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The opinions expressed in the pamphlet are those of the authors and should not be attributed to the Executive Directors of the International Monetary Fund or their national authorities.

The term “country,” as used in this pamphlet, does not in all cases refer to a territorial entity that is a state as understood by international law and practice; the term also covers some territorial entities that are not states, but for which statistical data are maintained and provided internationally on a separate and independent basis.

Contents

Preface	v
Introduction.....	1
The Basis for IMF Financing.....	2
Organization of the Pamphlet.....	4
Major Reform Proposals.....	5
The Changing International Environment.....	7
Exchange Rate Flexibility.....	7
Expanded Private Capital Flows.....	14
Maintaining exchange rate pegs.....	147
Financing current account deficits.....	17
Increased Integration of National Economies.....	18
Expanded Membership.....	21
The Rationale for IMF Financing.....	23
Market Imperfections.....	24
International Public Goods.....	26
Lessons from Mexico for IMF Surveillance and Financing.....	27
Implications for the Future Need for IMF Resources.....	33
Potential Financing Needs of Individual Countries.....	33
Contagion and Monsoonal Effects.....	36
The Impact of Surveillance on the Need for IMF Financing.....	37
References.....	39
Tables	
1. Ratios of Nongold Reserves to Imports of Goods and Services.....	8
2. Selected Corrections of Large Current Account Deficits and Associated Output, Real Exchange Rate, and Reserve Changes.....	13
3. Selected Industrial and Middle-Income Developing Countries: Monthly Changes in Gross Reserves (1985–93) Relative to IMF Quota.....	15

CONTENTS

4. Net External Financing Flows to Developing Countries and Economies in Transition.....	20
5. Correlation of Returns on Selected Latin American Brady Bonds with Returns on Mexican Brady Bonds, January 1993–March 1995.....	22
Charts	
1. United States: Real Effective Exchange Rate, Current Account Balance, and General Government Fiscal Position	10
2. Italy and Sweden: Real Effective Exchange Rate and Current Account Balance.....	12
3. Trade Flows Relative to GDP.....	19

Preface

The fiftieth anniversary of the IMF in 1994 has been the occasion for a number of conferences and related studies that have considered how the institution may evolve in the future. Moreover, changes to the international economic environment related to enhanced financial market integration and vastly expanded capital flows have prompted calls from many quarters for a systematic reassessment of the financing role of the IMF. The desirability of such a study has been heightened by recent events, including most notably, the European exchange rate crises of 1992-3 and the Mexican economic and financial crisis of 1994-5.

This pamphlet focuses on one aspect of this overall reassessment: the rationale for IMF financial support and the relationship between this support and the surveillance carried out by the IMF in seeking to correct maladjustments of member countries' balance of payments.

The pamphlet is based on a paper prepared by the authors as part of the response to the Interim Committee's request for a review by the Executive Board of the role of the IMF. The authors would like to thank Peter Clark, Donald Mathieson, and Steven Symansky of the Research Department for discussion and comments; colleagues in other departments also provided valuable comments on earlier drafts. Claire Adams provided statistical and computational assistance, and Rosalind Oliver typed numerous drafts as well as the final revision of the pamphlet. The pamphlet was edited by Thomas Walter of the External Relations Department.

The Role of the IMF

Financing and Its Interactions with Adjustment and Surveillance

Introduction

The Articles of Agreement¹ define a broad range of responsibilities for the IMF. Article I specifies that the IMF is to promote international monetary cooperation; to facilitate the expansion of international trade, and thus contribute to high employment and real income growth; to promote exchange stability; to assist in the establishment of a multilateral system of current payments and in the elimination of foreign exchange restrictions; to give confidence to members by making resources temporarily available under adequate safeguards in order to minimize the disruption from adjustment of balance of payments problems; and to help reduce balance of payments disequilibria. The original Articles have also been amended to give the IMF new responsibilities, in particular for surveillance and for administration of the SDR Department. In practice, the functions of the IMF have evolved over time in response to changing circumstances in the world economy and the changing needs of its members.

In conjunction with the fiftieth anniversary of the Bretton Woods institutions, much attention has been focused on the role of the IMF; the recent economic crisis in Mexico has heightened this attention. At its meeting in April 1995, the Interim Committee, the principal governing body of the International Monetary Fund (1995c), considered a number of initiatives to strengthen the IMF's effectiveness, especially in the area of surveillance, and called for further review of the "evolving role of the IMF in an environment of increased globalization and integration. . . ." The Interim Committee (International Monetary Fund (1995c)) specifically requested the Executive Board to

continue to review the adequacy of the IMF's resources, and in connection with its review of the role of the IMF, to carry forward its work on the eleventh general review of quotas . . .

¹Adopted at the United Nations Monetary and Financial Conference, Bretton Woods, New Hampshire, July 22, 1944. The Articles have since been amended three times, with changes coming into force in 1969, 1978, and 1992.

examine the issues related to borrowing by the IMF . . .

initiate a broad review . . . of the role and functions of the SDR [Special Drawing Rights] . . .

examine the options for continued financing and adapting of the ESAF [enhanced structural adjustment facility] . . .

[and consider] how the IMF can better assist members in coping with sudden market disturbances.

Within this very broad agenda, the present pamphlet has a relatively specific purpose: to focus on a general rationale for IMF financial support and on the relationship between such support and IMF surveillance in carrying out the IMF's responsibility to seek to avoid and help to correct maladjustments in countries' balance of payments.

In addition to financing, the IMF plays important roles in undertaking surveillance of the international economy and members' policies, in providing technical assistance, and in making statistical and other information about member country economies and the international economy available. These aspects of the IMF's activities are important independently of their interaction with IMF financing. However, in this pamphlet, these functions are considered only insofar as they interact with the IMF's role in providing financing to member countries. It would be too large a task to attempt in one paper a complete, in-depth treatment of the overall role of the IMF. Accordingly, this pamphlet needs to be viewed in the context of other related elements of the ongoing review of the IMF's activities and responsibilities. The present pamphlet does not reconsider many issues relating to the strengthening of IMF surveillance; it does not take up specific questions relating to the size and distribution of quotas, sources of IMF financing, or the scope of IMF facilities; and it largely ignores important areas of IMF activities, such as technical assistance and the provision of unconditional liquidity in the form of allocations of SDRs.

The Basis for IMF Financing

The general rationale for IMF financial support to members is characterized by Article I(v) of the Articles of Agreement:

To give confidence to members by making the general resources of the Fund temporarily available to them under adequate safeguards, thus providing them with opportunity to correct maladjustments in their balance of payments without resorting to measures destructive of national or international prosperity.

Giving “confidence to members” refers not only to actual support to members in difficulty, but also to the reasonable expectation that appropriate support will be available for members that accept the inevitable (and generally desirable) risks when they adopt more open policies. “Temporary” support “under adequate safeguards” not only protects the IMF’s resources; it also assures that the expectation of support does not create an incentive for bad policies or an inducement to delay necessary adjustment. The requirement that there be a balance of payments need limits the scope for IMF support.² The objective of avoiding “measures destructive of national or international prosperity” expresses not the forlorn hope of painless adjustment, but rather the realistic expectation that conditional support for strong adjustment programs can help to forestall adjustments that are unnecessarily disruptive to both the country involved and to its partners in international trade and finance.

In the original Articles of Agreement, the IMF’s responsibility for overseeing exchange rates under the par value system encompassed what has subsequently become the function of IMF surveillance under the mixed exchange rate system that has prevailed since the early 1970s. Legally, the mandate for IMF surveillance is separate and distinct from the mandate for IMF financing, but surveillance interacts with the purposes of, and needs for, financing.³ Effective surveillance by the IMF and constructive response by members should help to avoid or diminish the severity of both general disturbances to the world economy and the specific problems in individual countries that contribute to balance of payments difficulties. Even with effective surveillance, however, countries will sometimes experience maladjustments in their balance of payments, either because of exogenous disturbances or because economic policy management is inevitably subject to human error. In such circumstances, the availability of conditional financing from the IMF can strengthen the hand of surveillance, both by providing increased leverage to motivate appropriate adjustment policies and

²The formal requirement for “balance of payments” need is contained in Article V of the IMF Articles of Agreement, which stipulates in Section 3(b)(ii) that a member is entitled to purchase the currencies of other members provided that “the member represents that it has a need to make the purchase because of its balance of payments or its reserve position or developments in its reserves.”

³Article IV, Section 3 designates three general areas of responsibility for IMF surveillance: oversight of “the international monetary system in order to ensure its effective operation . . .”; general oversight of “the compliance of each member with its obligations under Section 1 of [Article IV]”; and “firm surveillance over the exchange rate policies of members. . . .”

by helping to contain the undue adverse effects of adjustment. Thus, as was conceived at the time of Bretton Woods, there remain important symbiotic interactions between IMF surveillance and financing.

Organization of the Pamphlet

The next section discusses the changing international economic environment, which is central to assessing whether and how the IMF's role should change. Greater use of exchange rate flexibility and reliance on private international capital flows have permitted industrial countries to rely much less on IMF financing than was thought likely at Bretton Woods or characterized earlier experience of the IMF. However, many IMF members do not enjoy ready access to private capital flows, especially in times of economic difficulty; the number of such countries has grown recently as new members, including the transition economies, have joined.

The following section analyzes the circumstances in which IMF financing continues to have an important role, even in a world of extensive mobility of private capital. In particular, market imperfections and indifference to some of the "public goods" aspects of financing flows explain why private capital flows cannot completely substitute for IMF financing. Through the exercise of surveillance and conditionality, the IMF can deal directly with national policy authorities to secure commitments to policies designed to correct payments imbalances. By so doing, the IMF can catalyze other sources of financing that would not be available in the absence of an IMF-supported program. Moreover, looking to the public goods aspects that are dominant in some countries that need balance of payments financing, the IMF may rationally be prepared to act in circumstances in which private sector lending decisions based solely on private financial risks and returns would lead to economically harmful inaction.

Possible lessons for the role of the IMF from the recent Mexican crisis are discussed in the succeeding section. The crisis has shown that openness to financial markets puts a premium on disciplined implementation of the right policies. Stronger surveillance by the IMF and willingness of the authorities to implement policies that are consistent with IMF advice can help to reduce the likelihood and extent of balance of payments difficulties. Provision of financial data and surveillance over the financing policies of members are particularly important. However, a costless adjustment of Mexico's overvaluation and external imbalances was unlikely even in the best of circumstances, and some degree of IMF financing

might well have been necessary. In the actual circumstances, the strong adjustment program of the authorities, together with the large volume of external financial support, helped to limit the costs to Mexico and, more broadly, to the world economy.

General implications of the present discussion for the need for IMF resources and its relation to IMF surveillance are discussed in the concluding section. Although industrial countries have not made upper credit tranche purchases in recent years, the IMF must maintain adequate liquidity to meet reserve tranche use and the possibility of upper credit tranche programs. For middle-income developing countries, increasing exposure to international financial markets may increase the need for short-term IMF financing to counter the effects of possible shifts in investor sentiment. This should go hand in hand with a relevant strengthening of IMF surveillance, particularly on matters that contribute to the likelihood or severity of potential balance of payments crises. Transition economies and lower-income developing countries, which generally lack ready access to private capital flows, can reasonably be expected to continue to rely, from time to time, on IMF assistance in addressing balance of payments adjustment problems. Their special economic problems imply that IMF surveillance and IMF-supported adjustment programs (as well as technical assistance) need to give particular attention to structural issues and be closely coordinated with the efforts of other multilateral institutions. Correspondingly, the time span that is relevant for “temporary” support for balance of payments adjustment for these countries may often be somewhat longer than for other countries that generally face less daunting adjustment problems.

Major Reform Proposals

The pamphlet assumes that the international monetary system will continue to evolve in line with the trends of recent years.⁴ The predominant view is that, at least for the foreseeable future, the current decentralized system of managed flexibility among the major currencies will continue. With major reforms of the international monetary system, however, a more substantial reassessment of the role of IMF surveillance and financing would be needed.

For instance, the international monetary system could evolve in the direction of greater exchange rate fixity, with the major currencies to be

⁴For a discussion, see Goldstein and others (1992).

linked by a system of target zones.⁵ The Bretton Woods Commission has suggested that the IMF take over from the Group of Seven industrial countries the responsibility for coordinating policies in order to reduce exchange rate volatility and misalignments, and perhaps eventually for moving to a system of flexible exchange rate bands.⁶ In present circumstances, however, it seems premature to devote much attention to these issues, given the opposition of major countries to proposals for an international monetary system based on pegged exchange rates.

A quite different direction has been suggested by others, namely, for the IMF to abandon its financing role and shift its attention almost entirely to enhancing the “market discipline” exerted by private capital flows as the means of avoiding and correcting maladjustments in countries’ balance of payments. In effect, the IMF might become a kind of agency for rating countries’ economic policies (see Minton-Beddoes (1995)). Moreover, it has also been proposed in this context that the IMF should play a central role in the coordination of sovereign debt restructuring as the international equivalent of a bankruptcy court (see Sachs (1995) and Minton-Beddoes (1995)).

It is doubtful that strengthened market discipline is an entirely adequate substitute for IMF surveillance and (conditional) IMF financing of payments imbalances, however. Furthermore, the IMF’s role in, and relations with, member countries would change substantially if it were to act more like a rating agency. In the absence of an internationally agreed and enforceable procedure for dealing with sovereign defaults—which seems at best a distant prospect—informal mechanisms will need to continue to operate and to evolve; undoubtedly, the IMF will need to continue to play a central role (along with the Paris Club and the London Club) in such mechanisms. As at present, the IMF’s role in facilitating relations between debtor and creditor countries will continue to benefit from its ability to provide financial resources. Therefore, the establishment of an international debt adjustment facility would not, in itself, be likely to imply a major change in the IMF’s financing role, although it might involve a change in the nature of its policy advice and a reinforcement of surveillance (see, for instance, Eichengreen and Portes (1995)).

⁵Proposals for a target zone system are most closely associated with John Williamson. See, for instance, Williamson and Miller (1987) and Williamson and Henning (1994).

⁶Bretton Woods Commission (1994). See also Bergsten (1995), de Larosière (1995), Kenen (1995), and Volcker (1995).

The Changing International Environment

Compared to the world conceived at Bretton Woods, four major developments have changed the international environment in which the IMF operates. First, a system linked to gold of fixed parities with infrequent adjustments has given way to much greater exchange rate flexibility. Second, the size and agility of private capital flows have increased greatly. Third, countries have become more integrated, through increased openness to both trade and capital flows, as barriers to trade in goods and assets have been removed and technological changes have reduced transaction costs. Fourth, the membership of the IMF has expanded enormously, and the institution has become universal, increasing the potential demand for IMF resources on the part of many of the newer members, which sometimes need substantial balance of payments financing.

Exchange Rate Flexibility

The move to floating exchange rates among the currencies of the largest industrial countries in the early 1970s fundamentally altered the nature of the international monetary system by removing any link between the value of money and the price of gold, and by freeing monetary policies to be directed toward domestic objectives. For those countries that adopted floating exchange rates—including the three largest industrial countries—maintaining a fixed parity was no longer a critical concern of economic policy; these countries typically used the increased flexibility to give greater weight to key domestic policy objectives. Current account imbalances did not disappear, nor were they more rapidly eliminated, as a consequence of floating exchange rates. Official reserves continued to be held by countries with floating exchange rates (Table 1), and governments continued to intervene to influence the course of market-determined exchange rates. However, without the obligation to intervene to defend pegged rates, the objective of most intervention changed, and official settlements imbalances lost most of their earlier significance.

The change in the fundamental character of the international monetary system brought by floating exchange rates necessarily created important changes in the IMF's role. IMF surveillance over the international monetary system and over members' economic performance and policies (especially their exchange rate policies) replaced the earlier responsibility to supervise exchange rates under the par value system. As the monetary

TABLE 1. RATIOS OF NONGOLD RESERVES TO IMPORTS OF GOODS
AND SERVICES¹
(In percent)

	1970	1975	1980	1985	1990	1994 ²
Industrial countries	13.4	13.0	13.2	13.4	15.3	17.6
Developing countries	19.4	32.0	29.2	27.0	28.6	31.0
Countries with recent debt-servicing difficulties	17.0	25.5	31.2	19.3	20.8	39.1
Small low-income economies	17.1	12.1	10.0	12.0	10.6	27.4
Countries in transition	...	...	...	...	...	16.3
Former Soviet Union ³	...	...	...	...	...	13.2

Sources: IMF, World Economic Outlook and International Financial Statistics databases.

¹End-of-year reserves as ratios of imports of goods and services during the year. Imports include interest payments on debt where data are available. Country groups are consistent with those used in the May 1995 *World Economic Outlook*; some of these groups have experienced changes in membership during recent years.

²Data for some countries are staff estimates.

³Excludes Tajikistan. Imports exclude trade within the former Soviet Union and, in most cases, do not include services.

policies of the major countries now provided the nominal anchor for the international monetary system, an essential part of the IMF's role was to ensure that those policies were neither inflationary nor deflationary. IMF financing of payments imbalances of the industrial countries, in support of established or adjusted exchange rate pegs, generally ceased, and, over time, the focus of IMF financial support shifted to developing countries.⁷

It is difficult to reach a definitive judgment about whether, on balance, the move to a system of floating exchange rates has improved or worsened

⁷The last IMF-supported programs for industrial countries were implemented in Italy and the United Kingdom in 1977, after the general move to floating exchange rates. Both countries were experiencing balance of payments difficulties in the aftermath of the first oil shock, and the Italian lira and the U.K. pound were under severe downward pressure. The IMF, at that time, was still seen as playing an important role in helping to deal with these problems. Since the summer of 1992, the U.K. pound and especially the Italian lira have depreciated substantially, particularly against the currencies of other large European countries. These depreciations have helped to bring large improvements to the current accounts of both countries, and they have not involved the use of IMF resources.

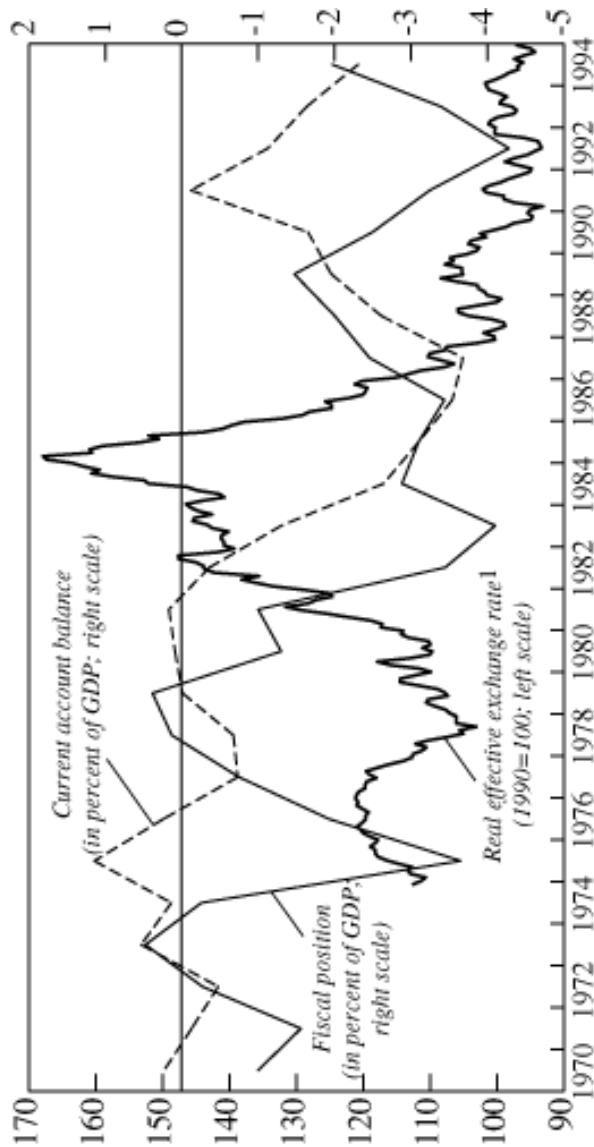
the overall performance of the world economy.⁸ The experience with the defense of pegged exchange rates since the collapse of the Bretton Woods system has made clear that the relevant counterfactual for assessing the consequences of maintaining a global system of pegged exchange rates would have required significant modifications in the policies actually pursued by the largest industrial countries. Simulation exercises to assess such counterfactuals using multicountry econometric models generally suggest that exchange rate pegging is suboptimal relative to policies directed at domestic economic stabilization.⁹ However, the argument remains that discipline exerted on national economic policies would have been stronger under a global system of pegged exchange rates and that such discipline would have helped to avoid some important policy mistakes, notably the excessive monetary accommodation of the upsurges of inflation in the mid- and late 1970s. Nevertheless, as a practical matter, it is clear that policymakers in the three largest industrial countries generally have no interest in, and see no benefit from, moving to an international monetary system that would impose significant constraints on their ability to direct their own national monetary policies in accordance with their domestic objectives.

While floating exchange rates have the virtue of allowing greater independence of national monetary policies, at least for the largest countries, it is far less certain that floating exchange rates necessarily produce optimal patterns of adjustment in countries' balance of payments. In particular, there appear to be instances in which market forces drive exchange rates in a manner contrary to the needs of orderly balance of payments adjustment, as seems to have occurred in the United States in the first half of the 1980s, and especially in late 1984 and early 1985 (Chart 1). Alternatively, when financial markets suddenly sense the need for a correction in a country's balance of payments, they may drive exchange rates in the right direction but to an extent that appears to force an unduly large or rapid correction. For example, the large depreciations of the Italian lira and the Swedish krona since the summer and autumn of 1992 have helped

⁸It is sometimes suggested that the general slowdown of industrial country growth since the early 1970s may be attributed in some significant measure to the collapse of the global system of pegged exchange rates. There is, however, no serious empirical evidence to support this hypothesis. For a review of the evidence on the effects of exchange rate volatility under floating rates, see Goldstein (1995).

⁹See, for instance, Taylor (1989), and Frenkel, Goldstein, and Masson (1989).

CHART 1. UNITED STATES: REAL EFFECTIVE EXCHANGE RATE, CURRENT
EXCHANGE RATE, CURRENT ACCOUNT BALANCE, AND
GENERAL GOVERNMENT FISCAL POSITION



Source: IMF, Research Department and World Economic Outlook database.

¹ Based on normalized unit labor costs in manufacturing.

to bring large and rapid improvements in the current accounts of both countries (see Chart 2). However, it is arguable that somewhat less exchange rate depreciation would have allowed better-balanced economic recoveries with less danger of an acceleration of inflation.

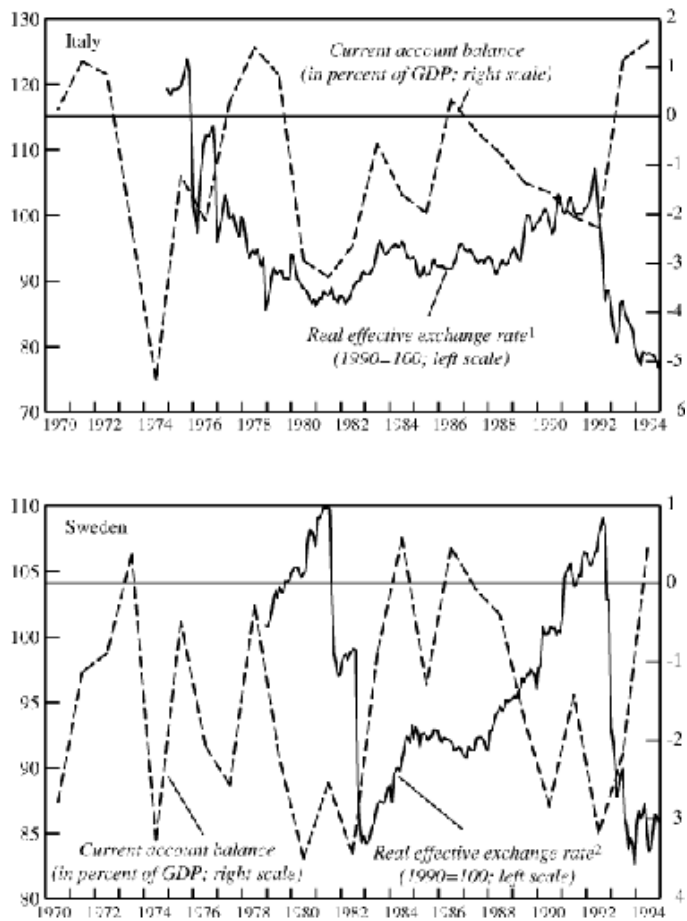
Another example of the problems caused by floating exchange rates is the sharp depreciation of the Mexican peso during the early part of 1995, which has contributed to a rapid reduction of Mexico's current account deficit, but not without large output losses and an upsurge of inflation. On the other side of the ledger, the strong appreciation of the Japanese yen since the summer of 1992 appears to be self-defeating in the short term because Japan's current account surplus has risen, as a result of the J-curve, and because the yen appreciation has tended to undermine economic recovery.

More generally, it is often the case that exchange rate adjustment alone is not the most efficient or desirable method for correcting a payments imbalance. Currency depreciation generally needs to be accompanied by other measures to bring about the reduction in aggregate demand required to close the saving-investment imbalance and to resist the excess demand resulting from the increase in net exports. Market forces that induce changes in exchange rates generally cannot by themselves assure durable improvement in a country's external payments position, but they may in some cases reinforce the needed policy discipline.

Beyond these theoretical considerations, the empirical evidence clearly shows that for most countries reducing payments imbalances under the regime of generalized floating exchange rates has not been a wholly painless process. Typically, correction of an unsustainable current account deficit has been accompanied by large output losses, as well as by real exchange rate depreciation. Table 2 presents data for selected countries that substantially reduced large current account deficits. For the industrial and developing countries presented, the current account change was associated with both a slowdown in output growth and a real exchange rate depreciation. Output losses were particularly large for some developing countries in recent years, notably Turkey, Mexico, and the Philippines.

The continued holding and use of international reserves, especially by developing countries, is further evidence that a purely market-driven adjustment of exchange rates is not viewed by those countries as optimal (see Table 1). For industrial countries, which generally enjoy favorable access to world financial markets, the cost of holding reserves (the

CHART 2. ITALY AND SWEDEN REAL EFFECTIVE EXCHANGE RATE AND CURRENT ACCOUNT BALANCE



Source: IMF, Research Department and World Economic Outlook database.

¹ Based on normalized unit labor costs in manufacturing.

² Based on consumer price index.

TABLE 2. SELECTED CORRECTIONS OF LARGE CURRENT ACCOUNT DEFICITS AND ASSOCIATED OUTPUT, REAL EXCHANGE RATE, AND RESERVE CHANGES
(In percent)

	Years	Change in Ratio of Current Account to GDP	Change in Rate of Growth of GDP	Change in Real Effective Exchange Rate ¹	Change in Reserves ²	Memorandum: Initial Current Account Ratio
Industrial countries	1982-83	6.3	-4.3	-17.0	-30.9	-8.3
	1985-86	4.2	-1.5	-9.6	-8.2	-10.3
	1992-93	3.5	-1.4	-17.1	-46.4	-2.3
	1992-93	3.6	-2.6 ³	-26.6	-21.9	-4.6
Developing countries	1988-89	21.4	-0.9	-8.9	-28.0	-6.4
	1986-87	14.9	-2.8 ³	-24.5	-54.0	-7.9
	1988-89	14.7	-1.6 ³	-3.3	-58.7	-9.2
	1982-83	7.5	-4.1	-7.0	-51.5	-8.5
	1982-83	7.3	-7.4	-40.3	-70.0	-3.7
	1993-94	5.6	-13.2	-17.0	-7.0	-3.7
	1986-87	5.3	-7.3	-19.6	-57.7	-10.3
	1983-84	4.8	-9.2	-16.8	-5.9	-5.3
	1980-81	4.0	-1.8	-4.5	-33.8	-12.3

Sources: IMF, World Economic Outlook and International Financial Statistics databases.

¹Change of relative consumer price indices over the two years.

²In first year.

³Average output growth in the two years.

difference between borrowing costs and the return on reserves) is usually relatively low. For many developing countries, in contrast, the cost of holding reserves is quite high. Accordingly, the decision by many developing countries to hold reserves presumably reflects a preference for using reserves to meet payments imbalances, rather than relying exclusively on the alternative of exchange rate adjustment. In this regard, it is noteworthy that the level of reserve holdings relative to imports has risen since 1970 (Table 1), and that the use of reserves (Table 3) by both industrial and developing countries is relatively large in comparison with IMF quotas.

Expanded Private Capital Flows

As has been well documented elsewhere (for instance, by Mussa and others (1994), and Goldstein and others (1993)), the size and agility of private capital flows have vastly expanded in recent decades. This development has had two major implications for the international monetary system. First, it has made it more difficult to maintain pegged exchange rates when the market comes to believe that the exchange rate peg may not be viable—a difficulty that may have been compounded by the fact that the stock of reserve assets has not grown commensurately with private capital flows.¹⁰ Second, it has allowed countries to finance current account deficits (and surpluses), presumably benefiting both creditors and debtors, but also apparently delaying desirable adjustment in some circumstances.

Maintaining exchange rate pegs

The crises of 1992–93 involving the Exchange Rate Mechanism (ERM) of the European Monetary System (EMS) are the clearest recent example of the difficulties of maintaining exchange rates in narrow bands around central parities. The experience of this period suggests the importance of early adjustment of unsustainable exchange rates, the need for consistent and credible macroeconomic policies to validate a fixed peg, and the mas-

¹⁰Turnover on the three largest foreign exchange markets increased threefold between 1986 and 1992, while foreign exchange reserves of industrial countries increased by only 77 percent in U.S. dollar terms over that period. In April 1992, a survey of foreign exchange markets estimated that global *daily* turnover was \$880 billion, compared with a stock of non-gold foreign exchange reserves of industrial countries equal to roughly \$414 billion (Mussa and others (1994)). Preliminary analysis of a more recent survey by the Bank for International Settlements of foreign exchange markets suggests that daily turnover now exceeds \$1 trillion.

TABLE 3. SELECTED INDUSTRIAL AND MIDDLE-INCOME DEVELOPING
COUNTRIES: MONTHLY CHANGES IN GROSS RESERVES (1985–93)
RELATIVE TO IMF QUOTA

	Standard Deviation	Month/Year Maximum Loss (In percent of current quota)	of Maximum Reserve Loss
Industrial countries			
Australia	19	56	1/92
Austria	30	108	3/91
Belgium	16	49	9/92
Canada	16	49	9/92
Denmark	61	215	1/93
Finland	60	222	10/91
France	20	64	11/93
Germany	65	281	10/92
Greece	61	116	10/93
Iceland	32	99	9/92
Ireland	54	240	9/92
Italy	36	127	7/92
Japan	22	61	3/90
Netherlands	22	33	3/93
New Zealand	31	97	6/88
Norway	55	240	11/92
Portugal	106	579	9/92
Spain	83	530	9/92
Sweden	78	317	11/92
Switzerland	46	120	1/93
United Kingdom	14	31	9/92
United States	5	13	3/91
Middle-income developing countries			
Argentina	24	57	3/91
Bolivia	18	55	1/90
Brazil	30	60	1/86
Chile	23	35	1/86
Colombia	23	71	10/93
Costa Rica	23	72	5/90
Egypt	34	153	11/90
El Salvador	21	61	5/90
Hungary	27	45	12/92
Indonesia	18	31	5/90

TABLE 3 (*concluded*)

	Standard	Month/Year	
	Deviation	Maximum	of Maximum
		Loss	Reserve Loss
		(In percent of current quota)	
Israel	46	98	10/91
Jordan	57	334	8/91
Korea	58	196	12/89
Malaysia	68	193	12/92
Mexico	52	167	11/93
Morocco	20	38	3/89
Paraguay	39	160	10/92
Peru	18	47	9/91
Philippines	30	96	5/93
Poland	15	54	12/90
Singapore	93	161	3/91
South Africa	8	23	9/92
Thailand	37	59	7/92
Tunisia	27	93	4/91
Turkey	36	112	12/93
Uruguay	19	103	11/86
Venezuela	15	28	7/90

Source: IMF staff calculations.

sive force of speculative flows when parities are not considered to be sustainable by the private capital markets. Indeed, the experience during the ERM crises indicates that, in the modern situation of international capital mobility, massive pressures can arise because of doubts about the sustainability of exchange rates, even if those exchange rates appear to be in line with fundamentals.

H o w e v e r, access to private capital flows can also assist in the defense of pegged exchange rates by enabling governments to secure additional (borrowed) reserves with which to intervene in the money markets. For example, during the ERM crisis in 1992, the United Kingdom arranged a foreign currency borrowing program valued at ECU 10 billion, and Sweden arranged for credits totaling ECU 31 billion, to help defend their exchange rates. In both instances, efforts to defend the official parities proved unsuccessful. Thus, while access to private capital flows may assist in defending pegged exchange rates, it is clearly no guarantee of success.

Financing current account deficits

Current account deficits can arise for various legitimate reasons (that is, not related to inappropriate policies), and increased availability of private capital flows can help to finance those imbalances. First, these deficits can result from long-term differences between saving and investment across countries. Countries with more profitable investment opportunities but inadequate domestic saving can benefit from foreign capital; likewise, countries with excess saving can obtain a higher return by investing abroad. Second, different cyclical positions of countries will lead to current account surpluses and deficits, as saving and investment typically move differently over the cycle. As a result, paths for consumption can be smoother than they would be if the current account were always balanced. Third, current account surpluses and deficits can result from unsynchronized portfolio diversification across countries (for instance, if faster liberalization in one country leads to net capital outflows). Portfolio diversification generally improves the trade-off between risk and return.

However, greater private capital flows may not always or necessarily lead to greater economic efficiency and welfare. Inflows may delay needed policy adjustment. For example, the persistent inflows of capital to the United States since the early 1980s have had the beneficial effect of helping to finance U.S. investment in circumstances of low national saving (and a substantial fiscal deficit). It might have been preferable, however, if sterner external discipline had induced more strenuous efforts to correct the underlying causes of the U.S. current account deficit. Alternatively, the euphoria concerning the prospects for monetary union in Europe led to massive inflows into high-inflation, high-interest rate EMS countries during the 1987–92 period. These inflows were often funded in currencies with lower interest rates (mainly the deutsche mark).¹¹ Similarly, there was a sharp increase in capital flowing into emerging markets in 1992–93, complicating the task of economic policy in these countries because of their limited ability to sterilize the inflows and contributing to overvalued exchange rates. The counterpart of excessive inflows is the rapid withdrawal of capital when sentiment changes, which occurred in both cases cited above. Changes in sentiment led to a massive speculative attack against a number of European currencies, including some whose

¹¹This was termed a “convergence play” by Goldstein and others (1993).

central parities were not obviously overvalued on competitiveness grounds, and to indiscriminate selling of Latin American bonds and stocks in the immediate aftermath of Mexico's devaluation of December 1994.

The point here is not that international capital flows are generally misdirected or that relatively free international capital mobility is generally bad—quite the contrary. The point is that the modern regime of international capital mobility is not perfect and that the IMF's financing and surveillance activities may therefore be able to help improve its performance.

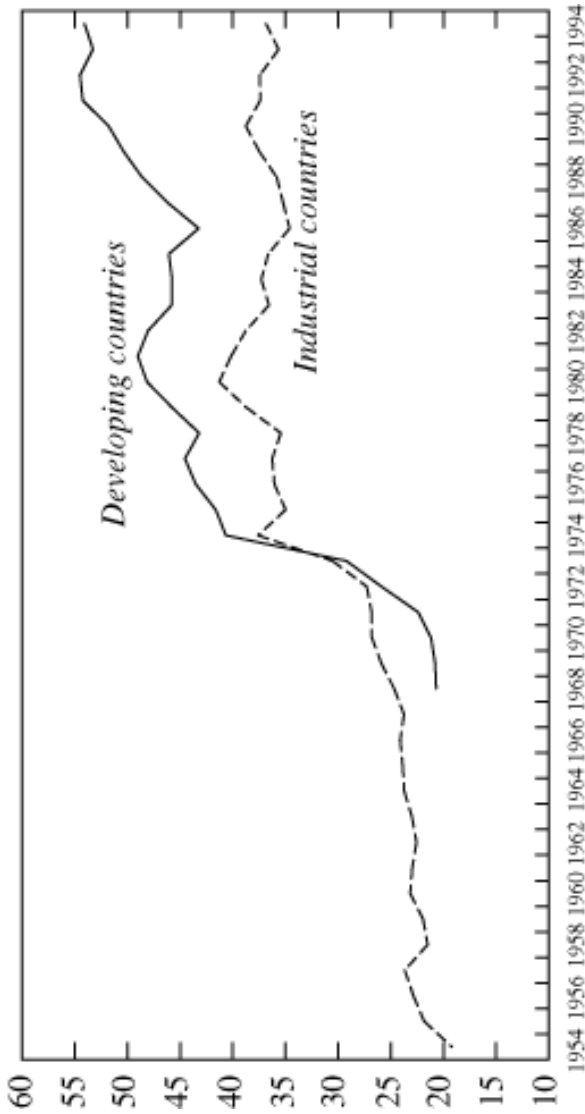
Increased Integration of National Economies

Since the Second World War, trade in goods and in financial assets has increased enormously. To some extent, growth in the early postwar period involved merely a return of exports and imports to prewar levels as reconstruction proceeded and wartime controls were abandoned. However, trade continued to grow in later decades at a sustained pace that has exceeded GDP growth in both industrial and developing countries (Chart 3). This sustained growth has reflected a fall in tariff and nontariff barriers as well as a reduction in transport costs. The IMF has contributed to this process through its success in promoting widespread current account convertibility.

Integration of financial markets has been even more dramatic. One feature of this integration has been expanded capital flows, as discussed above. The immediate postwar period began with most countries (with the notable exceptions of the United States and Canada) having numerous restrictions on capital account transactions. Capital account convertibility has now become virtually complete among industrial countries and has been adopted by a number of developing countries. This expansion of capital account convertibility, coupled with technological and financial innovations, has increased cross-border claims enormously. For instance, the stock of international loans rose from 5 percent of industrial country GDP in 1973 to 19 percent in 1993.¹² Developing countries have also gained access to private capital, in the form primarily of bank lending in the 1970s and 1980s, and more recently in the form of portfolio flows and direct investment (Table 4).

¹²Figures quoted in Mussa and others (1994).

CHART 3. TRADE FLOWS¹ RELATIVE TO GDP
(In percent)



Sources: IMF, World Economic Outlook and International Financial Statistics databases, and staff estimates.
¹ In goods and nonfactor services.

TABLE 4. NET EXTERNAL FINANCING FLOWS TO DEVELOPING COUNTRIES
AND ECONOMIES IN TRANSITION
(In billions of U.S. dollars)

	1987–88	1989–90	1991–92	1993–94
Developing countries				
Non-debt-creating flows, net	31	53	66	118
Net credit and loans from IMF	–9	–3	1	–1
Net external borrowing	72	97	199	214
From commercial banks	21	29	26	–28
From official creditors	38	43	35	29
Other	13	25	138	213
Total, net external financing	94	147	265	332
Countries in transition				
Non-debt-creating flows, net	1	1	11	24
Net credit and loans from IMF	–2	–1	5	5
Net external borrowing	–25	2	4	9
From commercial banks	7	8	–8	9
From official creditors	–4	10	41	10
Other	–28	–16	–29	–10
Total, net external financing	–26	2	20	37

Source: International Monetary Fund (1995b, Table A33).

Increased economic integration has resulted in gains from trade in both goods and asset markets that, in turn, have surely contributed to postwar prosperity. This increased integration has also meant that countries are increasingly exposed to shocks from abroad, through both trade and capital market linkages. To be sure, the game has been worth the candle; the benefits of integration have generally far outweighed the costs. However, the appropriate speed and necessary conditions for full capital market liberalization remain important policy issues. To the extent that the external shocks are small or are negatively correlated with domestic shocks, greater external exposure may not be harmful; nevertheless, the concern about external shocks or about shocks that may be amplified because of openness is legitimate. For example, neither the debt crisis of the 1980s nor the recent economic crisis in Mexico could have occurred to economies that were effectively closed to trade and capital movements.

For several reasons, developing countries tend to be more exposed to external shocks than the larger industrial countries. First, a number of

developing countries are heavily dependent on export earnings of a few primary commodities, making their current account positions especially vulnerable to fluctuations in world prices and foreign demand. Second, these countries often do not have well-developed domestic financial markets, so they cannot fall back on efficient domestic sources of financing for shortfalls in government revenues. Third, developing countries cannot borrow abroad in their own currencies and generally have to rely on foreign currency financing (or reserve use) to deal with balance of payments shortfalls. When an adverse external shock or a domestic disturbance (including policy errors) generates a balance of payments financing problem, foreign currency financing tends to dry up, and the magnitude of the adjustment required to correct the payments imbalance is magnified. Fourth, many developing countries have accumulated large external debts in foreign currency; servicing these foreign currency debts requires either trade surpluses or other capital inflows. The existence of a large volume of international foreign currency claims (or, more generally, large foreign portfolio investments) exposes a country to changes in foreign investor sentiment, which could force the authorities to restrict domestic demand drastically to adjust the balance of payments. Fifth, analysis of data for internationally traded assets of developing countries suggests that these assets are subject to problems of financial market inefficiency. In particular, there is evidence of bandwagon effects, showing up in serially correlated asset returns, perhaps because of the portfolio shifts into and out of institutions specializing in emerging markets (International Monetary Fund (1995a)). Moreover, contagion effects were present in the weeks immediately following the December 1994 Mexican devaluation, as internationally traded asset prices of different Latin American countries facing different economic fundamentals moved together much more closely than during earlier periods (Table 5).

Expanded Membership

The context of the IMF's operations has changed greatly as a consequence of the substantial expansion of its membership. This expansion resulted from two principal events in the postwar period: the process of decolonization, which had begun in the late 1940s and largely run its course by the 1970s, and the recently initiated transformation of former centrally planned economies into market economies. These two events have made the IMF into a universal organization. At the same time,

TABLE 5. CORRELATION OF RETURNS ON SELECTED LATIN AMERICAN
BRADY BONDS WITH RETURNS ON MEXICAN BRADY BONDS,
JANUARY 1993–MARCH 1995
(In percent)

	Jan. 1993– Jan. 1994	February– May 1994	Mid-May 1994– Mid-Dec. 1994	Mid-Dec. 1994– Early March 1995
Argentina	0.56	0.84	0.77	0.89
Brazil	0.22	0.51	0.45	0.73
Venezuela	0.55	0.65	0.47	0.78

Source: Folkerts-Landau and others (1995, Table I.4).

because most of the IMF's new members have not established assured access to private capital flows, the number of members that are likely potential users of IMF resources has continued to expand.

In particular, most transforming economies are still much less integrated into the world economy than many developing countries. Correspondingly, these transition countries have generally not been able to draw on private capital flows to anywhere near the same degree as middle-income and more advanced developing countries (Table 4), although some individual countries have attained market access or are soon to do so. Accordingly, many transition countries—like the poorer developing countries—have needed to rely on official financing for much of their balance of payments support. As most transforming economies do not benefit from large amounts of official bilateral financing flows, the IMF has been heavily involved in making balance of payments financing available to them, subject to comprehensive conditionality to help ensure that necessary structural policies are implemented in a framework of macroeconomic stability.

In sum, when projecting the potential need for IMF resources, the Bretton Woods conference did not anticipate the move to greater exchange rate flexibility and the pervasive access of industrial countries to private financing. However, it also did not anticipate either the growth in world trade and capital movements and the greater integration of national economies, which has left them more exposed to external shocks, or the expansion of the IMF's membership, which has created new demands for IMF resources by countries where the correction of payments imbalances may typically require somewhat more time than was envisioned at Bretton

Woods. These evolving needs explain why the membership has approved periodic increases in IMF quotas.

The Rationale for IMF Financing

The IMF's balance of payments financing is supplementary to what is available from the private sector (as well as from other official lenders).¹³ In the conception of the international environment that inspired Bretton Woods, private capital flows were not expected to be a major factor; indeed, unlike current account convertibility, capital account convertibility was not expected to be the rule. In such a context, the financing role of the IMF was clearly intended to be central to the international monetary system. In practice, however, there were few drawings on IMF resources in the early postwar years, and, in recent years, the vast expansion of private capital flows has reduced the need for IMF financing for those countries with secure access to international capital markets—in practice, most of the industrial and some of the developing countries.

The question therefore arises whether the IMF's role as a supplier of balance of payments financing can continue to be justified. As in other areas of government intervention, the general rationale for the IMF's role needs to be grounded in the existence of market imperfections or in the inadequate provision of public goods, both of which IMF lending can help to remedy. At this level of generality, the rationale for the IMF's financing activities remains much the same as it was at the time of the Bretton Woods conference: unimpaired access to private financing of payments imbalances is generally available to some important countries in the world economy, but not to all countries. Accordingly, in the absence of IMF financing (accessible under appropriate conditionality), many countries facing balance of payments difficulties might need to adopt policies that would be unnecessarily destructive of national and international prosperity. By helping to avoid such outcomes, IMF financing benefits both those countries experiencing balance of payments difficulties and their partners in international commerce and finance.

¹³These include loans from development banks and central bank swaps. The former typically involve long-term project financing, while the latter generally are limited in scope (except for the European Exchange Rate Mechanism's Very Short-Term Financing Facility) and short term.

Market Imperfections

Market discipline generally speeds up the recognition of unsustainable policies and thereby brings about needed policy adjustments. However, the market does not always act on the basis of appropriate judgments or reflect socially optimal assessments. At times, markets continue to provide financing for unsustainable policies, delaying needed adjustment. When a belated recognition of problems occurs, the change in market sentiment can lead to a violent reversal of the capital inflows, causing a balance of payments crisis. Without official financing, the crisis would force on the authorities disruptive adjustment, with potentially high costs in terms of output and employment losses. For other countries whose economic fundamentals justify access to private capital, access might be available only at a high cost, or not available at all. Lack of access to international capital markets would exclude a country from benefiting fully from the efficient allocation of capital.

Four important factors affecting private lenders can cause these market imperfections to occur.

- *Imperfect information* about a country's policies and the economic circumstances facing it can lead to shifts in sentiment that are not justified by fundamentals. A recent example is the large flows to most emerging markets in the early 1990s and their sharp interruption or reversal after the Mexican crisis (see Folkerts-Landau and others (1995)).

- *Coordination problems* among lenders can lead to bandwagon effects or "free rider" behavior. The Latin American debt crisis of the 1980s illustrates both aspects of the problem. Lack of concern for potential risks and competition among banks to recycle the revenues of oil producing countries produced an initial period of overlending in the late 1970s. The onset of the debt crisis in 1982 led to a protracted period of negotiation of debt relief, during which creditors attempted to position themselves favorably with respect to both the borrowing country and other creditors.

- *Problems in enforcing loan contracts* on sovereign borrowers can produce a reluctance to lend. The inability of borrowers to credibly commit to repay loans, together with the absence of clear recourse of creditors in the event of default, may lead to suboptimal lending (see Eaton and Fernández (1995)).

- *Multiple equilibria* can exist. For instance, there may be one equilibrium in which lenders believe the authorities intend to do what they say

and in which money is available on reasonable terms that allow policy commitments to be fulfilled, and another equilibrium in which lenders do not believe the authorities and in which investors demand a high risk premium that, in turn, provokes a balance of payments crisis. There is no assurance that the market, left to itself, will choose the better of the two equilibria. Although empirical work in this area is still in its infancy,¹⁴ an examination of speculative attacks on ERM currencies suggests that these episodes are not distinguished from non-attack periods by different economic fundamentals.¹⁵

The IMF can alleviate these market failures through both its surveillance and its lending activities. Through stronger surveillance, including encouragement of countries to make more timely data publicly available, the IMF would help to provide financial markets with the information that they need to form judgments concerning a country's creditworthiness, alleviating the first problem described above. The IMF has also assisted members in their relations with commercial banks and official creditors through strengthened surveillance, thereby creating confidence in the countries' adjustment policies and facilitating debt-restructuring agreements, and thus helping to correct the second market imperfection (see, for instance, Chapter III of Watson and others (1986)).

H o w e v e r, it is through financing and the accompanying exercise of conditionality and provision of policy advice that the IMF can have the most impact. The commitment of resources in support of a program signals the IMF's confidence in a member's policies. Such a signal is more likely to convince private lenders of the creditworthiness of a borrower than mere announcement of support. In this way, the IMF can catalyze other sources of financing and help extract commitments from other lenders.

The IMF must also safeguard its resources and take account of the repayment of resources to the IMF in its conditionality. The exercise of conditionality makes the third problem cited above less severe. Thus, the IMF may be willing to provide support in some circumstances when private lenders are not, as the latter have less influence on the policies of borrowing countries. Moreover, the exercise of conditionality would be expected to have externalities on other lenders, who would also reap the benefit of

¹⁴Seminal contributions include Jovanovic (1989) and Dagsvik and Jovanovic (1994).

¹⁵See Eichengreen, Rose, and Wyplosz (1994).

sounder policies in borrowing countries and their increased ability to repay. In this way, as well as by signaling confidence in a member's policies, the IMF may help avoid bad equilibria—the fourth type of market imperfection.

International Public Goods

A second major area where the IMF needs to supplement private capital flows is the provision of international public goods. In particular, the IMF, by being prepared to make resources available in times of adverse shocks, can encourage countries to greater openness to trade and capital flows. Because openness is a public good (gains from trade accrue to all parties), it is in the global interest to encourage it (see Frenkel, Goldstein, and Masson (1988)); indeed, the growth of trade and the elimination of foreign exchange restrictions are explicitly listed as purposes of the IMF in Article I. The IMF can encourage provision of these public goods by supplying a form of insurance against adverse shocks for countries (for example, Mexico, Argentina, the Czech Republic, and Poland, among many others in recent years) that are liberalizing or have liberalized their economies. This insurance involves access to IMF credit on reasonable terms should the balance of payments deteriorate. Private financial markets are unlikely to provide such insurance in adequate amounts; if they do, it is at a risk premium that is too high because lenders cannot fully appropriate the benefits to global welfare. The availability of IMF resources provides the assurance necessary for countries to engage in desirable policies that have favorable externalities and thus enhances the ability of other organizations (for example, the World Trade Organization) to fulfill their mandates in this area.

It is true that, just as in other insurance activities, such as fire insurance, there is a potential moral hazard problem: the insured party may be induced to take on more exposure to adverse shocks than is desirable. If the IMF is likely to bail out countries when they run into trouble, won't they undertake inadvisable policies, in particular, unnecessarily risky ones?

In examining this moral hazard problem, three things have to be kept in mind. First, as in the case of fire insurance, some risk taking is desirable;¹⁶

¹⁶Risk avoidance in the absence of fire insurance might involve a decision not to build wooden houses or install gas appliances, at a social cost that is greater than in the equilibrium when fire insurance is available.

the risk-minimizing solution, which might prevail in the absence of a safety net, would be to close the economy to foreign trade and capital. Second, excessive risk taking is limited by coinsurance, so that the insured party can expect to suffer a significant part of any loss. In particular, a country that chooses inappropriate policies that would lead to balance of payments difficulties typically pays an important cost in the subsequent adjustment process. In addition, IMF financing does not consist of grants, and the recipient of such financing must pay interest and promptly repay the principal.¹⁷ Finally, as an extension of the analogy with fire insurance, the IMF can be said to play the role of fire inspector through its exercise of surveillance and conditionality, which reduces the scope for excessive risk taking.

Another international public good is an exchange rate system that facilitates smooth adjustment and promotes stability; as Article I(iii) indicates, its promotion is one of the purposes of the IMF. Of course, the context of infrequently adjusted pegged rates has changed radically with the replacement of the Bretton Woods system by generalized floating. In large part, this change reflects the infeasibility of defending fixed exchange rates at a global level in the context of expanded capital flows (as discussed above) and the preference of the largest industrial countries to devote their monetary policies to promoting domestic stability objectives (as described in Mussa and others (1994)). As these countries have been generally successful in recent years in delivering low inflation, it can be argued that it would be a mistake to distract their attention from keeping their own domestic houses in order (see Frenkel, Goldstein, and Masson (1991)). Nevertheless, the IMF retains an important responsibility to help ensure through its surveillance activities the smooth functioning of the flexible exchange rate system with a minimum of volatility and misalignments.

Lessons from Mexico for IMF Surveillance and Financing

Several important aspects of the 1994–95 Mexican economic crisis have been extensively discussed elsewhere.¹⁸ Accordingly, for present purposes,

¹⁷Similarly, disaster relief for damages to houses built on a floodplain, which takes the form of loans at market interest rates, rather than grants, poses no moral hazard problem.

¹⁸See among other sources, Background Paper II of Folkerts-Landau and others (1995); Annex I of International Monetary Fund (1995b); and Camdessus (1995).

it is appropriate to focus on eight points that relate to broader concerns about the role of the IMF.

First, inadequate economic information can add to the uncertainty facing private asset holders and may also induce them to act on the basis of something other than a correct understanding of economic fundamentals (as discussed above under “Market Imperfections”). In the case of Mexico, many private asset holders appear to have misjudged the need for a correction in Mexico’s balance of payments and based their investment decisions on the expectation that there would be no devaluation. Absence of, or delay in reporting, key economic data may have contributed to this situation. The rude awakening that came with the devaluation and subsequent sharp depreciation of the Mexican peso clearly caused many asset holders to re-evaluate both their portfolio positions and the credibility that they attached to the policies of the Mexican authorities. A sharp reversal of capital flows and a crisis of confidence ensued. As for the future, there is obviously no certain safeguard against sudden shifts in investor expectations or the economic effects of such shifts. Nevertheless, timely reporting of economic data and cogent analysis of economic prospects and policies can play a useful role. The IMF has responsibilities in both areas: it can encourage timely reporting of accurate and extensive economic data; and it can analyze and make known its general concerns about existing or emerging economic problems.¹⁹

Second, open financial markets and exposure to private capital flows put a premium on disciplined, continuous implementation of sound, consistent policies. The economic crisis that has beset Mexico since late December 1994 is, to a significant extent, the consequence of problems that accumulated during and before 1994. If timely policy measures had been taken to deal with the appreciation of the Mexican peso and the low national saving rate, Mexico might not have escaped all of its present economic difficulties, but the magnitude of these difficulties could have been significantly diminished. For the IMF, there are important lessons for both surveillance and financing. It is an essential task of IMF *surveillance* to recognize emerging balance of payments difficulties and to

¹⁹There is, of course, the controversial issue of whether and how the IMF should publish its views on individual countries. The IMF already has a variety of means for presenting its general views on important economic policy issues, including the *Annual Report*, staff documents such as the *World Economic Outlook*, and speeches and press briefings by the Managing Director and other IMF officials.

provide timely and relevant policy advice on how to deal with these difficulties, thereby limiting the dangers of major economic and financial disruptions. It is the responsibility of national authorities also to recognize emerging problems, to pay careful attention to relevant analysis and advice, and to act constructively to contain risks of major crises. The recent experience with the Mexican crisis suggests the potential and need for improvement on both sides of the surveillance process. However, it is also clear that IMF *financing* is necessary in some circumstances: it would be fanciful to suggest that better surveillance alone can satisfactorily resolve all problems, given the difficulties in reaching a domestic consensus on appropriate policies and the occurrence of unforeseen events.

Third, in the case of Mexico, weaknesses in the banking and financial sector appeared to have played a significant role both in developments leading up to the devaluation and in the severity of the crisis that followed the devaluation. For the IMF, the implication is that surveillance should focus particular attention on the soundness of the financial sector, both under normal circumstances and under a scenario in which the economy might be subjected to strong adjustment pressures. Early diagnosis and correction of weaknesses in the financial sector might do much to lessen the severity of losses associated with a country's necessary efforts to correct maladjustments in its balance of payments.

Fourth, a special feature of the Mexican case that contributed importantly to the severity of the crisis was the large volume of short-term, U.S. dollar-denominated debt issued by the Mexican Government—the tesobonos. For the IMF, which has a responsibility to assist countries experiencing balance of payments difficulties, the lesson is that surveillance should focus on policies, including debt management, that have potentially important implications for the use of IMF resources.

Fifth, a more favorable aspect of the situation in Mexico in late 1994, compared with that prevailing at the start of the debt crisis in the summer of 1982, was that a significant part of the capital flowing into Mexico during the 1990s had taken the form of direct or portfolio investment in the private sector.²⁰ When the crisis came, the market prices of these private assets absorbed the primary impact of the shift in investor sentiment. In

²⁰This is true more generally of capital flows to emerging market countries during the 1990s.

contrast, the debt crisis of the 1980s had involved a drawn-out process of debt reschedulings and eventual write-downs of syndicated bank loans to the Mexican Government or loans guaranteed by the Mexican Government, during which Mexico had effectively been cut off from world capital markets. To preserve this advance in the structure of capital flows, it will be important to maintain the principle that the risks associated with private investments in private sector assets are not the responsibility of governments. Otherwise, if governments take on the responsibility for servicing the debts of private entities, the economic disruption and financing requirements associated with balance of payments adjustment problems could escalate significantly. The IMF can play a useful role in forestalling such adverse developments through surveillance that discourages the extensive provision of explicit or implicit government guarantees for private investments. Moreover, consideration could be given to sponsoring the adoption of a code of conduct, under which governments would agree not to press other governments to provide *ex post* guarantees benefiting foreign investors.²¹

Sixth, with respect to the effects of the crisis beyond Mexico, it is clear that financing flows and asset prices in other countries responded quickly, via contagion effects, to the onset of the crisis in Mexico. During the weeks immediately following the devaluation and floating of the Mexican peso, equity and bond prices across Latin America came under significant downward pressure, despite the different circumstances facing these countries.²² It seems likely that the relatively prompt availability of large-scale financing to support an appropriate adjustment program played an impor-

²¹It is critical that the potential problem of defaults by sovereign borrowers should not be allowed to expand through governmental assumption of the debts of private entities, as has sometimes happened in the past.

²²Argentina came under considerable pressure in the wake of the Mexican crisis and adopted a strong adjustment program aimed at generating an overall fiscal surplus and reducing the current account deficit while maintaining the parity of the Argentine peso with the U.S. dollar. Relative to GDP, the external current account deficit of Argentina prior to the crisis was about half that of Mexico's. Argentina's adjustment program has been supported by the release of two purchases under the existing IMF extended arrangement (SDR 278 million, or 18 percent of its IMF quota), and by a lengthening of the extended arrangement to a fourth year and an increase in the amount of the arrangement by the equivalent of SDR 1,537 million (100 percent of quota). In addition, Argentina obtained parallel financing from the World Bank, the Inter-American Development Bank, and the Export-Import Bank of Japan, as well as through the placement of bonds with private foreign banks and the domestic private sector, totaling the equivalent of 275 percent of quota.

tant role both in containing the crisis within Mexico and in limiting its broader contagion effects. For the future, the lesson is clear: in the modern international environment of highly mobile capital and sensitive financial markets, a considerable premium will be placed on prompt and forceful action to contain an economic crisis and its potential contagion effects, whether or not those contagion effects are rational from the perspective of individual investors. For the IMF and its members, this means both that countries should be prepared to act promptly and that adequate mechanisms of financial support should be provided for strong adjustment programs.

Seventh, while it is not possible to establish with a high degree of confidence the consequences of a hypothetical failure to establish a strong adjustment program for Mexico, it may reasonably be concluded that the results for Mexico (and other countries) would have been substantially worse than the painful adjustment process that is presently under way. As a practical matter, without the assurance of substantial external support (almost \$40 billion of medium-term financing from the IMF and the U.S. Government), the Mexican Government might well have been forced to reschedule unilaterally its external and internal debt, most notably the tesobonos. Such an outcome would almost surely have led to a deeper and longer recession in Mexico, stronger and more persistent contagion effects for other emerging-market countries, and impairment of Mexico's medium-term economic growth prospects. By any reasonable standard of judgment, the benefits from avoiding these losses must be many times the economic cost of the financial support provided to Mexico.

Eighth, it has sometimes been suggested that the financial support provided to Mexico was a "bailout" that raises serious concerns about the "moral hazard" of inducing governments to pursue unduly risky policies. Such concerns, however, are exaggerated. Moral hazard would arise if the expectation of highly subsidized financial support induced governments to pursue otherwise unsound policies on the basis of the rational calculation that the generosity of potential support made such policies economically advantageous. As discussed above, however, the coinsurance mechanism limits such excessive risk taking, and it is clear that the economic pain of the present crisis in Mexico (even with large-scale financial support) is very substantial. No government would have rationally decided to risk the economic difficulties that currently beset Mexico because of the expectation of the financial support that Mexico has received in the current crisis.

Indeed, several countries, taking heed of the Mexican example, have been motivated to correct policy deficiencies.

Another concern is that external support for Mexico undermined market discipline by shielding holders of Mexican assets from the size of the loss. Market discipline is important because, in principle, it helps to guard broadly against the general risks of unwise policies, not only against the narrower problem of “moral hazard” behavior on the part of the borrower. The weakening of market discipline would not appear to be a relevant issue for most assets, which dropped substantially in value in the Mexican crisis, but it is a cause for concern in the case of the tesobonos, whose holders suffered no losses.

In the case of Mexico, the use of reserves and the infusion of external financial support enabled the authorities to meet the rolling panic as investors sought to cash in their maturing tesobonos. Does this imply that market discipline will in the future be seriously undermined? That would be the case if market participants were to draw the conclusion from this episode that foreign-currency-denominated liabilities of sovereign governments are always risk free. However, this would not be the logical conclusion to draw, as holders of such securities have suffered capital losses in the past, for instance, during the debt crisis in the 1980s. It is also clear from the general external analysis of this case that most market participants see it as unique, and they are therefore unlikely to conclude that it is the relevant precedent when they consider future investments.

Looking to the future, one may hope that financing requirements on the scale of those in the Mexican crisis will not arise and that, when difficulties do arise, adjustment programs will be sufficiently strong that defaults on sovereign debts can usually be avoided. However, investors should not be guaranteed against the risk of default. With such guarantees, creditors would not have incentives for caution, and it would probably also be difficult to impose adequate disincentives to imprudence by borrowers. Thus, notwithstanding the fact that IMF-supported programs may in many instances assist in avoiding sovereign defaults (when circumstances so warrant), the general conception of the role of the IMF—as a provider of *temporary* balance of payments assistance *under adequate safeguards*—does not and should not include the provision of protection against such outcomes. Moreover, in view of the substantial costs and potential adverse spillover effects from sovereign defaults, and of the limits on financial support to forestall even true liquidity crises, the international community

has reason to insist on prudent avoidance of policies that raise such default risks.

Implications for the Future Need for IMF Resources

The preceding discussion of the role of the IMF has broad implications for the likely future requirements for IMF resources to meet the needs of members to secure a more orderly correction of maladjustments in their balance of payments. In examining these implications, it is useful to consider separately the situations of industrial countries, economies in transition, and middle- and low-income developing countries. The need for IMF resources will also be considered from the perspective of avoiding or mitigating contagion and “monsoonal” effects (discussed below). Finally, the interaction between surveillance and the need for financing is discussed.

No attempt is made here to quantify the scale of increase in IMF quotas that might be needed in the relatively near term; that specific task requires separate analytical treatment. In addition, as noted in the introduction, no detailed consideration is given to the role of technical assistance to developing countries and transition economies. Technical assistance can in important ways provide support for the IMF’s policy advice by helping to address medium-term structural imbalances and to ensure that an adequate infrastructure is created. Thus, it is a necessary complement to the IMF’s surveillance and financing roles.

Potential Financing Needs of Individual Countries

Industrial countries have made no use of upper credit tranche IMF facilities for almost two decades. This situation appears likely to continue as long as industrial countries generally maintain unimpaired access to private capital flows as a means of financing their international payments imbalances. In addition, some industrial countries may be able to draw on regional support mechanisms in times of difficulty, as has happened in the past.²³ Nevertheless, it cannot be excluded that industrial countries

²³ Apart from its normal mechanisms for fiscal transfers to lower-income members, the European Community (now the European Union) has previously provided large-scale financial support to Italy and to Greece to assist in dealing with balance of payments difficulties. The European Commission has generally cooperated with the IMF in surveillance over member states, but the European Union has preferred to have its members rely on financing within the Community rather than approach the IMF.

may make more active use of their reserve tranches or that some industrial countries may need to make use of IMF credit. And, if industrial countries do need to make more active use of IMF resources, it will likely be in circumstances of general stress in the international monetary system. Accordingly, prudence dictates that the IMF should continue to maintain adequate liquidity to meet possible drawings by creditor countries and should keep in place (and possibly strengthen) the General Arrangements to Borrow (GAB)²⁴ as a mechanism to help meet the contingency of large-scale drawings, particularly by participants in the GAB.

Among the *transition economies*, there are important differences in their paths of economic development, and, correspondingly, there are likely to be significant differences in their need to make use of IMF resources. Some countries have already achieved a substantial degree of macroeconomic stabilization and structural reform. The need for these countries to use IMF resources to assist in dealing with balance of payments problems may well be less in the future than it was in the initial phase of their stabilization efforts. Some of these countries have already begun to establish favorable access to private capital markets, and one country has already completely repaid its borrowings from the IMF. Even these transition economies, however, have not yet generally established track records that would assure continued access to private sources of balance of payments financing in the event of economic difficulties. Accordingly, these countries may, from time to time, need to call on IMF resources to support their balance of payments adjustment efforts.

Transition economies that are less well advanced in their stabilization efforts and in their development of relations with creditors and donors seem likely on average to have a greater need for IMF resources in the years immediately ahead. These countries generally do not enjoy assured access to private capital flows, and the opportunities to catalyze sources of balance of payments financing other than IMF resources appear generally less favorable than for other countries. The time span during which many transition economies will require IMF support in conjunction with their macroeconomic stabilization efforts may turn out to be somewhat longer than has been the case with IMF-supported balance of

²⁴A facility that enables the IMF to borrow from the largest industrial countries (the Group of Ten countries) and associates.

payments adjustment programs, and the amount of cumulative financial support somewhat larger. After many years of operating as centrally planned economies, many transition economies face unusual difficulties in establishing the basic institutions and patterns of behavior that are essential for macroeconomic stability and for reasonable balance of payments viability. These special circumstances, however, should not override the fundamental principle that IMF financial support should be temporary.

For *middle-income developing countries*, this increased openness to international trade and international financial markets has been a very important positive development of recent years. Such increased openness contributes to the growth and welfare both of these countries and of their partners in trade and capital market transactions. However, as previously discussed, increased openness generally makes developing countries more vulnerable to disturbances affecting their balance of payments, including shifts in world capital market conditions and in investor sentiment toward emerging markets. Many developing countries appear to have responded to this increased vulnerability by holding higher levels of international reserves. However, as recent events have demonstrated, with the openness to international capital flows, even large reserve holdings can be rapidly exhausted in circumstances of balance of payments difficulties. Some higher-income developing countries have established track records of continued access to private capital markets, even during periods of general economic stress. This situation, however, cannot soon be expected to prevail for the bulk of developing countries. These countries will remain vulnerable to potential withdrawals of access to private financing precisely in those circumstances when other factors are likely to generate balance of payments difficulties. Accordingly, the IMF will continue to play an important role in providing balance of payments financing in support of members' adjustment programs.

The *poorest developing countries*, many of which have heavy debt burdens and face constraints on development assistance, also merit IMF support for strong adjustment programs to restore external viability. Given the magnitude of the structural imbalances in many of these countries, the adjustment period for correcting payments imbalances has typically been longer than for other developing countries. Moreover, concessional assistance to these countries is generally needed to help deal with balance of payments problems if their debt-servicing burdens are not to be made

worse. This situation implies use of the ESAF, the interest rate on which is only $\frac{1}{2}$ of 1 percent, rather than of the IMF's general resources. The nature of the problems facing these countries also implies that the IMF has an especially important role to play in providing technical assistance and in coordinating its efforts with other international financial institutions and regional development banks. Unlike the work of the World Bank Group, however, continued IMF involvement rests on the provision of temporary balance of payments financing and macroeconomic policy advice, rather than project lending and development assistance. Thus, the character of, and justification for, its involvement with the poorest developing countries are the same as for other member countries.

Contagion and Monsoonal Effects

The existence of contagion effects among developing countries makes it essential to promptly attend to emerging crises. Given the IMF's responsibilities in the international monetary system, it is natural that it have a central role both in seeking to avert crises through strengthened surveillance and in containing crises through conditional financing for countries that are experiencing balance of payments difficulties. By limiting potential contagion effects, forceful action at the early stage of crisis may well reduce the ultimate demands on IMF resources. Moreover, the need for IMF financing would presumably be short to medium term, provided the commitment of IMF resources in support of a strong adjustment program was successful in calming the crisis.

However, one of the key difficulties in assessing the potential needs for IMF financing is the apparent "monsoonal" character of the balance of payments difficulties faced by developing countries and their linkage to general disturbances in the world economy. The monsoonal effect means that balance of payments disturbances for major groups of developing countries tend to be bunched in time and correlated with general economic conditions in industrial countries. In the late 1970s, the economic recovery in the industrial countries, the surge in world commodity prices, the negative real interest rates in important industrial countries, and the easy availability of loans from international banks encouraged and facilitated large-scale borrowing by many developing countries. In the early 1980s, the deep recession in the industrial countries, the collapse of world commodity prices, the sharp increase in real interest rates, and the curtailment of lending by international banks all contributed to the debt crisis that si-

multaneously afflicted a significant number of developing countries and triggered an extended period of economic difficulties.

During the early 1990s, a qualitatively similar but less violent cycle of events has affected the economic and financial situation of many developing countries. However, there can be no guarantee that cyclical disturbances to the world economy will generally be as mild as has characterized the experience of the past few years—which is a significant outlier in comparison with the broader range of historical experience.²⁵ Accordingly, prudent planning should be guided by the possibility that future disturbances to the world economy may generate substantial simultaneous requirements from a large number of developing countries for use of IMF resources in support of balance of payments adjustment programs.

The example of Mexico suggests that the IMF can act quickly to provide financing in crisis situations by using existing facilities. The Mexican case is clearly exceptional in terms of the size and circumstances of support, relative to the scale of the IMF's resources. However, even with the likelihood that IMF financing in individual cases would be significantly smaller than in the case of Mexico, the possibility that a number of countries might need substantial balance of payments financing more or less simultaneously raises concerns about the adequacy of procedures and the scale of IMF resources. Consistent with this view, the Halifax Summit of the Group of Seven industrial countries (International Monetary Fund (1995d)) recommended in June 1995 that the IMF “establish a new standing procedure—[an] ‘Emergency Financing Mechanism’—that would provide faster access to IMF arrangements with strong conditionality and larger up-front disbursements in crisis situations.” A related question is the adequacy of IMF quotas and the availability and modalities for use of other financing sources (including an expanded GAB).

The Impact of Surveillance on the Need for IMF Financing

Whatever modalities might be developed to improve the timeliness and effectiveness of the IMF in providing financial support to members facing

²⁵Although the U.S. economy has experienced only a mild cyclical fluctuation (by historical standards) since the mid-1980s, some other industrial countries had quite deep recessions in the early 1990s. However, recessions in different industrial countries have been somewhat out of phase, and fluctuations in the combined activity of all industrial countries have been subdued. Also, in contrast with earlier experience, developing countries as a group maintained strong growth during the early 1990s, despite the sluggishness in the industrial countries.

balance of payments difficulties and undertaking suitable adjustment programs, IMF surveillance also clearly has an important role to play in limiting the likelihood and severity of difficulties calling for such support. At least three important dimensions to this surveillance responsibility influence the potential requirements for IMF financing.

First, as experience clearly demonstrates that large-scale financing needs arising simultaneously from a number of countries are most likely to occur in circumstances of general stress to the world economy, IMF surveillance should focus on the causes of such general economic stress and on the policies that will help to avoid it. In this key area, it is not primarily surveillance over the most likely users of IMF support, but rather over the countries of greatest systemic importance, that is most vital. The IMF is in a unique position to exercise multilateral surveillance over its members and to identify policy problems with potential regional and global impact. Thus, strengthening surveillance over the major industrial countries and the larger developing countries—although they may be unlikely to draw on IMF resources—can contribute to reduced overall financing needs.

Second, effective surveillance that provides early diagnosis and motivates timely adjustment can diminish the likelihood and severity of maladjustments in the balance of payments of IMF members. Accordingly, such surveillance should reduce both the likely scale of IMF financing that may be needed in individual cases and the risk of major crises with widespread contagion effects.

Third, surveillance that addresses vulnerabilities in countries' financial systems and associated financial policies (including debt management) can help to identify situations in which correcting balance of payments difficulties will amplify the adverse effects on an economy. For example, a restrictive monetary policy might endanger an already fragile banking system. Strengthening these systemic weaknesses should ease the task of correcting balance of payments maladjustments and reduce the scale of needed financing.

These recommendations are consistent with a number of recent initiatives that have been taken to strengthen the IMF's surveillance role. In particular, the Interim Committee at its April 1995 meeting agreed that IMF surveillance should be strengthened in a symmetrical manner, as follows:

- by the IMF's establishing a closer and more continuous policy dialogue with member countries, and producing frank and candid recommendations concerning appropriate policies;

- by regular and timely provision of economic data by all members to the IMF;
- by the timely publication of comprehensive data by members, in order to lend greater transparency to their policies;
- by the IMF's paying more attention to members' financing policies and the soundness of their financial sectors; and
- by the IMF's better focusing its surveillance in order to identify problems of potential systemic importance.

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