

ESSAYS IN INTERNATIONAL FINANCE

No. 96, October 1972

THE WORLD MONETARY SYSTEM:
A MINIMAL REFORM PROGRAM

MICHAEL V. POSNER



INTERNATIONAL FINANCE SECTION

DEPARTMENT OF ECONOMICS

PRINCETON UNIVERSITY

Princeton, New Jersey

This is the ninety-sixth number in the series ESSAYS IN INTERNATIONAL FINANCE, *published from time to time by the International Finance Section of the Department of Economics of Princeton University.*

When this essay was written, its author, Michael V. Posner, was a visiting Research Professor at The Brookings Institution, Washington, D.C. He is at present at Pembroke College, Cambridge University, where since 1961 he has been Fellow and Director of Studies in Economics. He has also served as Director of Economics in the Ministry of Power, and Economic Adviser to H.M. Treasury in London. In 1971-72 he was Consultant to the European Department of the International Monetary Fund in Washington. Among his publications are International Trade and Technical Change (1961), "Industrial Policy in the U.K." (1971), and Fuel Policy (forthcoming). The views expressed in this essay are those of the author and do not purport to represent the views of the British Government, the IMF, or The Brookings Institution.

The Section sponsors the essays in this series but takes no further responsibility for the opinions expressed in them. The writers are free to develop their topics as they wish. Their ideas may or may not be shared by the editorial committee of the Section or the members of the Department.

PETER B. KENEN, *Director*
International Finance Section

ESSAYS IN INTERNATIONAL FINANCE

No. 96, October 1972

THE WORLD MONETARY SYSTEM:
A MINIMAL REFORM PROGRAM

MICHAEL V. POSNER



INTERNATIONAL FINANCE SECTION

DEPARTMENT OF ECONOMICS

PRINCETON UNIVERSITY

Princeton, New Jersey

Copyright © 1972, by International Finance Section
Department of Economics
Princeton University
L.C. Card No. 72-9551

Printed in the United States of America by Princeton University Press
at Princeton, New Jersey

The World Monetary System: A Minimal Reform Program

This essay attempts to answer two questions: In what aspects of its performance is it reasonable to ask that the world monetary system be improved? What rules or instruments can reasonably be negotiated or enacted to bring about these improvements? Some writers prefer to start with a list of requirements that a well-designed system should meet, or with a set of axioms whose logical implications can be allowed to determine the ultimate characteristics of the system. These are perfectly good—not to say elegant—ways of proceeding, but they do have one common property that I should like to avoid if possible: the systems that are ultimately excogitated are very tautly designed. There is no redundancy, very little in the way of optional extras, no room for building on extra bits or lopping off unattractive features.

One virtue of the piecemeal approach used in this paper is to separate aspects that are essential from those that are merely desirable. Another virtue is that, by proceeding from the system as it is now, it minimizes the issues on which agreement has to be reached: “Where we cannot agree, leave things as they are,” is the implicit rule. One weakness of this pragmatic attitude is that we cannot be sure the machine we have tinkered with will ultimately run; at a later stage, therefore, we shall give it a test outing.

The essay first tries to describe the system as it is at the moment. It then proceeds to examine the main complaints that have been levied against it, trying to distinguish fair complaints from mere idealistic grumbles and to collate the improvements it is reasonable and necessary to seek. A third section makes suggestions for building on the extra bits of machinery that seem to be required. Section 4 deals with the gold price and possible “two world” solutions, and suggests that the present system, reformed minimally along the lines of this essay, can survive well enough to make extreme alternatives unattractive.

The argument leading to the recommendations of the third section can be summarized as follows. The system has been changed significantly by the American devaluation of 1972 and by other exchange-rate changes since 1967. Differences of view about the system today are for the most part the reflection of real or imagined clashes of national interest. Intellectual dissension about exchange-rate flexibility, convertibility, and other issues still exists, but the arguments apply very differently to different

countries. There is some limited need for formal reform of the system, but all countries, and in particular large countries, have to face the fact that their freedom of action in all matters affecting foreign payments is limited. If the large countries can agree among themselves on capital-account policies and on technical assessments of trends in balances of payments, the required constitutional reform of the system is quite small. If they cannot agree, then no reform is possible or useful.

I. What Is the System Now?

The par-value system. The International Monetary Fund (IMF) has 120 members. Some ten or twenty are dominantly primary producers with virtually no industrial production; they sell their exports on a world market for commodities in which they take the prices offered and buy their imports on a world market for manufactures in which, once again, they are price takers. For these countries, the exchange rate need not be of major importance, and, for the international community, the way such countries choose their exchange-rate policy is not a central issue.

Another seventy or eighty countries of the developing world live, by choice or accident, in conditions of open or repressed inflation and engage in more or less frequent devaluations. Certainly, whenever one of these countries wants to devalue, the world community does not object—the IMF does not insist that exchange rates be maintained to reinforce domestic anti-inflationary policies. Indeed, the IMF has often connived in establishing a parallel free-exchange market where downward movements lead (or pull) down the official rate. True, the developing country has to consider its export competitors, who may resist an apparent attempt to obtain a beggar-my-neighbor advantage, as well as the effect of devaluation on domestic policies. But this sort of dispute is endemic and does not arise because of a malign quirk in the system-as-it-is. “Flexibility” for developing countries cannot be said to be inhibited by the present rules of the game.

We now come to the industrialized countries, accounting for three-quarters of world trade and for most of the complaints about world payments. Consider first the smaller but still significant countries such as Australia, Austria, and Norway. This group has not made much use of exchange-rate changes in the past, perhaps mistakenly. But in the world of 1972, any of these countries, if suffering at all palpably from a payments disequilibrium, could move its rate up or down uninhibited by the international system; par-value changes would go through the IMF virtually on the nod. The reluctance of the governments of these countries to

change their rates when necessary arises to only a small extent from fears of destabilizing speculation or doubts about making a new rate stick; with the possible exception of Australia, this group of countries is preoccupied with domestic issues in making decisions, as is only right. It is possible, as I argue later, that the option of "small and possibly frequent" parity change, if more explicitly open to IMF member countries, would be attractive to this group of countries.

The smaller members of the Group of Ten (Italy, Benelux, etc.) may feel that rather more international restraint is imposed on them. Countries of this type can be forced to revalue upward, as the events of 1971 showed, when their main trading partners move, but only after much pressure and argument. Downward moves might be tolerated in times that are generally calm, without emulation by non-Europeans, provided a clear need were shown. It is the pressures of the European Economic Community (EEC) that inhibit devaluation. It may be true that the smaller Group of Ten countries have been damaged in the past by a world prejudice in favor of "rigid" exchange rates. Although Italy's famous refusal to devalue in 1964 was a deliberate act of domestic policy, this example and others may provide evidence that, while the international system itself has not deterred exchange-rate variation, the system and its spirit have in the past reinforced prevailing domestic notions that rates should be fixed. If the same economic conjuncture developed in Italy again, however, the authorities would probably choose a modest devaluation, and, if this proved difficult internationally, the Treaty of Rome should take the blame, not Bretton Woods.

We are left with five countries, out of the original 120, whose exchange-rate policies are interlocked and determined by the system. Of those five, the United Kingdom, France, Germany, and Japan would all experience significant international difficulties if they tried to devalue, however obvious the disequilibria to which they were responding. The British float of June 1972 is the exception that proves the rule. A general impression was formed—in markets and official circles around the world—that a sterling parity of \$2.60 was markedly too high. In face of this prejudice, right or wrong, the British authorities had to follow the market "promptly" (as spokesmen had put it prophetically earlier in the year). But the depreciation was tolerated by Britain's trading partners only because the case was conceded to be so strong. In more doubtful cases (e.g., the need some observers claim to discern for sterling to sink below \$2.40), unless the authorities make up their minds before the market, hints of devaluation would dramatically affect reserves and induce defensive actions (and, worse, defensive speeches) like those

of 1963 to 1969. Ministers frequently promise to be good and often promise to be "timely" in their exchange-rate actions, but it is hard for them to promise to be clever and even harder to promise that the market will never be stupid.

Moreover, all these currencies occupy key positions in world trade and payments, partly because of formal roles as reserve assets, partly because much of world trade is financed or invoiced in these key currencies. Many smaller but not insignificant countries are likely to move with one or another of the big four. This likelihood, in turn, increases the reluctance of any big country to tolerate the attempt of another to steal a competitive advantage by a devaluation that is excessively prompt.

Equally, it has in the past been brutally clear, and remains likely, that currency appreciation will be resisted by more than one country in this group. The branch of government responsible for domestic monetary policy might welcome appreciation as an alternative to speculative inflows; the central bank might not wish to take in further reserves (although, if rational, it would be even more unwilling to see a depreciation of the home-currency value of those reserves it already holds); but the branch of government responsible for home employment and the export industries' prosperity will resist appreciation, particularly by large steps, because it is hard to replace lost export- or import-competing sales through fiscal expansion.

Thus, stickiness of exchange rates for these four countries is a characteristic of the present system that is hard to overcome, not so much because of the system but because of unavoidable structural interdependence.

There remains the United States, which has now demonstrated, at the expense of a rather risky six-month crisis, that she can devalue the dollar. Presumably, appreciation must also be seen as a possibility, though it is hard to imagine international pressure activating a President to urge upon Congress a reduction in the gold price.

The international exchange-rate system of 1972 therefore provides for easy devaluation by all save a small handful of countries, some of which (members of the EEC) are more directly inhibited by their own special interrelations than by the international system as such. Not many countries are likely to be flexible upward, except those for which the accumulation of reserves is clearly a wasteful way of investing national savings.

Long-term capital flows. Exchange rates have to be adjusted not to the needs of the current account alone, but also to capital-account flows. Disputes about the capital account are not evidence of a systematic flaw

in the world monetary apparatus, but instead reveal a major disagreement about the role and desirability of U.S. capital exports, which no constitutional reform will resolve.

The outward flow of long-term capital from most advanced countries is determined by the interplay of three alternative constraints. First, the government may anticipate a balance-of-payments problem because of its unwillingness or incapacity to devalue: increases in foreign investment have then to be compensated by some multiple contraction of home-resource use; and, in consequence, foreign investment would be constrained by the limited willingness of governments to deflate the home economy for balance-of-payments reasons. I suggest that this constraint is in practice not now much regarded, because most governments assume that, in the long run, they will be able to attain an equilibrium exchange rate.

Second, governments may recognize that the financing of any given capital-account deficit requires an equal current-account surplus. At any given pressure of demand, exports are alternative to domestic absorption, and governments may be unwilling to manage their use of exchange rates and domestic resources so as to generate sufficient saving for diversion into the foreign balance. This second constraint, although similar to the first, must be sharply distinguished from it.

Third, entrepreneurs may not be sufficiently willing to make foreign direct investments; or asset holders may not be sufficiently willing to acquire portfolio paper; or financial institutions may be unwilling to float foreign issues.

If the third constraint is below the second, it alone is effective; if the second constraint is below the third, government controls will be required, and the second constraint rules. German capital outflow is ruled by the third constraint, British by the second.

Note that controls usually impose a limit on the use of home currency to buy foreign currency for external investment. Most controls therefore work by inducing resident companies to seek foreign finance for their foreign operations. The accumulation of foreign assets is influenced very little; what the controls achieve is the accumulation of liabilities to foreigners and the freeing of domestic saving to finance capital accumulation at home, rather than export surpluses.

For the United States, the game has been, and remains, strikingly different. None of these constraints has really been important. Although some have talked as if the first balance-of-payments constraint has operated, the structure of controls erected in the 1960's and still in place today was not chosen as an alternative to domestic deflation: no one

seriously believed that U.S. imports should be curbed by creating slack in the domestic economy, in order to balance the international books. Equally, few American economists seem to be concerned with the second constraint; perhaps because Keynesian fine tuning of the economy is advocated by a different group from those who actively favor exchange-rate flexibility, the fact has not been explicitly noted that one of the main purposes of the recent devaluation was to divert resources from the domestic to the foreign sector—a task other countries have found painful. The trade-off between home and foreign use of resources has not been discussed. Hence the only difference of opinion in the United States is between those who would like to see the controls abolished and to leave it to foreigners to take the dollars or take the (dollar-depreciation) consequences, and those who think it desirable, in both the national and the international interest, deliberately to choose a lower exchange rate so as to achieve “basic balance” with whatever level of outward investment U.S. business elects.

Thus the system has been characterized by a basic asymmetry with respect to capital outflows and their financing. The United States has erected an apparatus of controls, corresponding to no felt domestic need, purely to satisfy what Americans perceive to be the requirements of the international system. The rest of the world regards controls on capital outflows as a regular instrument of economic policy, associated with, but not necessarily determined by, the exchange-rate regime. Naturally, American commentators are more hostile to this system than are some European or Japanese economists, but in their understandable annoyance some Americans may miss the point. Foreign insistence that the United States regulate its outflow does not rest on some arcane unwillingness of foreign central banks to take dollars or on an irrational refusal of foreign treasuries to allow the United States to attain the current surplus needed to finance a free capital outflow. It rests, at least in part, on a vague unwillingness of foreign governments to sell domestic fixed assets, even in return for otherwise unrequited American exports, let alone in return for liquid dollar assets. On certain plausible assumptions, this unwillingness may be economically irrational, but it is nevertheless a political fact of life.

This fact of life should be distinguished from the superficially equivalent reluctance of high-wage countries to tolerate low-wage imports. In the trading case, it is the domestic reallocation of resources that is resisted; in the capital-account case, it is the international redistribution of the ownership of factors of production that is deplored. Nevertheless, few countries have been able to resist a direct capital inflow, whatever

their public posture, and although Japan did set some limits on portfolio inflow, most other countries made no such attempt. There was a reluctance to apply in specific cases the general theoretical objections to capital inflow, because domestic interests would usually find the individual transactions attractive; only where identifiable entrenched interests would clearly suffer was the general principle of restrictionism triumphant. Hence, a sort of experimental neurosis was induced in some countries receiving inflows: they asked, loudly and shrilly, how it was that the main capital-exporting country was free of the several constraints that limited outflows from most other countries.

Summarizing, the situation can be characterized as follows: Most countries (other than the United States) are confined by one constraint or another on capital outflows; some advanced countries receiving inflows (particularly from the United States) would wish, on politico-economic grounds, to resist them, but such resistance is often difficult for domestic reasons. The recipient countries therefore turn to the United States and complain that the international regime must be at fault; otherwise, the U.S. outflow would be limited at source. In fact, the absence of effective U.S. constraints on outflow arises from the wealth and weight of the U.S. capital market (which makes the third constraint inoperative) and from the size of the U.S. economy (which makes the management of resource use in obedience to the second constraint unattractive to the U.S. authorities).

The long-term capital account is therefore a double source of contention and confusion, and the situation is confounded still further by the ambivalent attitude of the IMF toward capital controls. The Articles of Agreement allow (almost encourage) capital control; Fund practice has been to object (usually mildly) to most practical manifestations of such controls, on the grounds that they are discriminatory *de facto* or disruptive of free current transactions. A highly stylized and possibly unfair stereotype of earlier Fund attitudes would have been: If free capital outflows lead to deficits, higher domestic interest rates will both help to keep long-term flows at home and encourage equilibrating short-term flows. Today, the Fund staff is probably nearer the American view that downward exchange-rate flexibility for the dollar will control capital outflows (by raising their price to the investor) and will finance them (by generating appropriate current surpluses). Recipient countries, however, will be as unwilling to accept this argument from the Fund as they have been to accept it from the United States. There is, here, a basic clash of view and understanding that will not be resolved by any magic reworking of the monetary system.

Official liquidity and short-term flows. At the end of 1970, possibly the last quasi-equilibrium observation, world reserves stood at \$100 billion, of which some \$50 billion were holdings of foreign currency, four-fifths of it in dollars. Annual changes in the dollar slice of official reserves depended in a sense on the U.S. basic balance of payments, but could be explained statistically by changes in the relative size of the official and unofficial components of the *stock* of dollars held by foreigners, and by net short-term *flows* between the United States and the rest of the world. These changes accounted for the dominant part of the annual increment in total world reserves through the 1960's.

This situation gave rise to a string of complaints that we shall examine below. Here we need note only (a) that the annual creation of Special Drawing Rights, inaugurated in 1968, already represents between 1 and 3 per cent of the existing volume of reserves; a modest increase in their rate of creation could probably satisfy most economists' concern for meeting the need for official liquidity as such; and (b) that even Draconian controls, on the British or French scale, cannot stop significant flows of short-term funds between countries, which necessarily lead to swings in the *ownership* of world reserves (though not to changes in the world *volume* of reserves, save in the case of the present dollar system). Hence, any world system has to live with short-term flows—either by allowing exchange rates to move or by financing the flows by collective action.

One way of describing the present system is to say that the stock of world reserves is entirely demand-determined. The supply of dollars is infinitely elastic, and foreign central banks, through their own monetary policy (interest rates) and exchange-rate policy (balance of payments), influence the stock of dollars held officially abroad. This seems as good a definition as any of the "dollar standard."

Convertibility. We must first ask what this highly charged word really means. In 1947, fulfilling a commitment undertaken as part of the U.S. loan agreement of 1946, the United Kingdom announced the convertibility of sterling for current transactions. Nonresidents who had acquired sterling as a result of sales of goods or services to the United Kingdom were thereby entitled to receive dollars in exchange, at the official rate, from the Bank of England. This experiment was suspended after six weeks, and it was not until eleven years later that the United Kingdom formally assumed convertibility obligations under Article VIII of the IMF Articles of Agreement—though, for many years before, *de facto* convertibility was assured by back-door intervention that kept "transferable sterling" (sterling that could be used by any nonresident to settle current sterling debts) near the official par value.

The U.S. obligation in respect of convertibility was always defined under IMF Article IV, Section 4(b), as an obligation to supply gold in return for dollars—an obligation similar to, but not identical with, the obligation on most other countries to supply dollars in exchange for their own currency. It was this convertibility on demand that was formally suspended in August 1971, though it had virtually ceased in March 1968 or even earlier. However, it was not the formal closing of the gold window that provoked the generalized float in the autumn of 1971, but the implied determination of the U.S. authorities to seek an effective depreciation of the dollar against other currencies. It had taken only one and a half days in March 1968 to force the Group of Ten to accept the suspension of the gold pool and an implicit shift toward effective inconvertibility; the struggle of 1971 was a hundred times longer because the stakes this time were real—exchange rates that would influence output and employment.

The suspension of U.S. obligations, however, had no direct effect on world trade and payments, whereas when the United Kingdom suspended convertibility again after the abortive experiment of 1947, sterling ceased to be usable (at any fixed or reliable value remotely approaching parity) for buying nonsterling primary commodities or prized industrial products. The inconvertibility of the dollar in 1972 had no such meaning. Dollars are *de facto* and *de jure* convertible into all other currencies, and can be used to settle all debts, at exchange rates maintained by other countries within legally controlled limits of parity. Thus “inconvertibility” is an odd word to describe the present situation, and “convertibility” an odd target to place before the U.S. authorities in current negotiations.

What the United States does not do under present circumstances is to finance its over-all balance-of-payments deficit (however defined) with assets; *de facto* it had ceased to use that form of finance to any material degree long before 1971. In the decade ending in 1970, the U.S. basic deficit had amounted to \$17 billion, and its asset loss to \$6 billion. The United States had financed its deficits by issuing claims upon itself—by running up nonresident claims on the United States. Thus, inconvertibility really means “claim financing” and convertibility really means “asset financing” of U.S. deficits.

Even when clarified in this way, the issue is not emptied of muddiness or controversy. But it is important to note that the essence of the issue is as we have stated it, *not* the superficial and contingent reflection of that essence which is the “intervention” or “numeraire” role of the dollar. The United Kingdom and most other large countries deal in one currency only—the U.S. dollar—to maintain their par-value obligations.

The United States does not deal at all (though the New York Federal Reserve Bank is known to deal for the account of many foreign central banks). But if the United States were ready, in practice as in principle, to sell gold (or SDRs or any other "asset") to satisfy unwilling holders of dollar claims, this asymmetry in market roles would be seen as no more than a banking technicality.

As we shall see below, many American economists see "asset financing" itself as no more than a surface expression of the need for parity changes, or as an unnecessary halfway house toward the achievement of such changes. Their view remains to be discussed. But it does seem unnecessary to clutter the discussion further with the banking technicalities of intervention systems.

Compatibility. A well-known property of the present system as we have so far described it, best stated by McKinnon (1969), is that it is in some sense overdetermined: it may not be possible simultaneously to satisfy the aims of all players in the game. The importance of this striking insight has been much exaggerated in subsequent commentaries, however, as we shall try to show.

From time to time, the member countries of the Organization for Economic Cooperation and Development (OECD), meeting in informal committee, reflect on secretariat forecasts of the current balance of payments of OECD countries. Suppose that, for a given year, those forecasts suggest an aggregate OECD surplus of \$10 billion. By implication, the rest of the world is expected to run a \$10 billion deficit, necessarily financed by the sum of two items: a net capital flow from the OECD group *plus* a fall in the reserves of the rest of the world. (This statement assumes that there is no net addition to the world's monetary gold stock.) Suppose that the capital flow, short- and long-term, can be accurately forecast at \$6 billion. Then the question arises, will the rest of the world allow its reserves to fall by \$4 billion? And, if not, what else in the system can be expected to give way?

Traditionally, commentators have concentrated on the possibility that the residual, adjustable variable is the U.S. balance. But this is true only to the extent that all other countries are assumed to have targets for their balances and are prepared to take the steps apparently necessary to achieve them; in practice, many governments treat philosophically a temporary divergence of aims from outcomes, and have been enabled to do so in part through IMF standbys or swaps; this provides the first degree of freedom in the world payments system. A second is provided by argument and discussion in the OECD forum; if the over-all surplus forecast for the OECD countries is too large, for instance, and the

non-OECD world is believed unable to accept the implied deficit, some OECD countries may be urged to inflate, to appreciate, to free outward capital controls, or to liberalize import restrictions. A third is the changes in the stock of monetary gold held by central banks. And a fourth has been the ability of the system to create or destroy reserves through central-bank operations with the Eurobanks, although this type of transaction was often in the perverse direction (*IMF Annual Report*, 1971, p. 82).

Only insofar as these four degrees of freedom failed to operate was there a requirement for the United States to be passive, and, in fact, it is hard to find evidence of such passivity (see Machlup, 1968) or of the willingness of other countries to acquiesce in American passivity. It is true that the American deficit, and therefore the annual increase in the stock of nonresident dollars (net of those "created" by bankers), has been absolutely large in the past. Any attempt to rewrite the history of the last twenty years without a dollar deficit, but with other things held as equal as possible, would encounter severe difficulties in "replacing" both dollars as a source of international liquidity and dollar-financed expenditures as a source of effective demand. But this does not constitute a proof of the proposition that American passivity was indispensable to the working of the system in the 1960's.

A world in which all countries aim for domestic full employment and a basic balance of payments equal to or greater than zero must, of course, lead to systematic divergence between targets and outcomes—but the divergence may be recorded for many countries, not just one. As we shall argue later, the key to progress may be to persuade countries to change the *form* of their aims, so that they seek the accretion of reserves rather than basic surpluses (then allow the system to manufacture reserves through the creation of SDRs), or to change the *content* of their aims (so that some countries accept deficits for a period, or agree to reduce the absolute size of target imbalances, irrespective of sign).

2. Complaints against the System and Proposed Improvements

Instability. One traditional complaint is that a system with multiple reserve assets and freedom of choice in reserve composition will necessarily prove unstable unless the relative prices of the assets are allowed to change in response to market pressures. The stock market is not unstable, because dealers change the price of all stocks, securing continuous portfolio balance. Gold, SDRs, dollars, sterling, etc., are fixed in their price relationship except for infrequent and abrupt movements. In consequence, Gresham's law operates, and the effective quantity of reserves is

reduced because countries retain "good" reserves and trade only in "bad" money (see Kenen, 1963, and Aliber, 1967). Moreover, as Hirsch (1971) points out, the continual creation of one particular form of reserve asset—claims on the central banks of a key-currency country—necessarily sows the seed of future crisis (just as, in the stock-market example, the continued flotation of bonds by even the largest and most prosperous of companies would make its equity market uneasy).

As we saw earlier, this instability makes the volume of reserves fluctuate (as dollars swing from private to official holdings or from foreign countries to the United States) and provides a potent vehicle for exchange-rate speculation as such. This effect on the volume of reserves is admittedly a unique consequence of the present practice of using national currencies as international reserves. But does it matter very much? The destruction or creation of reserves through speculative processes does not take place on its own, only as a result of two other processes: exchange-rate speculation and interest-rate arbitrage. The processes of speculation and arbitrage are far more immediate in their challenge, and far more necessary to resist, than the reserve destruction or creation they carry with them.

Speculation against parity changes is another aspect of instability that has attracted much attention. Prime Minister Wilson, President Nixon, and many lesser mortals have stigmatized speculative attacks on their currencies and have sought new arrangements to forestall them. A case against speculation is not hard to make, though in practice many speculators see themselves as protecting their employers against avoidable loss, not as seeking uncovenanted gains. Consider, for instance, an economy in balance-of-payments equilibrium but with a low rate of economic growth. The authorities desire to accelerate growth and believe that this will be possible, after a time lag, at the existing exchange rate. Speculators think otherwise, or have a horizon shorter than the relevant time lag. They force the rate down. The resulting worsening in the terms of trade, the kick to the internal inflationary process, and the shock to confidence make it harder to achieve faster growth consistently with other targets of economic policy. (Only the third of these adverse consequences would be absent in a floating-currency world.) Some of us thought, it now appears erroneously, that this was a fair picture of the United Kingdom in 1963. The fact that we were wrong does not mean that we may not be right on a subsequent occasion. So speculation may be malign.

But, looking back over the last decade, it is hard to see what crimes to lay at the speculators' door. Consider a few historical episodes:

- a. United Kingdom, 1963-67: The speculators turned out to be right, and it might well have been better to yield earlier (March 1964, July 1966, or June 1967).
- b. United Kingdom, 1968-69: The speculators were, in most senses, wrong, and they were defeated. Their actions were very trying to the nerves of a few official persons and probably had a net adverse effect both on economic policy and on the action of myriad economic agents. Recent memories of this difficult period may have induced the government(s) of the day, after taking official advice, to err on the side of fiscal and monetary restrictionism in 1970. But it would be hard to build a case for *bouleversement* of the system because of that element in British discomfort during 1968-69 which was caused by speculation.
- c. Italy, 1964: Speculation was defeated. A case can be made for suggesting that it would have been better for the lira to be devalued, in tune with speculative pressure. A better case can be made for asserting that less internal deflation would have been needed if speculative pressure had been smaller.
- d. France, 1968-69: It has been asserted that there was no need for devaluation after the events of May 1968, and that only speculation forced it eventually. Whether or not this is in some sense true, the French authorities were keen enough on their (effective) exchange rate to fight like tigers in the fall of 1971 to save themselves from appreciating, and as a matter of fact the French surplus remained small in 1970 and 1971.
- e. The dollar, 1960-71; the D-Mark, 1960-71; the Yen: Can one say more, with the benefit of hindsight, than that it would have been better if speculators had succeeded a little earlier?

The conclusion to draw from these episodes, and from the discussion of instability as a whole, is that the property of instability does not in itself constitute a severe complaint against the system. Speculation can never be stilled, whatever the regime we adopt (the "floating" price of, say, copper moves quite a lot, and speculative positions are no doubt taken up from time to time); the additional speculative pressure added by the key-currency system does not make matters much worse. Set alongside speculation in particular, and short capital movements in general, the problem of creation and destruction of reserves appears small. The history of the last decade may seem hard to square with this conclusion, but this was a time of transition, when we were moving from the apparently fixed peg of the late 1950's to the adjustable peg of the 1970's.

Asymmetries: debtors and creditors. Under this head we deal with several well-founded complaints, leaving until later the particular problems that are alleged to arise because of the special asymmetries between the United States and the rest of the world. Keynes saw but did not state explicitly a need for the international system to constrain creditors as well as debtors. The objection to countries running deficits was obvious: the absorption of the unrequited exports of its trading partners. (Keynes had in mind *current* account imbalance; if we prefer to think of *basic* imbalances, the "unrequited exports" must be defined so as to include the export of securities.) The reason offered for "putting some part of the responsibility for adjustment on the creditor country as well as on the debtor" was that "This is an attempt to recover the advantages which were enjoyed in the 19th century when a favourable balance in favour of London and Paris, which were the main creditor centres, immediately produced an expansionist pressure in those markets. . . . The object is that the creditor should not be allowed to remain entirely passive. For if he is, an intolerably heavy task may be laid on the debtor country, which is already for that very reason in a weaker position" (Horsfield, 1969, p. 6).

This account has been generally interpreted as suggesting that, when the deficit country alone reacts, a deflationary bias is imparted to the system. If all countries always pursued (and attained) domestic full employment, this fear would be dissipated; it would reappear only if the surplus country were indissolubly wedded to the pursuit of its surplus, and this class of problem is better treated under the head of "Compatibility" below. But perhaps Keynes had in mind the beggar-my-neighbor policies so feared in the 1930's, when there was no generally recognized fiscal means to full employment. Today's situation should be better; nevertheless, if the worst happened and one major market were significantly and obstinately depressed, forcing other countries into deficit, no system of world trade and payments we could build in the next year or two would survive. The Keynesian problem, in the dramatic way we have so far chosen to interpret it, has not been solved; we merely assert that there is no certain way of solving it.

But what of the less dramatic possibility, that the failure of single or small groups of surplus countries to revalue will exert a slow and prolonged drag on the system? In such a scenario, the rest of the world, with no machinery available for easy collusive devaluation against the surplus area, would be forced into lower levels of domestic activity than they would otherwise have chosen, to protect their payments situation. The failure of the Fund's scarce-currency clause indicates that no means

of collective discrimination or penalty is readily available. A single persistent creditor could well run a surplus of \$2 or \$3 billion; if the impact of this were shared, proportionately to trade, among the other Group of Ten countries, the representative victim might be pushed into deficit by an amount equal to perhaps half of its "target surplus." While one or more countries might take this blow with equanimity for a time, one or another country would sooner or later resist and attempt to avoid the accommodating deficit through appropriate action. This in turn would increase the burden on countries that had not yet reacted, and a general unease, reflected in cautious demand-management policies, would spread through the system.

If it were possible to avoid this asymmetrical exemption of the creditor from the pressure to correct imbalances, it would be desirable. We carry forward to section 3 this first reasonable cause of complaint against the system.

But there is another aspect to the problem. If there is one creditor and $n-1$ debtors, in a world where collusion is difficult, it is far easier for one country to revalue with the consent of the rest of the world than to arrange for a concerted devaluation by other countries. Moreover, as Williamson has recently pointed out (1971, pp. 12-15), there are secondary burdens of moving exchange rates, and these are probably heavier for a large group of devaluers than for a single revaluer. Hence, we may readily agree that it would be desirable, if it were possible, to have some institutional arrangement that would persuade single (or small groups of) creditors to revalue.

Although Williamson was arguing that it is easier for one country to devalue than for the rest of the world to revalue, the essence of the proposition seems to be symmetrical; it is easier for one country to move in any direction than for $n-1$ countries to move in the other, and this appeals mightily to common sense. Thus it was not surprising that, in the autumn of 1971, there developed general acceptance of a proposition almost contradictory to the "creditor adjustment" principle—the view that the United States should devalue. The revaluation of gold to \$38 by the United States was also widely defended on the grounds that, by this "contribution" to the adjustment process, the American authorities were maintaining the value of reserve assets (gold, gold-linked SDRs, and gold-linked creditor positions in the Fund) against a weighted average of world currencies. If, for instance, the Smithsonian realignment had been achieved uniquely by a revaluation of all other currencies against the dollar, all countries other than the United States would have experienced a decline in the value of their true reserves, when expressed

in home currency. In my own view, this was always a slightly dotty argument, since central banks should not be in business to minimize their real or paper losses. Nevertheless, a quaint World General Will in favor of dollar devaluation was manifested and ratified by the U.S. Congress, and this certainly suggests that most countries wish devaluations to continue to play at least an equal part in the adjustment process. So, in our enthusiasm for seeking adjustments by creditors, we should not seek to turn the present system upside down.

Asymmetries: the U.S. "indiscipline." We have already encountered the major asymmetry—or, more accurately, muddle—relating to long-term capital flows. We have also noted the special problem of short-term capital flows, complicated by the triple role of the dollar as the American domestic currency, a main vehicle for nonresident private precautionary and transaction balances, and an international reserve asset held by central banks. We have also examined the notion that the U.S. dollar is asymmetrically inconvertible. There is, however, one other aspect of asymmetry which must be weighed: the notion that, in the present system, even more than in the decade ending in August 1971, the American authorities are free from international "discipline."

To take a preliminary point, even in the first few months of 1972, when the dollar standard was rampant and the echoes of President Nixon's August 15 speech were still in everyone's ears, the American authorities did seem to pay some attention to foreign complaints about interest rates, for instance. The Treasury bill rate, which was down at one time to 2.9 per cent, rose by a full percentage point during March, rather faster and more sharply than might have been expected in light of the domestic position of the U.S. money markets. "Discipline"—more politely and accurately, the comity of nations—is not entirely abolished because of the absence of formal rules or market stimuli.

Equally and oppositely, the United States has a gross domestic product of \$1,000 billion and one-way balance-of-payments flows of only \$50 billion. The degree of weight that it gives to external considerations in its internal policies is bound to be less than in the United Kingdom (where the trade/GDP ratio is four times as large) or in other European countries even more internationally dependent. If a certain degree of domestic inflation is tolerable in the United States when traded off against other domestic desiderata, its government is unlikely, under any imaginable regime, to pay great attention to the international consequences. Under some international systems, it may indeed be driven to impose direct balance-of-payments controls (sometimes to its own national disadvantage, sometimes to the foreign disadvantage, sometimes

both); but never has it taken steps remotely like the British budgets of 1968. Thus discipline, in the European sense, will never characterize the international stance of the United States.

The technical point needs to be made with some precision. Assume a deficit of equal size (proportionate to its own balance of payments) in the United States and the United Kingdom. First, the relevance of this deficit to policymakers (represented by higher domestic absorption for a given pressure of aggregate demand) will be smaller in the United States, and the consequences of allowing the economy to become habituated to it will be negligible. Second, the percentage effect on domestic real income of any given required change in the terms of trade will be smaller in the United States. Third, the relative pressure on domestic resources for any given required turnaround on the balance of payments will be less, and may well be achievable purely through the price mechanism, with no accompanying fiscal action (with which may be associated a fourth point—that the price elasticities of international trade, if they could be accurately measured, may be greater for the United States). It would therefore be rational for the United States to fear less than other countries the ultimate consequences of running a deficit.

If, of course, we ask whether the United States should rationally wish to retain a deficit longer than other countries without corrective action, the answer is no—not at all—provided the means of adjustment have minimal effects on the domestic economy. And this rule suggests, in turn, that the United States should have a clear preference for exchange-rate variation.

It has been argued, to the contrary, that if the balance of payments (and the likely deficit) is small relative to gross domestic product, little domestic deflation will be required to adjust the imbalance without devaluation. But the income elasticities of import demand and export supply may be smaller than the price elasticities. And, more important, countries where imports do not loom large in consumer expenditure will have less inhibitions about devaluation than about fiscal or monetary moves, however small; Mr. Meany has not complained of the effects of devaluation on the cost of living but would complain mightily if home-loan costs rose, even slightly.

Thus, a rational U.S. approach to balance-of-payments adjustment should evince indifference between rapid or delayed correction and should prefer exchange-rate flexibility to any alternative. In practice, under the present system, this is transformed into a stance that causes understandable annoyance in the rest of the world: "Take the dollars or take a revaluation." The annoyance arises in large part because of an issue

encountered earlier—the feeling that it is better for one country than for N—1 countries to move the rate. But it arises also because foreigners resent a system that allows the United States to take a stance they feel is not open to them. In this they are surely mistaken. If the United Kingdom runs a deficit and exhausts its reserves, it has the option (in default of its Fund obligations, but to no greater degree than the United States) of ceasing to support sterling in the market. In those hypothetical circumstances, the rest of the world would be faced with a dilemma similar to that which has been posed by the United States. The practical difference is that dollars are a far larger part of world reserves and non-resident private balances than is sterling. But this merely makes the dilemma of a dollar float harsher than that of a sterling float, and the speculative pressures somewhat larger. The real trading dilemma—whether to allow the deficit country an improved competitive position—is identical in the two cases.

In summary, the freedom from discipline that is supposed to be the unique attribute of the American position has two aspects: The first, a low trade/GDP ratio, is a fact of life. The second is no more than the alleged reluctance of the U.S. authorities (compared with foreign governments) to take the initiative of a unilateral devaluation. Since the 1972 Par Value Act, this reluctance is clearly no longer absolute, nor even relatively great. True, the story has it that Secretary Connally had to conduct a Dutch auction (starting at \$40) before he found a devaluation that the French and British would promise not to emulate, but it may be presumed that the U.K. Treasury had to go through much the same steps (in gentlemanly simulation rather than active combat) when deciding on the size of its devaluation in 1967. This source of asymmetry should perhaps be relegated to the history books.

Americans have recently complained of a reverse asymmetry. Because of the asymmetry between debtor and creditor, most of the world has devalued steadily against the dollar through the last two decades. This complaint would be devastating only if the devaluations by other countries had exceeded the amounts needed to compensate for their price rises relative to internal U.S. price rises, which is apparently not so (Kenen, 1969, p. 710), and only if the rest of the world had legislated a refusal to allow the United States to devalue. In fact, the (sometimes discordant) chorus of complaint and instruction from August 15 onward was designed to persuade the Americans to devalue. This American complaint is no better founded than its European counterpart.

Lack of independence of domestic monetary policy. A complaint sometimes made about the system in the late 1960's was that it allowed very

little freedom for independent national monetary policies. Among the suggestions for tinkering with the system that received some support before President Nixon's initiative were proposals for the deliberate coordination of national monetary policies so as to avoid short-term capital flows. In a highly simplified model of money and the balance of payments there is a one-for-one correspondence between changes in the domestic creation of money and the balance of payments; domestic monetary policy influences the current account and the capital account, but not the rate of interest or the price level. More sophisticated models obtain essentially similar results, popularized in the assertion that independent monetary policies are impossible under fixed exchange rates, although empirical studies suggest that the degree of independence has in the past been surprisingly great (Branson and Hill, 1971; Caves and Reuber, 1971).

The recent move to wider bands and the incorporation of forward margins into the analysis moderate somewhat the burden of this complaint. Although it can be shown on some assumptions that wider margins will reduce international monetary interdependence, and some aspects of experience in early 1972 are consistent with the theory, much still depends on expectations. If the market expects all parities to hold, forward premia will move equally and oppositely to spot rates within the bands; but even on this assumption, short-term interest-rate differentials will attract uncovered shifts of funds because the market will not expect the spot exchange rate to dance quickly up and down within the bands. And if we allow the market to anticipate changes in the parities themselves, long-run interest arbitrage will also be vigorous, even with wider bands. Finally, governments that wish to maintain higher nominal interest rates than their partners will not care to be told that they may purchase the right to such interest rates by punishing their exporters (by allowing the spot exchange rate to rise).

The complaint, then, seems well founded that the present system, even with wider bands, limits freedom for national monetary policies. But does this matter very much, save perhaps to the Germans and the Dutch? And what could possibly be done about it? A system of freely floating rates, with no government intervention, might restore some sovereignty to domestic monetary policies (although the policies of small countries would influence the exchange rate more than the interest rate), but such a system is neither possible nor desirable, for reasons given later. In any other system, short-term flows cannot be substantially inhibited, however Draconian the controls, and the insulation of the money markets from the effects of these flows cannot be complete. It is not even a

question of trading off freedom for capital movements against the independence of monetary policies. The international dependence of monetary policies, I would argue, is endemic. Now that we have instituted a regime of wider bands, no further action is possible save the further tightening of national controls, which is an issue for national, not international, discussion.

The export of inflation and reserve policies. There are two senses in which the pre-1971 system allowed the taste for inflation of the dominant country in the system to determine the rate of inflation in all countries. First, as both price rises and excessive demand occur in the United States, imports rise and exports fall off compared with the levels they would otherwise have reached; this increases aggregate demand in other countries. Such Keynesian pressures can in principle be resisted through appropriate fiscal restraint in other countries, which would thereby generate a budget surplus, a trading surplus, and an increased allocation of national saving to the accumulation of reserves. But if the supply of specific factors to the export industries is inelastic, fiscal action may be difficult or impossible. Furthermore, a latent domestic inflationary process may be released by the weakening of the inhibitory forces of competition that is the inevitable result of foreign price rises. In practice, then, "imported" inflation is impossible to avoid, save insofar as other governments are willing and able to appreciate their currencies continually and at the right pace.

Second, even nonmonetarists would agree that an underlying contribution to the international inflationary process is made by a dominant country that has too rapid a rate of monetary expansion, and therefore nominal interest rates that are for a time too low. As shown earlier, these monetary pressures are internationally propagated and difficult to resist, except insofar as a government is prepared to force its exchange rate so high within the band that the market firmly believes it will soon fall.

In both senses, therefore, exchange-rate appreciation is the main device for resisting inflationary pressure. In the scenario one usually encounters, however, there is one "inflationary" country (the United States) and many countries (including, of course, Germany) that wish to resist inflation. To ask that Germany revalue its currency is, therefore, to ask that it confront the difficulties mentioned earlier of attempting to move in a coordinated way with other noninflationary countries and of bearing the political burden. Even now, when the U.S. authorities have shown their willingness to devalue the dollar, and have thereby softened the force of these traditional complaints, the problem still remains. Ger-

many and other countries may want the reserves they derive from U.S. deficits, but not the accompanying addition to effective demand or the domestic monetary consequences that follow.

Whether this problem is substantial or not depends on the extent to which governments really have demands for reserves high on their list of policy targets. I would argue in the negative. Governments do have policy aims relating to the balance of payments—usually the avoidance of trouble. And a country that has recently emerged from a period of reserve loss may wish to redress some of that loss (“repay debt”) at a reasonable pace. Some government advisers would suggest that the need for reserves is adequately met by policies designed to yield balance-of-payments equilibrium, on the grounds that liquidity will normally be made available when necessary to a country seen to be in such a state, whatever (within reason) the size of its reserves. Countries in which such views prevail would, quite consistently, support and gain from the international creation of reserves but might be unwilling to join in a negative-sum game in which each player trades off real benefits against the chimera of reserve gains. Some governments will doubtless be attracted, however, by reserve accretion as a mode of national savings; and a system that matches such countries, eager to acquire reserves, against the United States, willing to create them without limit in the form of dollar claims, will immensely facilitate the transmission of any inflationary pressures that are autonomously generated within the United States.

The peculiar feature of such a system is its limitlessness, but of course any country endowed with a large initial stock of reserve assets may perform similarly, with the same effect. Countries that strongly wish to acquire reserves, strongly wish to avoid inflation, and strongly wish to avoid revaluing their exchange rates upward were in a mess before 1971, and while they may properly blame the international system for one component of that mess—the limitless ability of the United States to manufacture reserves—the rest of the blame rests either on their own shoulders or on the shoulders of the regrettable fact of life that big countries have more influence on the world rates of inflation than small countries.

Hence, the lesson that I draw from this discussion is that the old system failed to separate fully a policy for the creation of world reserves from the operation of the U.S. balance of payments. This is a traditional and proper complaint, on which much has been written, and my reform proposals are conventional. But the problem of imported inflation, worrying though it is, cannot be solved by reform of the international system.

Incompatibility of policies, inconvertibility, and reserve-creation problems: a first survey. We have already seen that the system is not without some methods for reconciling the balance-of-payments aims of different countries. But these methods are weak and uncertain, and the cumulative scramble for surpluses by the industrialized countries could cause severe trouble. This complaint about incompatibility becomes, therefore, a prime claim for improvement in the system.

It is convenient to discuss under one head three issues: the suggestion that "asset financing" of deficits (the term I proposed as a substitute for the word "convertibility") is a royal road to the achievement of compatibility; the associated complaint that it is the absence of convertibility that makes incompatibility so potent a cause of trouble; and the alternative view that, if the United States does move to asset financing, the potential incompatibility between balance-of-payments targets becomes greater.

If all countries financed all deficits with assets, and obtained assets in return for all surpluses, the equal and opposite character of aggregate surplus and deficit positions would become transparently obvious: annual issues of SDRs, changes in the stock of monetary gold, and Fund transactions are small compared with the massive absolute size of surpluses and deficits. This transparency is rendered opaque by movements in the holdings of dollars, by sharp shifts from U.S. liquidity imbalances to imbalances on official settlements, and so on. Since a main method of reconciling potential incompatibilities of policies and actual incompatibilities of aspiration must be international discussion, it is desirable to make that discussion as uncluttered as possible.

But the asset financing of imbalances, when put in this context, is clearly only a means to an end—the smooth working of the international adjustment process, as it has been traditionally described—and is not even the only or necessary means to that end. It would be so only if it were generally thought to be so by many governments. If the notion of nominal equality or symmetry among all countries looms high in the subjective-welfare functions of important European governments, their willingness to play the rest of the game (particularly the moves required to achieve international compatibility) may require prior agreement on symmetry. This was doubtless one point in Arthur Burns's mind in Montreal, when he said (with studied moderation), "It seems unlikely to me that the nations of the world, taken as a whole and over the long run, will accept a system in which convertibility of the dollar into international reserve assets . . . is entirely absent" (*New York Times*, May 13, 1972). This point must be recognized in our minimal program (after we have carefully studied its meaning and implications).

Another way of striving to arrive at this conclusion is to contrast the

finite limits imposed on deficits by an asset-financing rule (and the associated speed at which adjustment must be sought) with the infinite extent of potential U.S. deficits under a dollar-standard system (and the correspondingly small or slow pressure to adjust). This is one aspect of that problem of "discipline" that we have already encountered. But the argument is two-edged. Those who most believe in the desirability of rapid appreciation by surplus countries will be least willing to see the spur to such adjustment weakened by giving surplus countries reserve assets instead of dollars. Foreigners who receive assets when the United States is in deficit will be less receptive to U.S. calls for realignment than will foreigners faced with the prospect of absorbing unlimited quantities of "inconvertible" dollars. In a sense, the more asset financing there is, the less need will foreigners see for a dollar devaluation. So I will not pursue further this particular argument in favor of convertibility.

On the other hand, if we are inclined to allow that Burns's hunch is correct and foreigners will insist on some obeisance to the notion of convertibility, it follows that the international creation of reserves will have to be larger and should be more closely geared to the reconciliation of firmly held balance-of-payments aims.

Thus we carry forward, from this preliminary canter around the course, requirements for internationally agreed reserve creation, for some form of U.S. asset financing of deficits, and for some improved machinery for adjusting in an internationally compatible way the balance-of-payments targets of different countries. These last two points require further examination.

Asset financing of deficits. It would be convenient if all countries (including in particular the United States) financed their deficits with internationally acceptable assets. My reasons for this assumption are twofold: First, this is what many governments say they want; second, the wheels of international transactions will turn more smoothly if all participants are happy about the liquidity, shiftability, and interchangeability of the media used for debt settlement. But before we commit ourselves to this deceptively easy-sounding program, we must encounter a number of difficulties and objections, listed in ascending order of importance.

a. The United States has announced its wish to see the "role of gold" diminished and might therefore be reluctant to use its existing gold stock for payments purposes on any systematic scale.

b. The different view has been voiced that the existing stock of gold (and SDRs) is regarded by the U.S. authorities as a rock-bottom minimum, a national emergency reserve; but this leads to the same conclusion, that the United States has virtually no assets to use internationally.

c. A once-for-all creation of SDRs sufficient to equip the United States

with a large stock of reserves would either be a grossly discriminatory "gift" to the United States, or, if distributed generally, would inflate world official liquidity to an extent unlikely to be acceptable.

d. If the United States were to pay in, say, SDRs when in deficit, it would insist symmetrically on receiving SDRs, not dollars, when in surplus. This would mean some sort of fairly grand international machine for converting existing officially held nonresident dollars into SDRs, initially, in a once-for-all funding operation, or incrementally, whenever the rest of the world was in deficit with the United States and needed SDRs, not dollars, to pay its debts.

e. If a U.S. surplus were to be the main method by which the United States acquired assets to finance future deficits, the rosy future would have to begin with a long period of U.S. surpluses. This would postpone indefinitely the fact of U.S. convertibility, although, of course, the promise could be airily and safely made once the United States were seen to be firmly and quasi-permanently in surplus. More important, there is little chance of the other nine Group of Ten countries agreeing on an exchange-rate structure that would yield a permanent surplus to the United States. Some countries (e.g., Japan) will object because the rate of growth of their export industries is seen as a main motor of economic growth at home. Some (e.g., Germany), while willing and ready to see their exchange rate move modestly up against the rest of the world, as an anti-inflationary device, will be unhappy to contemplate a downward revision of plans for the growth of actual export volume from key industries. A higher external value for the D-Mark will mean lower D-Mark prices but a constant real-payments surplus. Still other countries (e.g., Britain) will be unwilling to see themselves nudged once again into a chronic deficit position—they would permit at most some attenuation of their (cyclically corrected) surplus. Whatever central bankers may say at international meetings, these are the real considerations that move governments (and indeed many modern central bankers as well).

f. Because of (e), and an understandable wish to enjoy a period of dollar strength, the U.S. authorities will attach far more importance to a rapid move toward surplus than to any general acceptance of the principle of convertibility. If it seems necessary, the U.S. authorities are bound to seek an even lower average effective price of the dollar (either by their own acts or by further pressure on individual surplus countries).

g. Moreover, for many economists, convertibility smacks of fetishism, in the technical sense that it represents an obsession with the means to an end, rather than the end itself. The "end" is equilibrium in the foreign-exchange market, which requires an appropriate international structure

of exchange rates. If there seems to be a need for significant flows of reserves from countries (like the United States) in a weak initial reserve position, the solution is to move immediately to a better structure of rates, not to engage in maneuvers whose sole rational purpose is to signal the need for such a move. And if, at a point in time, most governments believe that the U.S. deficit is a cyclical episode, or a temporary dip in the downward arm of a J-curve, then the rational step is for them to back their bets by holding ("inconvertible") dollars until the cycle is reversed or the J-curve surmounted.

h. The final attack on the convertibility proposal is to ask what "deficit" should be met by asset flows. This is a horse that must be backed before the race is run; it is no use waiting until a period has passed and then examining the record to see which short-term flows the United States must "pay for" and which should be financed by foreign (or IMF) accumulation of dollars. The most sensible definition would probably be "the basic balance minus x "—where x is some forecast of the normal upward trend in private plus official transactions balances of U.S. dollars. But x would be hard to define and predict precisely.

For all these reasons, asset financing of a U.S. deficit is unlikely to be a practical possibility until some years have passed. The right immediate aim may be a combination of three elements: first, a pattern of exchange rates sufficient to achieve a (cyclically adjusted) surplus for the United States, as substantial as trading partners will permit; second, some device as in (d) for ensuring that the United States gains assets from its surplus; third, a precise but undated commitment by the United States to resume convertibility when the first two elements have run their course. If the rest of the world is unhappy about the first of these elements, their attitude puts greater weight on the suggestions immediately below.

Compatibility of targets and policies. It would be a better world if the main countries (a) could state clearly their own balance-of-payments targets (including the relation among the several sub-balances); (b) would agree to argue out these targets and reformulate them on a compatible basis, bearing in mind the problems of the capital account; (c) could make and update accurate forecasts, corrected for cyclical and special factors; (d) could obtain reliable quantitative estimates of the relationship among exchange rates, domestic activity, and flows of trade and payments; and (e) could conduct themselves so that, when the results of these exercises became available, the indicated policy changes could be promptly and smoothly implemented. Each of these desirable outcomes is, of course, unattainable—if only because they would require all governments to be completely good and many economists to be completely

clever. It is more useful to ask how far short of perfection the system can fall on these five counts and still work reasonably well.

We have already indicated one important degree of freedom—the fact that for advanced countries balance-of-payments targets are not absolute. A degree of philosophic indifference characterizes the approach of most finance ministries to the precise set of numbers that will be chosen by the international roulette wheel. But it is perhaps useful to draw attention to two major problems.

The first involves step (d). I know of no individual national forecasting model in which the various export and import elasticities or propensities can be regarded as well-specified or reliable, and although brave efforts are being made to combine national models internationally in a consistent manner, the basic data remain inadequate. This inadequacy should be reduced by time and effort (though I admit to some doubt about how far progress in this field can ultimately go), but it would be wrong to suggest that by, say, the middle of the decade we shall have achieved fairish certainty about the basic relationships. The degree of doubt about any one country's "equilibrium exchange rate" might still be in the neighborhood of the Bretton Woods 10 per cent, and in multi-lateral bargaining these error margins will cumulate in a manner that will make it impossible for a quorum of Nobel prize winners collectively to bang the table and say, "This is the required set of exchange rates, corresponding to your targets agreed at stage (b)."

Second, and this is a matter that has been given much attention, step (e) will run into difficulties under a par-value system, given the stickiness of rates and market speculation, and these difficulties will be reinforced by the general imperfection of the technical calculations of step (d). The temptation will be to delay changes, moving only by crisis-ridden discontinuous jumps when the lessons of arithmetic become irresistible. This essay takes a philosophical attitude toward this real problem. It rests on its own casually historical account of speculative episodes, suggesting that speculation is usually benign or can be resisted, and on the optimistic picture of exchange-rate flexibility offered in section 1, suggesting that even the stickiest of countries has learned a lesson in the last decade.

Nevertheless, my view of efforts to achieve compatibility is that I am wholeheartedly in favor of them; in particular, recalling an earlier discussion, I would hope that opportunities were taken to press some extra burden of adjustment on individual creditor countries. But it seems over-ambitious and excessively optimistic to believe that great strides forward, political or technical, will be made in the next few years. The system will

continue to rely, for a tolerable measure of robustness to changing circumstance, on the willingness of countries to suffer balance-of-payments swings without always becoming very worried about them.

Exchange-rate flexibility. At the beginning of this essay I described at length the present system and tried to show that all but a small group of countries have had as much flexibility as they wanted. To give to this handful somewhat more opportunity for flexibility is a proper aim of reform, since a complaint is *prima facie* well founded if one or more governments feel it to be so. It remains, however, to ask whether institutional arrangements should be changed so as to induce some or all governments to want and to use more flexibility than they now enjoy.

This would be wrong-headed. Some of the reasons have recently been noted by Katz (1972) and Cairncross (1972), and I agree with much of what they say. Summarizing (I hope not unfairly) the essence of their arguments, they suggest that the exchange rate might well be used in some periods as an (intermediate) target for policy, not just as an instrument. Katz stresses that governments may wish to stabilize the rate while taking domestic action on the pressure of demand or the allocation of resources; otherwise, the rate might move promptly in a way that would make it impossible to achieve domestic aims. Cairncross suggests that the gains from prompt exchange-rate moves might be far smaller than is generally supposed and should therefore weigh less overwhelmingly against the losses that follow in the train of adjusting the peg.

I would add three points. The first is conventional and dull, but nonetheless in my view overwhelmingly true and relevant. Governments are not willing, and will not in the foreseeable future be willing, to allow exchange rates to float freely; nor are they likely to agree to a set of intervention rules (still less to allow a central international body to intervene for them) save around a set of generally accepted parities, or central rates. In designing a system for the 1970's, we had better assume the continued existence (except in times of temporary crisis) of some such set of "generally agreed parities," and an adequate name for such a setup is the Bretton Woods par-value system. Absent such a system, different bits of the world will set up mini-Bretton Woods of their own, and, even if that happened, something very much like the Tripartite Agreement of the 1930's would surely develop to knit the different sub-systems together. Somewhat wider bands and somewhat more flexibility of parities have developed through the stresses of the last few years. I am here asserting that there is little further scope for development.

Second, as some economists recognized long ago (Henderson, 1949; Balogh, 1963) and others have recently rediscovered, if the objective

of devaluation is to turn the terms of trade against the devaluing country, real wages must be held below what they would otherwise have been, which means that money wages must be held against rising import prices. This will be the easier, the quicker and larger is the turnaround in the trade balance, and this in turn will depend upon the strength and success of the accompanying policy measures, on the size of the price elasticities, and on the speed of response. If the world is characterized by low elasticities, slow responses, and an obstinate downward inflexibility of real wages and real consumption, exchange-rate movements are bound to be painful and only mildly successful.

It does not follow that exchange-rate changes are absolutely undesirable, or that some beautiful alternative could be substituted. But a useful distinction can be made between two sorts of disequilibria, along very old-fashioned lines. In the first, comparative cost structures (or, in more modern language, patterns of technical change or economic growth) may change through time, leading to (small) changes in the equilibrium values of exchange rates. The parities laid down by the founding fathers in 1946 may not have been, they recognized, absolutely right for the cost structures after the war: hence the arrangement that once-for-all changes of up to 10 per cent would be made "on the nod" [Art. IV, Sec. 5(c)(i) of the IMF]. But the need for these changes would develop slowly, and adjustment would be made at the volition of governments, at times and under circumstances chosen as propitious. In the second sort of disequilibrium (traditionally called price disequilibrium), the need to adjust would arise because of disparate rates of inflation in different countries, and this need could be large, urgent, and repetitive in the same direction. Small, trade-dependent countries will find this sort of disequilibrium hard to resolve, because of the linkage between exchange rates and domestic price structures. Hence the importance that governments in such countries attach to direct control over domestic costs; they know that resort to devaluation caused by disparate international rates of inflation will be treated inevitably as an admission of defeat and deplored for that reason.

Note that the position of the United States is quite different, not because of some contingent asymmetry in the international payments system, but because of its size and low trade/GDP ratio. The United States can choose its own rate of inflation and need not impose it on the world, as under the bad old dollar standard. It can, in fact, devalue at will to correct disequilibria of both types. Hence, we may expect to find a greater taste for exchange-rate flexibility in the United States than elsewhere—a point that needs to be taken into account.

Third, and this reinforces the general difficulty of coping with price disequilibria in small, trade-dependent economies, the rate of domestic wage inflation may react directly to changes in the exchange rate, without passing through the intermediate stage of import price changes. According to a Scandinavian doctrine (Jacobsson and Lindbeck, 1969), export prices are determined by world markets; profit margins are conventionally set at desired levels; and the rate of wage increases in the export sector of the r^{th} country is therefore determined by the rate of world inflation and the r^{th} country's effective exchange rate. Intersectoral wage differentials are highly inflexible in the medium or even long run, and export-sector increases are therefore transmitted to the rest of the economy through settlements based on comparability or emulation.

The missing component of this model, and of my argument thus far, is its failure to allow for indigenous cost-push inflation—possibly a venal omission for a small, highly dependent economy, but a more serious gap in an analysis of the inflationary process in a typical Group of Ten country. Suppose an employer exporting a significant proportion of his output is faced by a pay-claim strike; his willingness and eagerness to resist will be the smaller, the more flexible downward the international price of his country's currency, and the bigger and more widely watched his business. With freely floating rates, a large individual wage settlement that is widely recognized as inflationary, and as a leader in the wage round, would push down the exchange rate and validate the settlement *post hoc*. In a crawling regime, automatic or discretionary, the causation may be to some extent in the reverse direction: rational employers will "budget" for the maximum annual rate of decline in the parity and will move their maximum wage offer upward to the full extent of the annual crawl. Only under a regime where the authorities are known to be unwilling to validate each and every inflationary wage settlement through a prompt and timely adjustment of the exchange rate will the rational employer in an oligopolistic market be unwilling to bear the costs of a strike. Insofar as this type of mechanism operates, exchange-rate flexibility greater than at present will never be overwhelmingly attractive to governments caught in the inflationary process.

This argument suggests that one ought not to persuade governments to be more flexible downward; but the system should allow more flexibility to those countries that positively wish it, and whose trading partners will tolerate it.

Summary on exchange rates. For most countries, particularly in the developing world, there is already as much flexibility as trading partners will permit. The resistance of richer countries to low-wage imports arises

from their concern to protect indigenous workers in specific industries, not from a general fear of balance-of-payments disequilibrium caused by malfunctioning of the international adjustment system. Among industrial countries, even though the smaller ones are not now much inhibited by the system from moving their rates downward, some symbolic surgery is perhaps necessary to signal the recent change of spirit. It is important that no country—and, in particular, not the United States—feels that the system stops it from proposing suitable movements in its exchange rate, and creditor countries should be urged to consider revaluations rather more readily than in the past. We need also to see that no rules or customs of the IMF, other than the natural concern of other countries about their own competitive positions or terms of trade, prevent or inhibit agreement to such proposals. Countries that wish to do so should be allowed to announce a sequence of small moves, up to a total to be agreed internationally, or may announce their intention of proposing at future dates smaller moves than have been customary in the past, whenever they consider that market conditions warrant it.

Additionally, outside the mainstream of this discussion, “temporary floating,” as practiced recently by Germany, Canada, and Britain, needs to be brought under some institutional control. As a way of feeling toward a new equilibrium rate, or accustoming trading partners to the notion that a devaluation is needed, this device has gained adherents. The IMF should recognize this and strive to ensure that the temporary breaking away of one country from the system does not stimulate general disruption.

3. A Minimum Set of Changes

We are now in a position to pull together the several features of the present system that we have recognized as being unsatisfactory in an essential and ameliorable way, and to suggest ways of improving them. First, some preliminary remarks on the period to which my proposals refer and the expository device by which I have chosen to translate desired changes in performance into changed rules or conventions of the system.

The time scale on which I have concentrated is that of the middle 1970's, from early 1973 until, say, the end of 1976. Circumstances are always changing, and with them the tastes of economists and governments. It would be foolhardy, even for a conservatively minded economist, to ignore the very substantial shift in the view of central bankers and officials that has occurred in the last few years, in part as the result of academic prodding; what appeared in 1965 to be wild and extravagant

proposals, fraught with danger, are now relatively commonplace. But it is my view that, for the next four or five years at least, a relative stability of institutions and practices is both likely and desirable; those whose taste for change is greater may, if they wish, regard this as a suggestion that we seek to build a stable space platform from which further adventures may be launched later in the decade.

On this time scale, new institutions would scarcely be relevant or useful, and even changes in the Articles of the IMF should not be sought lightheartedly; it took eighteen months to move from agreement on the main lines of the SDR proposal in the late summer of 1967 to the first issuance of SDRs. Thus I have chosen to express my conclusions as a draft resolution that might be passed by the Governors of the International Monetary Fund, or some similar international body. My purpose in choosing this method is, admittedly, partly jocular and deprecatory; grand proposals for reform look rather insubstantial and unexciting when expressed in the language of any international bureaucracy. But such an approach may not be far from what is eventually attempted, although other approaches, embodying the same limited aims, are possible.

Exchange-rate flexibility. The resolution would usefully embody and recognize some of the changes which, as we noted in section 1, have already taken place. It would then proceed to take account of the further recommendations summarized above.

It is the view of the Fund that the government of the United States has the same rights and duties as all other members; in particular, that the U.S. authorities are able, when they judge it necessary, and after such consultations as they deem appropriate, to propose to the Executive Directors of the International Monetary Fund changes in the par-value relationships between the U.S. dollar and all other currencies; it is open to the U.S. authorities to make this sort of proposal either in terms of the gold value of the U.S. dollar, or in terms of the relation of the U.S. dollar to the SDR. It remains the right and duty of all other members of the Fund, after suitable consultations, to examine the gold or SDR par values of their own currencies in light of any U.S. proposals that might from time to time be made; if national authorities think it appropriate, they may in turn make proposals about their par values; but all governments will consider their positions in light of their common recognition of the need to allow to the U.S. dollar the same degree of effective flexibility as is available to other currencies.

It is also the view of the Fund that an individual member may approach the Fund Board to propose a sequence of small changes in its par value (up to a total that should be stated) and that such proposals should be treated in all respects as if they were proposals under Article IV, Section 5. Equally, the problems of some members faced by speculation or uncertainty might

sometimes be eased (and the stability of the general system increased) by a temporary suspension of their obligations under Article IV, Section 3: such a period of temporary floating would be subject to special consultation procedures, and the member would be expected to return to some par value very soon. In interpreting the term "fundamental disequilibrium" in the light of such proposals, the Executive Directors should bear in mind the necessity to prevent fundamental disequilibria from developing, and the inevitable penumbra of uncertainty that surrounds the notion of an equilibrium exchange rate. The Executive Directors will wish to ask the opinion of the staff as to whether the balance of probabilities suggests that a movement of par values in the same direction as the member is proposing, or the temporary suspension of par-value obligations, would be consistent with the maintenance of exchange stability in the sense of Article IV, Section 4(a).¹

Convertibility of the U.S. dollar. The purpose of the resolution is to embody some sort of undertaking by the U.S. authorities, and to show the implications for the behavior of other countries, but to avoid launching upon any scheme that is not absolutely necessary for the achievement of the minimum aims I put forward above. Thus the Fund resolution might continue:

The Fund notes that staff believe that the present structure of par values is such that the U.S. basic balance of payments can be expected to move into surplus in the next few years, and accepts this view.² When the United States is in surplus, other member countries in aggregate will be losing reserves, and many of them may find it attractive to reduce their official holdings of U.S. dollars. Thus, in the natural course of events, the United States may be expected to gain reserve assets to a lesser extent than its balance of payments would allow. The Fund therefore intends to establish a facility that would allow the United States to purchase SDRs with its own currency whenever the annual addition to its reserves would otherwise fall short of its payments surplus; the United States would neither receive nor pay interest on SDRs acquired in this fashion. In light of this forecast of trends and the establishment of this facility, the Fund notes with satisfaction the statement by the U.S. authorities that they hope and expect that it will be possible for them, after the forecast trends have been validated by experience, to finance any deficits that might occur by payments of reserve assets.

¹ This is the clause that states the undertaking of members, *inter alia*, "to avoid competitive exchange alterations."

² If this could not be said, it would be the duty of all concerned to make that fact known to national authorities, and to arrange for the reconvening of the Smithsonian Conference. Whether or not the surplus would be substantial enough to equip the United States with the additional reserve assets it might one day need to observe a "convertibility" obligation is, as we saw, another matter.

It may not be necessary to state in further detail the future intentions of the U.S. authorities. But since this essay attempts to look forward four or five years, to a time when the U.S. surplus might be fading but before the U.S. authorities thought it appropriate to shift the dollar parity again, this "resolution" should embody some notion of what might eventually be done. It is here that my attempt to minimize the immediate constitutional change encounters its most serious obstacle.

If the United States is to settle its deficits with reserve assets, who will decide which dollars to transmute into SDRs (or gold, or Fund positions), and how will the volume of dollars presented by foreigners be limited to equal exactly the U.S. statistical deficit? Because of the existence of free exchange markets, and the use of the dollar for intervention in most of these markets, it is not possible to identify dollar balances as those which resulted from a particular U.S. deficit. Nor can the system merely leave it to foreign central banks to present to the United States for conversion incremental dollar balances as they arise, because (a) country A may acquire these dollars not as a result of a U.S. deficit, but as a result of country B's deficit; (b) some central banks may prefer to hold additional dollars rather than exchange them for some reserve asset; (c) foreigners (private and official) already hold large stocks of dollars that they may wish from time to time to exchange for other assets. To ration out among potential claimants the dribble of reserve assets that the United States might be willing to provide in fulfillment of its obligations to "finance deficits with assets" might thus seem to require an apparatus of Byzantine ingenuity, complexity, and centralized control.

One route of escape might be argued as follows: When the United States is in underlying surplus (even if in cyclical deficit), other countries will in fact not present dollars for conversion; when the United States is in underlying deficit, and sufficiently in deficit to induce foreigners to present dollars for conversion, the United States will devalue, returning to underlying surplus. The first part of this simple prediction arises from the assumed interests of other countries; the second corresponds closely to what I have argued are the interests of the United States. But I admit that an open commitment by the U.S. authorities to such a rule would fail to satisfy the political need for a "convertibility" rule that Mr. Burns discussed in his Montreal speech. It might therefore be correct to provide roughly as follows:

At the end of each year, the U.S. authorities will make available to the Fund reserve assets to an amount equal to the basic deficit of the United States, account being taken of the normal increase in transactions balances

of nonresident dollar holders. These reserve assets will be made available to member governments (in exchange for dollars that will revert to the U.S. authorities) in proportion to each member's balance-of-payments surplus. If any eligible member does not wish to acquire the reserve assets on offer, the assets rejected by that member would be returned to the pool for division among other members on the same basis.

This is the simplest method of offering the appearance and some of the reality of reserve asset financing, without any necessary prior funding of dollar balances, compulsory harmonization of reserves, and so on. I admit to the belief, possibly cynical, that the operators of such a facility would not in fact lead busy lives, for the reasons described immediately above. But it should be sufficient to satisfy the Europeans without outraging the Americans.

An international policy for reserves. The use of U.S. dollars as a reserve asset has complicated and confused the rest of the world's attitude toward the U.S. balance of payments. Any way of clearing this confusion must satisfy the following needs:

a. The main element in the increase of reserves during the next decade must be internationally created SDRs. While the further U.S. deficits may add significantly (say, \$15 billion) to foreign reserves during 1972-73, the switch from private to official holdings in 1971 (say, \$20 billion) may be expected to reverse itself to some extent during the next few years. SDR creation of \$3 or \$4 billion per year during a decade of U.S. balance or surplus will mean that, by 1980, gold and SDRs will make up two-thirds of reserves.

b. After the worst deficit of 1971-73 ceases, dollars will cease to accrue to central banks, and these institutions will see themselves (and be seen by others) to be struggling merely to redistribute the existing stock of reserves—an argument that should clearly form part of the compatibility debate.

c. It would be convenient if countries began to see reserve accumulation in this light, and if they also could put their reserves aims in a long-term and secondary context. Only those countries with a recent history of extreme reserve attrition could be justified in treating reserve accumulation as a primary target.

Thus the two requirements we derive from this discussion are a determination to continue with the international creation of liquidity at a fairly fast rate, and a collective recognition that robbing Peter of reserves so that Paul may accumulate must be subject to international agreement. This view might be embodied in the resolution as follows:

It is the view of the Fund that reserve creation should proceed at a fairly steady rate during the coming decade, amounting to 3 billion SDR a year.

The role of reserve currencies will fall through time relatively and absolutely (because of the "facility" mentioned in the last subsection). It will best ensure the purposes of the Fund if each member pursues with moderation any aims it may have for changing its total reserves, bearing in mind the implications these aims will now have for the balance of payments of other members.

Capital flows. We have already analyzed the confusion of positions adopted by different countries on the control of long-term capital flows between advanced countries. The United States probably has a genuine national interest in seeing that these flows continue; the rest of the industrialized world is ambivalent on the question. This issue will be easier to settle when divorced from the largely extraneous questions of exchange-rate policy and international liquidity. But it will be impossible to approach the compatibility issue until countries have declared their views on the size of the current surplus the United States should be encouraged to run as a means of financing long-term outflows, to what extent the accumulation of short-term private holdings of dollars should be seen as the appropriate alternative method of financing long-term investment, and to what extent long-term capital outflows should be limited by recipient countries.

When the debate has died away, it seems to me inevitable that the EEC countries will be driven to some common attitude on inflows of U.S. private capital, and that this attitude will be less than completely liberal. It will be appropriate for the United States to bargain on this question, using all the cards in its hand. But it would be a silly outcome if this bargaining led to a reduction of both capital flows and trade, and if flows were temporarily disrupted, because the bargainers failed to perceive the sticking points of people on the other side of the table.

On this issue, therefore, we can recommend only full and explicit bargaining, each side having previously explored and identified its own national interest more fully than at present.

Thus the resolution might continue:

The Fund notes the division of opinion between members on the proper aims and methods of control of capital movements. The Fund's attitude to short-term flows is that they should be controlled or financed, unless an informed view develops (in the minds of national authorities or the Fund's staff) that some par-value adjustments might be needed. The Fund has no collective view concerning long-term flows; it urges its members to engage in bilateral and multilateral discussion, in any appropriate forum, to resolve differences of view. The Fund reminds all its members of their common interest in avoiding competitive or retaliatory restrictions on payments arising out of an understandable but reconcilable difference of national objectives in respect of capital flows.

Compatibility in general. The Fund resolution would conclude:

The Fund has requested its staff to keep under frequent periodic review likely developments in world payments. The staff will be asked to discuss directly with national authorities trends that they detect in the balances of individual member countries. After such consultations, the staff will submit reports to the Executive Directors, drawing attention to any problems which may seem to furnish *prima facie* reasons for eventual changes in the par values of individual currencies. The Fund, in close collaboration with other international institutions, will initiate discussions between member countries to ensure that the balance-of-payments aims of individual members are clearly understood by all, and to examine the ways in which those aims might be made compatible.

Summary. The changes I have suggested were intended to be minimal. They turn out to be very small, though not, I believe, negligible. The message of this essay is, therefore, that much of the heat and dust about "reform" should be allowed to subside, and hard negotiations about apparent clashes of national interest begun.

4. Alternatives

Will the reforms I have sketched satisfy all governments? What could happen if there were substantial dissatisfaction? Are there, in any case, irresistible causes operating to make other changes inevitable? There are two possibilities worthy of brief consideration.

The gold price. As Gilbert (1968) has frequently argued, a substantial rise in the monetary gold price would solve simultaneously a number of the problems we have examined. A once-for-all increase in the value of the U.S. gold stock would increase the quick-asset/quick-liability ratio of the United States, making convertibility a more serious possibility; it would render usable monetary gold that is at present hoarded by central banks; it would increase the value of the annual increment to the monetary gold stock, thus making annual agreement about the issuing of SDRs less necessary. Moreover, since it remains true that the system encourages devaluation more than revaluation (because the pressure on deficit countries is greater than on surplus countries), and the United States has joined the army of potential devaluers, the real value of monetary gold may not fall so rapidly through time, thus helping to avoid liquidity crises.

If it is true that the recent unprecedented rise in the market price of gold reflects expected future commercial demand (rather than pure speculation on the future actions of the monetary authorities), this would reinforce the argument for an increase in the official price; it is hard to

see why one central bank should sell to another at \$38 when it can get \$50, \$60, or \$70 on the free market. A rise in the gold price would, in this case, become the only alternative to the complete demonetization of gold.

These arguments are unpalatable to those of us averse emotionally and intellectually to a metallic money, but that does not reduce their strength. It used to be possible for the enemies of gold to rely on a U.S. veto of any substantial rise in the price of gold, but belief in the immutability of U.S. policy on many more important matters has been shown to be wrong. Moreover, while a general consensus among most governments concerning the desirability of a given course of action can be relied upon to enforce it (until a new generation of bureaucrats, trained in new academic dogmas, takes over), the stubborn view of one government alone is not a rock to build upon. On the one hand, an international bargain may be struck, and a gold price rise can be traded off against other gains, like any other real or imagined national interest. On the other hand, many countries in the rest of the world are quite capable of asserting their own determination to raise the price of monetary gold for transactions among their central banks while currency exchange rates against the dollar remain unchanged, and the fiction of a U.S. gold price of \$38 is maintained.

A two-world solution. If such a gold bloc were to establish itself, the fact that the United States neither buys nor sells gold at its official price would make it possible to maintain consistent market exchange rates among currencies, although the IMF would find it hard to continue its own operations. Par values or central rates of some sort could probably be expressed in a neutral way, so as to maintain a semblance of the existing Bretton Woods system; but it is more likely that, as part of the same process of fission that led to the establishment of a gold bloc, the non-Communist world would split into two or more trading groups. If I was right to argue that governments discern real advantages in a system of relatively fixed exchange rates, each of these blocs might sustain a mini-IMF of its own, but between the blocs exchange rates might be highly flexible (although they would not float freely, as the authorities would form a duopoly or small oligopolistic group for purposes of intervention).

If the split occurred, it would be because several countries wanted the outcome; the present world would be found to be unsatisfactory, partly because there was too much exchange stability between some country pairs, too little between other pairs. I would hazard the opinion that such a search for Mundellian optimal currency areas, if it takes place, will be

impelled in part by the wish to join together with trading partners who share a similar approach to capital flows. And some European countries, with the harrowing experience of 1971 in mind, will be unwilling again to risk the rupture of stable relationships with close trading partners just because one major outsider needs to devalue. If it were really true that one large pariah dog could be identified in advance, the rest of the pack would be willing to cast him off in advance, *if* it were also true that this could be done without notable losses.

But these two provisos are not now observed. The United States may be chronically out of line in one direction, but the United Kingdom occupied a similar position not so long ago, and Japan and Germany are widely thought (it is the expectation, not the reality, that is material) to be out of line in the other direction. Unconstrained U.S. outward capital flows might be an irritant that would provoke change, and the attraction of a higher gold price (which foreigners might deem to be attainable if the United States were isolated) might be a positive inducement to change. But the losses through the pressures to protectionism that would be provoked by a deliberate European decision to isolate the United States remain a potent deterrent to a two-world solution. It is nevertheless possible to imagine three circumstances in which a two-world decision might be taken: (a) if U.S. protectionism grows to such a point that foreigners believe they have nothing further to lose from isolating this prosperous market; (b) if a repetition of the currency floating of 1971 occurred because of a further dispute about the appropriate international price of the dollar, two worlds might seem better than none; (c) if the U.S. authorities came to believe in the desirability of a floating dollar as strongly as many American economists, they might positively welcome a two-world solution as an alternative to the scheme presented in this essay. There is no absolute reason why a two-world system would present greater barriers to trade and payments than already exist, though it would take strong nerves and cool tempers to resist the pressures that would be everywhere present. But I, myself, can see no reason why the United States should feel it necessary, in its national interest, to take such a risk; it already has most of what it needs from the international system.

5. Conclusion

Neither the United States nor any prospective foreign bloc would find it necessary or profitable to desert the present monetary system, minimally reformed along the lines suggested here. But excessive ambition by any party to the forthcoming negotiations might precipitate a

split, which would be dangerous though not necessarily catastrophic or even very serious. If the split occurs, some central banks will certainly be dealing in gold at prices far above the present official price. And, even without the split, there is a sporting chance that the gold speculators will realize their profits. For those to whom neither two worlds nor a high gold price is attractive, I suggest that a minimal reform and consolidation along the lines of this essay might be a reasonably secure alternative.

References

- Aliber, Robert Z., "Gresham's Law, Asset Preferences, and the Demand for International Reserves," *Quarterly Journal of Economics*, 81 (November 1967), pp. 628-638.
- Balogh, Thomas, *Unequal Partners*, Vol. 2, Oxford, England, Blackwell, 1963.
- Branson, William H., and Raymond D. Hill, Jr., *Capital Movements in the OECD Area: An Econometric Analysis*, OECD Economic Outlook Occasional Studies, Paris, December 1971.
- Cairncross, Sir Alec, "Doubts about Floating Rates," *Euromoney*, August 1972.
- Caves, Richard E., Grant L. Reuber, et al., *Capital Transfers and Economic Policy: Canada, 1951-1962*, Cambridge, Harvard University Press, 1971.
- Gilbert, Milton, *The Gold-Dollar System: Conditions of Equilibrium and the Price of Gold*, Essays in International Finance No. 70, Princeton, N.J., 1968.
- Henderson, Sir Hubert, "The Function of Exchange Rates," *Oxford Economic Papers*, New Series, 1 (1949), pp. 1-17.
- Hirsch, F., "SDRs and the Working of the Gold Exchange System," *IMF Staff Papers*, 18 (July 1971), pp. 221-253.
- Horsfield, J. K., ed., *History of the International Monetary Fund*, Vol. 3, Washington, IMF, 1969.
- Jacobsson, Lars, and Assar Lindbeck, "Labor Market Conditions, Wages and Inflation: Swedish Experiences 1955-67," *Swedish Journal of Economics* (1969, No. 2), pp. 64-103.
- Katz, Samuel I., *The Case for the Par-Value System, 1972*, Essays in International Finance No. 92, Princeton, N.J., 1972.
- Kenen, Peter B., *Reserve-Asset Preferences of Central Banks and Stability of the Gold-Exchange Standard*, Princeton Studies in International Finance No. 10, Princeton, N.J., 1963.
- , "The International Position of the Dollar in a Changing World," *International Organization*, 23 (Summer 1969), pp. 705-718.
- Machlup, Fritz, *The Transfer Gap of the United States*, Reprints in International Finance No. 11, Princeton, N.J., 1968.
- McKinnon, Ronald I., *Private and Official International Money: The Case for the Dollar*, Essays in International Finance No. 74, Princeton, N.J., 1969.
- Williamson, John, *The Choice of a Pivot for Parities*, Essays in International Finance No. 90, Princeton, N.J., 1971.

POSTSCRIPT

This essay was written before the Annual Meeting of the International Monetary Fund in September 1972. I wish, therefore, to add a comment on one passage in the speech by the U.S. Secretary of the Treasury to the Annual Meeting. He seemed to suggest that the United States wished the dollar to enjoy the same margin of fluctuation against other currencies, within the approved margin on either side of parity, as was available to other countries. If this proposal is carried through to its logical conclusion, it seems to involve the use of Special Drawing Rights not just as the numeraire of the system but as the medium of intervention to be employed by central banks.

In my essay, I have suggested that such a development is neither necessary nor desirable and have concluded that the system can manage perfectly well with the continued use of the dollar as intervention currency. I find it difficult to understand why the United States should hold strong views on this question, unless it wishes to use "wider bands" as a device for seeking a lower effective exchange rate for the dollar against other currencies. If this is the U.S. aim, I would hope that it will be abandoned in the course of negotiations, because such is not and should not be the function that wider bands are meant to serve. Margins of fluctuation around parities may help governments to resist short-term capital movements and restore some measure of freedom in domestic monetary policy. While at any point they *could* be used to seek lower exchange rates in the interest of balance-of-payments adjustment, such an aim would be far better served by allowing the parities themselves to move.

Doubtless the negotiations during the next year will concern many other awkward points of principle and tactics, but for the rest I am happy to let my case stand.

October 1972

PUBLICATIONS OF THE INTERNATIONAL FINANCE SECTION

Notice to Contributors

The International Finance Section publishes at irregular intervals papers in four series: **ESSAYS IN INTERNATIONAL FINANCE**, **PRINCETON STUDIES IN INTERNATIONAL FINANCE**, **SPECIAL PAPERS IN INTERNATIONAL ECONOMICS**, and **REPRINTS IN INTERNATIONAL FINANCE**. **ESSAYS** and **STUDIES** are confined to subjects in international finance. **SPECIAL PAPERS** are confined to surveys of the literature suitable for courses in colleges and universities. An **ESSAY** should be a lucid exposition of a theme, accessible not only to the professional economist but to other interested readers. It should therefore avoid technical terms, should eschew mathematics and statistical tables (except when essential for an understanding of the text), and should rarely have footnotes. Most important, it should have a certain grace of style and rhythm in its language.

This does not mean that a **STUDY** or **SPECIAL PAPER** may be awkward and clumsy, but it may be more technical. It may include statistics and algebra, and may have many footnotes. **STUDIES** and **SPECIAL PAPERS** may also be longer than **ESSAYS**; indeed, these two series are meant to accommodate manuscripts too long for journal articles and too short for books.

To facilitate prompt evaluation, please submit three copies of your manuscript. Retain one copy for your files. The manuscript should be typed on one side of 8½ by 11 strong white paper. All material should be double-spaced—text, excerpts, footnotes, tables, references, and figure legends. More complete guidance appears in the Section's style guide; prospective contributors are urged to send for it before preparing their manuscripts.

How to Obtain Publications

A mailing list is maintained for free distribution of **ESSAYS** and **REPRINTS** as they are issued and of announcements of new **STUDIES** and **SPECIAL PAPERS**. Requests for inclusion in this permanent list will be honored, except that students will not be placed on the mailing list because of their frequent changes of address. A smaller list is maintained for free distribution of **STUDIES** and **SPECIAL PAPERS** to institutions of education and research and university libraries here and abroad.

ESSAYS and **REPRINTS** ordered from the Section are 50 cents a copy plus 50 cents handling charge per order. **STUDIES** and **SPECIAL PAPERS** are \$1. (These charges are waived on orders from persons in countries whose currency restrictions make it difficult to remit.) Noneducational institutions that wish to avoid placing separate orders for **STUDIES** and **SPECIAL PAPERS** can have all four series sent to them automatically in return for an annual contribution of \$25 to the publication program of the International Finance Section.

All manuscripts, correspondence, and orders should be addressed to:

International Finance Section
P. O. Box 644
Princeton, New Jersey 08540

(Customers in England, Scotland, and Ireland may find it more convenient to order Section publications from the Economists' Bookshop, Portugal Street, London, W.C. 2, or Blackwells, Broad Street, Oxford. These booksellers will usually have Section publications in stock.)

List of Publications

The following is a list of the publications of the International Finance Section. The issues of the four series marked by asterisks, and Essays Nos. 1 through 60, are no longer available from the Section.¹ They may be obtained in Xerographic reproductions (that is, looking like the originals) from University Microfilm, Inc., 300 N. Zeeb Road, Ann Arbor, Michigan 48106. (Most of the issues are priced at \$6.00.)

ESSAYS IN INTERNATIONAL FINANCE

- No. 61. Charles P. Kindleberger, *The Politics of International Money and World Language*. (Aug. 1967)
62. Delbert A. Snider, *Optimum Adjustment Processes and Currency Areas*. (Oct. 1967)
- * 63. Eugene A. Birnbaum, *Changing the United States Commitment to Gold*. (Nov. 1967)
- * 64. Alexander K. Swoboda, *The Euro-Dollar Market: An Interpretation*. (Feb. 1968)
- * 65. Fred H. Klopstock, *The Euro-Dollar Market: Some Unresolved Issues*. (March 1968)
66. Eugene A. Birnbaum, *Gold and the International Monetary System: An Orderly Reform*. (April 1968)
67. J. Marcus Fleming, *Guidelines for Balance-of-Payments Adjustment under the Par-Value System*. (May 1968)
68. George N. Halm, *International Financial Intermediation: Deficits Benign and Malignant*. (June 1968)
- * 69. Albert O. Hirschman and Richard M. Bird, *Foreign Aid—A Critique and a Proposal*. (July 1968)
- * 70. Milton Gilbert, *The Gold-Dollar System: Conditions of Equilibrium and the Price of Gold*. (Nov. 1968)
71. Henry G. Aubrey, *Behind the Veil of International Money*. (Jan. 1969)
72. Anthony Lanyi, *The Case for Floating Exchange Rates Reconsidered*. (Feb. 1969)
- * 73. George N. Halm, *Toward Limited Exchange-Rate Flexibility*. (March 1969)
74. Ronald I. McKinnon, *Private and Official International Money: The Case for the Dollar*. (April 1969)
75. Jack L. Davies, *Gold: A Forward Strategy*. (May 1969)
- * 76. Albert O. Hirschman, *How to Divest in Latin America, and Why*. (Nov. 1969)
77. Benjamin J. Cohen, *The Reform of Sterling*. (Dec. 1969)
- * 78. Thomas D. Willett, Samuel I. Katz, and William H. Branson, *Exchange-Rate Systems, Interest Rates, and Capital Flows*. (Jan. 1970)
- * 79. Helmut W. Mayer, *Some Theoretical Problems Relating to the Euro-Dollar Market*. (Feb. 1970)
- * 80. Stephen Marris, *The Bürgenstock Communiqué: A Critical Examination of the Case for Limited Flexibility of Exchange Rates*. (May 1970)
- * 81. A. F. Wynne Plumptre, *Exchange-Rate Policy: Experience with Canada's Floating Rate*. (June 1970)
82. Norman S. Fieleke, *The Welfare Effects of Controls over Capital Exports from the United States*. (Jan. 1971)
- * 83. George N. Halm, *The International Monetary Fund and Flexibility of Exchange Rates*. (March 1971)
84. Ronald I. McKinnon, *Monetary Theory and Controlled Flexibility in the Foreign Exchanges*. (April 1971)
85. Robert A. Mundell, *The Dollar and the Policy Mix: 1971*. (May 1971)

¹ A list of the titles of Essays Nos. 1 through 60 is available from the Section, or consult the complete publications list in earlier essays.

- * 86. Richard N. Cooper, *Currency Devaluation in Developing Countries*. (June 1971)
- * 87. Rinaldo Ossola, *Towards New Monetary Relationships*. (July 1971)
- 88. Giovanni Magnifico, *European Monetary Unification for Balanced Growth: A New Approach*. (Aug. 1971)
- * 89. Franco Modigliani and Hossein Askari, *The Reform of the International Payments System*. (Sept. 1971)
- 90. John Williamson, *The Choice of a Pivot for Parities*. (Nov. 1971)
- 91. Fritz Machlup, *The Book Value of Monetary Gold*. (Dec. 1971)
- 92. Samuel I. Katz, *The Case for the Par-Value System*, 1972. (March 1972)
- 93. W. M. Corden, *Monetary Integration*. (April 1972)
- 94. Alexandre Kafka, *The IMF: The Second Coming?* (July 1972)
- 95. Tom de Vries, *An Agenda for Monetary Reform*. (September 1972)
- 96. Michael V. Posner, *The World Monetary System: A Minimal Reform Program*. (October 1972)

PRINCETON STUDIES IN INTERNATIONAL FINANCE

- *No. 1. Friedrich A. and Vera C. Lutz, *Monetary and Foreign Exchange Policy in Italy*. (Jan. 1950)
- * 2. Eugene R. Schlesinger, *Multiple Exchange Rates and Economic Development*. (May 1952)
- * 3. Arthur I. Bloomfield, *Speculative and Flight Movement of Capital in Postwar International Finance*. (Feb. 1954)
- * 4. Merlyn N. Trued and Raymond F. Mikesell, *Postwar Bilateral Payments Agreements*. (April 1955)
- * 5. Derek Curtis Bok, *The First Three Years of the Schuman Plan*. (Dec. 1955)
- * 6. James E. Meade, *Negotiations for Benelux: An Annotated Chronicle, 1943-1956*. (March 1957)
- * 7. H. H. Liesner, *The Import Dependence of Britain and Western Germany: A Comparative Study*. (Dec. 1957)
- * 8. Raymond F. Mikesell and Jack N. Behrman, *Financing Free World Trade with the Sino-Soviet Bloc*. (Sept. 1958)
- * 9. Marina von Neumann Whitman, *The United States Investment Guaranty Program and Private Foreign Investment*. (Dec. 1959)
- * 10. Peter B. Kenen, *Reserve-Asset Preferences of Central Banks and Stability of the Gold-Exchange Standard*. (June 1963)
- * 11. Arthur I. Bloomfield, *Short-Term Capital Movements under the Pre-1914 Gold Standard*. (July 1963)
- 12. Robert Triffin, *The Evolution of the International Monetary System: Historical Reappraisal and Future Perspectives*. (June 1964)
- 13. Robert Z. Aliber, *The Management of the Dollar in International Finance*. (June 1964)
- 14. Weir M. Brown, *The External Liquidity of an Advanced Country*. (Oct. 1964)
- * 15. E. Ray Canterbery, *Foreign Exchange, Capital Flows, and Monetary Policy*. (June 1965)
- 16. Ronald I. McKinnon and Wallace E. Oates, *The Implications of International Economic Integration for Monetary, Fiscal, and Exchange-Rate Policy*. (March 1966)
- 17. Egon Sohmen, *The Theory of Forward Exchange*. (Aug. 1966)
- 18. Benjamin J. Cohen, *Adjustment Costs and the Distribution of New Reserves*. (Oct. 1966)
- 19. Marina von Neumann Whitman, *International and Interregional Payments Adjustment: A Synthetic View*. (Feb. 1967)
- 20. Fred R. Glahe, *An Empirical Study of the Foreign-Exchange Market: Test of A Theory*. (June 1967)

21. Arthur I. Bloomfield, *Patterns of Fluctuation in International Investment before 1914*. (Dec. 1968)
22. Samuel I. Katz, *External Surpluses, Capital Flows, and Credit Policy in the European Economic Community*. (Feb. 1969)
23. Hans Aufricht, *The Fund Agreement: Living Law and Emerging Practice*. (June 1969)
24. Peter H. Lindert, *Key Currencies and Gold, 1900-1913*. (Aug. 1969)
25. Ralph C. Bryant and Patric H. Hendershott, *Financial Capital Flows in the Balance of Payments of the United States: An Exploratory Empirical Study*. (June 1970)
26. Klaus Friedrich, *A Quantitative Framework for the Euro-Dollar System*. (Oct. 1970)
27. M. June Flanders, *The Demand for International Reserves*. (April 1971)
28. Arnold Colclery, *International Adjustment, Open Economies, and the Quantity Theory of Money*. (June 1971)
29. Robert W. Oliver, *Early Plans for a World Bank*. (Sept. 1971)
30. Thomas L. Hutcheson and Richard C. Porter, *The Cost of Tying Aid: A Method and Some Colombian Estimates*. (March 1972)
31. The German Council of Economic Experts, *Toward a New Basis for International Monetary Policy*. (October 1972)

SPECIAL PAPERS IN INTERNATIONAL ECONOMICS

- No. 1. Gottfried Haberler, *A Survey of International Trade Theory*. (Sept. 1955; Revised edition, July 1961)
- * 2. Oskar Morgenstern, *The Validity of International Gold Movement Statistics*. (Nov. 1955)
- * 3. Fritz Machlup, *Plans for Reform of the International Monetary System*. (Aug. 1962; Revised edition, March 1964)
- * 4. Egon Sohmen, *International Monetary Problems and the Foreign Exchanges*. (April 1963)
- * 5. Walther Lederer, *The Balance on Foreign Transactions: Problems of Definition and Measurement*. (Sept. 1963)
- * 6. George N. Halm, *The "Band" Proposal: The Limits of Permissible Exchange Rate Variations*. (Jan. 1965)
- * 7. W. M. Corden, *Recent Developments in the Theory of International Trade*. (March 1965)
8. Jagdish Bhagwati, *The Theory and Practice of Commercial Policy: Departures from Unified Exchange Rates*. (Jan. 1968)
9. Marina von Neumann Whitman, *Policies for Internal and External Balance*. (Dec. 1970)

REPRINTS IN INTERNATIONAL FINANCE

- *No. 1. Fritz Machlup, *The Cloakroom Rule of International Reserves: Reserve Creation and Resources Transfer*. [Reprinted from *Quarterly Journal of Economics*, Vol. 79 (Aug. 1965)]
- * 2. Fritz Machlup, *Real Adjustment, Compensatory Corrections, and Foreign Financing of Imbalances in International Payments*. [Reprinted from Robert E. Baldwin et al., *Trade, Growth, and the Balance of Payments* (Chicago: Rand McNally and Amsterdam: North-Holland Publishing Co., 1965)]
- * 3. Fritz Machlup, *International Monetary Systems and the Free Market Economy*. [Reprinted from *International Payments Problems: A Symposium* (Washington, D.C.: American Enterprise Institute, 1966)]
4. Fritz Machlup, *World Monetary Debate—Bases for Agreement*. [Reprinted from *The Banker*, Vol. 116 (Sept. 1966)]

- * 5. Fritz Machlup, *The Need for Monetary Reserves*. [Reprinted from *Banca Nazionale del Lavoro Quarterly Review*, Vol. 77 (Sept. 1966)]
- 6. Benjamin J. Cohen, *Voluntary Foreign Investment Curbs: A Plan That Really Works*. [Reprinted from *Challenge: The Magazine of Economic Affairs* (March/April 1967)]
- 7. Fritz Machlup, *Credit Facilities or Reserve Allotments?* [Reprinted from *Banca Nazionale del Lavoro Quarterly Review*, No. 81 (June 1967)]
- 8. Fritz Machlup, *From Dormant Liabilities to Dormant Assets*. [Reprinted from *The Banker*, Vol. 117 (Sept. 1967)]
- 9. Benjamin J. Cohen, *Reparations in the Postwar Period: A Survey*. [Reprinted from *Banca Nazionale del Lavoro Quarterly Review*, No. 82 (Sept. 1967)]
- 10. Fritz Machlup, *The Price of Gold*. [Reprinted from *The Banker*, Vol. 118 (Sept. 1968)]
- 11. Fritz Machlup, *The Transfer Gap of the United States*. [Reprinted from *Banca Nazionale del Lavoro Quarterly Review*, No. 86 (Sept. 1968)]
- 12. Fritz Machlup, *Speculations on Gold Speculation*. [Reprinted from *American Economic Review, Papers and Proceedings*, Vol. 56 (May 1969)]
- 13. Benjamin J. Cohen, *Sterling and the City*. [Reprinted from *The Banker*, Vol. 120 (Feb. 1970)]
- 14. Fritz Machlup, *On Terms, Concepts, Theories and Strategies in the Discussion of Greater Flexibility of Exchange Rates*. [Reprinted from *Banca Nazionale del Lavoro Quarterly Review*, No. 92 (March 1970)]
- 15. Benjamin J. Cohen, *The Benefits and Costs of Sterling*. [Reprinted from *Euro-money*, Vol. 1, Nos. 4 and 11 (Sept. 1969 and April 1970)]
- 16. Fritz Machlup, *Euro-Dollar Creation: A Mystery Story*. [Reprinted from *Banca Nazionale del Lavoro Quarterly Review*, No. 94 (Sept. 1970)]
- 17. Stanley W. Black, *An Econometric Study of Euro-Dollar Borrowing by New York Banks and the Rate of Interest on Euro-Dollars*. [Reprinted from *Journal of Finance*, Vol. 26 (March 1971)]

SEPARATE PUBLICATIONS

- * (1) Klaus Knorr and Gardner Patterson, eds., *A Critique of the Randall Commission Report*. (1954)
- * (2) Gardner Patterson and Edgar S. Furniss Jr., eds., *NATO: A Critical Appraisal*. (1957)
- (3) Fritz Machlup and Burton G. Malkiel, eds., *International Monetary Arrangements: The Problem of Choice*. Report on the Deliberations of an International Study Group of 32 Economists. (Aug. 1964) [\$1.00]



