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Floating Exchange Rates and International Monetary Reform

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Floating Exchange Rates and International Monetary Reform, by Thomas D. Willett, traces the role of exchange rate arrangements in the evolution of the international monetary system. Drawing heavily on both historical research and his own experiences in the U.S. government, the author analyzes the key factors in the creation and the demise of the Bretton Woods exchange rate system and in the 1976 Jamaica Agreements on reform of the international monetary system.

Willett argues that the new monetary system based on floating exchange rates adheres to the basic principles of international financial cooperation established at Bretton Woods in 1944, though it substantially alters the exchange rate procedures established there. On balance, he concludes, the performance of floating rates has come closer to the expectations of its supporters than of its critics. The study also analyzes the major criticisms of the Jamaica Agreements—that they fail to deal adequately with the problems of international liquidity and confidence and surveillance of the adjustment process. Many of these charges are attributed to a failure to recognize fully the implications of the adoption of flexible exchange rates as the new basis for the international monetary system.

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3

THE JAMAICA REFORMS AND INTERNATIONAL MONETARY PROBLEMS

In substance the agreements on monetary reform reached at Rambouillet and Jamaica accept flexible exchange rates as the basis for our new international monetary system. These agreements are often criticized as being seriously incomplete because they do not include many of the proposals considered in the preceding reform negotiations and published by the Committee of Twenty (C-20) in its *Outline of Reform*.

But such criticisms frequently tend to overlook that these proposals dealt with the requirements for restoring a par value system with convertibility of the dollar in reserve assets as a major control mechanism, and that flexible exchange rates have made many of the reforms discussed in the C-20 exercise unnecessary for a well-functioning international monetary system. The following section offers a brief review of the C-20 negotiations and discusses why ultimately a de facto decision in favor of a loose rather than tightly structured international monetary system was made.

The last sections of this chapter consider how the new loose monetary system based on managed floating makes a substantial improvement over the Bretton Woods system in terms of coping with problems of liquidity and confidence as well as of adjustment. Chapter 4 will discuss issues of international surveillance of the adjustment process and control of beggar-thy-neighbor policies under floating exchange rates.

The C-20 Negotiations: The Choice between a Tight or Loose International Monetary System

By the beginning of the C-20 negotiations in 1972, it was generally understood that it was not feasible to restore the par value system as

it had operated in the past. The increasing frequency and magnitude of financial crises under the Bretton Woods adjustable peg system had clearly demonstrated that prompter adjustments in exchange rates were essential to improve the functioning of the international monetary system.

To achieve this in practice the attitudes that had discouraged the prompt use of exchange rate adjustments needed to be revised. Furthermore, if some new type of par value system were adopted, a high degree of international oversight of adjustment actions would be required to reduce the old tendency of countries to delay adjustments to mutual imbalances in hopes that the other party or parties would initiate the necessary adjustments. In other words, economic and financial interdependence had reached the point that a tight system of international coordination and policing of adjustment measures was needed for a system of pegged exchange rates to have any chance of working smoothly.

No system based on par values and convertibility could work without the adoption of an effective exchange rate policy by the United States and the creation of a system of prompter and more symmetrical use of exchange rate adjustments by both surplus and deficit countries. Such a system would require that a great deal of traditional national sovereignty over exchange rate and balance-of-payments policies be ceded to the international community through greater use of objective indicators and determination of adjustment responsibilities combined with provision of a graduated set of implicit and/or explicit penalties and sanctions to be applied to those who failed to carry out these obligations. The U.S. proposals for reserve indicators were an attempt to present the requirements for an effectively functioning system based on restoration of par values and convertibility.[1]

In the U.S. proposals, reserve indicators played the dual role of presumptively allocating adjustment responsibilities and also providing a safety valve or "elasticity," as it was frequently termed during the negotiations, by limiting the extent to which a small number of

[1] The basic outline of the U.S. approach to international monetary reform was laid out in Secretary of the Treasury George Shultz's address at the 1972 annual meetings of the Board of Governors of the International Monetary Fund. A much more detailed illustration of the U.S. reserve indicator proposals was represented as an appendix to the 1973 Annual Report of the Council of Economic Advisers. See also *International Monetary Reform, Documents of the Committee of Twenty*; William B. Dale, "The International Monetary Fund and Greater Flexibility of Exchange Rates," in C. Fred Bergsten and William A. Tyler, eds., *Leading Issues in International Economic Policy* (Lexington, Mass.: D.C. Heath, 1973), pp. 3–17; and Robert Solomon, *The International Monetary System 1945–1976* (New York: Harper and Row, 1977).

countries with large balance-of-payments surpluses could drain reserve assets from reserve currency countries such as the United States. This elasticity was provided by an upper limit on reserve holdings eligible for conversion.

From the beginning, one of the major sources of disagreement in the negotiations was over how much flexibility of exchange rates was needed to make a new system workable. Many continued to hope that, when added to the greater willingness of countries to make parity adjustments more promptly, only minor increases in the flexibility of institutional arrangements would be sufficient. Such hopes, however, were unrealistic. Indeed, given the vast differences in national rates of inflation that had developed, together with the huge scope for capital to move internationally in anticipation of parity adjustments, it was becoming increasingly doubtful that a system of limited exchange rate flexibility based on crawling pegs could prove workable.

Even if underlying world economic and financial conditions had been sufficiently stable to make a crawling peg system feasible, however, international agreement on such a system of "stable, but adjustable parities" probably could not have been secured. The requirements for an effectively functioning par value convertibility system placed most countries on the horns of a political dilemma. A flexible rate system based on an inconvertible dollar was politically undesirable because it was viewed as smacking of a dollar standard and dollar imperialism.[2] On the other hand, the amount of international coordination of policies and ceding of traditional national sovereignty to the international community that would be required to make a parity system function tolerably well was also very undesirable on political grounds.

The importance of such political factors for the course of the reform discussions cannot be stressed too heavily. For example, such concerns underlay Charles de Gaulle's attack on the "exorbitant privileges" of the dollar. As Boyer de La Giroday has argued, a major objective of many countries in the negotiations of monetary reforms, especially in the first years of the negotiations, was "to restrain the country or countries whose currencies have become international from

[2] These concerns with perceived "dollar imperialism" were characteristic of what Harry Johnson has termed the "political-economic," as contrasted with the "economic-scientific," approach to international monetary analysis. This political-economic approach "derives from national and international politics and tends to view the international monetary system as merely one sphere of the contention of national rivalries." Harry G. Johnson, "Political Economy Aspects of International Monetary Reform," *Journal of International Economics*, vol. 2, no. 4 (September 1972), p. 407.

exercising the consequent privileges. This . . . objective is likewise expressed in the search for a symmetry of rights and obligations; to realize this is to see very clearly the essential political nature of that search."[3]

Those taking this political-economic approach to international monetary issues rejected proposals for flexible exchange rates on the grounds that this would imply a politically undesirable "dollar standard." Such political criticisms of floating rates and of the analogous passive balance-of-payments policy for the United States arose from a failure to understand fully the economics of alternative monetary systems. For example, it was widely but incorrectly viewed that the major cause of the "unfair" privileges of the dollar under the Bretton Woods system was the lack of automatic convertibility of dollar accumulations into reserve assets and that a fully inconvertible dollar floating rate system represented the extreme form of such privilege.

Such opposition to a so-called dollar standard failed to distinguish between the economics of a floating rate system and that of a pegged rate system. The system of international obligations to maintain pegged exchange rates combined with an inconvertible dollar clearly would permit U.S. macroeconomic policies to dominate macroeconomic developments in other countries, and it could be equitable only if other countries were given a major say in the determination of U.S. policies. But this conclusion would not carry over if flexible rather than fixed exchange rates were adopted.

The distinction between an effectively inconvertible dollar under a pegged as opposed to a flexible rate system was also overlooked by

[3] F. Boyer de La Giroday, *Myths and Reality in the Development of International Monetary Affairs*, Princeton Essays in International Finance, no. 105 (June 1974), p. 8. Issues of symmetry were among the major topics of discussion in the symposium on the international monetary system in the *Journal of International Economics* (September 1974), which contained papers by Bhagwati, Cooper, Fleming, Triffin, Johnson, Kindleberger, and Samuelson. Other important contributions to the symmetry discussions and debates and related issues such as substitution and consolidation mechanisms include William Fellner, "The Dollar's Place in the International System," *Journal of Economic Literature*, vol. 10, no. 3 (September 1972), pp. 735–56; J. Marcus Fleming, *Reflections on the International Monetary Reform*, Princeton Essays in International Finance, no. 107 (December 1974); Peter B. Kenen, "Convertibility and Consolidation: A Survey of Options of Reform," *American Economic Review*, vol. 63, no. 2 (May 1973), pp. 189–98; F. Boyer de La Giroday, *Myths and Reality*; John Williamson, *The Choice of a Pivot for Parities*, Princeton Essays in International Finance, no. 90 (November 1971); and Fred Hirsch, *An SDR Standard: Impetus, Elements, and Impediments*, Princeton Essays in International Finance, no. 99 (June 1973). For an excellent discussion of de Gaulle's foreign economic policies and their relation to his overall foreign policy strategy, see Edward A. Kolodziej, *French International Policy Under de Gaulle and Pompidou: The Politics of Grandeur* (Ithaca: Cornell University Press, 1974).

many of the critics of a passive balance-of-payments policy for the United States, such as was advocated in the late 1960s and early 1970s by a number of economists including Fellner, Haberler, Krause, McKinnon, and myself.[4] Haberler and I, for instance, in arguing for a passive U.S. balance-of-payments policy, explicitly advocated greater exchange rate flexibility in general; and we indicated that for a reserve currency country, the analogue to freely floating for a nonreserve currency was a passive balance-of-payments policy. Likewise, we stressed that a policy of "benign neglect" toward the U.S. balance of payments did not mean a lack of concern with or a refusal to participate in general international monetary reform.

Unfortunately, despite statements to this effect in our initial study and further elaboration in other papers appearing shortly thereafter,[5] many critics insisted upon straw-man mischaracterizations of this approach. For example, in his valuable analysis of the choice of the best control pivot for exchange rate parities, John Williamson argued that neglect would be benign for Americans, but not for America's partners. His presentation was marred by a selective characterization of the benign-neglect position, however, that failed to discuss major elements of our position.[6] Indeed, our proposal received as much or more criticism from U.S. nationals than from our foreign partners, which indicates that it was better balanced than Williamson suggested. Domestic criticism, especially by those who were concerned about the competitiveness of U.S. trade, focused primarily on the fact that a passive U.S. policy would leave to others the choice of the mix of financing versus adjusting to any underlying U.S. payments deficits.

Much of the literature on apportioning balance-of-payments

[4] Lawrence B. Krause, "A Passive Balance of Payments Strategy for the United States," *Brookings Papers on Economic Activity*, no. 3 (1970), pp. 339–68; Gottfried Haberler and Thomas D. Willett, *A Strategy for U.S. Balance of Payments Policy* (Washington, D.C.: American Enterprise Institute, 1971); William Fellner, "The Dollar's Place in the International System," *Journal of Economic Literature* (September 1972), pp. 735–56; and Ronald I. McKinnon, *Private and Official International Money*, Princeton Essays in International Finance, no. 74 (April 1969).

[5] See, for example, Gottfried Haberler, "U.S. Balance of Payments Policy and the International Monetary System," American Enterprise Institute Reprint no. 9 (Washington, D.C.: American Enterprise Institute, January 1973), and Thomas D. Willett, "Options for U.S. Balance of Payments Policy and the Future of the International Monetary System."

[6] See John Williamson, *The Choice of a Pivot for Parities*, Princeton Essays in International Finance, no. 90 (November 1971). It should be added that Williamson, while not noting our advocacy of exchange rate flexibility, does conclude his discussion of benign neglect by arguing that greater exchange rate flexibility would reduce the scope for conflicts in the area. See Williamson, op. cit., p. 15.

adjustment responsibilities has stressed the political costs of initiating the necessary measures. Considerably less academic attention has been given to the political costs of forswearing the use of adjustments measures. But concern about political costs to national sovereignty has been a major reason why most countries have not been willing to adopt freely floating exchange rates. It is incorrect to view the adoption of a passive balance-of-payments policy by the U.S. as placing all resulting political costs on others.

As was particularly stressed by McKinnon, from an international standpoint one of the chief benefits of a monetary system based on a passive U.S. balance-of-payments policy was the consequent muting of potential inconsistencies when a large number of national governments had objectives with respect to both their overall balance-of-payments and trade or current account positions. In such a world, a passive U.S. payments policy gave additional freedom to the operation of the system. And because of its large economic size and relatively low dependence on foreign trade, in addition to the key international financial position of the dollar, the United States was clearly the leading candidate to play such a role.

Of course, as McKinnon noted early on, there were limits to the role that a passive U.S. policy could play. Too blatant a mercantilist pursuit of an undervalued currency by one or more major countries could still lead to serious difficulties for the overall operation of the system. Furthermore, as became clear in the late 1960s and early 1970s, there were definite political limits on the range of balance-of-payments and trade positions over which it was feasible on domestic political grounds for the U.S. government to maintain a passive balance-of-payments policy. Such pressures were of course an important factor in the decision of August 1971 to terminate the convertibility of the dollar into reserve assets and to impose a temporary import surcharge.

During the 1972–1974 phase of the negotiations, the United States position was basically one of indifference, or perhaps of mixed mind about the relative merits of the floating rate and a new workable par value system; but it insisted that any return to convertibility by the United States be based upon the implementation of an effective, prompt, and symmetrical international adjustment process. Not surprisingly, given the perceived inequities in the operation of the Bretton Woods system discussed above, the U.S. negotiators focused primarily on the need for tightness in the operation of the adjustment process[7] while favoring a rather looser concept of symmetry with respect to convertibility. Specifically, the U.S. proposals were based on the free convertibility of the dollar into reserve assets on demand, except when foreign countries' reserve accumulations had risen above internationally specified levels.

The Europeans, on the other hand, were primarily concerned that a new monetary system should have tight provisions for convertibility and looser provisions for attaining symmetry in the adjustment process. Thus, while granting the need for prompter and more symmetrical operation of the adjustment process, European negotiators were reluctant to give up much national sovereignty over the initiation of balance-of-payments adjustment policies, and they indicated support for U.S. reserve indicator proposals only if used in a very weak presumptive form. Conversely, most European negotiators favored very tight arrangements on convertibility in the form of mandatory asset settlement. They wished to avoid the possibility of a continued expansion of reserve currency holdings even if the expansion were genuinely convertible into special drawing rights (SDRs) or gold.

While it can be argued that the United States and/or the Europeans were not completely reasonable in their demands relative to their willingness to make concessions, the two major reasons why reform along the recommendations of the C-20 outline was not achieved were: first, the growing recognition of the basic difficulties of making any type of par value system work well enough to avoid persistent speculative crises in today's world; and second, the unwillingness to relinquish formal national sovereignty to the extent required to give such a system any real chance of working. Meanwhile, experience with floating rates gradually eased many of the fears that floating would cause a breakdown of international financial cooperation and a repeat of the international economic chaos and warfare of the 1930s.

The reluctance of countries to limit formal national sovereignty was further illustrated in the portion of the reform negotiations dealing with reserve assets. While most countries in principle favored

[7] That is, the need for strong international supervision of the adjustment process both to assure that adjustment actions by the United States would not be undermined by offsetting reactions by other countries and that other countries would bear a fair share of the burden of initiating adjustments.

As used in this chapter, the terms *tight* and *loose* refer to the general judgments about the overall degree of stringency of international obligations implied. Note that conceptually a tight system would not necessarily have to contain a great number of detailed rules and regulations or pegged exchange rates. For example, a system of complete free floating under which no official exchange market intervention was allowed would be a tight system by this definition. In practice, however, the serious reform discussions were about tighter systems involving a high degree of exchange rate pegging versus looser systems of managed floating.

a reduction in the role of reserve currencies and enhancement of the SDR, few showed any real desire to convert substantial amounts of their own foreign currency holdings into SDRs or to accept any substantial limitations on their own individual freedom to determine the composition of their portfolio of reserve assets.

As Richard Cooper had predicted,[8] there were many real economic asymmetries in the international monetary system that would make a fully symmetrical international system much more difficult to achieve than many experts and officials had anticipated. These asymmetries, combined with the importance placed by officials on preserving a wide range of at least nominal national sovereignty in their international monetary affairs, led to a collective judgment that a loose system of international monetary relations based on exchange rate flexibility was superior to a tight symmetrical system based on pegged exchange rates, convertibility into reserve assets, and strong international supervision of reserve behavior and the adjustment process.[9] Essentially, it was decided that the perceived costs of instituting a tight symmetrical par value convertibility system was not worth the perceived benefits, and the oil shocks provided a convenient excuse for shifting gears and focusing instead on how best to operate a system based on flexible exchange rates.

Given the need to choose between two politically undesirable alternatives for monetary reform—floating exchange rates or a tight system of international regulation—and in the absence of important forcing events that required a decision, there were strong incentives to drift with the status quo.[10] By 1974 the continuation of a system of floating rates in practice had become acceptable to most countries. Most of the objections to floating rates on technical, economic, and financial grounds had been overcome, and the substantive issues were the degree and form of official management of floating rates. But

[8] Richard N. Cooper, "Eurodollars, Reserve Dollar, and Asymmetries in the International Monetary System," *Journal of International Economics*, vol. 2, no. 4 (September 1972), pp. 325–44.

[9] The importance of taking into account national preferences in designing an international monetary system has been stressed by Aliber. See Robert Z. Aliber, *National Preferences and the Scope for International Monetary Reform*, Princeton Essays in International Finance, no. 101 (November 1973). On the importance of issues of sovereignty in reforming the international monetary system, the former managing director of the IMF, Pierre Paul Schweitzer, has recently written, "... in my experience there is no field where governments at present attach so much importance to sovereignty as the monetary field" ("Political Aspects of Managing the International Monetary System," *International Affairs*, vol. 52, no. 2 [April 1976], p. 208).

[10] In the early part of the negotiations, this tendency was reinforced by the major concern of the European countries with their own intra-European monetary arrangements.

political concerns about formal acceptance of a system of floating rates were not overcome as quickly.[11]

As experience with floating continued, and recognition of the difficulties of trying to run an adjustably pegged system in a world of high capital mobility increased, the expected life span of the floating rate system lengthened. This gradual shift in attitudes and softening of official position over time made it possible at last to reach agreement at Jamaica on the formal legalization of floating rates. Desires for formal symmetry and "protection of past positions," however, dictated the need for ingenious technical compromise in legal language and provisions so that the remaining major disputants, the United States and France, could both claim victories to their constituencies. This is just what had been done with the international liquidity negotiations, where giving the new international reserve instrument the name of Special Drawing Rights allowed both those who had advocated creating a new asset and the French, who had argued that there should only be a new form of credit, to claim to have won a technical victory for their positions.[12]

The new Articles of Agreement legalize floating exchange rates and also provide procedures for a possible future return to a par value system. Thus, there is formal scope for advocates of both fixed and floating rates to claim victory at Rambouillet and Jamaica, although in practice the agreements reflect a substantive consensus among the main industrial countries on the desirability of flexible exchange rates and underlying economic and monetary stability, and recognition that attempts to peg exchange rates cannot by themselves create international monetary stability.

The Jamaica reforms represented a substantial setback to those who saw international coordination of policies and the ceding of

[11] As Richard Cooper wrote in 1975, "Formal arrangements induce sovereign states to insist on formal symmetry in status, partly to cater to national sentiment at home. Informal arrangements carry no such compulsion. To the extent that asymmetries of treatment are important for efficient functioning, informal arrangements are therefore likely to be superior to formal arrangements that emerge from a negotiating process. ... precisely such informal arrangements seem to mark the current monetary regime of managed flexibility of exchange rates, which few (if any) countries are willing to accept formally but which most (if not all) fully accept in practice" ("Prolegomena to the Choice of an International Monetary System," *International Organization*, vol. 29, no. 1 [Winter 1975], p. 96).

[12] On the SDR negotiations, see Stephen D. Cohen, *International Monetary Reform, 1964–1969: The Political Dimension* (New York: Praeger, 1970); Fritz Machlup, *Remaking the International Monetary System* (Baltimore: Johns Hopkins University Press, 1968); Solomon, *The International Monetary System*; and Susan Strange, *International Monetary Relations* (London: Oxford University Press, 1976).

national authority to international forums as important goals in their own right. But such a view is not the only formulation of internationalist objectives. A substantial body of experience and analysis has accumulated, particularly in connection with economic and monetary integration in Europe, which strongly questions whether the adoption of institutions requiring close coordination of national policies to achieve efficient outcomes really contributes to international cooperation. All too often, attempts in this direction have resulted in increased friction among countries and a decline in international good will and cooperation. It seems a much wiser and more prudent course to recognize differences in national preferences and adopt a system that minimizes conflicts among these preferences than to attempt the other extreme of designing a system that would work nicely if countries would only change their preferences and to hope that the latter will occur.[13]

The Jamaica Agreements took the former course and are likely to have little appeal to utopians—either those who would insist on completely freely floating rates for all countries, or those who would favor complete fixity combined with one or another blueprint for making such a system operate. The agreements do, however, contain the framework of a system that is likely to minimize conflicts among governments as they are. It is a loose rather than a tight system and as such is more difficult to analyze in detail. But then the primary objective in designing an international monetary system is not to make life easy for the analyst.

The Completeness of the Jamaica Agreements

The outcome of the long process of negotiations on international monetary reform which culminated at Jamaica is an agreement on a basic framework and principles within which international monetary relations will evolve through time. The agreements do not purport to be complete in the sense that they offer detailed solutions for issues. But the current array of international monetary relationships as sanctioned by the Jamaica Agreements do represent a substantial improvement over the original Bretton Woods system in terms of all three of the major problem areas of the international monetary system—adjustment, liquidity, and confidence. The agreements at Rambouillet and Jamaica have also further strengthened both the formal and informal mechanisms for international monetary discussions and cooperation, thus improving their ability to deal with the continuing flow of issues and problems in the operation of the international monetary system.[14]

Some continue to argue, however, that despite the formal international nature of the Jamaica Agreements, we still do not have a genuine international monetary system, and even that Jamaica has legalized anarchy. To a considerable degree such criticism comes from those who preferred the creation of a tight rather than loose international monetary system as discussed in the preceding section. But as will be argued below, it is not really legitimate to refer only to tight versions as constituting a system. Discussions of what may and may not appropriately be termed an international monetary system have proven to be quite susceptible to semantic gymnastics which generate much more heat than light.[15] The basic difficulty in drawing an analytical distinction between what should and should not be characterized as a system is that in practice no operational system of international monetary relationships will have all ground rules and functional interrelationships fully specified. This was true of real-world experience with the gold standard as well as the more highly structured agreements at Bretton Woods.

Some commentators have also questioned whether it is appropriate to refer to the Jamaica Agreements as a "reform" of the international monetary system. Here the critics are on somewhat stronger semantic grounds in terms of Machlup's definition of reforms as "de-

[13] Of course, the purpose of almost any set of international discussions or negotiations is to influence preferences and behavior as well as to determine rules. But there is much to be said for designing international institutions and agreements to cope with the imperfect world and national governments as they are, while attempting to nudge and entice countries to move in desirable directions, rather than drawing up blueprints predicated on governments substantially changing their behavior.

[14] It had become rather commonplace for critics to charge that we did not have an international monetary system, or that we had an international monetary disorder rather than order. In a formal sense, such charges were true from the time of the formal termination of the convertibility of the dollar into gold in August 1971, until the recent Rambouillet and Jamaica agreements. It is understandable that over this period questions were raised by some experts about the legitimacy of the system of floating rates, despite its widespread de facto acceptance. Fortunately, the Jamaica Agreements remove this question of legitimacy from contention.

[15] In reviewing the recent debate, I concluded that if international monetary relationships are viewed unfavorably by the author, they are usually defined as a nonsystem or as monetary disorder, while if they are viewed favorably they are referred to as a system or order. On this score, I must acknowledge my own guilt in my paper on "Options for U.S. Balance of Payments Policy," in U.S., Congress, Subcommittee on International Exchange and Payments of the Joint Economic Committee, *The Balance of Payments Mess*, 92d Congress, 1st session, June 23, 1971, pp. 382–92.

signed changes of the system."[16] As Machlup goes on to argue, "It would be a mistake to think that most of the past changes in the international monetary system have been 'reforms.'"[17] This is true as well of the main feature of the Jamaica Agreements, the widespread adoption of flexible exchange rates as the basis for the international monetary system. The initial moves toward a system of flexible exchange rates did not result from internationally planned reforms, but as responses to the pressure of events.[18] The major significance of the Jamaica Agreements is the official acceptance of floating exchange rates as the basis of a desirable international monetary system over the longer term. To those who wished to see the world moved back away from flexible exchange rates, then the Jamaica Agreements were certainly not a reform. But to advocates of a system based on flexibility of exchange rates, the agreements might be described as the planned recognition of the desirability of changes that had occurred in a largely unplanned way. Such a view is consistent with the cogent arguments made by Peter Kenen several years ago that "the work of the Committee of Twenty and of its successors is not to build a monetary system, but to describe in accurate, enduring terms the system that exists and to accommodate additional change."[19]

Thus, the Jamaica Agreements are not primarily of significance for the structural changes they made, but for fostering the general acceptance of a common set of views (what Under Secretary of the Treasury Edwin Yeo has called a "shared analysis") of the basis of a sound international monetary system. These views included not just the acceptance of flexibility of exchange rates, but also the need for close communication, consultation, and cooperation among the major governments involved, as well as recognition that stability in exchange rates could come only from stability in underlying economic and financial conditions.

As Otmar Emminger, deputy governor of the Deutsche Bundesbank, has recently described this shared analysis, it is based on the consideration that

> . . . greater exchange rate stability cannot in the long run be enforced merely by intervention and exchange rate manipulation since the external stability of a currency must be underpinned by domestic stability. The Rambouillet communiqué states that exchange rate stability "involves efforts to restore greater stability in underlying economic and financial conditions," and similar wording was incorporated in the new Article IV of the IMF Articles of Agreement. There will no longer be an attempt, as in the Bretton Woods system, to impose stable exchange rates from outside by decreeing intervention points and international intervention obligations in the hope that internal economic and fiscal policies will follow suit. Instead, an attempt is to be made to achieve exchange rate stability from within by internal stability and with the help of market forces. This represents a sort of "Copernican revolution" in the approach to exchange rate policy.[20]

Because it is virtually impossibile to devise both sound and detailed procedures for international monetary relationships in a world of rapidly changing circumstances and of nations with a wide diversity of economic and financial characteristics and jealously guarded interests in maintaining a high degree of formal national sovereignty, the codification advocated by Kenen can only be achieved at a rather general level. Thus, the documents that emerged from Jamaica should be viewed more in the spirit of the development of the unwritten constitution of the United Kingdom than the much more highly structured set of procedures specified at Bretton Woods.[21] In effect, the Rambouillet and Jamaica agreements focus primarily on the major principles of acceptable monetary behavior, leaving specific procedures to evolve over time within this basic framework. Nobody would seriously argue that the Jamaica Agreements represent the end of international monetary evolution. But it is unreasonable to expect that there will ever be a complete international monetary reform, no matter how detailed and comprehensive an attempt might be made.[22]

[16] Fritz Machlup, *International Monetary Systems* (Morristown, N.J.: General Learning Press, 1975), p. 2.

[17] Ibid., p. 2.

[18] For a good discussion on this point, see Michael J. Brenner, *The Politics of International Monetary Reform—The Exchange Crisis* (Cambridge, Mass.: Bollinger Publishing Co., 1976).

[19] Peter B. Kenen, "Reforming the Monetary System—You Can't Get There From Here," *Euromoney* (October 1974), p. 19.

[20] Otmar Emminger, *On The Way*, pp. 12–13.

[21] See also Cooper, "Prolegomena," p. 96; and John Williamson, "The Benefits and Costs of an International Monetary Nonsystem," in E. M. Bernstein et al., eds., *Reflections on Jamaica*, Princeton Essays in International Finance, no. 115 (April 1976), p. 55.

[22] As Lawrence Krause has put it: "one lesson of history, however, should not be forgotten: there will never be a final definitive reform of Bretton Woods. As long as the world economy remains dynamic, changes will always be needed in response to new circumstances and new demand" (*Sequel to Bretton Woods* [Washington, D.C.: Brookings Institution, 1971], pp. 31–37).

There seems little doubt that at least some of the criticisms that the Jamaica Agreements do not represent a system derive from the false view that to constitute a system there must or at least ought to be a detailed blueprint of much greater specificity in many areas than was agreed to at Jamaica. There is, however, more than just semantics to some of the concerns that have been expressed about the Jamaica Agreements. Although many academic critics of the Jamaica Agreements do not expect Jamaica to provide an answer to everything, they believe rather that the agreements either fail to deal with an issue of current major importance or deal with it incorrectly. I would be less than honest if I did not admit that I had a few pet schemes of my own that I would have preferred to see enshrined in the agreements or accompanying understandings; but as will be argued in the remaining portions of this study, the Rambouillet and Jamaica agreements give us a system that makes major improvements on its predecessors in all three of what have come to be generally accepted as the major problem areas of the international monetary system—adjustment, liquidity, and confidence.

This completeness of the Jamaica reforms in this sense is not always sufficiently recognized, largely because the Jamaica Agreements contain only a small portion of the international monetary proposals for consideration contained in the *Outline of Reform* published by the Committee of Twenty in June 1974. In comparison with the wide range of proposals presented in the *Outline of Reform*, the Jamaica Agreements can easily give the impression of being only half a reform or less. Hence, it is not surprising that many have characterized Jamaica not as a reform, but as the failure of reform.

What is frequently overlooked is that the C-20 outline of reform proposed to return to a system containing a great deal of at least short-run fixity of exchange rates—that is, a system of stable, but adjustable par values.[23] These efforts to establish a revamped par value system with only limited increases in effective exchange rate flexibility did end in failure, but it is misleading to treat the presence of par values as a necessary condition for a legitimate international monetary system.

Many aspects of the proposals in the *Outline of Reform* are necessary for a well-functioning system only if a general par value system is reestablished. For example, it is frequently forgotten that

[23] This is, of course, not to say that all who criticize the Jamaica Agreements as being a nonsystem would have preferred adoption of all of the major proposals of the C-20 *Outline of Reform* including a return to "stable, but adjustable parities." See, for example, the views of John Williamson, "Benefits and Costs," pp. 54–59.

the convertibility of currencies into reserve assets is, in economic terms, a means not an end. Specifically, reserve asset convertibility is a way to influence the adjustment process under pegged exchange rates, in order to limit the amount of payments disequilibrium that one country can export to others under arrangements of joint obligation for the maintenance of exchange rates. All too often in the past, the free convertibility of currencies into one another and into goods and services has been impeded by controls in order to maintain convertibility into reserve assets at pegged exchange rates.[24] It is these types of convertibility that are essential to fostering international trade and investment and the efficient growth of the world economy.

Convertibility into reserve assets is in economic terms only one of many possible ways of apportioning or influencing adjustment responsibilities under systems of pegged exchange rates, and it often has not been a very efficient mechanism for doing so.[25] Indeed, much of the reform negotiations during 1972–1974 involved the search for alternative methods of improving the allocation of adjustment responsibilities under systems of stable but adjustable parities, including novel forms of convertibility and asset settlement.[26] Where countries do not have obligations to at least temporarily maintain pegged exchange rates, then the traditional function of reserve asset convertibility is not required for an efficiently operating international monetary system.[27]

As will be argued in the following section, the adoption of flexible exchange rates substantially improves the workings of the international monetary system not just with respect to balance-of-payments adjustment, but also with respect to confidence and liquidity. It is quite true that floating rates do not completely solve any of these problems in the sense of eliminating any need for national

[24] See, for example, Haberler, *Currency Convertibility*.

[25] See, L. H. Officer and T. D. Willett, "Reserve-Asset Preferences and the Confidence Problem in the Crisis Zone," *Quarterly Journal of Economics*, vol. 83, no. 4 (November 1969), pp. 688–95, and "The Interaction of Adjustment and Gold-Conversion Policies in a Reserve Currency System," *Western Economic Journal*, vol. 8, no. 1 (March 1970), pp. 47–60.

[26] For discussion of many of these proposals and the various types of convertibility, see Fellner, "Dollar's Place," and Kenen, "Convertibility and Consolidation."

[27] Tom de Vries has raised with some sense of urgency the question of settlement of claims and debts resulting from official intervention under managed floating. It is difficult to see, however, how this is really a serious international problem under generalized floats. It is an issue for particular countries maintaining pegged or jointly managed floats vis-à-vis each other, but it would seem best to allow each such group of countries to make its own decision in this regard. De Vries, "Jamaica."

or international concern with the operation of the international monetary system. But when realistic comparison is made with the previously existing Bretton Woods arrangements, the new system of flexible exchange rates makes substantial improvements in all three areas.

In this regard I would take strong exception to the implications that might be drawn from Fritz Machlup's recent review of the Jamaica Agreements in which he argues that somewhere between the Committee of Twenty's *Outline of Reform* of June 1974 and the Jamaica Agreement of January 1976, the main principles for a workable system as agreed to by academics and official experts "got lost or were dropped."[28] Machlup notes that agreement on the key issues among academic experts goes back many years[29] and cites favorably the 1974 *Outline of Reform* as embodying the substance of this analysis. However, in criticizing the Jamaica Agreements for having ignored these principles, Machlup does not distinguish clearly between analysis of these principles and problems under a system of flexible exchange rates, on the one hand, and under an adjustably pegged system of exchange rates as was envisioned in the *Outline of Reform*, on the other.[30] While noting that the agreements "include the permissibility of floating exchange rates," Machlup fails to discuss how flexible rates affect what he has identified as the two major problems of the Bretton Woods system—lack of an adjustment mechanism and failure to provide for an effective control of international reserves.[31] Although the Jamaica Agreements system may

[28] Fritz Machlup, "Between Outline and Outcome the Reform Was Lost," in Bernstein et al., eds., *Reflections on Jamaica*, p. 31.

[29] See Fritz Machlup and Burton G. Malkiel, eds., *International Monetary Arrangements: The Problem of Choice* (Princeton, N.J.: Princeton International Finance Section, August 1964). Machlup cites the important report in 1964 of the group of thirty-two academic experts on international monetary reform as an example. This important study delineates the main problems of the Bretton Woods system under the threefold classification of the liquidity, adjustment, and confidence or stability problems, a classification that, as noted above, became widely used in the analysis of international monetary reform.

[30] Machlup adds, "that floating will go on is not questioned: it should be clear to anybody in his senses that under present conditions the world has no other choice. Floating is now the only system which can work without continuously recurrent crises in the exchange markets . . ." (ibid., p. 33).

[31] Ibid., p. 30. It should be added that this was not neglected in the "Report of the Group of Thirty-two." For example, in discussing the problems of international liquidity, the report carefully states that "All members of the Group are agreed on the desirability of reforms designed to provide for a better controlled and steadier growth of international reserves if the present system of (relatively) rigid exchange rates is to be maintained, though some would prefer to replace that system by a system of freely floating exchange rates, which in

not be ideal, it represents a substantial advance over the old one and has to date operated tolerably well if not perfectly on both scores.[32] It is certainly true that the Jamaica Agreements are totally inadequate and incomplete as a basis for an effective international monetary system of adjustably pegged exchange rates. An attempt to activate the provisions in the Jamaica Agreements for restoration of a par value system without further reforms concerning many of the issues addressed in the *Outline of Reform* would be the height of folly and would be inconsistent with the generally accepted analysis of most international monetary experts. But fortunately, at least for the foreseeable future, the par value provisions of the Jamaica Agreements represent symbol rather than substance.

Floating Exchange Rates and International Liquidity and Confidence Problems

Overview: The Triffin Dilemma. By the early 1960s a number of writers such as Robert Triffin and Jacques Rueff had pointed to a basic inconsistency in the Bretton Woods procedures for providing international liquidity.[33] Triffin showed that, given projections that the growth of monetary gold stocks would be far below the growth in official demands for reserves, the Bretton Woods system, if not reformed, would lead to either a shortage of international liquidity or confidence crises.[34] If holdings of reserve currencies expanded to meet the growing demands for official liquidity, the ratio of liquid liabilities of reserve centers to their gold backing would have to continue expanding, inevitably inducing a confidence problem. On the other

their opinion would eliminate the problem of international liquidity by providing an automatic mechanism for immediate adjustment of international imbalances" (p. 33).

[32] The explosion of international liquidity resulting from the U.S. payments deficits in 1970–1973 should be attributed to the old system, not the new.

[33] See, for example, Jacques Rueff, "The West is Risking a Credit Collapse," *Fortune*, vol. 62, no. 7 (July 1961), pp. 126–27, and Robert Triffin, *Gold and the Dollar Crisis* (New Haven: Yale University Press, 1959).

[34] At the time of the Bretton Woods agreements, it had been projected that gold production would be sufficient to meet increased demands for international reserves as the world economy expanded. These projections, however, failed to foresee the rapid rate of world inflation in the early postwar period. This inflation greatly reduced both the real value of the nominal level of gold stocks and the incentives for gold production. Gold production consequently accounted for only a small proportion of the increase in international reserves during the postwar period. Demands for increased reserves had to be met primarily by increased holdings of reserve currencies. See Eckes, *A Search for Solvency*, p. 94.

hand, if this problem were avoided by allowing official currency holdings to grow only in line with their gold backing, a shortage of international liquidity would develop. Thus, in the absence of reform, the system would eventually run into either a confidence or a liquidity crisis; this came to be called the Triffin dilemma.

This section will analyze how the adoption of floating exchange rates presents a solution to the Triffin dilemma that substantially improves the operation of the international monetary system, in contrast with the Bretton Woods arrangements even as supplemented by the amendment creating a new reserve asset, the SDR. It concludes by considering whether the large quantity of dollars accumulated abroad during the operation of the Bretton Woods system represents a significant threat to the stability of our new floating rate system and requires the creation of some new institutional mechanism for dealing with this dollar overhang.

The Floating Rate Solution to the Triffin Dilemma. As recognition of the Triffin dilemma spread among international monetary officials, informal and then formal negotiations for international monetary reform were undertaken. By the time this round of international monetary negotiations had been completed and the new reserve had been created, the international monetary system had moved well past the ratio of dollars outstanding to gold backing that was to have engendered a confidence crisis and collapse of the system. And only two years after this major international monetary reform, the formal convertibility of the dollar into gold was terminated, thereby precipitating an era of greatly expanded use of floating exchange rates.

Where did the reform which focused only on providing a new reserve asset go wrong? One major problem was that the emphasis on expanding international liquidity and financing balance-of-payments deficits contributed to (and reflected) a tendency to downplay the more important question of balance-of-payments adjustment.[35]

[35] It should be stressed that this interpretation does not imply that Triffin himself was unaware of the importance of the adjustment process, or that he thought that SDRs by themselves would solve this dilemma. Indeed, Triffin and numerous other leading international financial experts, such as E. M. Bernstein and Fritz Machlup, showed why the addition of SDRs alone would not solve the confidence problem resulting from the coexistence of multiple reserve assets with pegged rates of exchange among them, and they offered various proposals for new institutional arrangements to deal with this problem. For instance, they recommended that a new facility be created to convert all existing reserve assets into SDRs, or that all reserve assets be used in fixed proportions. See, for example, Edward M. Bernstein, "The Gold Crisis and the New Gold Standard," *Quarterly Review and Investment Survey* (New York: Model, Roland and Co., first-half 1968), pp. 1–12, reprinted in Officer and Willett, *The International*

The liquidity problem may have been given priority at least in part because chances for securing international actions looked strongest in this area. But it looked easier to get international agreement for liquidity policies precisely because the latter were only indirectly related to the problem of balance-of-payments adjustment—the problem which is most crucial to the sound functioning of the international monetary system.

Of course, the provision of international liquidity is not entirely unrelated to the efficiency of the adjustment process. In the mid and later 1960s a greater understanding developed of the residual role that the U.S. balance of payments played in the international payments system. It became recognized that the U.S. official settlements deficit was at least in part a reflection of foreign official demand for dollars generated by insufficient growth of alternative forms of international reserves.[36] It seemed to follow that the U.S. balance of payments could be improved by more rapid creation of alternative forms of international liquidity. Creation of the SDR would help with the adjustment process, not just the financing, of the U.S. payments deficit.[37]

But this assumption that correction of the measured U.S. balance of payments was the objective of the game was based in large part on the early analyses of the confidence problem by Triffin and others, which concluded that a system based on continuing U.S. deficits would be inherently unstable. As was shown in two papers by Lawrence Officer and myself, however, the early formalizations of Triffin's analysis overstated the likelihood of the Triffin dilemma actually leading to a collapse of the arrangements for gold convertibility of the dollar.[38] They overlooked the strong stabilizing effect of the

Monetary System, pp. 151–67; Machlup, *Remaking the International Monetary System*; and Triffin, *Our International Monetary System*, pt. 2.

[36] The classic contribution on this subject was Emile Despres, Charles P. Kindleberger, and Walter S. Salant, "The Dollar and World Liquidity—A Minority View," *The Economist* (February 5, 1966), pp. 526–29, reprinted in Officer and Willett, *The International Monetary System*, pp. 41–52. Subsequent discussion on this issue was frequently marred by a failure to distinguish between the proposition that a measured U.S. deficit could sometimes or even usually represent a genuine foreign demand for dollars, which was not evidence of a real disequilibrium, and the stronger and undoubtedly false hypothesis that this necessarily was true of all foreign dollar accumulations and hence that there could never be a real disequilibrium.

[37] A good discussion of this point is given in Walter Salant, "International Reserves and Payments Adjustment," *Banca Nazionale del Lavoro Quarterly Review*, no. 90 (September 1969), pp. 281–308.

[38] See Officer and Willett, "Reserve-Asset Preferences and the Confidence Problem in the Crisis Zone," and "The Interaction of Adjustment and Gold Conversion Policies in a Reserve Currency System." The first formalization of

interdependence among the key official participants in the international monetary system and their feeling of having a stake in the preservation of the system. These factors combined to explain the reluctance of major official dollar holders to ask for gold conversions, especially after the announcement of systematic French gold conversions by Charles de Gaulle in 1965 increased the risk that large gold conversions by other countries would produce a collapse in the formal arrangements of the system. The refusal of other major official dollar holders to risk the possible consequences of demanding gold for dollars just to gain a more desired portfolio composition created the de facto inconvertibility of the dollar for large transactions.[39]

Our analysis suggested somewhat ironically that the system became more, rather than less, stable as it passed further into the "crisis zone," in which the United States had more outstanding official liquid dollar liabilities than it did gold backing for these liabilities. We concluded that the United States could probably go on running balance-of-payments deficits indefinitely without seriously endangering the stability of the system, as long as these deficits did not substantially exceed the growth in desired foreign official holdings of dollars. Our analysis placed emphasis on the role of the adjustment process and suggested that the major threat to the stability of the formal Bretton Woods arrangements would come not from the incentives for switches in portfolio composition as stressed by analogies with Gresham's Law, but through large payments imbalances that would increase incentives for recipient countries to use gold conversions as the ultimate signal of their dissatisfaction with

Triffin's analysis was presented by Peter B. Kenen, "International Liquidity and the Balance of Payments of a Reserve-Currency Country," *Quarterly Journal of Economics*, vol. 74, no. 4 (November 1960), pp. 572–86. Subsequent analysis includes Fred Hirsch, "SDR's and the Working of the Gold Exchange Standard," IMF, *Staff Papers*, vol. 18, no. 2 (July 1971), pp. 221–53; Harry G. Johnson, "Theoretical Problems of the International Monetary System," *Pakistani Development Review*, vol. 7, no. 1 (Spring 1967), pp. 1–28; John Makin, "The Composition of International Reserve Holdings," *American Economic Review*, vol. 61, no. 5 (December 1971), pp. 818–32, Makin, "On the Success of the Reserve Currency System in the Crisis Zone," *Journal of International Economics*, vol. 2, no. 2 (May 1972), pp. 77–85, and his "The Problem of Co-Existence of SDR's and a Reserve Currency," *Journal of Money, Credit and Banking*, vol. 4, no. 3 (August 1972), pp. 509–28; Robert Mundell, "The Crisis Problem," in R. A. Mundell and A. K. Swoboda, eds., *Monetary Problems of the International Economy* (Chicago: University of Chicago Press, 1969); Jurg Niehans, "The Flexibility of the Gold Exchange Standard and Its Limits," in Johnson and Swoboda, eds., *The Economics of Common Currencies*, pp. 46–64; and L. H. Officer, "Reserve Asset Preferences in the Crisis Zone, 1958–67," *Journal of Money, Credit and Banking*, vol. 6, no. 2 (May 1974), pp. 191–211.

[39] The dollar remained fully convertible into gold for transactions by smaller official dollar holders until the formal termination of convertibility in 1971.

the size of the U.S. payments deficit. A U.S. deficit merely reflecting foreign demands for reserves and balance-of-payments surpluses was not a real disequilibrium and therefore not a source of concern, at least on economic grounds. When developments in the U.S. economy generated an outflow of dollars on the supply side, however, large unwanted dollar accumulations occurred and the stability of the system was threatened. Conflict and tension in the international monetary system developed when the U.S. deficit, swollen by domestic inflation resulting from the Vietnam War, substantially exceeded the demand abroad for additional dollar holdings.[40] Liberal creation of SDRs could correct the less serious part of a U.S. deficit, but it could not do anything about the much more important problem of dollar outflows which foreign banks considered autonomous—that is, generated by U.S. activity rather than induced by their desire for reserve accumulations.

The adoption of greater exchange rate flexibility, on the other hand, operated directly on the real problem of the U.S. balance-of-payments deficit, which was the undesired accumulation of dollars. By reducing the cost of adjusting, flexible exchange rates make it easier for countries to avoid accumulating more reserves than desired, and thus reduce the major source of tension in the international monetary system. In practice, not only did the adjustable peg system turn out to be an inefficient basis for the operation of the international adjustment process, but convertibility into reserve assets turned out to be a very inefficient signaling device for the determination of adjustment responsibilities. Flexible exchange rates have offered a substantial improvement on both of these scores.

The adoption of a system of floating exchange rates has also reduced the incentives for reserve holders to switch portfolio frequently. Attempts to maintain a fixed price and free convertibility among reserve assets, without providing mechanisms to assure fixed prices and free convertibility, were bound to create the potential for

[40] Of course, considerable opposition to the continued dollar deficits was voiced abroad before this time. This was due largely to political motivations combined with the fact that not all countries' official dollar accumulations were desired. While I do not know of any good quantitative estimates, I would conjecture that at least half of the official dollar accumulations prior to 1969 represented primarily desires for additional reserves rather than undesired dollar accumulations as a result of maintenance of a pegged exchange rate structure. Some analyses also emphasize the role played by the U.S. rate of inflation in the desire or willingness for foreigners to hold dollar balances. See, for example, Harry G. Johnson, "Secular Inflation and the International Monetary System," *Journal of Money, Credit and Banking*, vol. 5, no. 1, pt. 1 (February 1973), and Thomas D. Willett, "Comment on Johnson" in the same issue.

a Gresham's Law type of instability problem.[41] Although recognized strategic interdependence reinforced international financial cooperation among the financial officials of the major countries to limit greatly the adverse consequences of such potential instability for the overall operation of the system, a monetary reform package that did nothing to deal with this problem could hardly be judged reasonable.

The *Outline of Reform* suggested that this problem, at least at the margin, be handled by eliminating multiple reserve assets and replacing them with SDRs through a consolidation and/or substitution facility such as had been proposed by a number of leading international monetary experts including Edward M. Bernstein, Fritz Machlup, and Robert Triffin. The Jamaica Agreements adopted the alternative approach of dropping the international obligation to attempt to maintain temporarily fixed prices among the major reserve assets.

It is sometimes forgotten that Gresham's Law—that bad money drives out good—was based on analysis of systems in which the price was set and maintained between the different kinds of money. When confidence in the ability to maintain the fixed peg is lacking, attempts to do so are the major cause of disruptive capital flows and asset switching; and the simplest solution is to abandon such attempts.[42]

[41] Robert Z. Aliber, "Gresham's Law, Asset Preferences, and the Demand for International Reserves," *Quarterly Journal of Economics*, vol. 81, no. 4 (November 1967), pp. 628–38.

[42] It is indicative of the extent to which this simple point has often been overlooked that in his very useful survey, "International Reserves and Liquidity," in Kenen, ed., *International Trade and Finance*, pp. 411–51. Benjamin J. Cohen notes that "instability inherent in a gold exchange standard is the same as that described by the old formula of Gresham's Law . . . [and] . . . stems directly from the coexistence of several different kinds of reserve assets (gold, dollar, sterling, et cetera) in what is supposed to be a fixed-price relationship to one another" (p. 435), but goes on to argue that "in principle there are three alternative ways to cope with a Gresham's Law problem. One is to adjust the relative supplies of the several assets to correspond to the asset preferences of the holders. The second is to adjust the asset preferences of holders by altering various of the attributes of the several assets (the most important of these attributes being interest income, convertibility risk, and exchange risk). The third is to reduce the total number of assets to a single-money system" (p. 436). He completely fails to note the other logical alternative of unpegging prices. In contrast, this point is recognized by Michael Posner, who begins his discussion of the instability problem in the following way: "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" (Michael Posner, *The World Monetary System: A Manual Reform Program*, Princeton Essays in International Finance, no. 96 [October 1972], p. 11). See also Friedrich von Hayek, *Studies in Philosophy, Politics and Economics* (Chicago: University of Chicago Press, 1967), pp. 315–18.

Changes in either official or private asset preferences under flexible exchange rates can still cause worrisome exchange rate movements, but this problem is of a different order of magnitude than the confidence problem under adjustably pegged rates.

The Dollar Overhang Under Flexible Exchange Rates. It is still sometimes argued, most notably by C. Fred Bergsten, that even under flexible exchange rates the so-called dollar overhang, combined with increased desires for portfolio diversification by foreign monetary authorities, is likely to cause a secular weakness or undervaluation of the dollar.[43] Such concerns have given rise to proposals to create an international substitution account or some method of funding outstanding dollar balances even under floating rates.[44]

The huge foreign official dollar accumulations during the last years of the adjustable peg system raised reasonable questions about whether this accumulation might not have produced a large quantity of essentially undesired official dollar imbalances, and whether such a substantial initial disequilibrium might not seriously hinder operation of the new floating rate system. In practice, however, the economically relevant part of the accumulated dollar overhang turned out to be much smaller than might have been anticipated. The meaningful part of the overhang appears to have been largely liquidated during the very early days of the generalized float, and there is little reason to believe that there is now any remaining genuine dollar overhang that requires special attention. Unfortunately, many discussions of the dollar overhang have not acknowledged this, chiefly because of failure to distinguish clearly among various concepts of the overhang and to recognize the relationships between these concepts and other key aspects of international monetary behavior.

The term *dollar overhang* has frequently been used to describe four different concepts: (1) the total amount of U.S. liquid liabilities to foreigners (both official and private); (2) U.S. liquid liabilities to foreign officials only (the official overhang); (3) foreign-held liquid claims denominated in dollars (U.S. liquid liabilities to foreigners plus foreign holdings of Eurodollars, which again may refer to either total amounts outstanding or only the portion held by foreign of-

[43] See C. Fred Bergsten, "New Urgency for International Monetary Reform," *Foreign Policy*, no. 19 (Summer 1975). Bergsten defines over- and under-valuation of the dollar in terms of the international competitive position of the dollar. There are a number of analytic difficulties with such a concept of over- and under-valuation, but that is a subject for another paper.

[44] See, for example, the testimony by Bergsten before the Subcommittee on International Trade, Investment, and Monetary Policy of the House Committee on Banking, Currency, and Housing, 94th Congress, 2d session, June 3, 1976.