Bretton Woods Revisited

Tour decades have passed since the representatives of 44 nations convened for three summer weeks in the seclusion of New Hampshire's White Mountains to negotiate the postwar international monetary arrangements now known as the Bretton Woods system. To mark this anniversary, in May of this year the Federal Reserve Bank of Boston gathered academic economists, business and banking leaders, and government officials from more than 20 nations at the site of the original conference for a symposium titled "The International Monetary System-Forty Years After Bretton Woods."

The conference addressed current problems of the international monetary system. (See the opposite page for the full agenda.) This article summarizes the papers and comments presented at the conference.

During the course of the conference, two themes surfaced frequently. First, several participants argued that the present arrangement of floating exchange rates among major industrial countries needs to be reformed to mitigate exchange rate misalignments and instability. Reforms such as exchange rate target zones were proposed to promote fuller international policy coordination. However, several flexible rate supporters stressed greater international policy coordination as a precondition to exchange rate reform. Second, many conferees maintained that we need to undertake measures that will enable the international monetary system to cope with the debt crisis. Interest rate caps, economic austerity programs in debtor countries, increased capital flows to debtors, and other measures were discussed as alternative—but not mutually exclusive-methods for dealing with the crisis.

I. Is There a Need for Reform?

After summarizing the key features of the Bretton Woods exchange rate system and the reasons for its breakdown in 1973, Richard Cooper

Jeffrey H. Bergstrand

Jeffrey H. Bergstrand is an Economist at the Federal Reserve Bank of Boston. The author has written articles on exchange rate determination and volatility and on domestic monetary control in an international money market. discussed the strengths and weaknesses of the current "nonsystem" permitting various exchange rate arrangements. He proposed an alternative framework for international monetary relations for the twenty-first century, after speculating about how the world economy would change over the next 25 years.

For the past decade, the international monetary system has exhibited a higher degree of exchange rate flexibility than under the Bretton Woods adjustable peg system and has sustained a relatively open trading environment, according to Cooper. While the economic performance of the 1970s was inferior to that of the 1950s and 1960s, the overall performance of the past decade would likely have been worse if the inflexibility of the Bretton Woods exchange rate system had been retained.

Yet Cooper alleged that existing monetary arrangements are inherently unstable for two reasons. First, exchange rates often vary without regard to underlying economic fundamentals, especially relative inflation rates. In fact, economists have generally failed to explain short-run exchange rate movements. Consequently, exchange rate impacts of domestic policy actions are often unpredictable, making macroeconomic management more difficult. Second, flexible exchange rates allow governments to try to manipulate these rates for domestic gains. Despite the uncertainty in exchange rate responses to domestic policy actions, governments will be tempted increasingly to try to pass problems such as excessive inflation or unemployment on to other countries.

Cooper then presented a possible scenario for the world 25 years from now. The year 2010 is far enough ahead so that major reforms can be seriously contemplated. However, it is not so far ahead that certain technological advances and economic changes cannot be anticipated. In his view, manufacturing will likely have followed the path of agriculture whereby a declining share of the labor force will be necessary to produce the industrial goods that society needs. Financial transactions will take place virtually instantaneously as a result of developments in the computer and electronics industries. These developments will facilitate firms' managerial control of production locations around the world, lowering transport costs and encouraging trade.

Given the intrinsic flaws of the current exchange rate system, Cooper argued that such an environment would induce governments to try to restore control over national economic activity by instituting domestic controls over trade and capital flows—in the absence of any internationally coordinated reforms.

The growing impact of external disturbances on national economic activity would increasingly frustrate governments, which would likely institute controls over capital movements to try to insulate their economies from foreign influences. Because capital transactions and current account transactions are inextricable, controls over the latter would likely evolve also. Consequently, international trade would diminish.

Cooper suggested that a credible system of fixed exchange rates, by contrast, could maintain an open trading environment in the presence of such technological and economic innovations. Exchange rates could be most credibly fixed if they were eliminated altogether, that is, if international transactions took place using a common currency. Yet a common currency would be viable only with a common monetary policy. While implementing a single world currency may seem overambitious for the year 2010, a common currency for a large community of nations would be feasible. The U.S. Federal Reserve System could serve as a model. The number of votes that a participating country would have on the governing board of this supranational monetary authority could be proportionate to the country's share of the nations' combined income. Like the Federal Reserve, the supranational monetary authority could engage in open market operations and issue broad minimum guidelines for bank regulation. Governments could still pursue fiscal policy at the national level. But having given up substantial control over domestic monetary policy, they could not engage in inflationary financing of budget deficits. Financial markets would coordinate national fiscal policies via interest rate changes. Balance of payments adjustments between countries would be comparable to those between regions of the United States.

Since this idea is so far from being politically feasible at present, Cooper noted that it will require many years of consideration before people become accustomed to the concept. Yet the economic effect could be approximated in the near future by giving more emphasis to exchange rate movements in setting national monetary policies. This recommendation applies largely to the United States, Canada, Japan, the United Kingdom, and the community of European Monetary System (EMS) countries rather than the many free-market economies currently maintaining fixed exchange rates.

Lord Eric Roll agreed with Cooper that the international monetary framework did need reform, although he suggested that the world economy may not be able to wait 25 years. Roll noted ostensible similarities between the world economy at the time of the Bretton Woods agreement and the world economy now, such as a preceding decade of exchange rate instability, increasing pressure for protectionism, and large amounts of indebtedness. Yet many differences also exist. The convergence of views on macroeconomic theory and objectives widespread then is absent now. The Third World's economic ills were relatively less important then than now. The concentration of world economic power in the United States and the United Kingdom in the mid-1940s has since been diffused.

Ariel Buira commented that Cooper's framework could founder upon several political and economic realities. At any time, countries are at different stages of the business and electoral cycles. Moreover, countries have different economic and political goals. Will a country with a high growth rate and a low inflation rate be willing to give up its monetary policy independence for external reasons? Perhaps, Buira suggested, a less formal framework than Cooper'sstressing the need for greater policy convergence internationally and increased foreign exchange intervention-is appropriate.

In any case, reform should emphasize symmetry in the adjustment process, according to Buira. Surveillance over domestic economic policies should apply to industrialized as well as developing countries. The IMF should be granted greater authority to enforce symmetry in global adjustment. Policies for adjustment among developing countries should stress production and investment in strategic sectors as well as demand management.

Anthony Solomon argued that much of the current misalignment of exchange rates is attributable to expansive U.S. fiscal policies. Greater exchange rate stability would likely evolve from greater international coordination of fiscal policies. National monetary policies would be easier to frame once fiscal policies were coordinated. Yet fiscal policy coordination cannot be brought about through the back door by simply reforming the exchange rate system. He added that some reform of existing financial mechanisms and arrangements is necessary in light of the current debt crisis to ensure adequate financing for developing countries.

Richard Cooper acknowledged the conventional wisdom to be that an overly expansive fiscal policy largely explains high U.S. nominal and real interest rates and the overvalued dollar. The U.S. budget deficit in 1982, however, was not out of line when adjusted for the recession's severity with those in previous

years of recession, notably 1958 and 1975. But the positive short-term real interest rates estimated for 1982 are in sharp contrast to the zero or negative rates estimated for 1958 and 1975. Consequently, U.S. monetary policy may have been notably tighter in 1982 than in the other two recession years.

II. Liquidity and Lending

John Williamson addressed the issue of international liquidity: Is its level adequate to sustain world economic recovery? If not, how should it be augmented? On the first question, Williamson's answer was negative; the debt crisis being experienced by so many developing countries is-practically by definition—evidence of a global reserves shortage. Using a

An SDR allocation would tend to alleviate the present dilemma of "reverse aid," according to Williamson.

buffer stock approach, he estimated that the capitalimporting developing countries faced an international reserves shortage of about \$22 billion as of mid-1983. Responding to the second question, Williamson proposed a new allocation of special drawing rights (SDRs) to expand world liquidity.² An SDR 21 billion allocation (roughly U.S.\$22 billion), distributed according to IMF quotas, would suffice as long as the reserve-surplus countries allow the reserve-deficit countries to earn the extra reserves that the latter need. The size of the allocation could be adjusted for

¹ International "liquidity" is largely synonymous with international "reserves." The latter are defined in the Ossola Report (according to Williamson) as "those assets of [a country's] monetary authorities that can be used, directly or through assured convertibility into other assets, to support its rate of exchange when its external payments are in deficit." Group of Ten, Report of the Study Group on the Creation of Reserve Assets, 1965, p. 21.

² A special drawing right (SDR) is a reserve asset ("paper gold") which was created by the International Monetary Fund in the late 1960s. SDRs are mutually acceptable among member countries for settling official debts. An SDR's value is calculated as a weighted average of 16 countries' exchange rates. In May 1984, one SDR was equivalent to (U.S.) \$1.06. SDR allocations were made on January 1 of each of the following years: 1970-72, 1979-81.

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the earliest feasible issuance (January 1985) and for expected reserve supply increases arising from alternative sources. The adjusted figure for the new allocation would be SDR 10 billion. Without such a reserves expansion, the industrial countries would need to bear a greater share of the adjustment burden because the developing countries would be forced to reduce imports of goods and services further.

Williamson noted that the world financial community has passed up previous opportunities to alleviate the current global reserves shortage through new SDR allocations. Opponents have warned of potential inflationary consequences, though even conservative estimates suggest there is a liquidity shortage. Others argue that an SDR allocation would deter developing countries from pursuing the necessary adjustment policies—that is, the appropriate policies to restore internal and external balance. However, the proposed allocation is dwarfed in size by recent bank loans that were conditioned upon austerity programs already underway. Some perceive a new allocation as providing more aid. Yet such an allocation would tend to alleviate the present dilemma of "reverse aid;" that is, the net resource transfer is now from the developing countries to the rest of the world, according to Williamson. A penalty interest rate on SDR use or a new reconstitution requirement might be desirable. Finally, the author noted that the limited usability of SDRs would be mitigated once SDRs were adopted for settlements within the private sector and between official and private sectors. The creation of an SDR clearinghouse would facilitate such settlements in SDRs, enhancing the SDR's role as an official intervention medium in foreign exchange markets.

In his discussion, Max Corden focused on the significance of a new SDR allocation for the industrial countries, for the debt-burdened developing countries in the near term, and for all capital-importing developing countries in the long run. First, Corden suggested that such an allocation would have an insignificant impact on industrial countries' net total reserves. The level of international liquidity among these countries is determined by their demand for and supply of reserves. If more SDRs were issued, industrial countries could merely adjust their holdings of foreign exchange reserves, leaving the level of their total reserves virtually unchanged. While causing no harm, the allocation would be inconsequential. Furthermore, even if the SDR increase expanded international liquidity, world inflation need not be af-

fected because exchange rates are flexible among the industrial countries. Second, an SDR increase allocated proportionately across countries according to their IMF quotas would be akin to using a "very broad sledgehammer to crack an admittedly large but narrow nut." While the debt-burdened developing countries would benefit from an expansion of their liqudity, the SDRs allotted to them would be too small to help them materially in the immediate crisis. Third, even if the debt crisis dissipates, Corden agreed that an SDR allocation, perhaps directly to the developing countries, would be feasible for the long run under either of two assumptions. First, private capital markets might have incorrectly appraised many developing countries as not creditworthy. Alternatively, there might be a need for aid.

During general discussion, Henry Fowler³ asserted that a single compelling *new* reason for an SDR issue has yet to surface. Yet an old reason still exists. Regular and modest SDR creations would encourage the SDR's use as the primary international reserve medium, as recommended in the second amendment to the IMF Articles of Agreement. Williamson added that if the vast external debt incurred by certain developing countries had been denominated in SDRs rather than dollars, the local currency costs of servicing and repaying these debts would not have risen as sharply.

Pedro-Pablo Kuczynski's paper also addressed the problems facing the capital-importing developing countries, particularly the Latin American nations (and the Philippines). He pointed out the striking contrast between these countries' external payments situation and that of other developing countries. While the total external debts of Latin American countries and of other developing countries were roughly equal in amount at the end of 1983, Latin America's ratio of debt to merchandise export earnings was more than triple that of other developing countries. Furthermore, for Latin American countries the cost of servicing their external debt was 42 percent of merchandise export earnings in 1983, compared with only 12 percent for other developing countries.

According to Kuczynski, Latin American problems will not be manageable without lower world interest rates, higher primary commodity prices, greater capital inflows, and economic reform. The large interest payments of the debtor countries must

³ Limited Partner, Goldman Sachs & Co.

be reduced without curtailing the net lending by commercial banks of the industrial economies. A lowering of the lending rate to the cost of money—say, the Certificate of Deposit (CD) rate—could reduce the debtor countries' interest payments by \$8 billion, or over a third of their combined current account deficit for the coming year. While this would lower the commercial banks' income stream, it would concurrently lower the risk of default on such loans. Sustained world economic growth would help to raise primary commodity prices and would expand debtor countries' exports. The reduction in net lending by banks to these countries from \$29 billion annually over the period 1979 to 1981 to only \$7 billion in 1983 and a projected \$10 billion in 1984 is a disturbing trend that should be reversed. Finally, austerity programs have been undertaken in most of these countries, with notable success in Mexico. However, the intensity of such programs fans social unrest, particularly within the urban lower-income populations, and increases the risk of political upheaval. The continuing decline in real per capita income—a 13 percent decrease between 1980 and 1983—cannot be sustained indefinitely without even greater turmoil.

Charles Kindleberger agreed with Kuczynski on the need to limit interest payments for most Latin American countries. Kindleberger favored a negotiated approach, initiated by Latin American countries, with interest rate caps applied only to outstanding debts. An interest rate reduction agreement would initially shift more of the burden to the banks' stockholders. However, the values of their shares could ultimately exceed the levels commensurate with a default. Such a program to aid the international finances of developing countries would be consistent with the asymmetric standards apparent in international trade, which also favor developing countries. Kindleberger suggested that rolled-over loans that were conditioned upon IMF-approved austerity programs should not permit interest rate increases but should allow interest rate declines.

While recognizing the importance of the IMF, Kindleberger expressed concern that the Fund did not respond swiftly enough as lender of last resort for the capital-importing developing countries. He had more confidence in ad hoc measures such as the Bank for International Settlements' bridging loans and the industrialized countries' swap networks. Consequently, he suggested that "we concern ourselves with mending fences, stitches in time, and similar old wives' tales."

III. Exchange Rate Arrangements

The next two papers returned to the longer-term focus initiated by Cooper: How should current exchange rate arrangements be reformed? Robert Roosa suggested the adoption of target zones for exchange rates initially among the currencies of the United States, Japan, and West Germany. The three governments would have to choose initial values (within some band) for the three exchange rates. The governments would then have to maintain desired exchange rate values using coordinated monetary and fiscal policies and joint foreign exchange market intervention. They would also have to meet regularly to set objectives. According to the author, the United States, Japan and West Germany would have to "accept responsibility for bringing their national econo-

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mies, and their currencies, into a pattern of compatibility " The target zone plan would reguire extensive consultation among the three countries beyond the exchanges of information that currently occur, as well as "harmonizing the domestic and the external economic performance of each country with the other two "

The presumed consequences of this proposal would be the restoration of certain beneficial aspects of the Bretton Woods gold-exchange standard. Roosa expects that exchange rate fluctuations would decline as the three countries jointly intervened to smooth exchange rate movements, a development which would also benefit other countries pegging to any of these three rates. Smaller exchange rate oscillations would reduce fluctuations in the SDR's value, because these three currencies dominate its valuation. The smoothing of the SDR's value would encourage its use as an internationally accepted unit of account. A target zone system would also enhance the role of economic fundamentals in determining exchange rate movements. Finally, Roosa suggested that the very process of organizing and implementing such an arrangement would "impel a shaping of domestic policy [by each country] to sustain a viable international position for each of the three."

In his discussion, Jacob Frenkel pointed out that the strongest argument for such an approach, in principle, is that the existence of target zones would force governments to adopt policies that conform to the system. But in practice, democratic governments that have had to choose between domestic economic goals and external commitments have typically selected the former. The issue of discipline should thus be placed in perspective. To enforce target zones, participating governments would have to coordinate monetary and fiscal policies or actively intervene in foreign exchange markets. However, recent empirical evidence suggests that sterilized intervention has little lasting impact on exchange rates, since such intervention leaves the domestic monetary base unaffected: Furthermore, Frenkel doubted that these governments would be willing to subordinate domestic monetary policies, and maybe even fiscal policies, to these supranational goals.

During the subsequent discussion, Roosa added that foreign exchange market intervention would be an essential but minor aspect of a target zone system. Instead, a target zone system would encourage a "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. Frenkel rejoined that he also wants to address the problem of exchange rate misalignments actively, 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."

Robert Triffin's paper also addressed reform of present exchange rate arrangements, emphasizing the lessons to be drawn from the evolution of the European Monetary System (EMS). Established in 1979, the EMS was created to reduce the dependence of members' economies on "the vagaries of an unstable dollar" and, in the longer term, to propel members toward a full monetary, economic and political union. Triffin claimed that the EMS has achieved partial success in reaching the first objective. Over the past five years, the EMS has preserved, or at least quickly restored, real exchange rate stability among members by periodically adjusting exchange rates to offset persistent inflation rate differentials. Progress

toward the second objective has been slow because policymakers in member countries have been reluctant to concede control over domestic monetary and fiscal policy.

Yet much progress toward making the European Currency Unit (ECU) the dominant currency among EMS countries has been achieved. Private use of the ECU has grown spectacularly during the early years of this decade. International contracts are increasingly denominated in ECUs. Triffin speculated that if and when the dollar depreciates, the role of the ECU in official and private settlements within and outside the EMS will be further advanced. Growing use of the ECU should encourage a harmonization of economic objectives within the EMS, enhancing the possibility of a full economic union. He noted that the success of the EMS should even "inspire a renewed drive for a reformed world monetary order . . . "

Robert Solomon commented that international economic systems are not "God-given and immutable;" such arrangements can be reformed and improved. He pointed out that the intrinsic flaws of the Bretton Woods system concerned the balance of payments adjustment process and the lack of a provision for expanding international liquidity. Yet the original conference participants should not be blamed entirely; responsibility must be shared by the subsequent generation, which provided only sporadic reforms. Solomon agreed with Triffin that the creation of the EMS was one of the more successful reforms. He questioned, however, whether the real exchange rate stability achieved by the EMS might not have been gained at the cost of lower employment and income than might otherwise have been attained.

Triffin responded that observers on the whole have been surprised at the success of anti-inflationary policies within the EMS, but he has come across little support for the view that employment and income have been lower in the EMS countries than would have been the case in the absence of the system. Lord Eric Roll asked whether the EMS has induced greater policy convergence among member countries than otherwise would have been attained. Triffin expressed no doubts that it has. He added that opportunities for regional coordination exist even where wider international economic cooperation is not feasible.

⁴ The ECU is a weighted average of the exchange rates of nine Common Market countries. In April 1984, one ECU was equivalent to (U.S.) \$0.82.

IV. Capital Flows, Trade Flows, and Exchange Rates

Henry Wallich's paper focused more narrowly on the relationship between exchange rates, international capital movements, and goods and services trade. According to Wallich, at least one-half of the total U.S. current account deficit should be attributed to the rise in the foreign exchange value of the dollar through the end of 1983. Yet the higher value of the dollar also indicates to Wallich an "overfinanced" deficit. That is, for the foreign exchange value of the dollar to have risen the demand for dollar-denominated assets abroad must have exceeded the U.S. supply. Consequently, Wallich addressed two questions: First, are capital flows determining exchange rates and thereby driving goods and services transactions, or vice-versa? Second, will the strong demand for dollars in foreign exchange markets continue and, if so, for how long?

Wallich suggested that the foreign exchange market may shed some light on the first issue. Daily foreign exchange transactions in the New York exchange market alone, expressed at an annual rate, are about 10 times the sum of annual U.S. exports and imports. He conjectured that foreign exchange transactions for capital flows are potentially large enough to swamp such transactions for goods and services trade. Thus, capital flows are likely to dominate exchange rate movements and consequently to drive current account transactions.

Regarding the second issue, Wallich noted that the projected \$80 billion U.S. current account deficit for 1984 could wipe out most of the (positive) U.S. net foreign investment position, reducing the U.S. role as a net creditor to the rest of the world. But he added that, given the very large stocks of claims on and liabilities to the United States, the demand for these claims and liabilities may be elastic enough to accommodate such a deficit without an extreme change in the value of the dollar. Furthermore, since the market has long taken into account existing and projected U.S. deficits, exchange rate movements in the near future could reasonably be expected to be gradual. He added that the outcome will depend on U.S. financial policies, especially regarding a reduction in projected budget deficits which the market probably expects.

Robert Aliber in his discussion expressed dismay that the richest country in the world is headed toward being a net debtor to the rest of the world. This development reflects mounting U.S. current account deficits, which could be attributed to relatively high real U.S. interest rates resulting from projected large U.S. budget deficits. However, these high U.S. interest rates cannot be explained entirely by the projected domestic budget deficits. Aliber believes there is a need for an alternative explanation of the level of real U.S. interest rates.

In reforming the system, Aliber suggested four factors that should be recognized. First, economists should not try to solve political problems pertaining to monetary reform. Second, international reform should be attuned to present circumstances; that is, a return to Bretton Woods would not work. Third, the larger the size of a proposed economic union the less likely is its success. Fourth, great reforms do not emanate from mediocre political leaders.

In general discussion, Edward Bernstein⁵ expressed doubt about a near-term fall in the dollar's value. Without some fundamental improvement in the perceived creditworthiness of developing countries, Bernstein did not foresee any massive shift internationally out of dollar-denominated assets. Scott Pardee⁶ added that foreigners do not enjoy the tax breaks on domestic interest payments that U.S. residents do. Consequently, a high real interest rate on U.S. loans to foreigners is consistent with a zero, or even negative, real interest rate paid by U.S. residents. William Poole⁷ expressed surprise that Wallich paid little attention to the issue of efficient allocation of capital. Poole suggested that the strength of the dollar and high real U.S. interest rates are consistent with a relatively high real rate of return on investments in the United States now—in contrast to the late 1970s. The seeming paradox is that the United States, a relatively mature economy which should have a low rate of return, is experiencing a high rate of return on investments, while developing countries are now experiencing atypically low rates of return.

V. Adjustment

Otmar Emminger's paper evaluated balance of payments adjustment and financing in the postwar era. Throughout this period, most external deficit countries continually faced a tradeoff between financ-

York.

Member, Council of Economic Advisers.

⁵ Bernstein presented some reflections on the 1944 Bretton Woods conference, which are incorporated in full in the proceedings.

⁶ Executive Vice President, Discount Corporation of New

ing external deficits and adjusting domestic policies to eliminate these deficits. These countries persistently leaned toward financing rather than adjustment. For instance, after the 1973 oil shock many countries paid for their larger oil import bills by shifting the balance more towards financing. Even after a 1976 Fund meeting stressing the importance of adjust-

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ment, commercial banks rapidly expanded their international lending to finance developing countries' deficit spending. Yet Emminger sensed that the medium-term situation now is manageable, assuming continued forceful adjustment among troubled debtor countries and sustained growth in the industrial countries.

In the case of the U.S. current account deficit, Emminger suggested that the United States rather than its trading partners bore the greater burden of this imbalance as a result of foregone U.S. exports. Since such a large external deficit is unsustainable in the long run, the current exchange rate pattern has become highly fragile. However, large projected U.S. structural budget deficits do not alone explain high U.S. real interest rates relative to Japan and West Germany. The latter two countries have been heading toward lower structual budget deficits. He added that the more solid fiscal policies of these two countries should be continued.

In concluding, Emminger noted that a flexible dollar exchange rate vis-à-vis the EMS currencies is essential to the system of world payments adjustment. For European countries, floating relative to the dollar provides partial protection against large external shocks such as oil price rises and against U.S. policies that diverge from European ones. More importantly, the vast amount of liquid dollar holdings in the world could "quickly topple any fixed dollar rate and derail even a mere target zone arrangement, as soon as psychological or political accidents happen."

Rudiger Dornbusch's comments focused on two aspects of the paper: the dollar problem and the LDC debt problem. Dornbusch agreed with Emminger that converging inflation rates are not enough to en-

sure stable exchange rates among industrialized countries. Diverging fiscal policies and real interest rates can create exchange rate misalignments. Regarding the debt problem, Dornbusch agreed that adjustment is necessary and that the IMF has helped to avoid a breakdown in the international monetary system. Yet adjustment, according to Dornbusch, has gone far beyond cutting fiscal extravagance. The current campaign could breed strong anti-American feelings. Standards of living in the adjusting developing countries may not reattain their 1980 levels for more than a decade. A solution to the debt problem must recognize that present high interest rates are transitory. For instance, a plan to forgive interest above some level (say, 10 percent) for a limited grace period-subject to IMF conditionality-would help debtors in dire need, but it would dissuade countries able to service their debt from incurring domestic depressions.

Adolpho Diz focused on the issue of conditionality in balance of payments adjustment. Conditionality refers to the stipulation of policy reforms that the IMF expects a country to adopt before drawing upon its resources. These policies usually entail economic austerity measures and currency devaluations. During the IMF's early years from 1946-52, its resources were scarcely used and conditionality was virtually absent. By 1968, the IMF's Articles of Agreement had been amended in two important respects. First, the Fund was required to adopt policies regarding allocation of its resources. Second, the IMF could challenge a country's proposed drawing on these resources (except gold tranches) if such use was perceived to be incompatible with Fund policies. The concept of conditionality had become fully developed.

Two techniques became prominent in the practice of Fund conditionality: designing economic programs and having consultations. Economic programs helped countries—especially developing countries—to focus on the relationships among fundamental economic variables in their economies. These programs encouraged the development of data collection and statistical analysis and the implementation of objective performance standards for these countries. Consultations helped to initiate personal contacts. They gave Fund staff members better perspectives on a member's policymakers, institutions, and political climate. Furthermore, they improved members' understanding of the Fund's diagnoses and recommendations.

During the 1970s, the Fund's capacity was expanded to develop special policies for special balance of payments problems, as the international monetary system changed in fundamental ways. According to Diz, the IMF's reaction to the economic turbulence of this period could be summarized as follows: the degree of conditionality was relaxed for certain shortterm financing facilities, the degree of conditionality was maintained for extended-term facilities, and additional facilities were provided. Yet this reaction had two negative features. First, since the Fund had to borrow heavily to meet its commitments, the cost of borrowing for members rose significantly. Second, as more members borrowed, conditionality became more stringent, on average, owing partly to the constraints on nonborrowed Fund resources. Since 1979, the practices of the Fund have benefited from few innovations, despite a dramatic increase in the demand for its resources. The bulk of the Fund's assistance to members has been under facilities requiring stringent conditionality. Yet the Fund has facilitated cooperation among commercial banks, central banks, and creditor and debtor governments. Diz concluded that a new perspective on conditionality may be forming, with a greater emphasis in the Fund on developing early warning procedures.

In his discussion, Eduardo Wiesner stressed that he had seen no fundamental change in the principles underlying the concept of conditionality in the past four decades to the benefit of the international monetary system and individual countries. Wiesner attributed this continuity partly to a fundamental maxim: resources are scarce. Conditionality is the implicit cost of obtaining scarce Fund resources. Borrowing countries knowingly face a tradeoff between a gradual, planned adjustment using the Fund's conditional resources or a sudden, perhaps calamitous, adjustment in the absence of conditional resources.

Wiesner noted that consultations and comprehensive economic programs surfaced as important Fund techniques because of the progress made in the 1950s and 1960s toward understanding the adjustment process. If balance of payments problems were temporary and self-reversing, there would be no need for extensive IMF assistance or for conditionality. Conditionality would be appropriate only when payments imbalances were caused by persistently inappropriate monetary and fiscal policies. Weisner agreed with Diz that conditionality became more stringent on average during the 1970s owing to increased use of Fund resources and a limited nonborrowed Fund resource base. According to Wiesner, the only way to lower conditionality is to increase Fund resources.

VI. The Role of the Fund

In the final paper, Jacques Polak discussed the role of the IMF in the international monetary system. Initially, Polak reviewed how the Fund's role has evolved in the face of changes in the world financial system and in opportunities for action. For instance,

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regarding exchange rates among the major currencies, the Fund's influence persistently declined during the past decade of flexible rates. Yet the Fund has steadily encouraged the use of exchange rates as a component of the adjustment process in small and medium-sized countries.

The dominant problem of the Fund, according to Polak, has been choosing the appropriate relative dosage of adjustment and financing. In the 1960s, too much attention was devoted to the problems of financing rather than to those of adjustment. Even after the first oil shock in the early 1970s, several industrialized countries—notably, the United Kingdom, France and Italy-preferred to offset the contractionary impact of a rise in oil prices and resisted adjustment. When the second oil shock occurred, however, numerous countries responded with a much stronger dose of adjustment. Ironically, the growing international awareness in the late 1970s of the need for adjustment was accompanied by an increasing reliance of LDCs and small OECD countries on unconditional commercial bank credit. The inadequacy of the Fund's nonborrowed resources at the time contributed to the enlarged role for commercial banks as creditors to these economies. Despite quota increases, the total of Fund quotas as a percent of world trade in the late 1970s (3.4 percent) was less than half that in the late 1960s (9.1 percent).

In 1980, the Fund adopted measures to expand its conditional lending capacity and subsequently enlarged its role in financing among countries with adjustment problems—stimulated, of course, by the debt crisis. With the recent expansion in the IMF's influence and available resources, Polak felt the Fund had begun to fill an international void. The Fund now prevails upon commercial banks to roll over debt and maintain open lines of trade credit. It works with central banks and governments to reschedule debt and to provide additional credit. It helps debtors obtain bridging loans from the Bank for International Settlements. Despite the IMF's increasingly decisive role in channeling financial flows to the Third World, Polak did not foresee a long-term role for the Fund as a regulator of the growth of international credit and liquidity. He indicated that the Fund could make a longterm contribution through periodic unconditional SDR allocations, although such allocations should not undermine the importance of conditionality and adjustment in general Fund lending.

C. Fred Bergsten commented that the Fund has successfully demonstrated global leadership during the recent international lending crisis. However, the IMF has not satisfactorily handled other important responsibilities pertaining to the international financial system. First, the Fund should exert greater influence on policies within and among the major industrialized countries. Although critical of the size of U.S. budget deficits, the Fund has ignored the excessive fiscal tightening common among other major industrial countries, notably Japan and West Germany. Bergsten suggested that a target zone system, implemented and managed with Fund assistance, would be a promising way to encourage IMF surveillance over industrial as well as developing countries. Second, the Fund has failed to improve the LDCs' reserve postion. Bergsten recommended a large onetime SDR allocation, followed by more modest allocations at annual intervals. With inflation now subdued, a "rear end loaded" SDR allocation, say, in 1985, could help alleviate the LDC reserves shortage with little impact on world prices. Third, the IMF should now enter private capital markets to prepare for any future borrowing emergencies. Fourth, the Fund should coordinate its activities with the World Bank to benefit from the latter's expertise and to pool resources for lending. In general, the Fund should expand its role as coordinator of the global economic and financial system.

Polak remarked that the costs to the IMF of entering the world capital market could well exceed the benefits. Once the IMF entered that market, the perceived quality of Fund paper (SDRs) held by central banks might diminish. Consequently, the SDR's value could be substantially reduced. He noted that the Fund's ability to improve surveillance over global economic policies is constrained by existing mechanisms. The prevailing forums for discussioneconomic summits, OECD meetings, IMF interim committee sessions, and the like-are handicapped

basically by conflicting views on what good policy is. Consequently, surveillance has been very broad but not very deep.

VII. Summary

Several conference participants recommended that the major industrial countries improve coordination of their domestic macroeconomic policies. Projected U.S. budget deficits were often criticized as potentially harmful to world economic recovery by raising real U.S. interest rates above current levels. In addition, Japan and West Germany might have to ease their fiscal policies to ensure sustained world economic growth. Furthermore, exchange rate movements could be increasingly taken into account in framing domestic monetary policies.

Supporters of exchange rate target zones emphasized that such a system would encourage participating countries to consult regularly and to design domestic economic policies taking external commitments into account. Opponents suggested that such a system could be blown away unless countries first coordinated their macroeconomic policies. Furthermore, once policies were coordinated, there would be no need for such zones.

Some conferees argued that the international debt crisis could be managed with some policy reforms and under certain plausible assumptions-especially sustained world economic growth. The IMF was cited as having filled an international void by prevailing upon banks and governments to reschedule debts and by arranging consultations and economic adjustment programs for debtor countries. Economic austerity measures have been successful in some countries, notably Mexico, in reversing the deterioration of their external accounts. However, the declines in per capita incomes have been substantial. According to some conferees, such declines cannot persist without increasing social unrest and the risk of political upheaval and default.

SDR allocations, interest rate caps, and greater capital flows to debtors were among the policy recommendations that surfaced at the conference. One author argued that the banking crisis is a manifestation of a liquidity shortage and that an SDR allocation could help to alleviate this shortage. Alternative suggestions were made to limit, defer or forgive interest payments for certain debtors. According to some participants, any of these measures would likely reduce short-term profits of the commercial banks affected.

However, the value of bank stocks could rise in the long run as the risk of default declined. Finally, the reduction in commercial bank net lending to these countries should be reversed, according to some conferees. Greater capital inflows are necessary to fi-

nance the debtors' adjustment to the more restrictive monetary policies of the industrial economies—nota-bly the United States—in the 1980s relative to the late 1970s, and to promote a sustained recovery among the debtor nations. The International Monetary System: Forty Years After Bretton Woods

On May 18-20, 1984, The Federal Reserve Bank of Boston gathered more than 100 government officials, private and central bankers, and academic economists for a conference examining the current problems of the international monetary system. The conference agenda is outlined below:

Reflections on Bretton Woods 1944

Edward M. Bernstein, Guest Scholar, The Brookings Institution.

Is There a Need for Reform?

Richard N. Cooper, Professor, Harvard University

Discussion

Lord Eric Roll of Ipsden, Chairman, S.G. Warburg & Co., Ltd.

Ariel Buira, Deputy Director, Bank of Mexico

Anthony M. Solomon, President, Federal Reserve Bank of New York

International Liquidity: Are the Supply and Composition Appropriate?

John Williamson, Senior Fellow, Institute for International Economics

Discussion

W. Max Corden, Professor, The Australian National University

International Emergency Lending Facilities: Are They Adequate?

Pedro-Pablo Kuczynski, Co-Chairman, First Boston International

Discussion

Charles P. Kindleberger, Professor, Massachusetts Institute of Technology

Exchange Rate Arrangements in the Eighties

Robert V. Roosa, Partner, Brown Brothers Harriman & Co.

Discussion

Jacob Frenkel, Professor, University of Chicago

The European Monetary System: Tombstone or Cornerstone?

Robert Triffin, Professor, Catholic University of Louvain, Belgium

Discussion

Robert Solomon, Guest Scholar, Brookings Institution

International Capital Movements: The Tail That Wags the Dog

Henry C. Wallich, Member, Board of Governors of the Federal Reserve System

Discussion

Robert Z. Aliber, Professor, University of Chicago

Adjustments in World Payments: An Evaluation

Otmar Emminger, Former President, Deutsche Bundesbank

Discussion

Rudiger Dornbusch, Professor, Massachusetts Institute of Technology

The Conditions Attached to Adjustment Financing

Adolpho C. Diz, Former President, Central Bank of Argentina

Discussion

Eduardo Wiesner, Director, Western Hemisphere Department, International Monetary Fund

The Role of the International Monetary Fund

Jacques J. Polak, Executive Director, International Monetary Fund

Discussion

C. Fred Bergsten, Director, Institute for International Economics

Copies of the proceedings are available without charge on request to the Research Library, Federal Reserve Bank of Boston, Boston, Massachusetts, 02106.