Exchange Rate Arrangements in the Eighties

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Literally dozens of international conferences have been convened already in the decade of the eighties to deplore "the failure of Bretton Woods' and to call for bold new reforms. It seems to me a calumny, though, to attribute failure to either of the Bretton Woods institutions, or to any of the supplemental facilities added to their scope over the past 40 years. The only trace of failure is to be found in that one segment of the international financial system that has been assigned to me for this symposium—exchange rate arrangements. And I am going to suggest that even the system of par value exchange rates envisaged here on Mt. Washington in 1944, and broadly realized across the world by 1958, only broke down in the early seventies because it had already by that time successfully promoted a remarkable diversity of growth in the incomes and trade of the principal participating countries. What is more, an increasing number of participants in the international markets for money and goods, after living with the resulting nonsystem of floating exchange rates for over a decade, are beginning to yearn for the comparative orderliness and stability which their idealized memories associate with "the days of Bretton Woods."

My own view is that for the rest of the eighties, and no doubt for even longer, the preoccupation of most of the world, so far as exchange rate matters are concerned, will be in finding ways back to the objectives—though not to the machinery—that were envisioned here four decades ago for the exchange rate mechanism. As some of you know, I have since 1974 been arguing for, and trying year after year to develop in an acceptable form, a concept of "target zones" for the exchange rates of some of the leading countries. Regardless of whether my successive efforts have yet produced a usable result, they do bring into focus many of the same objectives for the exchange rate system that underlay the original Bretton Woods formulation.

That formulation centered operationally, of course, on the gold-dollar system—the system which did break down. Yet I think it is helpful, en route to whatever may evolve in the years ahead, to review the way that system worked before the breakdown, to identify not only the causes of the breakdown but also the elements of strength in the system that disappeared with the breakdown, and to suggest ways in which some of those constructive elements might be restored within the context of a worldwide system of flexible exchange rates.

Consequently, as a preface to where I hope we might be going, I will take a look back at where we have been both under the gold-dollar standard

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and under floating. After that I will sort out some of the characteristics of the gold-dollar system that look more attractive now, after the experience with floating. I will then turn to the centerpiece, my own view of the potentials in a "target zone" approach for the exchange rate environment of the eighties and beyond. In doing that, I will suggest the scope there may be for recovering some of those attributes of the old system for which I sense nostalgia beginning to grow.

I. The Gold-Dollar System in the Quarter Century after Bretton Woods

As the recovering nations of the early postwar years approached a prospective era of open trade supported by freely convertible currencies, the image that many of us thought we saw over the horizon was a reconstituting of the disciplines and guidance which earlier incarnations of the gold standard had provided for all countries. The newly created International Monetary Fund (IMF), once a few transition years were completed, would preside over a par value system of currency relations among countries hinged to a gold standard that was defined in terms of ready exchangeability between gold and the U.S. dollar at a fixed price. Within this framework, each country might develop in its own way, but the obligation to maintain its currency's gold-related par value would always keep it responsive to the needs for order in the system as a whole.

This was not expected to be a world of static states, in which exchange rates were never changed. But it was hoped that a surging postwar expansion would be surrounded by a network of moderating constraints exerted across the exchanges, first, by the efforts of each country to reach a stage of viability within the world economy that would permit it to set a par value for its currency, and thereafter, by the actions taken to maintain that par value for an indefinitely long period of time.

It is important to remember, when caricatures of the old Bretton Woods approach to these matters are the subject of classroom ridicule, that the founders recognized from the start that countries inherently differ in resource potential as well as in performance, and that there would have to be variations among them in real growth. But the founders did believe that so long as each country was subject to the balance of payments discipline exerted through the fixed currency relationship, the domestic price levels and the external trade of all countries would adjust moderately up or down to maintain an orderly equilibrium among them. Once determined, exchange rates in this setting became parameters; the variables consisted of domestic policies affecting the prices, interest rates, production, employment, and short-term capital flows of each country. Gains or losses of foreign exchange reserves (notionally convertible into gold at a stable price) signaled a need for corrective domestic policies to restore the reserves to normal size, and to keep the actual exchange rate in the market from bumping against the ceiling or the bottom of the narrow band around parity permitted by IMF regulations.

In practice, however, this neatly elegant theoretical construction proved to be asymmetrical. There was no leverage available to impel strong countries to appreciate their currencies and risk curtailment of export-led booms, with

the result that only four parity increases occurred over the whole quarter-century. The number of reductions exceeded 100. To be sure, for countries whose reserves were falling toward minimal operating levels, drawing rights facilities were available at the Fund—either to help hold to a given parity or to support resumed expansion following a parity reduction. But neither increases in those availabilities of reserves through Fund quota increases, nor an imaginative enlargement of Fund lending capabilities beyond the original four-tranche conception, proved sufficient to withstand the buffets which struck the very heart of the system—the fixed dollar price for gold.

This is no place to recapitulate the many strands of that story. But it is important to recognize three major developments which would have made the continuance of a par value system unsustainable even if the United States had moved sooner, and further, than it did in adjusting its gold price in 1971. These same conditions permeate the "flexible disarray" that characterizes the current state of the world's currency markets, and I stress them because of their significance for any attempt to restore order in the present confusion—whether that be through trying to work toward "target zones," or any other approach.

First, as countries continued on their differing growth paths over the postwar years, the composition and pace of their economic growth differed so widely as to make unsustainable a simple model of adjustment that presumed an organic impetus toward equilibrium in the flows of goods and services among the leading countries. Second, with offshore markets able to create dollars, reliance upon dollars generated within the United States to provide the world with a controlled supply of reserve currency (as a sort of governor of worldwide purchasing power) became impossible. And third, capital flows among nations, and among national currencies in the newly emerging extraterritorial markets, became at times so large as to overwhelm the influence of goods and services transactions upon the market exchange rates of the major countries.

(1) Widening differences among countries in economic performance. Various attempts were made to shape new structures around the emerging forces in an effort to maintain order in the economic relations among countries. Such initiatives centered on the leading countries whose performance could provide a dominating influence toward stability in the world system as a whole. Creation of the OECD at the beginning of the sixties was aimed at assuring the kind of communication and systematic interchange of critical diagnoses among those countries which might help them to identify unstabilizing developments among themselves, and then to provide a consultative facility for working out common approaches toward limiting distortions or disruptions. Formation of WP-3 and the Group of 10 followed in close order to reinforce such objectives. But endemic differences still seemed to keep some countries tending persistently toward surplus, while others ran more or less continuing deficits in their international accounts. To try to develop guidelines for correction of these disparate tendencies, under the aegis of the IMF, the financial officials of member countries toward the end of the sixties were trying to define criteria for judging the appropriate size and behavior of the reserve assets of the leading countries. These criteria, once established,

were to lead to agreed reaction patterns for restoring a balanced viability among these countries. But events overtook such efforts before they could come to fruition.

(2) Expanding dollar supplies outside the United States. The pressures causing some currencies persistently to strengthen, and others to weaken, in response to their differences in economic performance, were exacerbated by the unusual dependence on the dollar. For from the early sixties onward there was virtually no control over the worldwide supply and use of dollars. The "dollar shortage" of the fifties was becoming the "dollar glut" of the sixties. It appeared impossible for the United States to maintain effective control over the supply of dollars at home and abroad simply by following the old rules of the gold standard game—i.e., by maintaining a surplus in its external current accounts. The urgent needs for capital expansion around the world attracted the expertise of rapidly developing multinational companies, many of them based in the United States, and all of them drawing on additional dollars to finance their desired growth. Capital outflows from the United States, spurred by direct investment from within and substantial borrowings from without, began to flood the world with an apparent excess of dollar liquidity—despite the absorption of liquidity that might have been expected from the large current account surplus of the United States, Central banks abroad found themselves with what became an "overhang" of dollars in their foreign exchange reserves.

One improvisation after another was attempted in order to preserve or restore confidence in the credibility of the dollar as a reliable standard of value and medium of exchange capable of assuring stability in the payments relations throughout an expanding world. A "gold pool" among leading central banks, initiation of a "ring of swaps" between the dollar and a dozen or more other currencies, creation of U.S. dollar obligations denominated in foreign currencies, the introduction of an Interest Equalization Tax and other measures to deter capital outflows—all these were part of an effort to sustain the dollar while also building a network of closer joint involvement with other countries in maintaining currency arrangements that could serve the best interests of all.

But this combination of improvisations could not cope with, and indeed may have contributed to, the enormous expansion in markets for U.S. dollars offshore, and the new networks of interbank relations that made possible the creation of additional supplies of dollars outside the United States and beyond the control of the Federal Reserve. The "offshore" currency markets soon became securities markets and, spurred by the U.S. effort to maintain control over capital exports from the United States, markets in Eurodollar securities (where the interest would not be subject to U.S. withholding taxes) flourished.

(3) Trade and services transactions dwarfed by other currency movements. Though at first extraterritorial markets in other currencies were discouraged by the central banks responsible for those currencies, the pressures of market demand persisted and eventually won out. The D-mark and yen, in particular, joined the vestigal remnants of the pound sterling and the French franc in meeting some of the currency needs of an expanding interdependent

world. In these circumstances, many other central banks found it feasible to increase the diversification of their reserve assets, adding sizable amounts of such leading currencies as D-marks and yen to the gold that they held as inner reserves and the dollars that they used as active reserves. Central bank diversification was paralleled by growing speculative and precautionary interests on the part of banks and businesses throughout the world as they shifted their own working balances between dollars and other currencies.

In time, flows of all forms of capital among nations and currencies reached a scale much larger than that characteristic of the payments flows for transactions in goods and services. By 1971 the resulting aggravation of swings into and out of dollars, for capital as well as "normal" transactions purposes, made it impossible to maintain fixed parity relationships between other leading currencies and the dollar.

The result was the attempt in 1971 to restore new credibility to the dollar by moving its par value from \$35 to \$42 for an ounce of gold. But by March of 1973 that too had become unsustainable and any remaining pretense of gold-dollar convertibility had to be suspended. In the decade following, the world has tested the theories of floating exchange rates that many economists had once advanced as an assured means of attaining order and stability in the international payments system.

II. The Search for Stability under a Floating Rate System

With the same elegance of analytical formulation that had characterized the earlier case for the gold standard, proponents of flexible exchange rates had argued that countries could pursue their domestic policies independently while any balance of payments adjustment would be handled by freely moving exchange rates. Instead of serving as parameters, exchange rates were to become the principal variable in the adjustment process. After an initial "break-in" period, exchange rate changes would establish a balance between a country's trade and capital accounts, and fluctuations would occur only marginally around the purchasing power relation between that country and the outside world with which it traded. But in reality, those same large and growing capital flows which had already precipitated the breakdown of the fixed rate system were now free to play havoc with both nominal and real exchange rates.

As capital started moving between centers increasingly on the basis of the expectations of market participants, the resulting exchange rate gyrations often far surpassed any movement of the underlying fundamentals in trade and prices. Under the fixed rate system capital flows were expected to play a subsidiary role, tending to reinforce an already impending exchange rate adjustment brought about by comparative price changes and shifts in trade. But under conditions of floating, capital flows have more and more become the prime determinants of exchange rates, thereby imposing on the curent account the burden not only of adjusting for changes in relative prices or trading potentials but also of overcompensating for excesses induced by capital flows.

With exchange rates "overshooting" continually against a traditional purchasing power parity standard, and official exchange market intervention only intermittent, it is no wonder that the possibility of countries making moderate adjustments in response to balance of payments discipline seems obsolete. The only remaining discipline now sets in after flexibility has permitted exchange rates to be driven to untenable levels, and a correction gets underway which may "overshoot" in the opposite direction.

That is why, after just a few months of all-out floating in early 1973, an urge for some kind of managed influence on exchange rate behavior permeated the new system. Some of the facilities that had been developed initially to help fortify the dollar became essential in the new environment. Individual central banks, hoping to minimize the wideswinging oscillations of their currencies, began to intervene more and more heavily from time to time in the trading markets for their own currencies. The swap facilities, initiated between the dollar and a number of other currencies in the sixties to finance central bank intervention directed at checking rate movements that gave promise of early reversal, came increasingly into play. Floating rates proved susceptible, on an even larger scale, to the same precautionary or speculative movements from one currency to another that had brought down the gold-dollar system.

Efforts to move market exchange rates back into line with approximations of purchasing power parity, through central bank intervention, have generally been frustrated by the continuing force of those currency and capital flows which may bear no relationship to the comparative price levels, nor even to the comparative productive advantages, of individual countries. Yet a longing for some degree of stability, even if not fixed-rate convertibility, in exchange rate relationships remains profound. And central banks, often despite the indifference or disparagement of the United States, have continued to support their currencies through intervention in magnitudes of multibillions during the "floating decade" (1973–1983).

Several countries of the European Economic Community, consistent with their aim for closer economic integration, tried a common approach toward their currencies. Commitments to a narrow band of permitted exchange rate variation, these countries felt, could help restore some degree of that foreign exchange discipline on domestic policies which seemed to disappear under a floating rate regime. A "snake" of linked relations between this group of currencies and the dollar became transformed by the late seventies into a parity "grid" in the form of the European Monetary System (EMS). The EMS then began moving toward eventual wider use of a common currency, the European Currency Unit (ECU). The EMS encouraged both the opening of balances denominated in ECUs on the books of member country banks and the issuance of interest bearing bonds denominated in ECUs.

While official use of ECUs has not thus far been significant, partly because of some official resistance in West Germany, the spectacular growth of the private market for ECUs is stark evidence of a felt need for some approximation of that degree of relative currency stability which fostered an unprecedented growth of trade, and of real capital movements, among countries in the two halcyon decades of the fifties and sixties. Maintaining the

market rate for each currency close to a declared par value within the EMS and encouragement of a new common currency clearly represent an attempt to recover for these countries some elements of the discipline they had accepted and respected during the heyday of a gold-dollar system operating within a framework of IMF rules.

For most of the developing countries of the world, of course, principal dependence still has to be placed on the capability of the leading countries to create a climate of stability for the world as a whole. Each of the developing countries, under the umbrella of potential IMF assistance, has to work out its own approach toward a stabilizing external influence, usually by tying its currency to one of the leading currencies. The dollar is still the currency of choice for most such countries, not only because of the convenience it offers as the most widely used transactions currency but also because no other currency has yet emerged to a position of sufficient stability in its own right for its use to have an overpowering attraction for countries seeking an anchor for their own currencies. The disciplines of the exchanges continue to be felt in the developing countries mainly through the loss or gain of their reserves. As corrective measures are introduced to restore depleted reserves, borrowing from the IMF can ease the transition period and action programs can be reinforced by IMF surveillance.

Until the last year or two, the central banks of the leading countries have actively discouraged other countries from relying on their currencies as anchors within the system. And indeed the risks to which the extensive external use of a country's currency might expose it in its own domestic economy and capital markets could at times be quite unsettling. Such risks present an understandable deterrent to a country moving into a key currency role, despite the presumed advantages which others often attributed to that kind of role during the years of dollar hegemony. Nonetheless it does appear that the forces of evolutionary development may inexorably be leading the D-mark (as a representative of the EMS) and the yen (serving the world's second largest industrial country) to take a place alongside the dollar as key currencies. The world economy appears destined to expand beyond the scale that any one currency or any one national capital market could expect adequately to serve. The strength of the economic potential behind these three key currencies, if meaningfully harnessed together, might conceivably be great enough to provide a common center of stability for the international monetary system.¹

III. Renewable Characteristics of the Gold-Dollar System

Recurring emphasis on a perceived need for management of floating rates reflects the nostalgia for some of the characteristic aspects of the gold-dollar system which I mentioned in beginning these remarks. These characteristics broadly fall into four categories. First, there was the limiting

¹I have attempted a more extensive description and analysis of dollar, D-mark, yen behavior during the years of floating, as well as a brief outline of a possible approach toward the use of target zones, in R.V. Roosa, *Economic Instability and Flexible Exchange Rates*, Singapore: Institute of Southeast Asian Studies, 1983.

of day-to-day or week-to-week fluctuations in exchange rates within a narrow range, avoiding the wide hourly or daily oscillations of recent years. Second, there was a general reliance on the existence of a known benchmark against which banks and businesses could measure obligations in other currencies over time, with reasonable assurance that values expressed in benchmark terms would have reliable continuity. Third, there was an assurance that most leading currencies would remain relatively stable for periods of several years at a time, with adjustments only occurring when underlying change in a given economy had become so great in relation to the rest of the world that a mutation in its exchange rate was appropriate; and the adjusted rate was then likely to remain virtually unchanged for another relatively long period. And fourth, there was a prevailing presumption that the "discipline of the exchanges" would be a major influence on the domestic economic policies of the leading countries, thereby creating a climate of viability for the world trading system so that the gains from an optimal international division of labor could be more nearly realized.

These were the kinds of conditions under a gold-dollar system that helped assure the firms buying or selling goods or services, as well as those making longer term commitments of an investment nature, that business calculations could be made in terms of exchange rate relations that would be relatively neutral, so far as the business decision was concerned, over considerable periods of time. Yet the gold-dollar standard as it formerly existed contained other inherent features whose consequences would destroy the system again if an attempt were made to restore it in the environment of the 1980s.

For the fulfilling of the four objectives just mentioned remained possible under the gold-dollar standard only so long as there was a fixed buying and selling price for gold in terms of dollars, and central banks believed that their holdings of dollars could be exchanged for gold on demand. When such conditions prevailed, countries could set parities for their own currencies in terms of gold or dollars, and market forces would keep the price of each currency within a narrow margin around its parity—so long as central banks were prepared to defend those margins by acquiring or selling reserves of dollars. Yet an attempt in today's world to meet any one of these essential conditions of the gold-dollar standard would almost immediately self-destruct.

Given the highly volatile public market for gold that has existed for more than a decade, a fixed price would probably have to be set well above any previous peak. Otherwise, there would be an immediate run on U.S. reserves, and the capacity to maintain the fixed price would be exhausted. Yet the alternative of a price of, say, one thousand dollars per ounce would provide a possible basis for the valuation of existing central bank reserves of gold so high as to generate a spontaneous burst of liquidity and portend a runaway inflation. Moreover, it must surely be doubtful that the United States would accept an obligation to buy gold at so high a price. Were it to do so, the buy and sell condition of the dollar's gold relationship would either be severed, or the creation of new dollars to acquire gold would in itself become an engine of inflation.

With the stabilizing influence of the basic gold-dollar relationship jeopardized, there could be no prospect for the kinds of pressures for balance of payments discipline that other countries would only feel if they were trying to maintain fixed par values for their currencies. And the three kinds of forces which brought down the golddollar standard at the beginning of the seventies would give the coup de grâce to any effort to achieve stability in exchange rates. The very measures traditionally relied upon to maintain reserves and support the exchange rate, though strengthening a country's current account, might well backfire as a related decline in domestic interest rates led to an offsetting outflow of capital.

What this means, in short, is that any search for those useful influences still attributed to the gold-dollar standard will have to be resolved, if at all, in some other way. Is it conceivable that a proxy could be found for the old standard—an approach that could approximate conditions conducive to the four objectives associated historically with the gold-dollar system, while bypassing its inherent contradictions in a modern environment? Would such an approach be practicable? Might it contain other pitfalls?

IV. The Potentials of a "Target Zone" Approach

At first glance, the notion of substituting some kind of orderly relationship among a few leading currencies for the old gold-dollar linkage would seem to point toward reliance on the SDR, particularly since it has been defined in terms of only five major currencies. But as will appear shortly, the intricacies of establishing a workable convergence of exchange rate performance among countries are so complex and challenging that an initial attempt, if there is to be any hope for its success, should be limited to three currencies. Concentration on the United States, West Germany, and Japan would seem logically indicated by their leading positions in production, trade, and capital movements, and by the emerging preference for the D-mark and the yen alongside the dollar in world commerce. Conversely, sterling and the French franc can be left aside, at least for a time, because of the apparent reluctance of the United Kingdom and France to encourage further worldwide use of their currencies.

There is good reason to urge that any attempt to implement target zones for the exchange rate relations among the three should be initiated in a manner compatible with IMF procedures and policies. Indeed, the effort here to outline both the potentials and the problems in a target zone approach is in part an offspring of a much more ambitious undertaking considered by the IMF itself, early in the floating rate era, when its staff developed "Guidelines for the Management of Floating Exchange Rates," which included a concept of target zones for the exchange rates of all Article VIII countries (that is, countries undertaking to maintain a fixed par value for their currencies). That came to naught at the time, no doubt partly because the Fund, necessarily careful to avoid singling out particular member countries for lead

²IMF, "Guidelines for the Management of Floating Exchange Rates," Selected Decisions of Executive Directors, Washington, D.C., 1974, pp. 21-30.

roles, became bogged down in trying to devise criteria that could fit a large number of countries and currencies, and still exert a meaningful, positive influence on the system as a whole. The objectives of the IMF initiative were, in any event, nearly identical with the four renewable characteristics of the gold-dollar standard already mentioned here.

This outline of an approach toward the use of target zones can best proceed in three stages: first, the procedures and criteria for determining what the agreed target zones might be; second, the methods which the three countries might use to reach, or to remain within, the target zones; and third, the extent to which the design and implementation of target zones for the exchange rates of the three currencies could be expected to replicate those four characteristics of the old standard that so much of the trading and financial world would now like to restore.

(1) Determining the target zones. If a beginning is to be made, the three governments would have to accept the concept of seeking order in the markets for their currencies, and to accept a consequent need for regularized negotiating procedures focused explicitly on their exchange rates. Once initiated, the negotiations would undoubtedly require various substrata of specialized representatives to develop data and analyses for many relevant sectors of the three countries' interrelations. But the major elements of diagnosis and decision would have to represent the highest levels of policymaking responsibility. And it would have to be clear from the start that there are no simple touchstones for determining appropriate target zones, 3 that, indeed, the outlining of target zones, however wide the agreed circumference might be, implies an approach toward harmonizing the domestic and the external economic performance of each country with the other two, while also taking into account the uses made of each currency in transactions among other countries and through the offshore markets.

What this means, in effect, is that these three countries would accept responsibility for bringing their national economies, and their currencies, into a pattern of compatibility that can perform for the world of the eighties and nineties what the United States did alone, and much less self-consciously, in the fifties and sixties. Senior officials would have to make judgments resting on an array of assumptions or projections (for several years ahead) as to the probable directions and magnitudes of change for each of the three countries, not only in domestic production and prices, but also in their external trade (both goods and services), and in their inflows and outflows of capital, vis-à-vis the rest of the world as well as with each other. They will have to work out, through a searching appraisal of these probable prospects, and their interrelations, some very rough boundaries of the zones in which the three-sided exchange rate relationships should fall. To do so would presume that the various forecasts have some likelihood of fitting together, and that these three countries are determined to try to so manage their affairs that their currencies can have a reasonably stable relationship with each other.

³For a possible approach to setting target zones, see John Williamson, "The Exchange Rate System," Washington, D.C., Institute for International Economics, September 1983.

This kind of consultation, and negotiation, would go far beyond the informal exchange of information and the proffering of advice that now occurs in the OECD or in other international bodies, or even in bilateral trade negotiations. The complex considerations would resemble those faced by the IMF in its most difficult appraisals of the prospects of particular members as it works out adjustment programs with them. Perhaps partly for that reason an IMF official might usefully attend the actual negotiations as an observer or catalyst, thereby bringing into the three-sided consultation both a cautionary consideration of the position of other countries and a realistic recognition of the limitations of any attempt to project the forces affecting exchange rate behavior. Realism might compel the three countries initially to focus only on the direction of change that should occur in the exchange rates among the three currencies, in order to come closer to an equilibrating balance.4 Moreover, in reaching a decision on direction, the countries would have to consider many of the same factors that would be relevant to the much more demanding task of defining target zones. Consequently to proceed in this less ambitious way at the start would be a useful way of "breaking in," providing experience not only in the appraising of forces to be considered but also in the implementing of agreed decisions.

(2) Implementing target zones. Having determined, at least directionally, where the market exchange rates of the three currencies ought to go, the authorities in the three countries will have to develop agreed, appropriate methods for edging market rates in the desired direction. In principle, the methods should be consistent with the same principles of open trade and free capital movements that the intended exchange rate stability is presumably meant to support. Thus, to the extent that mutual diagnosis by the three countries has identified, among the causes of their exchange rate maladjustment, such things as export subsidies or tariffs, or capital controls, or discriminatory taxation, one early action plan can be centered on the reduction or removal of such obstacles.

There are also positive approaches to be tried, such as changing the posture of monetary policy⁵ in one or more countries, or changing domestic tax and spending programs, or borrowing or retiring debt in each other's capital markets, or using other market-oriented methods for influencing domestic growth, or prices, or exports, or imports. And there would also be a place for joint intervention in the currency markets, to reinforce or emphasize a directional change, once underway, or to smooth out short-lived aberrations that might otherwise give rise to disruptive speculation or to a cumulative run in the wrong direction.

To be sure, many of the suggestions for action are no different from measures that might well be tried, or urged, in the floating rate environment in any event. The difference, in a target zone framework, is that the three

⁴The United States' program for strengthening the dollar in the autumn of 1978 was initiated because there was widespread agreement that the dollar was so undervalued that a change in direction was essential, for the United States and for the world economy.

⁵See, for example, Ronald I. McKinnon, "Currency Substitution and Instability in the World Dollar Standard," *American Economic Review*, June 1982.

countries would undertake a regularized commitment to consult, to negotiate, and, within practicable limits, to act, as part of a common effort to achieve balanced stability. The appraisal of obstacles, or of possible positive action, would occur against the frame of reference provided by agreed objectives. That is, the three countries would be engaged in working out reference points to use in developing policies of economic cooperation or harmonization. The relevant facts, and the gauging of impacts or interacting results, would be brought out in an atmosphere of continuous familiarity with the basic elements of each country's situation, and might even at times escape the glare of publicity or political posturing during the course of the continuing negotiations.

Once agreed, courses of action would take on a greater credibility as coherent parts of a package program. An intangible but implicit pressure for public acceptance and understanding could develop, in contrast with the fragmented, exaggerated, and often emotional reactions so common today when these or other countries bargain over trade concessions, or complain about interest rates, or dumping. Acceptance of the need for agreed action, on the part of officials within governments, and by the public outside, can surely be enhanced when it results from an established process of systematic consultation and negotiation. Even so, of course, there can be no guaranty of stability in the exchange rate relations among the three countries; but there is a good chance that rate variations among their currencies would be decisively reduced. What then, about the consequences for the world monetary system as a whole?

- (3) Replicating useful characteristics of the gold-dollar system. Once the three countries, under the aegis of the IMF, have accepted the constraints and obligations of a mutual approach to target zones, in order to reduce the burden of exchange rate uncertainties on their own economies, there will also be derived benefits to the rest of the world. For the three dominant currencies within the SDR will then be in a much stronger position "to collaborate with the Fund to promote exchange stability, to maintain orderly exchange arrangements with other members, and to avoid competitive exchange alternations." An approach back toward the four renewable characteristics of the old gold-dollar standard would then become possible.
- (a) Moderating short-term fluctuations. The guidelines suggested by the IMF staff as early as 1974 provided that "a member with a floating exchange rate should intervene on the foreign exchange market as necessary to prevent or moderate sharp and disruptive fluctuations from day to day and from week to week in the exchange value of its currency." That would be a Pyrrhic effort for most other countries so long as capricious swings in rate relations between the dollar and other major currencies could whipsaw the deliberate attempts by any other country to smooth its own rate oscillations. But once a target zone system were in operation, even in a preliminary stage, facilities for joint intervention by the three currencies would necessarily be

⁶IMF Articles, Article IV, Section 4(a). ⁷IMF, "Guidelines...", p. 24.

activated, and in their own interest the three countries would routinely act to reverse short-lived aberrations. And by pegging on any one of the three, or on the SDR, other countries could benefit directly from the smoothing operations of the three and could expect to cope with aberrant fluctuations of their own currencies more effectively through direct action on their own account.

(b) Establishing a durable benchmark. In the floating rate environment of the last decade, any international yardstick that might have been chosen for setting values over time has the elasticity of a rubber band, even after providing for an inflation adjustment, because the exchange rates of all currencies have been swinging widely. To be sure, if the proposed target zones were being implemented, the contrast would not be complete. The setting of target zones would not involve tightly drawn margins around inflexible par values for the three currencies, in the manner of the gold-dollar standard. Indeed variations of as much as 10 percent from top to bottom might be visualized for some time after the three countries reached the stage of setting (at least notionally) some loosely defined upper and lower limits in relation to each other; and no par or center values need be set or implied.

However, the likelihood that movements within the target zones might tend to offset each other, and that these currencies in combination would account for roughly three-fourths of the presently formulated valuation of the SDR, points strongly toward the probability that a three-country target zone effort would make the SDR the closest approximation to an internationally usable standard of value in the tradition of the gold-dollar system.

(c) Avoiding mutations in exchange rates. Under the gold-dollar system, as administered by the IMF, decisive one-time adjustments in exchange rates were, or were supposed to be, limited to conditions of sustained structural change in the economic position of the adjusting country. Even though rate adjustments came rather frequently as the performance paths of countries began to diverge more widely during the sixties, the general understanding was that underlying economic changes, once established, were the basis for moving the par value. The ability to rely on that rationale for any impending exchange rate changes, often enabled banks and businesses to hedge against impending exchange rate adjustments as they observed decisive structural changes occurring within a country, or in a country's foreign trade, or in its price behavior. Under floating rates that kind of an approach to projecting possible rate adjustments, at least among the dozen or more leading countries and currencies, has been much less reliable. The easy readiness with which huge sums can flow into or out of a currency in response to apprehension of political unrest, or expectations of changing interest rates, or even of exchange rates, has pushed fundamental analysis into a secondary role.

Once a target zone procedure became operational, however, the possibility would increase for a drift back toward a comfortable reliance on economic fundamentals in the determining of exchange rates. For the combined weight of the three countries, taking action in unison on the basis of jointly determined appraisals, could effectively limit the scope for cumulative "bandwagon effects" to run up (or down) any of these three currencies. And as familiarity grew, both among the three governments in implementing their

judgments and among the currency users of the world in distributing their currency holdings, the marketplace itself might well become a powerful reinforcement for the efforts of the three sets of officials. These efforts would aim to hold ordinary exchange rate fluctuations within a bounded zone, and to limit more definitive rate changes to conditions which all three recognize as evidence of impending or realized structural change.

To be sure, the further extension of this comparative stability among the three currencies to the exchange rates of other countries would resemble a "trickle down" theory, and might consequently contribute only marginally toward rate stability outside the dollar, D-mark, yen relationship. However, a relatively stable central core of the monetary system must almost inevitably promote some improvement over the conditions of the early eighties.

(d) Strengthening the "discipline of the exchanges." For the three target zone countries, adherence to the new arrangements would in fact institutionalize and articulate the discipline of the exchanges. These countries would literally be putting into effect among themselves all of the conditions outlined in the 1974 "Guidelines" of the IMF. The very process of considering together all the factors capable of influencing their own interrelations and then of setting target zones "within the range of reasonable estimates of the medium term norm" for their exchange rates, will impel a shaping of domestic policy to sustain a viable international position for each of the three.

To be sure, even under the conditions of floating in the early eighties, all traces of the discipline of the exchanges will not have been lost. So far as weak currencies are concerned, their exchange rate behavior will always exert some influence on their domestic policies under any international currency system. If exchange rates fall so far as to make the prices of needed imports prohibitive, or if reserves and borrowing power fall so low as to leave no means of paying for imports, whatever their price, then something will happen. Reaching those extremes may, however, be cataclysmic for the domestic political and economic system of the affected countries, and cause incredible human misery.

The aim should be to find ways to utilize the discipline of the exchanges instead as an early warning system, understood and put to use while orderly correction is still feasible. The enhanced prestige of the IMF and its SDR, under a three-country target zone system, should strengthen the power of the IMF, through its surveillance of all member countries, to press for early domestic action that can avert disastrously wide swings in exchange rates, and thereby help countries to avoid the kind of collapse that would require drastic corrective action and a prolonged period of painful adjustment.

In Conclusion

The case for some orderly management of exchange rates, without impairing the fundamentals of an open system of trade and payments, has become greater as existing rates have remained persistently over- or under-

valued. Alongside that growing need there has been a growing nostalgia for the old gold-dollar standard. Paradoxically, at the same time, much of the responsibility for the disruptive distortions that have emerged under the floating rate system has been attributed by many observers to a maverick performance of the United States, with its high interest rates and its overvalued dollar.

One way to move toward some of the useful characteristics of the old standard, and to bring the United States into a more harmonious codetermination of objectives and actions, would be to initiate a systematic program among the United States, West Germany, and Japan for establishing target zones for the exchange relations among their currencies. Such a program should be developed under the watchful eye of the IMF, and in accord with the guidelines for target zones once proposed for adoption by the IMF.

A three-way target zone system, in addition to all of the advantages in comparative stability and improved viability that it would bring to the three countries and their currencies, could also contribute to a strenthening and stabilizing of the SDR as a centerpiece in the world's monetary sytem. In turn, as the three countries responded more explicitly to an advance recognition of the policies implied by the discipline of the exchanges, the IMF's position would be enhanced for using its surveillance over its other members similarly—that is, to signal needs for adaptive change that could, in effect, anticipate and precede the otherwise harsher impact that would be felt when disciplines were exerted through the exchanges in the extreme form that works with punitive (if not actually crippling) effect.

At the least, a target zone system, understood and faithfully carried through by the three countries, could help to lessen the day-to-day swings that now so often add uncertainty to the exchanges, and could help to provide for the three countries and the world at large a moderately durable benchmark for the measurement of values across frontiers and over time. Some semblance of the old gold-dollar standard, but without its inherent instability, might indeed be attainable if the three countries were, with the blessing of the IMF, committed to the pursuit of target zones.

Discussion

Jacob A. Frenkel*

Robert Roosa's paper "Exchange Rate Arrangements in the Eighties" represents an eloquent and a well-reasoned case for the "target zones" approach to the exchange rate system. Roosa's paper starts with the premise that the current regime of floating exchange rates failed, and that it is desirable to develop a system that possesses some of the attractive features of the gold-dollar system which was part of the original Bretton Woods arrangement. Roosa recognizes that a formal restoration of the exchange rate arrangement of Bretton Woods is entirely impractical and, therefore, he recommends the adoption of target zones as the primary system linking the currencies of the United States, West Germany and Japan.

I have found Roosa's interpretation of the operation of the gold-dollar system during the quarter century after its introduction in Bretton Woods very illuminating. Of special usefulness was his emphasis on some of the logical difficulties that were responsible for the collapse (or the evolution) of that system. Since I believe that a good medical school needs to have a good department of pathology, I sympathize with Roosa's methodology of conducting a postmortem analysis on the old system prior to the introduction of his new alternative. The study of the historical record is presumably motivated by the famous assertion that "those who do not remember the past are condemned to repeat it." Unfortunately, when applying this dictum to the study of institutions and societies one may frequently observe that "the past is not what it used to be." Furthermore, and in contrast with many of the experimental sciences, when forecasts of the impact of institutional and legal systems on the behavior of individuals and societies are made on the basis of past experience one may frequently observe that also "the future is not what it used to be." This inherent difference between social and physical sciences reflects the impact of experience and memories on behavior. It renders the study of past records somewhat less productive than one would have liked since once we go through an experience (as individuals or as a society) we cannot ignore it any more and start all over again. For such cases Lewis Carroll's phrase "all the King's horses and all the King's men couldn't put Humpty Dumpty together again" is clearly applicable. Therefore, I share Roosa's judgment that the restoration of the gold-dollar system à la Bretton Woods is out of the question. My subsequent remarks deal with (i) the characteristics of the present system of flexible exchange rates, (ii) the proposed restoration of exchange rate rules, (iii) the question of who should join the target zones and (iv) the question of reform.

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The Characteristics of Flexible Exchange Rates

The presumption that the flexible exchange rate system failed is typically based on the observations that during the past decade exchange rates have been highly volatile, that changes in exchange rates have been unpredictable and have not been closely linked to differentials between national inflation rates. Indeed, charts portraying changes in bilateral exchange rates among the major currencies resemble an electrocardiogram of a patient who has just suffered a heart attack. Furthermore, if data from forward markets for foreign exchange provide measures of the market's prediction of future changes in exchange rates, then a comparison between actual and predicted changes reveals that most of the changes in exchange rates have been unpredicted. The forward market has accounted for only about 5 percent of the actual variability of exchange rates. Since these changes in exchange rates have not reflected exactly inflationary differentials, they have resulted in large changes in real exchange rates.

Granting these facts, my main point is that they should not have come as a surprise but rather that they are intrinsic characteristics of flexible exchange rate regimes. Events in the foreign exchange markets, as in other asset markets, are frequently dominated by changes in information. It follows that periods that are dominated by "news" are likely to be periods during which exchange rates, which are highly sensitive to expectations concerning the future course of events, exhibit large fluctuations. Since by definition the "news" cannot be predicted on the basis of past information, it is evident that, by and large, fluctuations in exchange rates are unpredictable. Further, since the prices of goods comprising the aggregate price index are less sensitive to expectations, it follows that during periods dominated by news which alter expectations, exchange rate developments will in general not mirror the course of inflationary differentials. Once we adopt a flexible exchange rate regime, we should expect to get these characteristics, as it were, these come with the territory.

Should They Be Fixed?

The volatility and unpredictability of exchange rates have stimulated many plans for the restoration of some form of "orderly" conduct for them. A popular intervention rule has been the PPP rule (Purchasing Power Parity rule) by which exchange rates adjust so as to exactly match inflationary differentials.

There are, however, at least four difficulties with a PPP rule. First, there are intrinsic differences between the characteristics of exchange rates and the prices of national outputs. These differences, which result from the much stronger dependence of exchange rates (and other asset prices) on expectations, suggest a more relevant yardstick; exchange rate volatility should be assessed by comparison with variability in the prices of other assets like securities rather than variability in the prices of national outputs. The evidence shows that the variability of exchange rates has been about half that of the stock market indices. Of course, this does not mean that the volatility

of either exchange rates or stock market indices has been acceptable, but rather that exchange rate volatility cannot be condemned as excessive by pointing to the fact that exchange rates have moved more than national output price levels.

Second, the prices of national outputs do not adjust fully to shocks in the short run, and thus intervention in the foreign exchange market to ensure purchasing power parity would be a mistake. When commodity prices are slow to adjust to current and expected economic conditions, it may be desirable to allow for "excessive" adjustment in some other prices.

Third, continuous changes in real economic conditions require adjustment in the relative prices of different national outputs. Under these circumstances, what seem to be divergences from purchasing power parities may really reflect equilibrating changes.

Fourth, if there is short-run stickiness of domestic goods prices in terms of national moneys, then rapid exchange rate adjustments, which are capable of changing the relative prices of different national outputs, are a desirable response to changing real economic conditions. An intervention rule that links changes in exchange rates rigidly to changes in domestic and foreign prices in accord with purchasing power parity ignores the occasional need for equilibrating changes in relative prices.

Thus, while it might be tempting to "solve" the problem of divergences from PPP by adopting a rigid PPP rule, I believe this to be a mistaken policy course. The key point to realize is that the volatility of exchange rates is not the likely source of the difficulties but rather a manifestation of the prevailing package of macroeconomic policies. Fixing or manipulating the rates without introducing a significant change into the conduct of policies may not improve matters at all. It may amount to breaking the thermometer of a patient suffering from high fever instead of providing him with proper medication. The absence of the thermometer will only confuse matters and will reduce the information essential for policymaking. If volatile events and macropolicies are not allowed to be reflected in the foreign exchange market, they are likely to be transferred to and reflected in other markets (such as labor markets) where they cannot be dealt with in as efficient a manner.

The preceding argument ignored, however, one of the important characteristics of the gold-dollar system which Roosa's target zones attempt to promote, i.e., the characteristic of the "discipline of the exchange." Accordingly, it could be argued that the obligation to peg the rate or to follow a predetermined intervention rule would alter fundamentally the conduct of policy by introducing discipline. Experience seems to suggest, however, that national governments are unlikely to adjust the conduct of domestic policies so as to be disciplined by the exchange rate regime. Rather, it is more reasonable to assume that the exchange rate regime is more likely to adjust to whatever discipline national governments choose to have. It may be noted in passing that this is indeed one of the more potent arguments against the restoration of the gold standard. If governments were willing to follow policies consistent with the maintenance of a gold standard, then the gold standard itself would not be necessary; if however, governments are not willing to follow such policies, then the introduction of the gold standard per se

will not restore stability since, before long, the standard will have to be abandoned.

One of the intriguing puzzles concerning the choice among alternative exchange rate regimes is the remaining wide division of opinions about the best choice. It seems that over the years neither the evolution of events nor the developments of economic theory have succeeded in narrowing the gap between extreme views and in bringing about a convergence of opinions in both academic and policy circles. As a matter of fact, Roosa's own proposals for target zones have been the subject of considerable discussions and analysis and yet many disagreements remain. My interpretation of the lack of convergence is that the participants in the debate have not shared the presumption concerning the relevant alternative to the system which they promote. Thus, extreme promoters of fixed rates believe that the relevant choice is between a "good fix" and a "bad flex;" on the other hand extreme promoters of flexible rates believe that the relevant choice is between "bad fix" and a "good flex." As is obvious, if these are the alternative choices the outcomes are self-evident-for who would not prefer a "good fix" over a "bad flex?" And, by the same token, who would not prefer a "good flex" over a "bad fix?" In reality, however, the choices are much more complex and much less trivial since they may involve comparisons between a "good fix" and a "good flex" or, even more frequently, between a "bad fix" and a "bad flex." When these are the choices, one may expect lack of unanimity. Reasonable people may also differ in their assessments of which "good" system is more likely to gravitate towards its "bad" counterpart. Furthermore, the likelihood that a given "good" system would deteriorate and be transformed into its "bad" counterpart depends on the circumstances and, therefore, it is not unreasonable that some economies would be wise to choose greater fixity of rates while some other economies would be equally wise to choose greater flexibility.

Who Should Join the Target Zones and Are the Zones Sustainable?

According to Roosa's proposal the key members of the proposed target zones arrangement would be the United States, West Germany and Japan. The United Kingdom and France are left out on the argument that they have not shown great interest in seeing their currencies being used worldwide. Roosa brings persuasive arguments in support of his proposals, and I find them by and large congenial. My main concern, however, is not with the details concerning the precise number of currencies etc., but rather with the link between this proposal and the key criteria that economic theory provides for the choice of memberships in monetary unions and currency areas.

As is well known, the literature on optimal currency areas highlights several criteria according to which prospective members should be chosen. These criteria include (i) the degree of openness of the economy, (ii) the size of the economy, (iii) the degree of commodity diversification, (iv) the degree of inflation rates among prospective members, (v) the degree of capital mobility, (vi) the degree of other prevailing forms of integration (like custom unions), (vii) the degree of similarities of tax structures and other fiscal

characteristics, and (viii) the degree of similarities of external and domestic monetary and real shocks. A central question is how do Roosa's members of the target zones measure up to this set of characteristics.

Suppose the target zones are established. Is it likely that the member countries will be willing to adjust their prevailing package of macroeconomic policies so as to conform with the rules of game? Until recently intervention in the foreign exchange market was believed to be effective even if its monetary consequences were sterilized. Thus, a commitment to an exchange rate arrangement did not need to imply a drastic obligation concerning the conduct of monetary policy. Recent evidence (from the Federal Reserve Intervention Studies) raises significant doubts on this presumption. The evidence suggests that the exchange rate effects of sterilized intervention are much weaker and much less reliable than the corresponding results of nonsterilized intervention. In view of these findings it is relevant to ask whether it is realistic to presume that these countries are likely to harmonize their monetary policies. Put differently, even if such harmonization was desirable from the viewpoint of the world, is it likely to be adopted? In dealing with this question it is instructive to recall John Stuart Mill's analysis in his *Principles of Political Economy* more than a century ago. There, he concluded regretfully that:

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

In predicting the future course of events, Mill believed that eventually the international monetary system would evolve into a unified currency area, a process that would be brought about by, what he termed, "the progress of political improvement."

Mill's prediction has been clearly refuted by the actual trend of events. This outcome may be regrettable, but it is clearly typical of government policies. As a general rule, governments tend to discount the future heavily, since their time horizon is relatively short. Consequently, faced with a conflict between internal and external targets, elected officials (who wish to be reelected) will typically sacrifice external obligations to domestic goals by renouncing previous commitments to the international rules of the game.

Is it likely that the current political realities will undergo a significant change in the near future? I believe not. Even though it is usually agreed that the international monetary system faces a fundamental conflict and that it is in the self-interest of all countries viewed as an aggregate to preserve a viable international monetary system, it is also clear that each and every individual country has the incentive to minimize the weight given to international considerations in the design of domestic policies. Unfortunately, Adam Smith's "invisible hand" cannot be relied upon to bring individual behavior in line with the global optimum since the world economy is not composed of atomistic units but rather of oligopolies. In such a world the "invisible hand" yields to the "visible fist" and the "free market" solution maybe suboptimal from the world's society viewpoint. A repetitive breakdown of rules could be

very costly from the global viewpoint. Therefore, it is extremely important that the monetary system does not depend in critical ways on harmonized policies, since such harmonization may not be sustainable.

Should We Reform or "If It Ain't Broke Don't Fix It"

Much of the discussion in Roosa's paper and in other papers in this conference evolved around the need for a reform of the way in which the international monetary system operates. A central feature of any operational monetary system must be a formal resolution of the so-called (n-1) problem. We have n currencies and only n-1 independent exchange rates. We thus have one degree of freedom and its disposal must be explicitly specified. It takes two to tango and it takes one for intervention. The original Bretton Woods system allocated the degree of freedom to the United States which obliged itself to peg the price of gold at \$35 an ounce; the other n-1 countries then committed themselves to peg their currency to the U.S. dollar. A design of the international monetary system is not complete unless it provides a resolution of this (n-1) problem. Therefore, my question is how does the target zones system deal with the extra degree of freedom?

In contrast with fixed parities, the target zones are moving. As they move how do we escape from the inherent difficulty of having the private sector speculate against governments? In the absence of an anchor what ensures credibility? How exactly are conflicts being resolved? These are critical questions that need precise resolution prior to implementation. I believe that the central difficulties with the current regime do *not* rest with the exchange rate policies but rather with the overall mix of the uncoordinated macroeconomic policies. It is unlikely, therefore, that the introduction of exchange rate targets can do any good unless they are accompanied by drastic changes in the way in which macropolicies are being designed. Placing excessive weight on the role of exchange rates may divert attention from the more central role that global macroeconomic policies play in the interdependent world economy.

A reform of the international monetary system should be viewed as a constitutional change that occurs once in a lifetime. It ought to be viewed as the "step of last resort." It ought to be thought of as the last bullet which should be used properly and which, once being fired, had better not miss. The success of a new monetary arrangement depends on the adoption of a consistent set of policy tools, and on a reasonable understanding of the implications of each course of action. It might be very costly to experiment with a new system just to learn how it works. In these matters the cost of delaying the adoption of a new international monetary arrangement until its full implications are understood is likely to be small relative to the cost of a premature implementation. The target zones proposal has many attractions. But since it is novel, prudence is clearly called for. More discussions and critical evaluations can be highly desirable. In view of this it may be a good place to conclude with a quote from John Maynard Keynes's remarks in his closing speech at the original Bretton Woods Conference exactly 40 years ago.

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Speaking on the desirability of critical evaluations of the proposed system Keynes said:

I am greatly encouraged, I confess, by the critical, skeptical and even carping spirit in which our proceedings have been watched and welcomed in the outside world. How much better that our projects should begin in disillusion than that they should end in it.

General Discussion

Otmar Emminger agreed with Roosa that governments need to "orient their policies more than at present toward exchange rate movements" and that key currency countries have a special responsibility in supporting the international monetary system. However, while sharing the belief that the exchange rate system employed should strengthen discipline, he doubted that target zones would provide the desired discipline.

Emminger believes that problems would arise in implementing a target zone system. First, governments would have to agree on initial values for the respective exchange rates, which would be a difficult task. For example, most countries would claim that the dollar is currently overvalued; yet other initial values for the dollar would require massive, coordinated foreign exchange market intervention to defend these target values. Second, the only chance for European governments partially to uncouple their interest rates from the U.S. interest rate is to maintain flexible exchange rates vis-à-vis the dollar. Third, given the enormous volume of international capital flows, governments would be unable to maintain target zones without frequent and extensive exchange market intervention.

William Poole added that exchange market intervention as a policy often becomes counterproductive. Once a government starts intervening regularly the market begins speculating about what the monetary authorities will do. If intervention is initially ineffective, political pressure descends on the central bank to preserve its credibility. Consequently, intervention is stepped up. Other measures—such as capital controls—also surface.

Robert Roosa responded that exchange market intervention would be an essential but minor aspect of a target zone system. Instead, a target zone system would encourage "mutual acceptance of a joint responsibility" for exchange rates prevailing among a group of participating countries. These countries would exchange ideas and design domestic economic policies taking into account their external commitments. Nevertheless, intervention can be effective in alleviating "disorderly" exchange market conditions, especially when it is coordinated among central banks.

Noting the experience of the EMS, Jean-Jacques Rey agreed with Roosa that a target zone system would encourage mutual acceptance of exchange rates among participating countries. The EMS induces member countries to meet periodically to agree on exchange rates among their currencies and to discuss policy alternatives to maintain these values. While "expectations" greatly influence exchange rates, expectations are formed taking into consideration the attitude of authorities toward their exchange rates. Consequently, expectations have generally reinforced the attainment of exchange rate stability within the EMS.

Jacob Frenkel rejoined that he also wants actively to address the problem of exchange rate misalignments, but he sees poor macroeconomic policies rather than a poor exchange rate system as the source of these misalignments. If macroeconomic policies were modified and coordinated first, a flexible exchange rate system would deliver the right thing.