stability.

There are many countries highly dependent on exports and imports that do a very large proportion of their trade with the United States. For these countries, prices in the United States become embodied in their domestic price level through the prices of export and import goods. But even countries that do only a moderate amount of trade with the United States find that U.S. export and import prices set a competitive standard that affects their price behavior. The fact is that when prices are rising in the United States, producers in other countries find that the compulsion to hold down their own prices is very much weaker and the environment for raising their own prices is very much more favorable. And when prices are stable in the United States, producers in other countries know they must hold down their own prices or risk the loss of their markets at home and abroad. In this sense, stability of prices in the United States exerts a disciplinary influence on prices in all other countries.

When wholesale prices of domestically produced industrial goods and labor costs per unit of output in manufacturing are stable in the United States, any country that allows its prices and costs to rise will find that its trade balance will be impaired. This is evident in the rise of the trade surplus of the United States from less than $1 billion in 1959 to $6.7 billion in 1964. The only reason that this did not put greater pressure on European countries to take similar action to stabilize their prices and costs is that the large outflow of private capital and U.S. Government grants, credits and other expenditures prevented the great rise in the trade surplus from converting the U.S. payments deficit into a payments surplus. Once the U.S. balance of payments is restored, there is no doubt that the stability of prices and costs in the United States will compel other large trading countries to maintain a similar degree of price and cost stability.

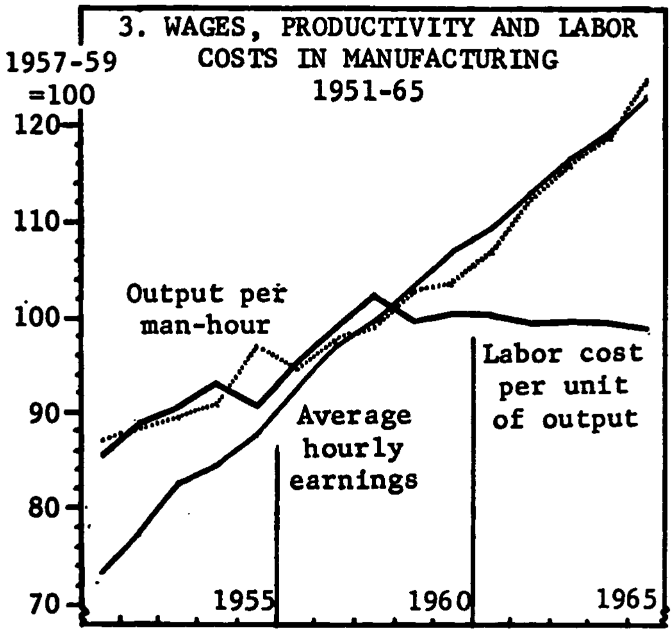
Nor need there be any doubt that the United States can and will maintain stability of prices and costs. The long-run history of the United States is one of monetary stability, not inflation. Except in periods of war, wholesale prices in the United States have been remarkable stable—more stable than in any other country with the possible exception of Switzerland. Although wholesale



prices in the United States in the postwar period rose until 1957, this was mainly the consequence of the activation of the excess liquidity built up during the great depression and the war. Once this excess liquidity was eliminated, the inflationary pressure on prices was removed and the United States had the greatest record of price stability, from 1957 to 1964, in its entire history. No country in Europe has been so successful in stabilizing prices. Unfortunately, the emergence of excess demand in 1965 and 1966 has brought a renewed rise in prices. Even so, the rise has been much less than in other large industrial countries. Nevertheless, with its payments problem, the United States cannot risk the impairment of its competitive position through a further rise in prices and costs.

Fortunately, the inflation of the past 18 months has not as yet become embodied in the cost structure. From 1951 to 1958, average hourly earnings in manufacturing in the United States increased more than the increase in output per man-hour. As a consequence, the labor cost of producing a unit of manufactured goods rose. Since 1958, however, average hourly earnings in manufacturing have increased somewhat less than the increase in output per man-hour. The United States is almost unique in having maintained complete stability of the labor cost per unit of output in manufacturing over the entire period from 1958 to August 1966. That stability is now threatened by inflated domestic demand. The United States has been slow in taking measures to protect the price and cost stability it has so successfully achieved in recent years. Now that it has begun to act, it may be expected that it will take whatever fiscal and credit measures are necessary to halt the inflation of prices and costs.

The entire financial world recognizes the central role of the United States in world monetary stability. The monetary authorities of every country, and there need be no exception to this sweeping statement, know that their own task of maintaining monetary stability will be much less difficult if the United States maintains a strong balance of payments and stable prices and costs. Other countries have manifested great patience and tolerance on the U.S. payments problem, although not without considerable apprehension. The United States must recognize its own responsibility for international monetary stability. The basic problem is to prevent any further rise in prices. Once that is achieved, we may be confident that when the present boom arising from fixed business investment and the war costs in Vietnam is over, the U.S. payments deficit will be quickly eliminated.



Balance-of-payments adjustment

In a dynamic world, no country can maintain its balance of payments in equilibrium at all times. Inevitably, there will be a payments surplus when its own economy is expanding less rapidly than that of other countries and a deficit when its own economy is expanding more rapidly than that of other countries. In fact, the payments surplus or deficit can be a very helpful means of avoiding an excessive cyclical expansion of recession and of minimizing the domestic price effects of cyclical movements of production, prices and costs. The essential point is that the payments surplus or deficit must be kept within the limits that will permit a restoration of equilibrium within the course of a cycle.

The process of adjustment requires the adoption of policies by the surplus and deficit countries to facilitate the restoration of a balanced pattern of international payments. In order to maintain international monetary stability, the process of adjustment should have neither an inflationary nor a deflationary bias. By its nature, the international payments system will exert pressure on the surplus and deficit countries to restore a balanced pattern of international payments. A balance of payments surplus and deficit increases the domestic money supply of the surplus country and decreases the domestic money supply of the deficit country. If domestic policy does not fully offset these changes in the money supply, there will be a tendency for monetary expansion in the surplus countries and for monetary contraction in the deficit countries.

The preliminary discussions on the Bretton Woods system were very much concerned with the adjustment of the balance of payments and its relation to world monetary stability. In the plan for an International Clearing Union, Lord Keynes proposed that the responsibility for adjusting a persistent imbalance in international payments should be shared by surplus and deficit countries. He believed that the existing system involved a deflationary bias. That was because deficit countries were impelled, by the depletion of their reserves, to take corrective action by restrictive measures, while surplus countries could neutralize the expansionary effects of their balance of payments. This analysis reflected the philosophy of the great depression and it was a generalization based on the large U.S. payments surplus of the 1930's. In fact, the asymmetry of the adjustment process is not one between surplus and deficit countries, but between larger countries and smaller countries, and particularly between the United States and other countries.

The attitude of the United States on adjustment was that a surplus country could not be asked to accept an obligation to restore a balanced pattern of international payments by expanding its own economy without regard to the conditions that led to deficits. If the imbalance were caused by persistent inflation in the deficit countries, the surplus countries could not be expected to induce an equal degree of inflation merely to restore the payments of the deficit countries. Such a principle would mean that the price level throughout the world would be determined by the countries with the most inflation. It would give international sanction to a steady and uninterrupted inflation throughout the world.

To reject the principle that a surplus country must expand its economy until a balanced pattern of international payments has been restored is not the same as saying that surplus countries have no responsibility for adjustment. But if they maintain a high level of employment, if they do not impose restrictions on imports, and if they encourage the outflow of capital, they have done all that can be reasonably expected of them. The responsibility thereafter is on the deficit countries to restore their balance of payments by appropriate means. If the deficit is caused by inflated demand, then the elimination of the excess demand may be sufficient to restore the balance of payments. And if its competitive position has been permanently impaired by an inflated level of prices and costs, then the deficit country may have to devalue its currency in order to absorb the inflation of the past, and it must protect its competitive position by avoiding inflation in the future. That is the principle adopted at Bretton Woods and it is the only principle consistent with international monetary stability.

The industrial countries have for some years been studying how the adjustment process can be improved. Working Party No. 3 of the OECD has just issued a very useful report on its deliberations. The Report points out that the most important step in improving the adjustment process is early detection of an emerging balance of payments problem. A country that acts promptly to eliminate a payments deficit, before its competitive position has become impaired, may find that it can quickly improve its trade position. This has been the experience in a number of countries with a payments deficit—Italy, Japan, and more recently Germany. In the United States, the surplus on goods and services was increased from $150 million in 1959 to $8.5 billion in 1964, simply by holding down prices and costs while the economy continued to grow at a very rapid rate.

Where the payments deficit is due to an enormous outflow of capital for long-term investment, the adjustment is very difficult. Some forms of foreign investment, particularly direct investment, may not be readily responsive to credit restraints. Although more direct measures may be necessary to limit such capital outflow, an appropriate credit policy would be helpful in holding down capital outflow. The United States, which has this problem in acute form, would have a considerable payments surplus if it could combine its 1964 goods and services account with its 1965 capital account. Allowing for the special problem of the United States with capital outflow, it is not unreasonable to say that the adjustment process is actually working reasonably well.

It would be useful to have general rules to guide surplus and deficit countries on their responsibilities. In fact, however, because each surplus country and each deficit country will have domestic problems of its own, they may find difficulty in applying general rules to their own case. Nevertheless, international cooperation can be helpful in getting that combination of fiscal, credit and exchange rate policies that would permit adjustment of the pattern of international payments without imposing serious deflation on the deficit country and without generating inflation in the world economy.

Adequate growth of monetary reserves

The last condition for international monetary stability is an adequate but not excessive growth of monetary reserves. An excessive growth of monetary reserves would give an inflationary bias to the world economy; an inadequate growth of monetary reserves would give a deflationary bias to the world economy. On the other hand, if monetary reserves were to grow at about the same rate as international trade and payments—that is, enough to meet payments deficits without unduly hastening or delaying the restoration of a balanced pattern of payments—there would be sufficient monetary reserves, if properly distributed, to induce international monetary stability.

An inadequate growth of monetary reserves could lead to deflation in several ways. In the first place, as the great trading countries would not be able to add to their reserves at the desired rate, even if the pattern of international payments were well-balanced, some of them might try to acquire a larger share of the smaller increment of reserves through excessively cautious fiscal and credit policies. This would hold down world trade and investment, disrupt the pattern of international payments, and compel other countries to follow deflationary policies in order to protect their own reserves or to have any increase in reserves.

In the second place, if the growth of monetary reserves were at an inadequate rate, the aggregate reserves held by the great trading countries would be too small for meeting normal fluctuations in the balance of payments, without seriously depleting the reserves of deficit countries. Under such conditions, the payments deficits that countires would be able to tolerate would be sharply reduced, and countries would be compelled to take harsh measures to avoid the emergency of a payments deficit or to terminate it very quickly when it does emerge. Even credits from the IMF would be not enough to provide countries with the "opportunity to correct maladjustments in their balance of payments without resorting to measures destructive of national or international prosperity."[1] Indeed, if aggregate monetary reserves were too small and their growth grossly inadequate, many countries would be unwilling to undertake the obligation to maintain fixed parities.

On the other hand, an excessive rate of growth of monetary reserves is certain to impart an inflationary bias to the international monetary system. Although the tie between the money supply and reserves is much looser than it was in the past, so that the growth of reserves need not manifest itself in a proportionate increase of the money supply, the mechanism of international payments would inevitably lead to monetary expansion. That is because with very much larger reserves, deficit countries could unduly delay the restoration of their balance of payments. This would pose an inflationary threat to both the deficit countries and the surplus countries. In the deficit countries, the delay in taking corrective action would permit an inflated demand to continue longer with greater likelihood of its being permanently embodied in a higher level of prices and costs. In the surplus countries, the continuation of payments surpluses for an unduly long period would necessitate the accumulation of unwanted monetary reserves acquired by expanding the domestic money supply. The task of maintaining a disciplined monetary policy and of avoiding inflation would become very much more difficult for the surplus countries.

There has never been a satisfactory system of providing monetary reserves for an expanding world economy. Under the gold standard, the growth of monetary reserves was dependent on the accidents of gold discoveries and gold production. In fact, the world suffered from alternate periods of gold inflation and gold deflation. Under the gold exchange standard, the situation was in some respects better and in others worse. At a time when the reserve currency countries, particularly the United States, had a payments surplus, aggregate monetary reserves actually decreased. In 1946 and 1947, for example, the dollar holdings of foreign central banks and Treasuries fell by over $2.3 billion. On the other hand, from 1958 to 1965, the dollar holdings of foreign central banks and Treasuries increased by over $5.2 billion. Thus, the growth of reserves under the gold exchange standard is to a very large extent an accident of the U.S. balance of payments.

In the present system, monetary reserves consist of gold, dollars, sterling and other foreign exchange, and net creditor positions in the IMF. The growth of gold reserves over the past 15 years has averaged about $500 million a year. There

[1] Articles of Agreement of the International Monetary Fund, I(v).

has been no increase in reserves in the form of sterling in this entire period. While there has been a large increase in foreign official holdings of dollars, the growth of reserves in this form will come to an end when the U.S. balance of payments is restored. Net creditor positions in the IMF are, in a real sense, reserves at the disposal of creditor countries; but they are matched by equal obligations of the deficit countries. They must repay these credits to the IMF in three to five years and when they are repaid, aggregate reserves decrease. The fact is that under the present system, with a balanced pattern of international payments, the growth of reserves would be about $500 million a year, all in gold, that is, less than 1 per cent of aggregate reserves. With this rate of growth in monetary reserves, a balanced pattern of international payments would inevitably lead to world-wide deflation.

To assure an adequate but not excessive growth of monetary reserves in the future, it is necessary to supplement the present system of reserves in the from of gold, dollars and other foreign exchange, with a new reserve asset. This reserve asset could be backed by the currencies of the great trading countries and be administered by the IMF. The amount of reserves to be created annually should be determined for a period of five years ahead by an appropriate growth trend of reserves, rather than by the needs of individual deficit countries for reserve credit or of developing countries for development finance. The new reserve assets created should be distributed equitably among all countries and should be used along with gold and dollars in the settlement of international payments. With such a reserve system, reserves would grow at an appropriate rate, countries could hold adequate but not excessive reserves, and the adjustment of payments deficit and surpluses would take place with deliberate speed—not so fast as to necessitate harsh deflationary measures in the deficit countries, not so slow as to result in the spread of inflation to the surplus countries.

Coordination of domestic policies

Even if the conditions for international monetary stability were actually fulfilled, this would not insulate a country from inflation unless its own policies were conducive to monetary stability. In a very real sense, therefore, the precondition for monetary stability is to have national policies that avoid a rise in the wholesale price index of domestically produced industrial goods and that limit the rise in wages and other labor compensation to the trend increase of productivity in the export industries—essentially in manufacturing. For this purpose, guideposts can be useful, but they must be made effective through fiscal and credit policies in which the trend growth of aggregate demand is properly related to the trend growth of real output (allowing for the normal secular rise in consumer prices relative to wholesale prices) and in which even cyclical expansion does not result in such a rise in the wholesale price index of industrial goods and of wages as to bring about a permanently higher level of prices and costs.

All that the conditions for international monetary stability can do, if they are realized, is to assure countries that if they follow appropriate national policies, monetary stability will not be upset by the international monetary environment. This environment is created by the combined effects of national policies in all of the great trading countries, and particularly in the United States. Because there is an international interest in the national policies of the great trading countries, it is desirable that they cooperate in securing complementary policies conducive to international monetary stability. This process has already been begun through international surveillance. The practical significance of this new form of international monetary cooperation will become evident only with experience. It is, however, a great step forward to have the great trading countries recognize their common responsibility in coordinating their national policies and in creating a stable international monetary environment.

Mr. Bernstein. So, Mr. Chairman, you now have my order of importance of the issues we have before us. The most important is the prompt activation of the SDR's. The second is study and formulation of a system for the balanced use of all reserve assets; I prefer to call it the composite gold standard.

The third important question is to remove the whole question of private holdings of gold from the international monetary system. My feeling is that this will work itself out pragmatically. There is no great danger from this, in my opinion. The world lived very well with a two-tier gold market from 1940 to 1953 under worse conditions than the present. I know of no reason for thinking that the international monetary system is going to break down with a two-tier market at $42 an ounce when it functioned quite well with a private price of $50 or $53 an ounce in dollars; I am not talking about prices in other currencies, but in dollars.

Chairman REUSS. Just that I may be clear on this, your testimony is that you would be relaxed on the gold price provided that there is done what you have regarded as an essential; namely, the setting up of some sort of reserve agreement?

Mr. BERNSTEIN. That is right, sir.

Chairman REUSS. You do need that to reduce the swelling, do you not?

Mr. BERNSTEIN. I think the great advantage of a composite gold standard is not so much that countries will violate the principles of the March statement, but that they would have a preference for gold which would make them run down their dollars and their sterling. We recognize this problem with the SDR's, and that is why the SDR plan has so many rules for supervision, for guidance, for designation, for reconstitution. In my opinion, it would be far better to have an automatically operating system such as the reserve settlement account.

It would almost be without any supervision. You hold and transfer reserves in the form of a composite reserve unit. That brings about the automatic use of all reserve assets which is just what the Fund is trying to do with all of these guidance provisions.

Now, I think the problem of the private gold market is going to settle itself. We do need a stronger balance of payments in the United States. We have to get it without deflation. I hope we will have a little more strength in the German economy. I don't believe the German economy is expanding anywhere near as much as it should. I believe their wages are not high enough for productivity and are not rising as much as the increase in productivity; and I think their interest rates are too high and monetary policy is too stringent still for their international position and for their savings.

Now, these things will work themselves out. It will be a great help if we have less inflation and the Germans have more expansion. But I don't think we are in any grave danger of being upset by the private gold market. I would not raise an issue that compels countries to act contrary to their preferences or prejudices as long as we are having no disturbance from the private gold market.

When there is a disturbance it will be time enough for the IMF, that has plenty of power on this, to state what it thinks is necessary. It has done it in the past, and it can do it again.

Now, on the question of a wider band, I do agree that it would be useful to have a study. I think there are many technical questions to be considered. I think the study should not have any limitations as to what kind of wider band we want. Let the experts think it all through.

Chairman REUSS. Thank you.

Now, would you address yourself to the four pillars of wisdom?

Mr. MACHLUP. Gladly.

First of all, I would like to thank my friend Bernstein for pulling his punches on points where he disagreed with me. After all, we all have the same purpose of clarifying the issues and, if we interpret the statistical information sometimes differently, this is no reason to become unfriendly.

We have always managed to remain very good friends.

Perhaps I may make one brief comment about his forecast of private gold consumption. When he spoke about the Swiss banker who told him about the private demand, about the purchases for gold for jewelry purposes, he may have forgotten to ask that banker whether these processors of gold were putting all this gold into jewelry for sale this year or whether they were perhaps acting like intelligent businessmen, increasing their inventories when they believe the price will rise.

Mr. BERNSTEIN. I did ask the question. I even looked into inventories in the United States. But I did ask the question.

Mr. MACHLUP. Good.

The point is that if purchases of gold for jewelry rose, say, to $750 million last year, I would guess that a third of these purchases was for piling up inventories, and not for immediate processing for jewelry for sale. Therefore, the estimate of the "vast" increase of consumption is, I submit, exaggerated.

Also, I believe that the income elasticity of demand for jewelry cannot be quite as high to explain the large increases in purchases and, hence, there was a strong speculative motive in the demand that we need not project into the future.

Therefore, I conclude that Bernstein's estimate at the Bologna meeting to the effect that the price would more likely be $30 than $35 if monetary authorities neither bought nor sold, was probably correct and need not be revised. I mention this merely so that the record would be clear on this question.

I wholeheartedly agree with your proposals, Mr. Chairman, on all four points to be passed on to the International Monetary Fund: faster ratification of the SDR plan, the ideas about reserve pooling, the ideas about the gold-price margin, and the ideas about the margin for exchange-rate fluctuations.

I would not be satisfied to learn that the International Monetary Fund is studying these things. Of course, there are always a few people on the staff of the Fund who are studying all sorts of things. That is not what we want. To get results, we need an official study with findings to be made public before the next annual meeting. It is not enough to have some people on the staff studying the problems, engaging in informal day-to-day studies. Wanted is an inquiry by a committee that will make an official report within a specified period of time.

Further, it is not sufficient if this committee tells us what is and what is not possible within the Articles of Agreement. Articles of Agreement can be changed; indeed, we have just ratified an amendment and hope that it will soon come into effect. If the inquiry were merely to show that the Fund may or may not buy or accept gold, may or may not pay less than the fixed price for gold, all this under the present Articles, such findings would not be sufficient. We want to know what would be desirable even if it should call for another change in the Articles of Agreement.

Regarding the proposal for a wider band of exchange-rate fluctuations, the present Articles of Agreement permit a margin of 2 percent, that is, 1 percent up and 1 percent down. Practically no member of the Fund makes use of this permission; they have set narrower limits for themselves. In other words, a permissible margin is not a prescribed margin. Hence, if Professor Mundell has said that he would not want a wider band for all countries, this is really not very relevant.

What we seek is a permission of 4 or 5 percent up and down, and we leave it then to each country whether it wishes to make use of it or not. Even with a permissible fluctuation of 5 percent up and down, a nation may decide to let its exchange rate move only three-fourths of a percent up and three-fourths of a percent down, just as most countries do today.

Incidentally, it may be worth noting that the Swiss now use a wider band than the Monetary Fund permits. This is sometimes given as a reason—not, I believe, a strong reason—for the Swiss not to join the Fund; the real reason has to do with their neutrality and other matters. But if the Swiss can use a wider band than the 2 percent, there is really no reason to be squeamish about the proposal for widening the band. It would help a great deal if there were a general permission for having a wider band. It would help very much in remedying the present balance-of-payments situation of the United States.

Not that I disagree with Bernstein about the inflation in the United States being the chief cause for the present difficulties. But, I would say, if we were able to stop inflating faster than other nations, we would probably narrow the present gap in our payments by about 50 percent, but we would not completely close it. This is the reason why we should resort to the use of a wider band of exchange-rate deviation from parity. It would help us restore balance in international payments.

Mr. Chairman, I conclude with an endorsement of your proposals on all counts.

Chairman REUSS. Thank you.

Senator Proxmire?

Senator PROXMIRE. Professor Machlup, you said earlier that the international balance-of-payments program of the administration is, as you put it, for the birds, and I am wondering what you include in that program? Do you include, for example, the fiscal action which the administration felt was a very important part of it, that is the tax increase and the spending cut? Do you include the agreement which the Secretary of the Treasury reached at Rio and in Sweden on SDR's? Would you exclude that part of it and if you excluded it, why? Why do you zero in on the rest of it and why do you call the whole thing for the birds?

Mr. MACHLUP. Well, Mr. Chairman, what has been called the President's balance-of-payments program, which was announced in January 1968, was a program of four or five points that had to do with direct investment by large corporations, with foreign lending by commercial banks, with tourist expenditures, and with, I forget——

Senator PROXMIRE. Government investments abroad and also Government personnel abroad, troops abroad, State Department personnel, and so forth.

Mr. MACHLUP. It was this program that I meant. I am wholeheartedly in agreement with the fiscal measures that were adopted this summer. I believe it was necessary to legislate the tax increase, and I believe that the SDR plan which you mentioned was also an important step.

To repeat, the SDR program and the tax increase were definitely important and useful actions; what I regarded as being for the birds were the restrictive actions announced in January 1968.

Senator PROXMIRE. Well, do you feel that overall the actions of the administration have had any effect? I agree that because there is a lag in our information and because so much of this didn't go into effect, so much of the tax increase, for example, didn't go into effect until fairly recently. It is hard to judge, but I understand the preliminary figures show a spectacular improvement in the balance-of-payments in the second quarter of this year, spectacular at least in the official reserve transaction basis where there is a $5,800 million surplus on an annual basis and only $624 million deficit on an annual basis in the liquidity area.

Do you feel this is an indication that we are—we have done anything that has helped us achieve a better position?

Mr. MACHLUP. I am afraid, Senator, that these improvements are deceptive. They are only statistical delusions and do not really reflect any improvements in what has sometimes been called the "basic" balance-of-payments. The improvements in the statistical appearance reflect to a large extent temporary changes in the type, form, and maturities of capital received from abroad, and cannot be expected to be lasting improvements of the balance of payments. Indeed the current account has deteriorated, and it is only on current account that we can expect lasting improvements.

Senator PROXMIRE. I notice that the difference between imports and exports on a seasonably adjusted annual rate in the second quarter was depressingly small, in fact it was almost a washout. Merchandise exports were—this is preliminary—$33,292 million, and imports were $33,240 million, which is as narrow as we have had, I guess, in any quarter in a long, long time. So it may well be that your analysis is correct, although I do feel these other elements may be is important as the export-import situation.

Mr. BERNSTEIN. May I make a comment?

Senator PROXMIRE. Yes, Mr. Bernstein.

Mr. BERNSTEIN. First, I would like to say you can't measure the balance-of-payments position of a country; you have to analyze it. That is inherent in what Fritz has said. If you look at something reported as a deficit you are going to get merely some arbitrary accounts which have been added together.

I think the proper statement is this: On a liquidity definition, the reason there was an improvement in the U.S. balance of payments is that the United States sold a lot of securities, to Canada and others, which are not defined as reserve liabilities. These are called reserve liabilities in the reserve transactions balance.

Senator PROXMIRE. You say a lot. How much roughly?

Mr. BERNSTEIN. $500 million; so you have to add that $500 million.

On a liquidity basis then there was no improvement in the balance of payments, the deterioration on current account being offset by a true improvement in the capital account, mainly through the sale of American securities to foreigners increased enormously.

Now, I will just go on to the reserve transactions balance. On the reserve transactions basis the principle explanation is that with the tight money position here, and with the flood of Euro dollars, American banks brought home much of the funds that were deposited with their branches in London. This can't go on. It helps in the exchange market right away, but it is a short period thing. In the long run we have to have a reasonable surplus, on the current account, on trade primarily, to enable us to finance what for the United States is its natural capital-exporting position, foreign investment by individuals and by companies that goes on without regard for what the surplus on current account is.

The balance of payments in the second quarter shows a reduction in the current account surplus and an equivalent improvement on the capital side. I am not quite ready to regard the improvement on the capital side as merely short run. I am going to go into that but first I would like to mention another thing. The U.S. balance-of-payments position is much more complicated than even a reasonably good interpretation of our balance-of-payments deficit would show. Because the truth of the matter is to get the U.S. balance-of-payments position you have to add the deficit of the United States to the surplus of Canada, because if Canada has a surplus, as it did, it is going to borrow less from us in the long run.

I would say that our real international payments position, despite the deterioration in our current account, looked more hopeful in the second quarter because of the strengthening of those countries which are so closely linked to the dollar that we are almost underwriters of their balance of payments, Canada and Japan. Similarly, in continental Europe, which were the great surplus countries, the surplus wasn't very great except in Germany.

Let me tell you why I want to be a little more cautious than Fritz without altogether disagreeing with him. There is no substitute for strong current account surplus of the United States. On the other hand, I really believe that our corporations—many of them, not all of them—overdid this business of investing abroad. I think there is reason to believe that the desire of American corporations to invest abroad has materially changed from what it was 2 and 3 years ago.

Mind you, once you get into the business of having affiliates abroad, there is a certain amount of investment you must do just to retain your market position. But if we look at the figures put out by the Commerce Department on prospective plant and equipment expenditures for direct investment abroad, what is striking is that the increase is so small that it will be more than accounted for and financed by the normal growth in capital consumption allowances——

Senator PROXMIRE. How much of that is the result of restraint of one kind or another by the Federal Government and how much of that is the result of this kind of decision which you imply is being made that they feel they perhaps have overinvested in the European and Japanese market and other areas for investments are not as attractive as they seem?

Mr. BERNSTEIN. I think in the voluntary program—this is before the present program—a very big part of it was due to a handful of companies going into the voluntary program on a wholehearted basis.

In the first half of the year a considerable part of it was due to the fact that many companies borrowed heavily in European markets for the purpose of raising funds abroad, through debentures, convertible bonds, and sometimes through short term and intermediate Euro dollar credits. I think that is not the whole explanation of the improvement in the direct investment accounts. But I would say in the short run it is mainly the program and in the long run it will be mainly the fact that American corporations will have completed their rapid expansion in Europe and elsewhere and won't need as much financing from this country. I would say that the figures put out by the Commerce Department a few days ago on plant and equipment expenditures of U.S.-foreign affiliates from 1966 to 1969 indicate this.

Senator PROXMIRE. I just have one other question and that is for you, Mr. Bernstein and for Mr. Mundell.

Mr. Mundell, you seem to disagree very vigorously, at least I construe it as a disagreement, with Mr. Bernstein on your reaction to the effect of the two-tier gold price. As I understand, reading from one of your monographs here, you say this has immobilized the reserves, the gold and other reserves, made them illiquid and you feel that, seem to feel, there is quite an urgent need for a new form of international currency, you call it intor.

Mr. MUNDELL. Yes.

Senator PROXMIRE. And Mr. Bernstein, you seem much more relaxed. I get the impression you think we are doing very well, the SDR is a fine advance, that if we can proceed to get approval by all governments of the SDR's we will be well on our way and then we can move to the second priority, as you put it, the composite reserve, composite gold standard, but that this can take a little time without the kind of financial, international financial, crisis that some of us have feared, without the restraint of international trade or catastrophic effect on international trade. Is this a basic disagreement, Mr. Mundell, between you and Mr. Bernstein?

Mr. BERNSTEIN. I am not sure it is. I have not had the benefit, Senator, of Bob's paper, but I, too, believe that there is a danger that countries will use their gold only in crises.

I do not know how strong that attitude will be, but I think it will grow as the feeling prevails that gold is going to be the scarce reserve asset, and fiduciary reserves will be the only source of growth in the future.

I am more relaxed than Bob for this reason: I have been through the evolution of the international monetary system, on the level of cockfighting where you do a lot of scratching with extra long claws. It is my opinion that these things evolve best if you make the big central banks see that there is a logical next step, and that this step does not change the system too much.

That is why I have always felt that the progress through, first, larger quotas and more resources for the fund through the GAB, then the swap arrangements, and now the SDR's was a natural evolution, an adaptation of the system we have experience with. I believe we can move along to the reserve settlement account if we convince our colleagues in Europe that this is one more step in the right direction, that we are not destroying but strengthening the system with a composite gold standard.

I have reason to believe that the reserve settlement account is regarded as a practical next step in this evolution, from my own reading of the central bank reports of Europe, I have talked to a half dozen officials of the Group of Ten. There are some skeptics, but what I find more astonishing is the kind of people who are interested and have said to me, "We would like to know more about how this would work in practice."

That is one reason why I put a lot of emphasis on how their own reserve accounts would look when the reserve settlement account is set up; how the transfers would take place, how the final settlements would be made.

I am convinced it is only a question of 2 or 3 years before there will be some kind of reserve settlement account, and I think we shall find ways of dealing with whatever problems come up in the meantime.

Improvement in the U.S. balance of payments would make everybody readier to look at the next step, and I am hoping that that will come in the course of this year and next year.

Senator PROXMIRE. Mr. Mundell, I had reference to your statement, "A Plan For a World Currency," where you say:

> We must, therefore, conclude that the new Fund Agreement does not meet the problems of the international monetary system. At the same time, the two-tier gold arrangements have immobilized gold reserves and made most gold-holding countries illiquid. There is still a huge gap in our international financial arrangements.

Mr. MUNDELL. Yes, I would like to comment on that. I am not as optimistic as Mr. Bernstein is.

Last year at the fund meetings everyone was excited about the new toy, and 2 months afterward, the pound sterling was devalued; and 6 months after, the exchange system broke up; and the problem last year, as I argued at that time, and as many of my colleagues argued also, was that the SDR agreement was not meeting a major problem in the system.

Now, I feel the same today. The SDR system is not going to solve the major problems that are going to come about even in the next year. Unless we do something rather rapidly, such as putting everything together in some kind of pool, creating a generalized asset, the system is going to change itself while new committees deliberate. My proposal is not in a sense in conflict with Mr. Bernstein's Reserve Settlement Fund. It is more inclusive than his. It goes beyond that. It goes, let us say, one or two steps beyond the plan Mr. Bernstein has advocated.

But I do believe that the two-tier system is impermanent. I do believe that gold has been put at the bottom of the pile of the central banks' reserves; and that, because of this, countries will be very reluctant to sell their gold now at $35 an ounce.

Senator PROXMIRE. How do you meet the Bernstein argument that we had a two-tier system from 1940 to 1953 under more difficult conditions and with a price that was considerably higher than the $42?

Mr. MUNDELL. Well, I suspect Mr. Bernstein is referring to his $53 price as the Bombay price.

Mr. BERNSTEIN. No, no.

Mr. MUNDELL. Or a price in a controlled market, in one of the black markets. It was not a New York price. It was a price in one of the European markets, and Europeans had exchange controls.

Now, after exchange convertibility in 1958 and 1959, and after the London gold market opened up in 1954, everything became different. Now, today, the Karachi price or the bombay price is $65 an ounce; and that is something quite different.

I differ in one sense from Mr. Bernstein. He thinks that the price of gold is going to go up gradually over the next few years. I do not believe that is necessarily the case. I believe that what will happen to the price of gold will depend to a greater extent—than what his remarks implied—on what central banks, in fact, decide to do about the system.

They can determine the price for the next 15 or 20 years if they want to, maybe 30 years—barring some rapid new inflation in the system. But as things now stand, central banks do not want to get rid of their gold; and, while they do not want to get rid of their gold, they feel illiquid, which means that the only kind of reserves they want to *use*—and this follows simply Gresham's law—is dollars. If I am right, they will attempt to acquire balance-of-payments surpluses and then use these surpluses, which they collect in dollars, to try to get gold at the U.S. Treasury.

Now, the U.S. Treasury will certainly take all the steps it can not to sell gold at $35 an ounce. Whatever formal agreements are made, it is the informal agreements that are really going to count.

I do not really think that the U.S. Treasury is now selling gold at $35 an ounce, really, as it is legally committed to do under the Articles of Agreement.

I do believe that gold is immobilized now. Effective international reserves have been drastically reduced not just by the devaluation of the pound sterling—which Mr. Bernstein, as I recall his testimony last November brought up—but also by the immobilization of their gold assets. Countries will begin to act increasingly like deficit countries, and that will have serious consequences even over the next 2 or 3 years.

Mr. BERNSTEIN. Mr. Chairman, I am afraid I have to enlighten my former colleague, Bob Mundell.

What I find astonishing is that he starts with the assumption that I am unsophisticated whereas he is fully sophisticated on these questions.

Mr. MUNDELL. No, no. You made a remark, Mr. Bernstein, and said that——

Mr. BERNSTEIN. That is what I am directing myself to.

Mr. MUNDELL (continuing). I had made a casual reading of the Articles of Agreement of the Fund in order to see whether the Fund was legally committed to buy gold. That was not a casual reading at all.

Mr. BERNSTEIN. You said that.

Mr. MUNDELL. I was referring to Article V–6.

Mr. BERNSTEIN. I am sorry, you said a quick reading of the Articles of Agreement; it is your language.

Mr. MUNDELL. No, it was not a quick reading.

Mr. BERNSTEIN. It is what you said.

Mr. MUNDELL. A quick reading of an amendment to the Articles. That is a different thing from a quick reading of the Articles. I have spent several years trying to understand what they mean. They complicate things.

Mr. BERNSTIEN. Do you want to discuss the Articles of Agreement and what they mean or would you like to get clear the question of what the two-tier gold market was from 1940 to 1953? The two-tier gold market existed from 1940 to 1953, when I was at the Treasury part of the time and the IMF part of the time.

I am well aware of the fact that $60 at the official exchange rate in rupees is not the same as the dollar price of gold.

The price of gold that I am quoting, and that went as high as $53, was a dollar price; that is to say, it was determined as follows: It was either quoted directly in dollars in Tangiers, or in New York, or it was converted into dollars at the official exchange rate for Swiss francs, in the Zurich market. I refer you to the table on gold prices in the paper I submitted.

The rates that I am talking about, the prices I am talking about, therefore, were prices in which the seller got dollars. In the case of New York, the American smelting firms were authorized to take in gold ores from outside the United States, refine them on consignment, and then sell the gold for dollars for export. When I speak of a price up to $53 an ounce, I mean the price quoted by the big American smelting companies for export of gold, f.o.b., New York.

Now, I come to the second question——

Mr. MUNDELL. Let me answer that.

Mr. BERNSTEIN. Let me answer the rest of the question because it may answer what you have in mind.

Mr. MUNDELL. No; it is something quite different.

The system has changed since 1953 in this sense, that in 1953 central banks believed that any dollars they held were freely convertible into gold.

Since 1960, or at least since 1968, that is no longer the case. That makes a fundamental difference in the operation of the two-tier system. Gold was not put at the bottom of the heap as it is now.

Mr. BERNSTEIN. I am not arguing about gold being at the bottom of the heap.

Incidentally, there were no exchange controls in Zurich and Tangiers, where the price was $50 an ounce. The exchange controls existed in some countries where the hoarders lived, and they paid even more than $50 an ounce, either in dollars or in their own currencies at the free rate, not the official rate of exchange.

But my proposition has nothing to do with the question whether there is or is not exchange control, which I regard as not really relevant to our question. It has to do with the proposition that if the international monetary system was not undermined by a private price of gold of $50 or more an ounce in the postwar period, I see no reason for thinking that it would be undermined today by a private price of $42 an ounce.

Professor Mundell, in his second intervention, touched on an important point. It is a point I was coming to, I might add, because it is the theme that runs through all my discussions of the private gold market and the monetary use of gold.

When the U.S. dollar was strong, countries did not feel that the gold market was the leader. They felt that the United States in the end would be the determining force on what would happen to the price of gold. They did not have many dollars in this period I am talking about. In fact, the price of gold was at its highest in the free markets when the official dollar holdings of the rest of the world, were at their post-war low, less than $2 billion at the end of 1947.

Today, the central banks wonder about a $42 an ounce price of gold in the private market and speculators feel more hope about a rise in the price of gold primarily because there is much less assurance that the United States will restore its payments position. I think that the difficulty about gold is not the two-tier market. The heart of the problem seems to be two other questions. First, the lack of assurance on the position of the dollar and, second, the conviction that from now on the amount of gold in monetary reserves is frozen, and that nothing but fiduciary reserves will be added. This is what makes them have a preference for gold, one effect of which is what Bob Mundell said.

I am not nervous about the system's collapsing. I have many reasons for thinking it won't collapse. I have also reasons for thinking that the best progress will be made by convincing the central banks in the Group of Ten that the composite gold standard is a natural evolution of the present international monetary system. They have known for several years that, in my view, and in the view of others, it is necessary to link all the reserve assets together in a composite reserve unit.

When I first wrote about a new reserve unit, I proposed it be used jointly with gold in international settlements. Today I think the problem is much more complex. We have added another reserve asset, SDR's. The position of sterling is weaker, the flight from sterling, not from private holdings but from reserve holdings, has been going on. The new credit arrangement is to give official holders of sterling assurance of its availability as reserves.

The dollar is in an exposed position, especially in a world in which a political or an economic crisis can occur at any time.

I think now definitely we must have a composite reserve unit that will include foreign exchange and SDR's as well as gold.

Chairman Reuss. Mr. Moorhead?

Representative Moorhead. Thank you, Mr. Chairman.

Mr. Bernstein, on this "widening the band," I understand the 5 percent up or down, and the 1 percent as applied to other countries, but will you explain how it would work as far as the United States is concerned?

Mr. Bernstein. Well, there are many ways in which it could work for the United States.

As you know, Mr. Mundell has suggested different currencies be handled differently. I would say that the present rule that no country shall change the parity of its currency in terms of gold without the approval of the International Monetary Fund would stand as it is today.

The rule on maintaining margins above and below this parity would be altered so that the exchange rate for the dollar would vary in terms of other currencies by no more than 5 percent from its established parity. That means the dollar could be 5 percent cheaper or 5 percent dearer in terms of any foreign currency. For the dollar the limit of the range would be 4.20 marks to the dollar and 4.80 marks to the dollar. That is the 5——

Mr. MUNDELL. 3.80.

Mr. BERNSTEIN. Thank you, 3.80 and 4.20.

Now, if you want to go even farther than that, you could within such a system allow other currencies a little more deviation from their parities by saying this applies to the dollar, but that any other country may, at its option, select another currency which shall be the one from which it will move by no more than 5 percent. That means the Germans might opt for the dollar to be the basis for measuring variations of the mark from parity. That would not change the 5-percent limit of the fluctuation of exchange rates from parity between the mark and the dollar or any other currency and the dollar. But it would allow greater fluctuations between the mark and other currencies. If sterling fell by 5 percent in terms of the dollar and the mark rose by 5 percent in terms of the dollar, the mark-sterling rate in the exchange market would have moved 10 percent from the parity relationship established between these currencies.

Mr. MOORHEAD. This is where I am having difficulty. I realize that Germany can select the dollar as its benchmark, but when we select, let us say, Germany, as the one currency to which we would key our fluctuation or do we——

Mr. BERNSTEIN. The practice is that, in fact, we do not key the dollar to any particular currency. I am talking now about the practice of central banks when they intervene in exchange markets.

But the Germans, the French, and the British, the way they keep their exchange rates within the margins required by the Fund is by saying "whenever the exchange rate is more than 1 percent from the parity with the dollar in our market, we will intervene and either buy dollars to hold our dollar rate down or sell dollars to hold our dollar rate up."

They all do that, without exception, when they intervene in exchange markets. The United States, in fact, is only a marginal intervenor in the markets. It does sometimes, both in the forward market and the spot market, but, in general, it is the central banks of the other countries that pick up dollars. That is their easiest way of intervening in the market to keep the rates within the range established by the Fund.

Now, what they would do in the future with a wider band for market fluctuations is to let the dollar rate vary from any other currency by not more than 5 percent of parity in either direction. But the International Monetary Fund could let any country opt and say, "We do our intervention with the dollar. Therefore, for us, the test of whether we have reached the limit of this range is whether it will be 5 percent above or below the dollar.

If Germany has a very strong currency, the mark might rise by 5 percent from 4 to 3.80 to the dollar. If sterling has a very weak currency, it could fall by 5 percent, from \$2.40 to \$2.28 to the pound, and then the rate you would get, the swing between the mark and sterling, would be about 10 percent because each country would have selected the dollar as the test of its 5-percent variation. That is all I meant.

We ourselves, in all probability, would not ordinarily become the major intervenors in the exchange market. That is because the easiest way, in fact, with exchange markets all over the world, is to let the central banks of each country intervene in their markets with dollars, putting them in or taking them out as needed to keep the dollar rate within the agreed limits.

We expect the SDR's to work in the same way. We expect that when a country has a balance-of-payments deficit and has to meet it, it will first meet it in the exchange market by selling dollars and it will get the dollars by converting SDR's. They may sell the SDR's for other currencies, but the general expectation is that they will mainly sell them for dollars, and mainly to the United States, but they can sell the SDR's for dollars to other countries, too.

Mr. MACHLUP. May I make a clarifying statement?

Representative MOORHEAD. Certainly.

Mr. MACHLUP. In the last sentences, perhaps inadvertently, Professor Bernstein said that countries using the dollar as intervention currency may use the SDR's in the same way.

There is one difference, however. They can use the dollar as intervention currency in the foreign-exchange market, selling dollars to private banks and traders, and buying dollars from private banks and traders. They cannot do that with SDR's. They can exchange the SDR's into dollars only by dealing directly with other central banks. There is a difference between interventions in the exchange market and operations among central banks. The intervention only among central banks, this is a difference that should be mentioned.

Mr. BERNSTEIN. What I meant to get across is that central banks needing dollars for intervention in the exchange market would sell the SDR's not in the market but to each other for dollars primarily, but conceivably for other currencies, and when they do, incidentally, it is expected the rate at which they do it for other currencies will be linked to the rate for the dollar.

By the way, Mr. Mundell asks me to clarify a misapprehension I may have left you under. I do not think I did. The Conference at Bologna in January 1967, was financed by the Chamber of Mines of South Africa. Of course, no one here would think for a second that anything said at that Conference was in anyway affected by the fact that our expenses to that Conference were paid. I doubt that anybody would have thought that.

Representative MOORHEAD. Maybe it is good to have it on the record.

Mr. MUNDELL. They have brought out a book edited by Randall Hinshaw, called "The Monetary Reform in the Price of Gold," that is really a very useful addition to the whole discussion on this question. It was put out by the Johns Hopkins Press.

Mr. BERNSTEIN. And I think, just reading it would show it was completely objective.

Representative MOORHEAD. Do I understand that the three of you are in general agreement concerning this move toward greater flexibility in exchange rates? You may not all agree it should be five; perhaps it should be more or less; but you are unanimous about the principle?

Mr. BERNSTEIN. May I put it this way: I am a lot more conservative than these gentlemen who are very bold and farsighted. I would like to see the question studied.

Mr. MACHLUP. That is all we want.

Mr. BERNSTEIN. I do not know if, in fact, all countries would use a wide range—many of them would feel the way Mundell does—that for them a smaller fluctuation, except in unusual circumstances is good enough for their balance-of-payments and preferable for orderly exchange markets.

Mr. MUNDELL. Well, I would like to clarify. I am even more conservative in this respect than Mr. Bernstein is on it. I did not sign the academic petition in favor of the wide margins with the sliding parity because there are enormous technical difficulties connected with the use of the intervention currency and various compounding systems of the kind that Mr. Bernstein referred to, and I would now respectfully endorse Mr. Reuss' suggestion that before we move as a general principle in this direction that a full-scale study be done on this and, perhaps, at the recommendation of the International Monetary Fund.

Representative MOORHEAD. Well I understand your testimony, Mr. Mundell, to be that insofar as the price of gold is concerned—our intervention in buying and selling it—you have, reached the conclusion that we should have a greater spread than we now have?

Mr. MUNDELL. Exactly, yes. I approach the problem of the gold margins quite separately from the question of the exchange margins. With respect to the gold margins I believe we should have a wider spread between the U.S. buying price and the U.S. selling price even for central banks.

Representative MOORHEAD. Is that the unanimous feeling of the panel?

Mr. MACHLUP. I am definitely in favor of that.

Mr. BERNSTEIN. I am not. As I think in my own discussion of what I would do with gold, I would let the gold question go to its natural solution, which natural solution is to pay no attention to the free market, not to risk the prestige of currencies in bringing the price of gold down, but rather to take the view it does not matter.

When we get the gold reserves earmarked in a reserve settlement account, it will be easy enough for the International Monetary Fund to say that the logic of this is to require no central bank dealings in gold. I would not give two pennies for what then happens to the price of gold in private markets.

We may have differences of opinion as to which way the private price will go, but whichever way it goes, whether it is according to Professor Machlup's analysis or mine, the fact is it won't matter if we once get the gold reserves earmarked in the reserve settlement account.

Therefore, I regard this as raising an extraneous issue which frightens the conservative central bankers of Europe, makes them wonder whether there are tricks in a reserve settlement account. I would keep the monetary price of gold where it is at $35 an ounce, without any change in the margin for buying and selling gold between monetary authorities. And I would move on to discussions with the Group of Ten on a reserve settlement account.

This is where their minds will be moving next, and I would like to persuade them on that without getting off to what I regard as a secondary issue best settled by the reserve settlement account.

Representative MOORHEAD. Thank you.

Now, getting down to the reserve settlement account or the pool or whatever name we give it, do I understand that for this to work that the nations must agree to put all of their reserves into the pool or reserve settlement account or can it operate with everyone required to put 51 percent of their reserves into the pool or settlement account?

Mr. BERNSTEIN. Well, actually—do you want to answer that? There may be a difference in different countries.

Mr. MACHLUP. I would say we should not quarrel about details and had better leave that to discussion within the next years.

I certainly would agree with Bernstein that the ideal would be to have all the gold and all the dollars and all the sterling, and perhaps also the SDR's, all in that pool; but there may be other views.

Some people may say that would be going too far and I should be willing to take half a loaf in this case. If they say, "We give only half of our gold," all right, let us start out with that, and let us hope that we shall get the other half quite automatically a few years later.

Representative MOORHEAD. Yes.

Mr. BERNSTEIN. I do not have any disagreement with this, because it is my own approach too. Let us not be dogmatic about what we want to do with the reserve settlement account except the objective. There we have to be firm.

Mr. MACHLUP. Yes.

Mr. BERNSTEIN. I have myself suggested—I started earlier, not today but some years ago—with a suggestion that all reserve assets be deposited, which means that a country would have given up its title to these specific assets.

I have moved on to the concept of earmarking them, which means countries retain title, and every time they make a transfer of CRU's, they have implicitly transferred some of their specific reserve assets. But countries would get back the precise assets they put in minus the final settlement when they withdraw.

I have even had central bankers ask me, "Can't we just put in some of our gold," and my answer is, "We can find ways to do this if that is what you want, to earmark pro rata a part of your gold, dollars and SDR's; provided we understand that the rest of the dollars that you do not earmark are not suddenly going to be thrown on the market. If you are willing to have all reserve transactions in the form of a composite reserve unit, and you are willing to replenish your account of composite reserve units when you have run it down, then there is no harm in putting in one-tenth of all your reserve pro rata at the beginning and put in one-tenth when you run that down, provided there are no other reserve transactions outside the reserve settlemnt account."

Representative MOORHEAD. Thank you, Mr. Chairman. Thank you, gentlemen.

Chairman REUSS. On the point raised by Mr. Moorhead with respect to this differential buying and selling price of gold that, I forget what it was you called it; a gold band or something, this is all academic, is it not, as long as we have the March 17 Washington agreement, so that central banks cannot buy it anyway, so——

Mr. BERNSTEIN. They cannot sell in the free market.

Chairman REUSS. And they cannot buy.

Mr. BERNSTEIN. They probably cannot buy in the free market.

My own feeling is that the only reason then for a wide gold band is that in all probability it would be a necessary corollary to the concept of wide margins.

Let me see if I can make that point clear. I have not tried. I have not wanted to be too technical.

Chairman REUSS. Wide margins on exchange rates.

Mr. BERNSTEIN. Yes.

Let me see if I can explain it. If the dollar fails by 5 percent relative to the mark, the rate would go from 4 to 3.80 marks to the dollar in the exchange market. Now the Bundesbank could not offer to sell gold at their parity of 140 marks to the ounce. Because then another country could sell gold to the Bundesbank at 140 marks to the ounce, sell the marks for about $36.80 in dollars, and buy gold from the United States at $35 an ounce. That would lead to such gold-dollar-mark arbitrage as to bring the mark-dollar rate back close to 4 marks to the dollar. So that my view is that a similar 5-percent margin on gold would be necessary to make the wider exchange band work.

Chairman REUSS. But if you have the reserve agreement——

Mr. BERNSTEIN. That is different.

Chairman REUSS (continuing). Which, it seems to me, you all agree is of the essence——

Mr. BERNSTEIN. You are quite right.

Chairman REUSS (continuing). Then we would waste our time talking about the gold band.

Mr. BERNSTEIN. That is right. If you had the reserve settlement account there can be no reserve transactions in gold between members at all. There can only be reserve transactions between central banks in the composite reserve unit. This gets them implicitly some gold, but only a pro rata part of the composite reserve unit.

Chairman REUSS. I would have just one more question on a subject which has not been raised, but I will raise it.

Under the new SDR agreement, and particularly if the introduction of SDR's is accompanied by the gold and foreign exchange pooling arrangements that all of you gentlemen have said to be essential, the supply of world reserves will be raised by whatever amount the IMF, or 85 percent of the voting power in the Fund, agrees is necessary. What needs to be done, if anything, for countries that are not satisfied with such a rate of reserve growth but think, at least as far as they are concerned, that they need 4 or 5 percent or whatever? Under the proposed system there is only so much pie to go around, and they cannot get it. Is this a problem and, if so, how is it solved?

Mr. BERNSTEIN. Yes, it is a problem. But I think we had better put the problem with greater precision.

The increase in reserves in the form of SDR's will be a certain percentage of aggregate reserves. The allocations to countries will be on the basis of their quotas.

This means that countries with large reserves relative to quotas will have a small percent increment in their reserves through allocations of SDR's.

A country like the United States, which has a very large quota in the Fund, and which has relatively small reserves for its international purposes, would get a large percentage increment in its reserves through allocations of SDR's.

By and large, there might be a slight tendency for the less-developed countries who are short of reserves, and the United States and the United Kingdom which are short of reserves, actually to get proportionately more than the countries which are well supplied with reserves, like the Europeans. But any country which feels that even a 5-percent increment of its own reserves is not enough for it because it is short of reserves will have the same option it has always had to try to earn additional reserves, and I quite agree with you that——

Chairman REUSS. You cannot do it, though, under the proposed system.

Mr. BERNSTEIN. Oh, yes.

Chairman REUSS. How can it? Under the millennium where your only reserves are——

Mr. BERNSTEIN. It earns more CRU's.

Chairman REUSS. They are SDR's.

Mr. BERNSTEIN. If a country has a balance of payments surplus its balance of composite reserve units will go up. If it has a deficit its balance with the reserve settlement account in the composite reserve unit will go down. Countries will still gain and lose reserves to each other, but they won't be able to raid each other's gold reserves. This is what will stop. But their total reserves in the composite reserve unit will go up with a payments surplus and down with a payments deficit.

Chairman REUSS. But those countries that have their reserves decreased because somebody has been a more eager beaver than they, are going to be disappointed, are they not? They are not even going to get the 3 percent, which is the average.

Mr BERNSTEIN. Well, I think we have to go another step, Congressman, which is this: I think we must expect that countries excessively well provided with reserves will, some of them will, be satisfied with a smaller proportionate growth than others It is not having any growth which tends to frighten them as Fritz Machlup has well pointed out. They have to have some trend increase in reserves, but they do not have to have the same as another country. So I would say that if we had an adequate growth of total reserves through SDR's, I would not be troubled by the fact that Germany might find that because we want to build our reserves its reserves have only grown a little bit. But I will tell you what would disturb me. If in order to make sure that the attractiveness of SDR's is maintained by not having too many issued, the increase in reserves is brought down to 2 percent a year, then you would have so many countries feeling that the growth of their reserves is inadequate that they might begin to pursue more restrictive policies than they should.

If you had an adequate growth of total reserves for the system as a whole, we need not worry too much that individual countries would get allocations less than the average and others a little more than the average. I think they would get enough for their needs, if we had a 4-percent growth in aggregate reserves.

Chairman REUSS. Thank you very much.

Mr. Moorhead?

Representative MOORHEAD. No further questions.

Chairman REUSS. Gentlemen, we are most grateful. You have made a real contribution to our thoughts and the hearing of the Subcommittee on International Exchange and Payments now stands adjourned.

(Whereupon, at 1 p.m. the subcommittee adjourned.)

APPENDIX

THE FOLLOWING LETTER WAS RECEIVED BY CHAIRMAN REUSS FROM PETER B. KENEN, CHAIRMAN, DEPARTMENT OF ECONOMICS, COLUMBIA UNIVERSITY

COLUMBIA UNIVERSITY,
DEPARTMENT OF ECONOMICS,
New York, N.Y., September 6, 1968.

Representative HENRY S. REUSS,
Chairman, Subcommittee on International Exchange and Payments, Joint Economic Committee, U.S. Congress, Washington, D.C.

DEAR REPRESENTATIVE REUSS: Following our conversations in Chicago, I set out below my own views on the work that should be done at the forthcoming meetings of the International Monetary Fund. I am sorry that long-standing commitments prevent me from appearing before your subcommittee, but hope that this brief note will be useful to you.

The last two years have seen enormous progress toward fundamental reform of the international monetary system. For the first time in modern history, the world is on its way to deliberate, considered management of international money. The SDR scheme approved at Rio was, of necessity, a compromise, falling far short of requirements, but much exceeding expectations. Few of us, indeed, believed that the Group of Ten and Governors of the Fund could reach significant agreement concerning the creation of reserve assets.

Yet the Rio agreement will not be meaningful until SDR's come into being, and the Fund meetings in Washington must make this task their first order of business. Few would agree that there, now, a serious shortage of reserves. But creation of a first tranche of SDR's need not and should not await strong evidence of shortage. On the contrary, the creation of SDR's before such a shortage appears is prerequisite to their effective use in meeting any shortage. Governments and central banks must become accustomed to holding and using the new reserve asset before events require that they take on SDR's in the significant amounts a shortage would imply. Put differently, prompt creation of SDR's on a modest scale is needed to prove that the central banks have confidence and faith in the Rio agreement. This year's meeting, then, should start the first five year period envisaged by the Rio agreement and should authorize creation of SDR's at a modest rate, say $2 billion per year, for the next five years.

This year's meetings have also to deal with two related questions: the future roles of gold and the U.S. dollar in the international monetary system. Last spring, in Washington, members of the now-defunct gold pool agreed that they would cease to sell gold to private purchasers and that their gold holdings were, in total, adequate, so that they would not buy gold in London or elsewhere. The first of these decisions was long overdue, and we have no reason to believe that it will come apart. The second, however, was not quite so firm and may well unravel unless the Fund's Governors endorse it with vigor. It is, in any case, a fragile agreement unless those who adhere to it recognize its corollary: If total gold holdings are to be adequate, each nation has also to be satisfied with its own holdings (or, more precisely, those who want to hold more gold are able to obtain it from those who want to hold less). There is as yet no evidence to this effect. France, though losing gold since the riots last spring, has not changed its policies; it would seek to buy gold if its reserves rose again.

The Washington declaration on the role of gold cannot be made fully effective so long as the demand for gold is an unregulated total of national demands, as these demands may well exceed global supplies. It cannot be made fully effective until monetary gold is "internationalized." Total gold holdings should be pooled in the IMF, with each country taking SDR's or comparable claims in exchange for gold turned over to the Fund. I would, in fact, go further, with Triffin and

Machlup, and urge the prompt deposit of all currency reserves, along with gold, to effect a final end to the gold-exchange standard. A complete consolidation of national reserves, replacing gold and currencies with claims on the Fund, would remove the chief threat to the monetary system, the threat that was ignored last year at Rio.

One would not expect the Fund's Governors to adopt a plan this year, but frank examination of the possibilities is very much in order, if consolidation is to be effected within the next few years. That examination, conducted responsibly, would be no threat to confidence or cause for speculation. It would, instead, add to the evidence at hand that governments and central banks intend to proceed in an orderly way to strengthen the monetary system.

Sincerely,

PETER B. KENEN, *Chairman.*

STATEMENT OF ROBERT TRIFFIN, PROFESSOR OF ECONOMICS, YALE UNIVERSITY

I am most happy and encouraged, in these dangerous times, to find myself in nearly complete agreement—subject only to minor qualifications—with the analysis and recommendations unanimously adopted by the Subcommittee on International Exchange and Payments on September 18, 1968, regarding proposed reforms of our international monetary system.

I very much regret that the lack of time forces me to concentrate attention on the few points on which my own proposals would be couched in slightly different form, and precludes devoting adequate space to explaining the reasons for my strong endorsement of the general trend of the report.

Recommendation 1

I fully concur and have very little to add. I would merely stress even further the fourth paragraph of page 2, and extend the call for curtailment of military spending to domestic as well as to direct foreign exchange expenditures. As pointed out in the accompanying paper, even domestic military expenditures have a considerable impact on our balance-of-payments; (a) they add to our import requirements, (b) curtail the export capacity and export drive of major industries and (c) undermine our competitive position through their inflationary pressures upon wages and prices.

The curtailment of military spending would, for these reasons, have a much larger and beneficial impact upon our balance of payments, and a lesser unfavorable impact upon economic activity and employment, than equal cuts in other federal spending or increases in taxation.

The sharp deterioration of our current account balance—by nearly $7.5 billion—in the first half of this year as compared with 1964, and the nearly equal decline in our net exports of private capital have left our "overall deficit" just about unchanged—at a level of $3.5 billion to $4.5 billion a year—but created havoc for other countries and a major setback in the postwar progress of liberalization of international trade and capital transactions.

An "agonizing reappraisal" of the methods through which we have tried—and failed—over these years to re-equilibrate our international accounts is a major prerequisite to the further development of international cooperation entailed in other countries' wholehearted acceptance of the SDR commitments and activation.

Recommendations 2 and 3

1. I would, first of all, merge these two recommendations through the adoption of a unified "conversion account", "reserve settlement account", or "international monetary pool", encompassing all three forms of reserve assets, as favored also by my academic colleagues and Dr. Bernstein. The twin problems of how to handle the shortage of gold and the overflow of dollar and sterling reserves are not really separable, since they relate essentially to the conversion of the latter assets into the first.

2. For reasons fairly similar to those expressed to the Subcommittee by some of my colleagues, I doubt whether central bankers could, or indeed should, be expected to remain indifferent to future fluctuations of the price of gold in the private market. I would rather expect, or hope, to have them agree to combat any large or sudden appreciation—through gold sales—or depreciation—through gold purchases. Such operations, however, should be undertaken only by joint agreement, and preferably only through a joint "conversion account" operated by the IMF itself, as suggested in my own proposals.

3. I would have liked the Subcommittee to make more explicit the view that future fluctuations—*upward* as well as downward—in the foreign exchange component of world reserves should be a matter for multilateral agreement rather than for unilateral decisions or bilaterally negotiated agreements. This view is also held strongly, I believe, by my colleagues, and is indeed implied by the last sentence of the third paragraph of page 2 of the Subcommittee's report. It should be spelled out at the end of Recommendation 3.

4. While I would welcome agreement on the all-encompassing plan for my colleagues, I cannot but consider—with Senator Javits—such an agreement as difficult to negotiate in the short time at our disposal, since foreign countries may be unwilling to switch 100% from gold to IMF deposits until they have been able to gain familiarity with the new system and confidence in the wisdom and fairness of its actual management.

This practical consideration—rather than my own preference—has led me to propose a more gradual move, allowing countries to retain—if they wish—in gold metal a proportion of their total reserves equal to the average ratio of gold to total reserves for the participating countries as a group.

5. In order to facilitate and accelerate agreement on the implied commitments and ease management problems, I have recommended in the past to initiate my proposed "Conversion Account" with a limited membership encompassing only the major gold and reserve holders, but taking fully into account the interests of other countries. (See my book on *Our International Monetary System: Yesterday, Today and Tomorrow*, pp. 146–164.)

The Table appended to this paper, however, revamps my previous tables to show the implications of a world-wide "Conversion Account" on the reserve composition of all members, as of March 31, 1968, i.e. the last date for which IFS estimates are now available to non-officials.

Recommendation 4

I remain, for reasons too long to develop here, somewhat hesitant—even though not flatly opposed—to this recommendation.

Intellectually, I would prefer to the proposed "band" between intervention rates, agreement on a "fork" between maximum and minimum reserve levels, barring—or limiting gradually—stabilization interventions by central banks in the exchange markets—either as buyers, or as sellers—when their reserves reach the upper or lower of these two levels.

Such a suggestion, however, raises many difficulties that would have to be explored further, but is also, in any case, unlikely to be considered seriously by the officials.

Exchange rate readjustments should certainly be made easier and more prompt and frequent than they have been in the recent past for the major countries. They should also be implemented more often through upward revaluation of the stronger currency or currencies, rather than biassed in favor of devaluation of the weaker currency or currencies.

Countries should not be encouraged, however to *rush* into *excessive* exchange readjustments, when overspending—as is now the case in the U.S.—or underspending—as has been the case, at times, for some surplus countries—are clearly responsible for all, or most, of the imbalance between deficit and surplus countries. Exchange rate readjustments are a proper remedy for the cost and price undercompetitiveness or overcompetitiveness inherited from *past* policies or accidental developments. They are neither an appropriate nor an effective remedy for *current* levels of inflationary overspending or deflationary underspending. Countries should be encouraged to correct the latter policies, and to consider then whether equilibrated spending levels still leave them with unacceptable deficits or surpluses as a result of the international cost disequilibria inherited from previous policies.

Additional suggestions

1. May I refer to some other important suggestions of mine in previous hearings of your Subcommittee, most recently on November 22, 1967:

(*a*) The *automatic* allocation of SDR's among all IMF members is in blatant contradiction with the recurrent theme of previous Group of Ten reports that reserve creation should be linked with a strengthening of the adjustment process. It is, moreover, morally repugnant as it assigns the lion's share (36%) of such allocations to two of the richest and most capitalized countries in the world, irrespective of the wisdom of folly of the policies responsible for their deficits and of the acceptability of such policies to the prospective lenders called upon to underwrite their financing in advance by their SDR commitments. Thirdly, such a system of allocation is, for these very reasons, unviable politically and would merely lead, in the event of deep-seated policy disagreements, to a refusal to recognize an actual liquidity shortage and to activate SDR's. Finally, it would break the traditional link which has always existed in the past between fiduciary reserve creation—i.e. primarily dollar and sterling reserve accumulation—and the financing of overseas developments. It would enable the developed countries to build reserves in the form of mutual claims against each other, instead of forcing them to "earn" their international reserves by transfers of goods and services to the less developed countries. The major—and unsustainable—objection against my own proposals in this respect, i.e. the inappropriateness of using liquid liabilities for long term financing, has fortunately been rejected in fact by the officials themselves when they decided to make 70% of the SDR's unrepayable gifts to their beneficiaries.

The lending power associated with SDR creation should instead be used to help—although it would be insufficient to cover fully—the financing of *internationally agreed* objectives, such as (i) development financing (including particularly badly needed contributions to the strengthening of IDA resources), (ii) the support of price stabilization programs for primary products, (iii) the offsetting of destabilizing, but reversible, short-term capital movements among major money markets (as contemplated in the IMF General Arrangements to Borrow), and (iv) other, and more traditional, forms of assistance by the IMF to agreed monetary stabilization policies of member countries.

While the ratification of the present SDR draft agreement should not be made conditional of such an amendment, valid objections to the present allocation system could be overcome by unilateral declarations of intention by the major developed countries to earmark for such purposes an amount of resources equal to the SDR's allotted to them.

(*b*) Advantage should be taken of the SDR's creation to initiate a new policy of decentralization of the IMF machinery, taking into full account the opportunities for regional monetary cooperation arising from the formation of economic unions or trading groups in various parts of the world, including at some future time—in spite of the present setback in Czechoslovakia—the encouragement of a reintegration of the COMECON countries in the international monetary and trading community.

These recommendations received considerable support in the subsequent Subcommittee report of December 6, 1967. The recommendations unanimously made in this report should be repeated and integrated with those of the present report.

2. The history of the present negotiation should lead also to an urgent and agonizing reappraisal of the negotiating format and techniques that are responsible in part for the slow progress of such negotiations and the bizarre reversals of so-called national negotiating positions that contribute to their often disappointing results.

3. These additional suggestions are discussed further in the accompanying paper on "An Agreed International Monetary Standard" and on "International Economic Policy Issues in 1969" (NICB, New York, September 19, 1968), which addresses itself mainly to the U.S. and U.K. balance-of-payments problems and policies.

HYPOTHETICAL RESERVE COMPOSITION AS OF MAR. 31, 1968

[In billions of U.S. dollars]

	Total	Working balances	Total	Other reserves: Minimum in IMF	Other reserves: Maximum in gold	Gold impact: Actual gold	Gold impact: Maximum gold shifts
	(a)	(b)	(c=a−b)	(d=0.35c)	(e=0.65c)	(f)	(g=e−f)
I. Reserve centers	16.6	2.3	14.3	5.0	9.3	12.2	−2.9
United States	13.9	1.5	12.4	4.4	8.1	10.7	−2.6
United Kingdom	2.7	.9	1.8	.6	1.2	1.5	−.3
II. Industrial Europe	32.3	3.6	28.7	10.1	18.6	18.3	+.3
A. European Community:	25.8	2.8	23.0	8.0	14.9	14.7	+.2
France	6.9	.6	6.3	2.2	4.1	5.1	−1.1
Belgium	2.6	.4	2.2	.8	1.4	1.4	
Netherlands	2.5	.4	2.1	.7	1.4	1.7	−.3
Germany	8.5	.9	7.6	2.7	4.9	4.0	+.9
Italy	5.3	.5	4.8	1.7	3.1	2.4	+.7
B. Other	6.5	.8	5.7	2.1	3.6	3.6	
Switzerland	3.0	.2	2.8	1.0	1.8	2.6	−.8
Austria	1.4	.1	1.3	.5	.8	.7	+.1
Denmark, Norway, Sweden	2.1	.5	1.6	.6	1.0	.3	+.7
III. Other developed countries	10.4	2.1	8.3	2.9	5.4	4.2	+1.2
Europe	3.5	.5	3.0	1.1	1.9	1.9	
Canada	2.3	.5	1.8	.6	1.2	1.0	+.2
Japan	2.0	.6	1.4	.5	.9	.3	+.6
Other	2.6	.4	2.2	.8	1.4	1.0	+.4
IV. Less developed areas	13.3	2.1	11.2	3.9	7.3	3.1	+4.2
V. World	72.6	10.1	62.5	22.0	40.5	37.8	+2.7

Source: All estimates are derived from the "International Liquidity" and "World Trade" estimates of International Financial Statistics (September 1968, pp. 14–18 and 35) rounded up to next $0.1 billion.

Explanatory Notes

1. Working balances, retained directly in foreign currencies, should not exceed 10 percent of 1967 exports and are assumed to average about 5 percent. These assumptions, however, are made only for illustrative purposes. Agreed working levels should be a matter for negotiation and should take into account foreseeable needs for proximate debt repayments.

2. Reserves proper—i.e., beyond working balances—should be held exclusively in gold and/or deposits with the IMF:

(*a*) the proportion retained in gold should not exceed, as a maximum the average proportion of IMF and countries' gold holdings ($40.5 billion, as of March 31, 1968) to countries total reserves beyond working balances ($62.5 billion); i.e., about 65 percent as of the end of March 1968; see column (e);

(*b*) the remainder (35 percent or more) should be held in deposits with the IMF, see column (d);

3. If, contrary to expectations, all countries kept the allowable maximum of their reserves in gold, in spite of the gold-value or exchange guarantees and earnings attached to IMF deposits, the resulting maximum gold transfers are shown in column (g) and their net sum is equal to the IMF gold holdings at that time.

4. If countries were allowed to convert into gold the portion of their IMF deposits which exceeds the agreed minimum, only when their working balances exceed 10 percent, gross gold withdrawals would have been limited to $2.5 billion (instead of $5.7 billion): $2.1 billion by the less developed countries—least likely to effect such withdrawals—and $0.2 billion each by Italy and the Scandinavian countries (col. g minus col. b). This would leave a substantial amount of gold available to the IMF for agreed interventions in the private gold market.

5. Subsequent deficits, or surpluses would be fully financed by the depletion of, or accretions to, each country's working balance. Surplus countries could

withdraw in gold their resulting "excess deposits" with the IMF, such withdrawals being covered, or more than covered, by the obligation of deficit countries to reconstitute their minimum IMF deposit requirement.

6. Insofar as countries did not exercise fully their rights to gold withdrawals, the gold needed to cover actual withdrawals would be called by the IMF from the countries whose gold reserves exceed the gold proportion of others.

ROBERT TRIFFIN.

SEPTEMBER 1968.

AN AGREED INTERNATIONAL MONETARY STANDARD

By Robert Triffin

"Men and nations behave wisely . . . after all other alternatives have been exhausted."

If we could trust this quotation, a sensible agreement on international monetary reform should be just "around the corner," for the mounting crisis of the international monetary system amply demonstrates that the only alternative to such an agreement is an impending collapse of the system itself.

The pessimists among us can unfortunately argue that such an agreement has no precedent in world history. Indeed, none of the international monetary standards which we have known in the past has ever been the product of an international agreement. The silver standard, the bimetallic standard, the gold standard, the floating-exchange standard, and the gold-exchange standard of yesteryears, as well as the bizarre arm-twisting dollar-exchange standard of today have all resulted from historical accidents, unforeseen, unplanned, and most often opposed and resisted by our so-called financial and political "leaders." Will they succeed tomorrow in their belated enthusiasm for the demonetization of gold and its replacement by a truly international fiduciary standard: the so-called IMF Special Drawing Rights (SDR's) or "paper gold" dear to Secretary Fowler? I hope so, but nobody can be certain yet that the transition will be an orderly one, and that our "leaders" will be able to spare us a most dangerous intermission of financial and economic disorder, compounded by political bickering that would widen even further the fissures now threatening the Atlantic partnership.

To make sure that we all understand the problem, I shall devote a few minutes to unravel the gibberish in which economists cloak, and often hide. The fundamental issue is that of national monetary power. Its roots lie in the substitution of *national paper money*—i.e. currency notes and bank deposits circulating only within each country's borders—for the *internationally acceptable and circulating commodity moneys*—gold and silver—characteristic of the pre-nineteenth century world.

This substitution of man-made money for commodity money is part and parcel of a far broader and irreversible historical, evolutionary trend: the effort of man to assert his control over his physical environment instead of being controlled by it, in the monetary field as well as in all aspects of human life. I have no doubt that this trend will continue and that is why I remain basically optimistic about the long-run prospects of Secretary Fowler's "paper-gold."

This control of man over money, however, could only be organized at first within the framework of each nation-state. Each of the several scores of countries into which the present world is divided issues its own national currency, but can impose its use and acceptability only within each country's own borders. Whenever a country's residents spend more abroad than foreigners spend in that country, its monetary authorities must find some means of settlement acceptable in payment by the foreign creditors. They could, of course, accumulate for that purpose adequate stocks of each and everyone of the hundred odd foreign currencies that might conceivably be needed for that purpose at some future time, but this would be an extremely wasteful and risky process. It is impossible to determine in advance which, and how much, of these currencies will be needed in fact, and any one of them can be unilaterally devalued by its own monetary authorities, or by market forces, at any point of time. The pound sterling, for instance, has lost about 40% of its dollar value since 1949, the French franc 75%, the Brazilian cruzeiro more than 99%. Central banks have thus always sought to accumulate reserves instead in an international acceptable asset, devoid of such exchange risks, and against which any foreign currency could be procured if and when needed.

International monetary conferences failed, time after time, to elicit international agreement as to the choice of such a reserve asset, but one of the two traditional commodity-moneys (gold) finally displaced the other (silver) in the latter part of the nineteenth century as the only international reserve instrument enjoying *de facto* worldwide acceptability. In pure logic, this was always of course a sheer absurdity. Digging the earth in South Africa and in Fort Knox, to extract gold from the first and bury it in the latter, can hardly be regarded as the most rational way to organize international payments. Moreover, the supply of monetary gold available to central banks depends on a number of hazards, none of which bears any relationship whatsoever to the amounts needed to sustain an orderly growth—neither inflationary nor deflationary—of national currencies, trade and production throughout the world.

Recurrent shortages of gold supplies with relation to needs were a favorite theme of the nineteenth century conferences aiming at reviving the use of silver as supplementary reserves, and of the marathon debates of the 1920's, and early 1930's: at Brussels, in 1920, Genoa, in 1922, and the Gold Delegation of the League of Nations, from 1928 to 1932. All these conferences failed to elicit any comprehensive and formally agreed solution of the problem, but they gave some sort of informal, though cautious, blessing to the growing use of so-called key currencies—primarily the pound and the dollar—as a useful supplement to gold for the purpose of reserve accumulation. The previous gold standard thus made way for the gold-exchange standard, a system under which central banks held their international reserves partly in gold and partly in gold-convertible national currencies, with the right to switch them at any time from the first to the latter, or from the latter to the first.

The growth of world reserves, under this system, was even more haphazard than under the pure gold standard. To the vagaries of gold production in the West, gold-sales by the Russians, private gold absorption by industry, the arts, hoarding and speculation it added those of the fluctuating supply or withdrawal of pounds and dollars resulting either from the British and American balance-of-payments surpluses or deficits, or from the uncoordinated decisions of scores of central banks to switch their reserves at any time, from gold into sterling or dollars, or vice-versa. As a point of fact, world reserves could grow at a satisfactory—or even at times widely excessive—pace only as long as the United Kingdom and/or the United States experienced large and persistent deficits in their overall balance-of-payments and foreign central banks chose nevertheless to continue to regard their sterling or dollar balances as "as good as gold."

These two conditions were unfortunately contradictory, as I pointed out about ten years ago in my book on *Gold and the Dollar Crisis*. The persistent deficits and piling-up of short term indebtedness of the center countries—the United States and the United Kingdom—needed to feed world reserves at an adequate pace were bound to undermine, in the end, the confidence of other countries in the ability of the center countries to honor their commitment to redeem in gold, at any time, the sterling or dollar balances that might be presented to them for conversion under the rules of the game.

The predominantly sterling-exchange standard of the 1920's had already indeed been brought to an ignominious end, for that very reason in September 1931, and the predominantly dollar-exchange standard of today is now threatened with a similar fate. While the net reserves of other countries have more than tripled since 1949, passing from $17 billion to $54 billion, those of the two center countries have dropped from $17 billion to *minus* $13 billion. The United States gold reserves have declined over this period by more than $14 billion, while its net indebtedness to the IMF and foreign central banks increased by nearly $15 billion. As of last March, our net liabilities to foreign monetary authorities and the International Monetary Fund totalled about $15.3 billion, exceeding our remaining gold stock of $10.7 billion by $4.6 billion. The situation of Britain was, of course, even worse, its liabilities to foreign monetary authorities and the IMF totalling more than $7 billion and exceeding five to six times its dwindling gold assets.

We speak today of reforming the gold-exchange standard, but in truth the gold-exchange standard is dead already, and beyond any hope of resurrection. Its death certificate was signed about eight years ago when our then Undersecretary of the Treasury, Mr. Roosa, had to entreat or bludgeon foreign central banks to refrain from exercising freely their legal rights to gold conversion, lest our inability to honor them forced an open suspension of these rights by the United States. From that day on, the gold-exchange standard of former days was transformed into a limping and essentially political, standard, dependent for its survival on the success, or failure of our negotiations with our creditors.

The practical inconvertibility of sterling has been made even more obvious by the recurrent sterling crises and the rescue operation that had to be negotiated repeatedly over the last few years and failed, in the end, to prevent the devaluation of last November.

Foreign central banks still accumulate sterling, and particularly dollar, balances, but they do so less and less spontaneously. Indeed the year 1965 witnessed a massive contraction (more than $2.6 billion) of the foreign exchange reserves previously accumulated at a pace of about $1.4 billion a year by the developed countries other than the U.S. and the U.K. This movement was slowed down in 1966, and accumulation resumed on a major scale ($1.9 billion) in 1967. in a desperate effort to stave off a devaluation of the pound and suspension of gold payments by the U.S. itself.

A few of my academic colleagues, and even some private bankers, are now suggesting to formalize and institutionalize a dollar area system in which all members other than the U.S. would commit themselves to hold most, or all, of their reserves in the form of dollar claims, renounce formally their right to gold conversion, and cooperate with us in erecting whatever trade and/or exchange restrictions might prove necessary to prevent excessive gold losses to the countries which refused to joint the system. Alternatively, the U.S. and the dollar area members might decide to suspend gold payments altogether, to non-members as well as among members.

This suggestion is, at first view, an extremely tempting one for a reserve currency. Like old generals, reserve currencies do not die. They don't even fade away. They shrink from worldwide acceptability to regional acceptability. This is what happened to sterling after 1931, when the international acceptability of sterling shrank to the dimensions of the sterling area, and had to be bolstered later by preferential treatment of commercial and financial transactions within the area, and discrimination against imports from, and capital exports to, the countries which refused to join the system.

The enormous financial. economic, and political bargaining power of the United States would enable us to enlist far more countries into a similar dollar area than Britain could ever entice into her sterling area. We could cease to worry about our balance-of-payments deficits, since we would merely pay for them with dollars, i.e. with our own IOU's.

But the ultimate consequences of the probable initial success of such a policy are worth pondering before we engage into it, or slip inadvertently into it as we are now doing. At home, it might encourage a dangerous degree of political irresponsibility. Congress, and even the Administration, would find it increasingly difficult to raise taxes or interest rates, or reduce expenditures, if assured in advance of unlimited credits by foreign central banks, financing whatever deficits we incur. Abroad, public opinion would soon awaken—or be awakened—to the political implications of such a system, i.e. the advance underwriting by foreign central banks and their nationals of whatever deficits we may incur in pursuing policies unilaterally decided by us, on which they may not have been consulted, and with which they may at times deeply disagree.

Our own officials are fortunately horrified at the eventual outcome of such a blatant attempt to impose our own monetary sovereignty upon the rest of the world. They label it privately the "Roman solution," and know that it would be bound to arouse sharp political, as well as economic, divisions between the United States and Europe, as well as many other countries. More and more countries would desert, sooner or later, the dollar area, and erect compensatory barriers against the "foreign-exchange dumping" associated with the downward drift of a floating dollar—no longer supported by central bank purchases—in the exchange market. Economic warfare *a la* 1930's between a new gold bloc and a shrinking dollar bloc would replace the economic cooperation that has assured our joint prosperity ever since the end of World War II.

Disastrous as it would be for all of us in the end, this course of events still remains the most likely one if our efforts to reach international agreement on what is, after all, an international problem continue to be frustrated by outworn and mutually defeating nationalistic aims, here and abroad, in the negotiations that have now been in process for nearly five years already.

Some optimism might be derived from the momentous step unanimously agreed to, last September, in Rio de Janeiro, among the 107 nations of the International Monetary Fund. This agreement paves the way for the adoption of a new reserve asset, to be jointly created through the concerted decision of member countries, in whatever amounts are deemed necessary by them to ensure an appropriate rate of growth of world reserves over future years. There is every reason to hope that this agreement will be ratified by a sufficient number of

Congresses and Parliaments to be ready for operation within another year or so. Yet, it solves only part of the much broader problems which are at the origin of the recurrent monetary crises which are now threatening the survival of a truly international monetary system.

The Rio agreement is confined to the creation of the new reserve asset, but says nothing about the future role to be assigned to the traditional reserve assets the instability of which is at the root of these crises, i.e. gold and the reserve currencies. Yet, how would it be possible to reach a rational collective decision on the amounts of the new reserve asset that might be needed over the next five years—as provided in the agreement—without having any inkling about the amounts of reserves that might be created through further dollar and sterling accumulation by central banks, or destroyed through the conversion of existing dollar and sterling holdings into gold metal by scared speculators and central bankers? I ventured to predict, right after Rio, that new sterling, dollar and gold crises would soon force the negotiators to put their nose into the dirt which they had bravely tried to sweep under the carpet at Rio.[1] The devaluation of the pound and the ensuing gold rush were to confirm this forecast, earlier and more dramatically than I would have anticipated. An estimated and unprecedented $3 billion to $4 billion of gold was lost by central bankers to private buyers in the short space of less than five months, following the devaluation of the pound, the U.S. gold loss alone amounting to more than $2.3 billion over this period.

Clearly, a comprehensive agreement covering all types of reserve assets, and particularly gold and the reserve currencies as well as any new reserve asset (such as the SDR's) is essential before the latter can come into existence and play its proper role in tomorrow's international monetary and reserve system.

As far as gold is concerned, two extreme views are still clashing at the moment. Some advocate a sharp increase in its price—from about 50% to three times its present official dollar value—while others would demonetize it internationally as it has long been demonetized nationally in the domestic monetary system of every country in the world, without exception. The objections to the first course of action are too decisive, too numerous, and too obvious to deserve an extensive review at this stage. An increase in the price of gold would be a step backward in the evolution of the international monetary system. By relieving—for a while—any danger of reserve scarcity, it would remove the major pressure for reform and rationalization of the system. It might, moreover, trigger a tidal wave of inflation by increasing massively overnight the nominal value of gold reserves the world over. In the longer run, it would leave the growth of world reserves totally dependent on the same absurd and irrelevant hazards on which it depends today. It would indeed give a new breath of life to the foreign-exchange component of the gold-exchange standard, since central banks might again be more willing, *after* an increase in the gold price, to accumulate once more interest-earning dollar balances whose gold equivalence would be less likely to be cut down again for some time to come anyway.

The opposite solution of a gold demonetization is far more attractive and is no longer regarded by the officials as a mere dream of academic utopians. Indeed, a first step in that direction was taken on March 17th, in Washington, by the countries of the defunct gold pool. After disbanding this agreement, under the weight of speculative attacks, they decided "no longer to supply gold to the London gold market or any other gold market. Moreover, as the existing stock of gold is sufficient in view of the prospective establishment of the facility for Special Drawing Rights, they no longer feel it necessary to buy gold from the market. Finally, they agreed that henceforth they will not sell gold to monetary authorities to replace gold sold in private markets."

Encouraging as this declaration may be for the future, I would not be overly sanguine about the prospect of any immediate and agreed demonetization of gold as far as concerns settlements among the monetary authorities themselves. This would seem to me both unlikely and, indeed, dangerous as long as the main alternative to gold remains confined to dollar holdings, for it would be tantamount to accepting the dollar area solution which I have criticized above. Such a solution would be all the more unviable if private hoarders and speculators continue to convert their holdings of dollars or other threatened currencies either into gold or into stronger currencies, such as the Swiss franc, the German mark,

[1] "Alchemy in Rio: The Problems Ahead," *Interplay*, November 1967, pp. 20–22.

etc. The monetary authorities of the latter countries would not accept to sell indefinitely their own currency in exchange for the other currencies dumped upon them by hoarders and speculators.

We must build before we can afford to destroy. Gold cannot be definitely eliminated—as it should—from the international monetary system until agreement has been reached on an acceptable substitute—other than full surrender of monetary sovereignty to a "dollar area" solution—and until confidence has been built up in this substitute on the basis of some years of experience with the soundness and fairness of its management.

Two major obstacles still need to be overcome before the proposed Special Drawing Rights can offer such an acceptable substitute. First of all, they are not supposed to be "activated"—i.e. created—until "a collective judgment [has been reached] that there is a global need to supplement reserves, and the attainment of a better balance-of-payments equilibrium, as well as the likelihood of a better working of the adjustment process in the future" (Article XXIV, Section 1, b).

The history of the negotiation makes it clear that this so-called "prerequisite" to SDR activation refers essentially in fact to a better—or even, in some previous language, full and durable—equilibrium in the balance-of-payments of the reserve-currency countries, primarily the United States.

This is obviously absurd. The reform of an international monetary system threatened by a catastrophic collapse should not have to wait until the United States has demonstrated perfect or near-perfect luck and wisdom in the management of its own affairs. The "prerequisite" should be re-worded instead in such a way as to make the world reserve system less dependent than it now is on the balance-of-payments fluctuations of the reserve-center countries.

This is precisely where agreement could be reached between the major opponents in the current debate on monetary reform. Contrary to widespread misapprehension and distortions, President de Gaulle has never advocated the return to a pure gold standard. All his speeches—and those of his Ministers—have admitted the need for a truly international credit superstructure that would not, however, bear the imprint of any particular country or currency. His constantly reiterated objective has been the elimination of what he calls the inequitable and exorbitant privilege of the reserve-currency countries to settle their deficits with their own IOU's, instead of being subject to the same adjustment pressures which all other countries have to accept.

This "exorbitant privilege," however, has now turned in fact into a "horrendous threat" or even an "excruciating burden" for both of the reserve currencies, which find themselves exposed to repay overnight the sterling and dollar indebtedness incurred by them over many years past, under the rules of the game of the absurd Monte-Carlo roulette dignified under the name of gold-exchange standard.

The interests of reserve debtors as well as reserve holders now converge and should prompt an early agreement on the orderly elimination of this absurd and unviable system. The British Government has now affirmed itself as anxious as President de Gaulle to reach such an agreement and our Under-Secretary of the Treasury, Mr. Deming, has recently testified in Congress that "these things are worthy of study," although he also felt that "things like that are probably premature."[2] Having proposed myself "things like that" nearly ten years ago, I cannot but feel that we have had plenty of time for study already, and that action is now long overdue rather than still "premature."

Recent press reports indicate that such an approach is now actively discussed, as far at least as sterling is concerned. My proposal for a Gold Conversion Account has recently been joined by similar, and even more radical and ambitious, proposals of Fritz Machlup, E. M. Bernstein, and James Tobin. Otmar Emminger, Governor of the Bundesbank and former Chairman of the Group of Ten Deputies, recently remarked[3] that "this ingenious scheme would certainly solve the problem of a dangerous shift between foreign exchange and gold. . . . The philosophy behind the proposal does broadly correspond to what a number of us had in mind in our earlier international discussions and negotiations." He also expressed doubts, however, about the negotiability of the proposal at the

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[2] *The International Monetary Fund's Special Drawing Rights Proposal and the Current International Financial Situation,* Hearing before the Subcommittee on International Finance, April 12, 1968, p. 43.

[3] In an address on "The Role of Gold in Our Monetary System" at the National Industrial Conference Board, in New York, February 14–15, 1968, pp. 15–16.

present time and concluded that "for some time to come the only practicable answer to our problem will be: to keep the dollar so strong and stable—literally 'as good as gold'—that the confidence problem does not really arise."

I have no doubt myself about the need to proceed along *both* of these lines of action, but do not think that either the success or failure of the latter should dispense us from pursuing the first. On the contrary, a Gold Conversion Account agreement would greatly facilitate our task of restoring equilibrium in the U.S. balance of payments, by eliminating a major source of instability and speculative capital flights.

I was greatly encouraged to read last week the comments of Governor Carli in his annual report to the General Assembly of the Bank of Italy (May 31, 1968): "The reform of the Fund Charter lays the foundation for a progressive concentration of all reserves in an institution whose framework can permit a more effective management of international liquidity and the settlements required by expanding levels of world trade. Foreign official circles are exploring the creation, within the Monetary Fund, of special accounts (the so-called conversion accounts) in which could be deposited dollar, and eventually sterling, balances which, in the judgment of central banks, exceed the working funds needed for intervention in the exchange markets."

This is indeed the essence of my proposal. Central banks would retain in the form of foreign-exchange reserves—i.e. of foreign national currencies, primarily dollars—only the working balances needed for market intervention. Excess foreign exchange would be deposited in a reserve account with the IMF, with appropriate exchange guarantees and interest-rates, and the account holders would draw on these accounts at any time to finance later deficits in their balance-of-payments. Current foreign-exchange accruals deposited in such accounts in the future would be debited immediately from the account of the debtor countries. On the other hand, outstanding foreign-exchange balances accumulated over many years past, and deposited with the IMF at the start of operations, would no longer be exposed to sudden and massive repayments, but would be held by the IMF as investments, with repayment provisions geared to the general stabilization objectives of the Fund.

Guaranteed and interest-earning reserve deposits with the Fund should be more attractive to central banks than either of the traditional reserve assets, i.e. unguaranteed foreign-exchange holdings and sterile gold metal. The $40 billion of sterile gold now held by central banks would gradually be exchanged by them for such deposits, and could be used by the Fund to regain control of the gold market and to facilitate the orderly liquidation of official gold stocks that would be called for when agreement is reached on the international demonetization of gold and its gradual replacement by reserve deposits in the IMF.

The future growth of world reserves could then be systematically oriented by the Fund, through its loans and investment operations, to support feasible, non-inflationary, growth rates in the world trade and production, and to support national adjustment and stabilization policies by Fund members. This would require, in time, an important amendment in the Rio agreement which foresees an *automatic* allocation of future SDR's among all countries, *pro rata* of their Fund quotas. This has the absurd result of allotting 36% of all SDR's to two of the richest countries in the world—the U.S. and the U.K.—and only 25% or so to more than eighty less developed countries. It would, moreover, help finance *automatically* national policies, irrespective of their soundness or folly, even when they are in total contradiction with the judgment and/or interests of the lenders.

It is obvious that such a system would be as unacceptable in the long run, to the lenders, as it is inequitable to the underdeveloped countries. The potential lending power derived from the creation of a new international reserve asset should be used to support agreed international objectives rather than unilaterally determined national policies. It should help finance monetary stabilization programs, offset disturbing movements of short-term funds among major money centers, and could even be used, in part, to supplement the resources of institutions such as the IBRD, IDA, ad the commodity stabilization program unanimously endorsed in the second resolution adopted at Rio last September.

Another amendment of the SDR agreement should aim at a decentralization of the Fund operations, taking full advantage of emerging regional monetary integration and institutions in Europe, Central America, etc., and facilitating in time, the reintegration of the U.S.S.R. and Eastern Europe in the international monetary and economic community.

I am particularly glad to note the support unanimously expressed for these proposed lines of future development by the Congressional Subcommittee on International Exchange and Payments,[4] and by Govenor Carli in the speech referred to above.

The problem is whether we shall be able to act in time, or whether our monetary and political leaders will continue to regard such ideas as worthwhile, but premature, and be once more overtaken by events. The memory of 1931 and its aftermath is still our best hope of avoiding a similar catastrophe tomorrow.

In any case, I have no doubt about the ultimate course of world monetary evolution along a path so clearly marked by man's history, and which past mistakes have made sometimes unnecessarily bumpy and devious, but have never been able to arrest, and far less to reverse.

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[4] In its report on *Guidelines for Improving the International Monetary System—Round Two,* Washington, D.C., December 6, 1967.

INTERNATIONAL ECONOMIC POLICY ISSUES IN 1969

(A summary of a paper delivered by Robert Triffin at the 52d annual meeting of the National Industrial Conference Board, New York, September 19, 1968)

1. *Main issue*

One of the main international policy issues of 1969 will remain the one which we have confronted, and failed to solve, for nearly a decade already, i.e. how to redress our balance of payments without drying up what has been, since the war, the main source of growth in the world monetary reserves needed to sustain feasible, non-inflationary, growth of world trade and production.

2. *Payments imbalances are an international problem*

In view of our dominant role in world trade and finance, our balance-of-payments problem and its solution cannot be viewed in isolation from their interrelationship with other countries' problems and policies. The most puzzling feature of the enormous imbalance of world payments in recent years is that the hugest and most persistent reserve losses have been encurred *not* by the poorer, less developed countries, but by two of the richest and most developed countries in the world, i.e. the United States and the United Kingdom. Over the four years 1964–1967, the underdeveloped countries have increased their international reserves by about $3 billion, but the gross reserves of the United States and the United Kingdom have dropped by $2.5 billion, and their net reserves by about $11 billion, and even more, in fact, if we include our indirect borrowings from other central banks through the Euro-dollar market incorrectly reported in our statistics as liabilities to private banks rather than to foreign monetary authorities. (I wish I had time to explore with you the possible relationship between this paradox and the reserve role of the dollar and the pound in the so-called gold-exchange standard.)

3. *U.S. deficits and policies*

More than $4 billion of our $6 billion deficits of the last four years have been financed from our own gold losses ($3.5 billion) and decline in our reserve position in the IMF ($0.6 billion). The rest (about $1.8 billion) and our accumulation of foreign exchange reserves ($2.1 billion, overwhelmingly accounted for by credit claims on the U.K.) was reflected in our mounting indebtedness to the IMF ($0.2 billion) and to foreign monetary authorities ($3.8 billion). We increased, over the same period, by an additional $5.5 billion our short-term indebtedness to commercial banks abroad. A substantial portion of this latter amount undoubtedly reflects dollar accumulation by foreign central banks through the Euro-dollar market.

The concrete policy measures adopted to hold down these huge deficits have centered mostly so far on reducing—by "voluntary" or "compulsory" restraints and the interest equalization tax—the outflows of U.S. capital and inducing inflows of foreign capital, particularly from the Euro-bond market, on an unprecedented scale. Our net exports of private capital have been successfully pared down in this fashion from about $7.5 billion in 1964 to about $4 billion in 1967 and probably not very far from zero in the first half of this year.

Unfortunately, this huge "gain" has been offset, and indeed more than offset, by modest increases in our foreign aid expenditures and, most of all, by the near elimination of our current account surplus which fell from $7.5 billion in 1964 to $3.5 billion in 1967 and probably $0.1 to $0.2 billion, at an annual rate, in the first six months of this year.

Estimates of our so-called "official settlements" deficit gyrate in bewildering fashion from quarter to quarter, but taken together with our short-term liabilities to commercial banks, they indicate a continuing deficit of about $4 billion per year.

4. *U.K. deficits and policies*

The overall deficit of the other reserve center country, the United Kingdom, continues to oscillate around $1.5 billion per year and even reached a record level of $5.6 billion, at an annual rate, during the disastrous first quarter of this year.

Of the $5.1 billion deficit of the last four years, about $1.8 billion was financed by reserve losses and the liquidation of the foreign securities vested during the war by the U.K. government. The rest ($3.3 billion) was financed by repeated borrowings from the IMF and foreign central banks, part of which was cancelled, in dollar terms, by the devaluation of the pound, last November.

Summing up the policy measures adopted by the U.K. to redress its situation (wage freezes, tightening of credit, restraints on capital exports, tax increases, reductions in government expenditures, devaluation of the pound, and, last but not least, the semi-consolidation of volatile sterling balances announced earlier this month) one can hardly avoid the feeling that the U.K. balance of payments should finally improve, drastically and rapidly. The still disappointing record of recent months certainly reflects continued distrust on the part of the so-called "gnomes" of Zurich and other places—including London itself. This may reflect in part the fact that the measures listed above were adopted only one at a time rather than grouped in a convincing and impressive package, and that the Government felt compelled each time to alarm public opinion by gloomy forecasts of the threats hanging over the pound, in order to justify each of these measures, none of which could, in isolation, be taken as an adequate remedy for the basic disequilibrium in the British economy.

5. *The surplus countries*

Large increases in the current surplus and net capital exports of other industrial countries (particularly the Economic European Community and Japan) have provided the main offsets to the deterioration of the U.S. and U.K. current account and capital exports.

The current account of these countries improved by about $4.6 billion between 1964 and 1967, and their net capital exports increased even more, by $5.9 billion, thus reducing their net reserve accumulation by about $1.4 billion a year. Most of their reserve increases over these four years was accumulated in gold metal ($3.9 billion) while their foreign exchange assets do not show any increase over the period as a whole. Their reserve lending to the IMF, however, rose spectacularly, by about $2.6 billion, from $2.2 billion to $4.8 billion.

6. *Policy conclusions for the U.S.*

A. Our main efforts should clearly aim at a drastic improvement of our current account balance, enabling us to resume the normal level of net capital exports to the rest of the world which economic as well as moral considerations should lead us to expect from the richest and most developed country in the world economy.

Controls over capital exports should be eliminated as soon as the success of such a redirection of our present policies will permit.

B. A number of my academic colleagues consider that this recommendation should be implemented by a devaluation of the dollar, necessary to restore our price and cost competitiveness in the world economy. This view will undoubtedly prove correct if our price and cost increases continue at their recent pace. The GNP price deflator was rising during the first half of this year at an annual pace of about 4%. That this reflects mostly internal rather than external inflationary pressures is confirmed by the fact that our export prices—which reflect both domestic and external factors—are rising by only 3% a year, and that our import prices—determined nearly exclusively by foreign conditions—have not risen at all over the same period.

Yet, I would myself regard any dollar devaluation as premature, and strongly hope that we may still be able to avoid it through alternative policy actions. Indeed, in a full employment economy already subject to such inflationary pressures, a dollar devaluation—even if deemed acceptable at home *and abroad*—could only improve the current account at the cost of accelerating even further domestic inflationary trends.

We shall be unable to gauge correctly whether our prices and costs are still competitive or not before we have eliminated the overspending which is, at present, the major cause of both the inflationary overflow of dollars at home and the deficit-triggering overflow of dollars abroad. We must tailor down our overall rate of private and government spending to the GNP achievable in a full employment economy—or rather somewhat below, in order to restore the current account surplus needed to finance normal and desirable rates of capital exports and reserve increases.

To many of us, such a policy should center on—rather than exclude—an agonizing reappraisal of our Vietnam policies, responsible for the $30 billion skyrocketing of our military expenditures since 1964, but still likely to be regarded as a sacred cow by the next Administration. Let me add that sensible reductions in our overbloated military establishment would have a far greater impact upon our import requirements and export capacity than most other kinds of fiscal and budgeting retrenchments, and would therefore have a far greater impact upon our balance of payments, and a lesser one on domestic activity and employment.

D. If our balance-of-payments deficit remains excessive, even after such action has been taken, it may then, but only then, be necessary to give serious consideration to the advisability of exchange rate readjustments. I would hope, however, that such readjustments might, more sensibly, take place through an appreciation of some of the stronger currencies of major surplus countries, the Deutsche mark for instance, rather than through a dollar devaluation which would inevitably trigger a chain reaction of other devaluations by most countries of the world.

7. *Policy conclusions for all countries*

The specter of a dollar devaluation calls to mind another basic need for an agonizing reappraisal of the way national policies are decided and made mutually defeating and ineffective in an interdependent world. No country can change successfully its exchange rate vis-à-vis another country if the latter decides to resist such a change. International policy measures must be decided internationally if we wish to avoid incompatible national decisions, reconcilable only through chance or chaos as in 1930's.

National governments must learn to forge together, by mutual agreement, compatible policy targets and instruments. We are now very far indeed from implementing such commonplace, but common sense, advise. I observed, several years ago, that the official targets of balance-of-payments policy proudly proclaimed to the world in 1960 by the U.S. and the U.K. aimed at an improvement of more than $5 billion in their combined balance of payments, but that no countries had volunteered as candidates for the implied deterioration of $5 billion in their balances of payments. I hardly need add that neither the U.S. nor the U.K. has fulfilled so far their 1960 policy objectives. They are, however, blandly repeating this year the same kind of unworldly arithmetic. We have announced our determination to improve our balance of payments by at least $3 billion, and the British are forecasting an improvement of some $2 billion in their own balance of payments, i.e. $5 billion in all. Again, no candidates have appeared for the implied deterioration of $5 billion in other countries' balances of payments.

Such policy targets should not be decided unilaterally, and indeed futilely. The amounts by which imbalance should be reduced, and the measures which should be adopted and accepted by all concerned to achieve the objectives and finance the remaining targeted imbalances should be explored and agreed jointly by deficit and surplus countries. This—slow and difficult as it may be to implement in practice—should enhance both the effectiveness of the adjustment policies considered necessary and the willingness of the surplus countries to finance the surpluses which they themselves want to retain as an alternative to exceedingly brutal readjustment policies by the deficit countries.

This imperative of policy compatibility brings me to my last topic: the problem of international monetary reform.

8. *The supply of world reserves*

The incompatibility of present policy targets may be quantified as follows. First of all, the combined $4.7 billion net reserve losses of the U.S. and the U.K. in 1967 are matched by only $2.2 billion of net reserve increases in the rest of the world, leaving a gap of $2.5 billion between the total elimination of U.S. and U.K. deficits and of other countries' surpluses. This gap is due in part to unavoidable estimating errors, but in part also to perfectly avoidable and deliberately misleading accounting of reserve statistics by some of the countries concerned. As much as $1.6 billion, however, was accounted for by the unprecedented drain of gold from official reserves into private hoards and speculation.

Secondly, however, international world reserves should probably grow at an average rate of, approximately, 4 percent a year, or even more, in order to sustain feasible, non-inflationary, rates of growth in world trade, production and domestic money stocks. The implementation of such a growth target would entail an annual increase of about $3 billion of the world reserve pool. Last year's shortfall is thus of the order of $4.5 billion to $5.5 billion.

9. The Rio Agreement

The famous SDR agreement, reached last year at Rio, provides the main hope that this problem will be solved at some future time. Yet, the amounts usually mentioned—$1 billion to $2 billion of annual SDR creation—can only be deemed niggardly and, most of all, the system is supposed to remain on ice until the U.S. and U.K. have succeeded in restoring viable equilibrium in their balance of payments. This is plainly absurd. In fact, the gold dishoarding and revival of confidence in dollar and sterling investments which would be triggered by such a success of U.S. and U.K. policies would remove, for some time at least, any danger of world illiquidity and make superfluous—or even inflationary—any immediate activation of the SDR system. Conversely, continued U.S. and U.K. deficits would risk to prompt more conversions of dollars and sterling into other currencies by speculators, and into gold by central banks, thus accelerating the contraction of world reserves and the need for SDR creation.

In any case the SDR plan pretends to solve only one of the three problems—i.e. the liquidity problem—of the present international monetary system. It offers no hint of a solution to either the "adjustment" problem, or the "stability" problem.

The automatic distribution of SDR among all countries on the basis of their relative IMF quotas means that prospective creditors are supposed to underwrite in advance the future deficits resulting from national policies, whether wise or foolish, whether acceptable or distasteful to them. This hardly fulfills the recurrent theme of previous Group of Ten reports that the creation of world reserves should be geared to a strengthening of the adjustment process and desirable balance-of-payments disciplines.

The other problem left unsolved is that of the so-called "stability" or "confidence" problem created by the large overhang of unrequited dollar and sterling balances, resulting from the operation of the gold-exchange standard over the fifty years past. The growing threat of liquidation of such balances into gold is by no means warded off by the two-tier gold system hurriedly adopted last March, in an atmosphere of panic.

I have no time left to rehash here my own proposals with relation to these two unsolved problems. I am, however, somewhat encouraged by the gorwing interest shown in recent months by academics and officials alike in the creation of a so-called "Gold Conversion Account" dealing not only with the proposed SDR's but with all three of the present components of the world reserve system, i.e. gold, foreign exchange reserves and reserve positions in the IMF. I am further encouraged by the sterling agreement announced at Basle earlier this month, and which might be a first—even though still modest and imperfect—step toward a broader agreement encompassing the dollar as well as sterling, and paving the way to the gradual substitution of a truly international reserve system for gold as well as for the reserve currencies of today.

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The main policy issue of 1969, however, is whether our so-called world "leaders" will be able to agree in time and to lead the future evolution of the world monetary system, or will once more, as they have invariably in the past, be overtaken by events and let the future be shaped, not by them, but by another world monetary crisis and a relapse into the mutually defeating nationalistic policies of the 1930's.

U.S. BALANCE OF PAYMENTS, 1964-JUNE 1968

[Years or yearly averages; in billions of dollars]

	1964	1967	1968 seasonally adjusted: January-June	1968 seasonally adjusted: January-March	1968 seasonally adjusted: April-June
I. Current account minus foreign aid	3.8	−0.7	−4.0	−4.5	−3.6
A. Current account	7.5	3.5	.6	.4	.8
1. Merchandise	6.6	3.5	.2	.3	
2. Other	.9		.4		.8
B. Foreign aid	3.7	4.2	4.6	4.8	4.4
II. Private capital exports	7.4	4.1	.2	−.3	.8
A. U.S. funds	6.6	5.5	3.8	2.6	4.9
B. Foreign funds, other than III	−.1	−1.9	−4.6	−4.1	−5.1
C. Errors and omissions	.9	.5	1.1	1.2	.9
III. Settlements balance (I−II)	−3.5	−4.9	−4.2	−4.1	−4.3
A. Dollar holdings other than B	−.1	−.2	−.2	−.3	−.1
B. Governments and banks	−3.4	−4.7	−4.0	−3.8	−4.3
1. Special government transactions	−.4		−.3		−.6
2. Monetary authorities and banks	−3.0	−4.7	−3.8	−3.8	−3.7
(a) Foreign commercial banks and Euro dollar holdings of central banks	−1.5	−1.3	−5.6	−1.7	−9.5
(b) Reported U.S. net reserves	−1.6	−3.4	1.8	−2.1	5.8
Memo: 1. Liquidity balance	−2.8	−3.6	−1.7	−2.6	−.7
2. Near-liquid liabilities and special transactions	(−.3)	−.9	−1.8	−.7	−2.8
3. Total (1+2)	(−3.1)	−4.5	−3.4	−3.4	−3.5

Source: Calculated from Survey of Current Business (June and September 1968) estimates.

WORLD PAYMENTS NETWORK, 1964-67

[In billions of U.S. dollars]

	1. Current account				2. Net capital account				3. Net reserves (1-2)			
	1964	1965	1966	1967	1964	1965	1966	1967	1964	1965	1966	1967
I. Industrial countries	7.0	8.1	7.3	7.3	7.6	8.0	7.9	10.5	−0.5	0.1	−0.6	−3.3
A. Reserve centers	6.9	6.1	4.5	2.6	10.3	8.0	6.3	7.3	−3.3	−1.9	−1.8	−4.7
United States	7.6	5.9	4.1	3.5	9.1	7.5	4.3	6.9	−1.5	−1.6	−.2	−3.4
United Kingdom	−.7	.2	.4	−.9	1.2	.5	2.0	.4	−1.9	−.3	−1.6	−1.3
B. Other countries	.1	2.0	2.9	4.7	−2.7	-------	1.6	3.2	2.8	2.0	1.3	1.4
European Community	1.6	2.5	3.0	5.4	−.3	1.0	1.6	4.1	1.9	1.5	1.4	1.3
Other Europe	−.6	−.6	−.6	−.5	−1.3	−.8	−.8	−.6	.6	.2	.3	.2
Canada	−.4	−.9	−.9	−.2	−.7	−1.1	−.6	−.2	.3	.1	−.3	-------
Japan	−.4	1.0	1.4	-------	−.4	.9	1.4	.1	-------	.1	-------	−.1
II. Other countries	−5.2	−6.9	−6.3	−7.9	−6.2	−7.2	−7.1	−8.6	1.0	.3	.8	.7
A. Developed	−1.2	−2.6	−1.9	−2.0	−1.7	−1.8	−2.1	−1.8	.5	−.8	.2	−.3
B. Less developed	−3.9	−4.3	−4.4	−5.9	−4.4	−5.3	−5.0	−6.8	.5	1.0	.6	1.0
III. World total equals asymmetries due to	1.9	1.2	1.1	−.6	1.4	.9	.8	2.0	.5	.3	.2	−2.5
A. Monetary gold stock									.7	.2	-------	−1.6
B. Other									−.3	.1	.2	−.9
United Kingdom portfolio liquidation								−.5	-------	-------	-------	−.5
Other											.2	−.4

NOTES

1. "Current account" equals balance on goods, services, and private transfers.
2. "Net Reserves" equals increases in gross assets (gold, foreign exchange, and IMF reserve positions) of national monetary authorities minus increases in liabilities to IMF and foreign monetary authorities.
3. Debt prepayments and other special financing transactions are included in the capital account.

Source: Derived primarily from IMF annual report for 1966 (tables 12, 13, and 15), for 1967 (tables 33, 34, 36, and 37) and 1968 (tables 4 and 5).

STATEMENT OF W. B. HICKS, JR., EXECUTIVE SECRETARY, LIBERTY LOBBY

This statement is submitted as representing the views of LIBERTY LOBBY's 15,000 member Board of Policy, on behalf of the 200,000 subscribers to our monthly legislative report, *Liberty Letter*.

LIBERTY LOBBY has long been deeply concerned about the drain on American gold reserves and the resultant danger to the economic and military security of the United States. Early in this session of Congress we testified in opposition to the legislation repealing the gold cover requirement on domestic American currency.

On May 13 of this year, we testified before the Senate Committee on Foreign Relations, in opposition to the legislation providing for U.S. participation in the International Monetary Fund's "Special Drawing Rights" scheme. We warned the Congress, and the American people, as follows:

"... Failure of the SDR plan as presently contemplated therefore seems inevitable, since the European nations which presently enjoy favorable payments balances will refuse to accept the worthless paper gold unless the United States yields to their pressure and transfers our last remaining gold into the International Monetary Fund.

"In fact, there are indications that such action is already being planned. Noted financial columnist Hobart Rowen has disclosed (Washington *Post*, March 3, 1968) that an extension of the SDR scheme 'is being discussed only in strictest confidence, with papers marked "confidential" to prevent leaks.' This plan would, according to Rowan 'establish an account probably in the International Monetary Fund—into which each country would deposit all or a major part of its reserves—gold, foreign exchange, even the new Special Drawing Rights. . . .' Each nation would have a pro-rata claim on the total IMF account, and each type of asset—gold, foreign exchange, and SDR's—would be made equally valuable.

"If such a plan is ever carried out, and the United States is deprived of its gold reserves, this Nation will have totally lost its freedom of action in the monetary field. The International Monetary Fund, rather than any American institution, will be in full control of the American monetary system and the American economy. Perhaps this is what one high IMF official had in mind when he said that the SDR scheme 'will add to the Fund a separate and major task, to supply the world with the amount of reserves that the International financial community will judge to be necessary.'

"To the extent that the United States gives up the right to determine our own economic policy to the IMF, an international body run by international bureaucrats, to that extent will our national sovereignty have been lost. With our economy under foreign control, the United States could not function as a truly sovereign and independent Nation, and our remaining political independence would be vestigial and short-lived."

The Congress did not accept our warning, and the authorization for American participation in the SDR scheme was enacted into law. But these hearings, on a plan to turn all American gold over to the IMF, bear out the earlier warning, and appear to justify a conclusion that such a plan was in fact the long range goal of the proponents of the SDR scheme.

We reiterate our unalterable opposition to any such attempt to turn control of the American economy over to any non-American organization. Now that the American people can see this backdoor approach to world government for what it really is, we are confident that they will demand that their Congress abandon the idea, and start working toward a solution of the gold problem which will replenish, rather than deplete, America's gold reserves.

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