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Michael Mussa and Miguel Savastano

INTERNATIONAL MONETARY FUND

The IMF Approach to Economic Stabilization

1. Introduction

When the International Monetary Fund makes resources available to a member country to assist with adjustment of its balance of payments, it does so under an agreed arrangement (or *program*) specifying the conditions governing that support. These conditions, known as *IMF conditionality*, include both policies a member may need to carry out prior to approval of the arrangement (by the IMF's Executive Board) and disbursement of the initial tranche of support, as well as policy undertakings that must be met for disbursement of subsequent tranches over the life of the arrangement (usually one to three years).

Of necessity, the IMF's approach to economic stabilization has vital quantitative features. Projections must be made for key macroeconomic variables (national output, the price level, the current account balance, and so on), under the policies to be adopted under the program. Particular attention must be paid to the likely availability of external financing to assure that viability is restored to the country's external payments position. As a central element of conditionality, IMF programs contain quantitative "performance criteria" for key variables related to macroeconomic policies, which typically include ceilings for the fiscal deficit and the central bank's net domestic credit, and floors for net international reserves. These performance criteria, which must be agreed by the na-

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tional authorities and the IMF, are calculated using a flows-of-funds framework known as *financial programming*. Thus, in a general consideration of quantitative approaches to economic stabilization, the approach employed by the IMF merits particular scrutiny.

Over the years as well as recently, the IMF approach to economic stabilization and especially IMF conditionality have been the subject of much controversy. IMF programs are often characterized as unnecessarily damaging to growth, harmful to the poor, unduly inflexible and unresponsive to the differing needs and circumstances of member countries, and based on rigid application of outmoded and discredited economic principles. Some of these criticisms can and should be dismissed as factually inaccurate.¹ Others are based on the wishful thinking that there are easy policy choices or that there should be virtually unlimited concessional official financing (or grants) for countries with severe balance-of-payments problems—problems often due, at least partly, to the countries' own policy mistakes. Other criticisms clearly merit substantive consideration. In individual cases, while recognizing that undertaking adjustment to correct external imbalances is necessary and difficult and that there are limits to official support, the degree of tightening of macroeconomic policies and the balance between adjustment and financing are always debatable issues.

This paper is not primarily concerned with the latter type of criticisms, which can only be addressed on a case-by-case basis, but rather with two more specific critiques that relate to the quantitative character of the IMF approach to economic stabilization. First, because IMF-supported programs employ a similar quantitative framework across a very wide array of cases, there is the accusation that the IMF approach to stabilization is rigid and unresponsive to the particular situations of different members and to changing conditions over time. Second, because of the common practice of setting quantitative performance criteria for fiscal and monetary policy in virtually all IMF-supported programs, there is the indictment that the IMF approach is based on outmoded economic models and principles that fail to take account of the complexity and uncertainty

1. Chief among these are the claims that IMF-supported programs seldom pay attention to the effects of adjustment on the poor, that they all contemplate a fiscal retrenchment of approximately the same size and composition which relies heavily on regressive tax rate hikes and undue compression of public investment, and that they (almost) invariably require a large exchange-rate devaluation. The evidence contained in numerous studies, conducted inside and outside the Fund, shows that all those claims are unfounded. Some, but certainly not all, of the studies that provide (or refer to) that evidence include Bernstein and Boughton (1993), Burton and Gilman (1991), Gupta et al. (1998), Heller et al. (1988), International Monetary Fund (1997), IMF Assessment Project (1992), Johnson and Salop (1980), Killick (1995, Chapter 3), Nashashibi et al. (1992), and Schadler et al. (1993, 1995).

of key macroeconomic relationships. These accusations, we intend to show, largely reflect misconceptions about how the IMF approach operates in reality, misconceptions that are partly due to the way the IMF describes its programs.

To understand the IMF approach to economic stabilization and especially how it functions in its quantitative aspects, it is first essential to understand the *process* of an IMF-supported program, described in Section 2. A typical IMF-supported program is not set in stone at its inception, either to proceed subsequently in exact accord with the initial plan, or to be terminated because of some minor deviation. A program begins with an explicit request from a member. IMF staff then prepares a *blueprint* of a program that is used as the basis for negotiations. When agreement is reached, often after hard bargaining over key elements of the program, the arrangement has to be cleared by IMF management and then approved by the IMF Executive Board. Thereafter, disbursements proceed automatically if all the performance clauses are met as initially specified. This rarely happens all the way through an arrangement. Instead, if various conditions are not met, deviations may be accommodated with *waivers*, projections revised, and numerical targets changed. Those who participate in the process of IMF-supported programs, from both sides, do so with full awareness of their fundamentally iterative, open-loop character.

With an understanding of this process, the economics of IMF programs is addressed in Section 3. At their core, IMF-supported programs in countries facing actual or prospective balance of payments (the main focus of this paper) need to emphasize the country's actions in three areas: (1) securing sustainable external financing; (2) adopting demand-restraining measures consistent with available financing; and (3) proceeding with structural reforms to promote growth and adjustment in the medium and longer term. The country's more basic objectives of high output growth, alleviating poverty, and so forth are not explicitly among those core areas. This does not imply unconcern with these objectives, but rather the priority that a country experiencing severe extended payments difficulties must assign in the shorter term to ameliorating these difficulties and correcting the macroeconomic and structural imbalances at their root, in order to achieve more basic objectives in a sustainable manner over the longer term.

Beyond this, a good deal of misconception concerning the inflexibility and dogmatism ascribed to IMF programs probably derives from the superficial similarity that those programs exhibit in terms of the specification of quantitative performance criteria for fiscal and monetary policies. Once account is taken of the *process* of IMF-supported programs, how-

ever, it becomes apparent that there is a great deal of flexibility to respond both to differences in circumstances and to changes in conditions in individual cases. In fact, properly understood, the intellectual doctrine associated with IMF financial programming is primarily a recognition of basic accounting identities supplemented with a small number of behavioral relationships and forecasts of key economic variables, the latter two being subject to revision as new evidence becomes available. This is topped with a reasonable discretion in judging both the size of the required macroeconomic adjustment and the relative effectiveness of the policy instruments available to the authorities to undertake it.

Before turning to the main subject of the paper, five further points deserve clarification and emphasis. First, as an international organization, the International Monetary Fund must serve the interest of and be accountable to its membership, within an established set of policies, procedures, and practices that assure reasonable equality of treatment, with due recognition of differences in circumstance. In short, not everything goes. A degree of conservatism in Fund arrangements is not only inevitable, but also desirable.

Second, under its legal charter, the Articles of Agreement, IMF financial support to members is supposed to serve a particular purpose, as specified by Article I(iv):

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

Plausible assurance that a member's use of the Fund's resources will be temporary requires a reasonable expectation of a member's sufficiently early return to external-payments viability (so that the member will be able to repay the Fund). Indeed, the primary legal justification for conditionality, as provided in Article V of the Articles of Agreement, is to impose "adequate safeguards" that render that plausible assurance. No one may reasonably argue that the IMF should ignore this constraint in its conditionality. Moreover, the IMF has no authority to write down claims against members who fall into arrears on their obligations to the Fund; in the end, those members become outcasts of the international community with prolonged and dire consequences. In the application of conditionality, prudence to contain the risks of such situations is clearly essential.

Third, while we do not review them here, empirical studies that have evaluated the macroeconomic effects of IMF-supported programs have generally found that they do best what they are primarily designed to

do, namely, improve the current-account balance and the overall balance of payments of countries experiencing external payments difficulties. And the most careful studies, which attempt to correct for a variety of econometric difficulties, confirm that this association is something more than the usual tendency for things to get better when they are very bad to start with.² Other macroeconomic effects associated with IMF-supported programs—on output growth, on inflation, and so forth—are more difficult to pin down, especially when proper account is taken of all the other factors that influence the outcome of a program. If anything, the results tend to show negative initial effects on output, while the effects on inflation are often not statistically significant.

Fourth, for exchange-rate policy (not discussed in detail in the rest of the paper), it is *not* the case that the IMF imposes its views on all members, or that those views (almost) always entail a devaluation and abandonment of currency pegs for “more flexible” regimes. True, discussions about exchange-rate policy and, in particular, the dismantling of exchange restrictions (an area that falls under the direct purview of the IMF as stated in Article VIII of the Articles of Agreement) are important and at times central aspects of program negotiations. Moreover, in some cases the reform of the foreign exchange system or an exchange-rate devaluation become preconditions (“prior actions”) for Board approval of an IMF arrangement. But this is hardly the norm. As in other areas, negotiations over exchange-rate policy give considerable weight to the views and desires of the member country. The many arrangements approved for countries in the CFA franc zone in the years prior to the January 1994 devaluation of the CFA franc (a period when IMF staff voiced repeatedly, though subtly, its concerns about the harmful effects of maintaining the old parity) attest to this fact. So does the evidence from a large number of Fund arrangements approved in the 1980s that is reported in an external evaluation of IMF conditionality and that led the authors to conclude, with some surprise, that: “perhaps the strongest tendency of IMF conditionality was to leave existing exchange-rate policies intact” (IMF Assessment Project, 1992, p. 39).³ That substantial deference is given to national authorities in

2. The empirical literature on the macroeconomic effects of IMF-supported programs is quite extensive. However, the question is difficult to address and the methodologies employed (particularly the earlier ones) have serious shortcomings, especially with the so-called “problem of the counterfactual”—i.e., ascertaining what would have been different in the absence of an IMF program—see Goldstein and Montiel (1986), Khan (1990), and Dicks-Mireaux et al. (1995). See Haque and Khan (1998) for a recent survey of this literature.
3. In the 1990s, views of country authorities have continued to play a key role in shaping exchange-rate policy in IMF-supported programs. For example, Argentina made its own

their exchange-rate and other economic policies is a reflection both of the right of members to determine their own policies, and of the experience showing that IMF programs tend to perform best when their associated policies are most closely “owned” by the national authorities in charge of implementing them.

Fifth, substantial deference to national authorities, however, still means that Fund arrangements impose tangible constraints on economic policies. This implies that there is an unavoidable political-economy component to IMF conditionality. National authorities may modify policies to comply with IMF conditionality when it would be difficult to find domestic political consensus in the absence of external pressure. On behalf of the international community, the IMF attaches conditions that the ultimate providers of IMF resources might find difficult to request and enforce on a bilateral basis. Thus, the IMF and its conditionality become a “scapegoat” on both sides of the bargain (see James, 1998). That such a scapegoat can be useful in securing necessary or desirable, but unpopular, policy adjustments is clear. That the IMF might actually be counterproductive because of the political consequences of its conditionality and the hostility associated with its scapegoat function is also at least a debatable issue (see Shultz, 1995, and Feldstein, 1998). We will not attempt to resolve this debate. We note, nonetheless, that the IMF is the creature of its members and is accountable and responsive to them; the IMF cannot, in broad terms and over a sustained period, pursue policies which the members do not generally approve.

2. *The Process behind IMF-Supported Programs*

IMF programs are, in practice, quite flexible. An IMF-supported program is *not* the initial agreement negotiated with a member. A Fund-supported program is a process. It evolves along a multiplicity of poten-

decision to adopt a currency board in early 1991, and received support from an IMF arrangement only in July of that year. When the peg came under intense pressure in the tequila crisis of 1995, a new program supported by the IMF helped Argentina sustain its decision to preserve its currency board. In mid-December 1994, Mexico devalued the peso and then moved to a floating rate before reaching any agreement with the IMF. Also outside any Fund arrangement, Brazil adopted the Real Plan in mid-1994 and defended it against intense pressures in the tequila crisis and from the Asian crisis beginning in October 1997. When Brazil requested, negotiated, and agreed on a program supported by the IMF in November 1998, the decision to continue with the Real Plan was fundamentally a decision of the Brazilian authorities. As market pressures intensified in mid-January 1999, the decision to devalue the real and subsequently to let it float was again a decision of the Brazilian authorities, although with knowledge that the IMF and the international community probably would not continue to support an exchange-rate policy that had become unviable.

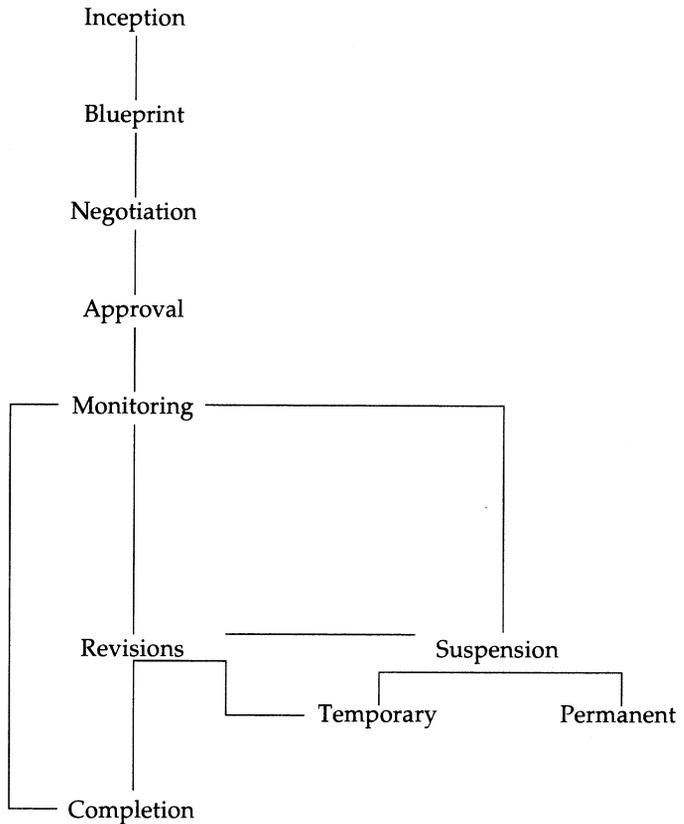
tial pathways, driven by exogenous economic events, by policy actions of the national authorities, and by the responses of the IMF staff, management, and Executive Board, within the general framework of the Fund's policies governing assistance to members. Those who work on IMF programs, inside the Fund or with the national authorities, generally understand the iterative and open-loop nature of the process.

The process involves two main parties: a country facing external payments problems rooted in macroeconomic and/or structural imbalances, and the IMF with a mandate to offer financial and technical assistance to members that undertake economic adjustment. From the country's side, the process is delimited by the authorities' capacity and willingness to implement the measures needed to resolve their external payments problems. From the IMF's side, the process is governed by policies and procedures that regulate the access to, and uses of, IMF financing—i.e., by IMF conditionality. These policies and procedures have evolved over five and a half decades from a few general guidelines to a more complex body that reflects the major changes in the international monetary system during this period and the effects of those changes on an expanding and more heterogeneous IMF membership—see Polak (1991) and Guitián (1995). Notwithstanding its increased complexity (reflected also in a growing number of facilities tailored to the needs of particular groups of countries), the core process underlying IMF-supported programs has proved to be remarkably resilient in its main features. Indeed, with relatively minor differences across the various types of facilities, that process comprises six broadly defined phases: inception, blueprint, negotiation, approval, monitoring, and completion (Figure 1).

2.1 INCEPTION

IMF programs get underway when the authorities of a member request financial assistance from the IMF. The request need not be written; normally an oral communication from the authorities to IMF staff and/or management suffices. Prior discussions with staff or management sometimes precede a request, but the decision to request support rests with the country's authorities. Indeed, in the regular process of IMF surveillance, staff or management may impress upon the authorities the need to adopt measures to redress actual or potential external or other macroeconomic imbalances, but it is up to the country authorities whether and when to take up that advice (see Mussa, 1997). Often, authorities delay required adjustment, and domestic and external imbalances worsen significantly before a request for assistance from the IMF (see Santaella, 1996, and Knight and Santaella, 1997). As a consequence, IMF programs

Figure 1 PHASES OF IMF PROGRAMS



often start with crisis or near-crisis conditions in the balance of payments, necessitating rapid policy responses to normalize external payments and correct underlying macroeconomic imbalances.

2.2 BLUEPRINT

When a request for IMF assistance is made, IMF staff from the area department responsible for relations with the member prepare a blueprint of an adjustment program. The blueprint takes account of key characteristics of the country—e.g., membership in a currency union, size of the public sector, depth and soundness of the financial system, access to international capital markets—features that the IMF staff knows well from its regular surveillance and preprogram discussions with the authorities. The blueprint also contains a preliminary assess-

ment of the proximate and underlying sources of the aggregate imbalances that have caused the deterioration of the country's balance of payments, gauges the size of the external disequilibria, evaluates the authorities' response to the unfolding crisis, and outlines the central elements of an adjustment program that could warrant financial support from the IMF. The staff then makes proposals regarding the type of financial arrangement, the size of the IMF loan, and the time profile of the disbursements that appear compatible with the country's external financing needs (the *access* and *phasing* under the arrangement), and the key policy measures that it would be advisable to have in place before providing any IMF financing (*prior actions*).⁴

A briefing paper summarizing the blueprint and containing a first attempt at gauging its quantitative implications in terms of a simple flow-of-funds accounting framework of key macroeconomic relationships is then prepared and circulated for comments to other (non-area) departments of the IMF. The flow-of-funds framework uses the latest annual estimates for the country's main macroeconomic variables and preliminary projections for at least one year ahead that incorporate the expected effects of the proposed adjustment measures. Consistent with the primary (and often pressing) goal of restoring balance-of-payments viability, the projections emphasize the expected evolution of international reserves, the current account, domestic credit growth, and the public-sector balance during the adjustment period; the rates of inflation and of output growth, the ultimate objectives of all adjustment programs, play a central role in the short-run projection exercise but are not regarded as formal targets of the prospective arrangement. A revised blueprint incorporating comments from departments is then submitted to IMF management for clearance. Management evaluates the blueprint and decides on the prior actions that should be sought from the authorities, as well as on the access and phasing proposals made by the staff.

2.3 NEGOTIATION

After the briefing paper is cleared by management, a mission visits the member to start negotiations (though sometimes negotiations may be held at Fund headquarters or in some other location). Normally, the mission's first task is to revise its estimates of external disequilibrium and of underlying macroeconomic imbalances and assess whether the adjustment effort envisaged in the blueprint remains broadly adequate. Even if revisions are not substantial, which they often are, the mission makes it

4. For a description of the various types of Fund arrangements and facilities and of the terms and conditions of IMF lending (as well as of the peculiar Fund terminology) see International Monetary Fund (1998).

clear to the authorities that negotiations will be conducted *ad referendum*, and that no agreement is final until the program is cleared by IMF management and approved by the IMF's Executive Board. In general, when agreement is reached, it represents a compromise between the blueprint in the staff's briefing paper and the initial negotiating position of the country's authorities.

Negotiations over some key aspects of the program can be contentious, though rarely openly confrontational. Disagreements about goals are not as common as disagreements about the policies necessary to attain those goals. Typically, country authorities tend to advocate less tightening of fiscal and monetary policies and a slower pace of structural reforms than those suggested by the staff, but there are cases where it is the staff who stands for an easing of the policy stance or some rebalancing of the policy mix. When the staff requests that certain actions—e.g., the dismantling of exchange restrictions, the lifting of interest-rate ceilings—be taken before Board approval of the program and disbursement of the first tranche of the IMF loan, the scope for disagreements and dispute tends to increase.

Program negotiations often take place over the course of several missions. If a serious impasse is reached, program discussions are put on hold. Typically, when negotiations resume (and they normally do), the country's situation has worsened markedly, requiring revisions to the staff's blueprint. Once the authorities and the staff reach agreement on the policies needed to underpin the adjustment effort, they negotiate the more technical features of the Fund arrangement. Those features comprise the mode and frequency of monitoring performance under the arrangement (i.e., macroeconomic and structural performance criteria, structural benchmarks, midterm reviews) and the relation between those performance clauses and the provision of IMF financing. Discussion of these features usually involves updates of the basic macroeconomic framework in the IMF staff's blueprint. This iterative procedure, the hallmark of financial programming, enables the staff and the authorities to assess in simple quantitative terms the interactions between the policy measures agreed on and the main targets of the adjustment program.⁵ After reaching agreement on numerical values for the main objectives of the program, normally for at least one year ahead, authorities and staff negotiate numerical values for the quarterly path of a small set of macroeconomic variables used to monitor the authorities' adjustment effort. Two such *intermediate variables* on which almost all IMF programs

5. See Robichek (1985) and Polak (1997) for discussions of financial programming as practiced by IMF staff. See also Section 3.

focus are the public-sector deficit and creation of domestic credit by the central bank. Typically, the behavior of those variables during the first 6–12 months of the arrangement become formal performance criteria, while the numerical values for the outer dates are *indicative targets* subject to revision in the program's midterm reviews.

The outcome of the negotiations is summarized in a *letter of intent*. The letter and its attachments spell out the main objectives of the program, the policy actions and reforms that the authorities have taken and intend to take under the arrangement (especially those for the first year), and the modality and frequency of the performance clauses and monitoring techniques agreed on with the staff. The letter of intent signed by the country authorities is their formal request for IMF financing and marks the end of the (initial) negotiation phase.

2.4 APPROVAL

Back at headquarters, the mission team prepares a *staff report* containing an account of discussions with the authorities and of the policy understandings reached with them. The report is accompanied by a detailed macroeconomic framework, which typically includes a full set of projections of the country's fiscal, monetary, and balance-of-payments accounts covering at least the first full year under the IMF arrangement, as well as a medium-term scenario showing the progress toward external viability envisaged over a five-year period. The report also includes an appraisal by the staff of the main risks and uncertainties (of both external and domestic nature) surrounding the proposed adjustment program, and a summary of the technical features of the financial arrangement (i.e., duration, access and phasing of the IMF loan, and the performance clauses ascribed to the various tranches).

The staff report and the letter of intent are then circulated for comment to several non-area departments, which check that the proposed program remains broadly consistent with the blueprint in terms of the adjustment effort, the attainability of the program's primary goals, and the application of IMF conditionality. Departments also offer their views about the risks of the proposed arrangement—views which may not coincide fully with those of the originating area department. A revised draft of the staff report is then submitted to management for clearance. Management makes the final decision on the size and phasing of the IMF loan but generally makes no changes to the projections and other technical features of the arrangement or to the policy understandings agreed by the mission. Increasingly, especially in important cases, management's view and guidance are provided on a continuous basis throughout the negotiating process.

When cleared by management, the staff report and letter of intent are distributed to the IMF Executive Board, and a date is set for Board discussion of the proposed arrangement, with the actual meeting sometimes made contingent on implementation of prior actions by the authorities. Management must recommend approval of all IMF programs as a requirement of consideration by the Executive Board. Although there often are expressions of concern or even occasional abstentions, management's recommendations have invariably been accepted by the IMF Board. However, the views of Executive Directors and of the national authorities they represent have substantial importance. The Board meeting is the occasion when Executive Directors, representing the 182 member countries, *could* reject the proposed program, and that fact provides an incentive for IMF management and staff to take to the Board only programs that they expect will command its support. Board meetings signal the international community's endorsement of the adjustment program. Executive Directors use Board meetings to indicate to IMF management and staff, and to the representatives of the borrowing country, the aspects of the adjustment strategy they consider essential for the attainment of the program's goals—and therefore for the continuation of their support for the arrangement. Through this process the Executive Board exerts, over time, considerable influence on IMF conditionality.

Table 1 reports the number of IMF arrangements approved by the Executive Board in five year intervals, and by type of facility, from 1973 to 1997, as well as the number of countries that received IMF financing during that period, broken down by region. The figures in the table can be interpreted in many ways. However, the sheer fact that in the last twenty-five years the Fund has approved a total of 615 arrangements for 126 (developing) countries that have confronted all types of balance-of-payments difficulties is *prima facie* evidence that the process leading to the approval of IMF programs possesses enough flexibility to respond to the different and evolving needs of a heterogenous membership. Board approval leads to the release of the first tranche of the IMF loan. What happens thereafter, and in particular what determines the disbursement of remaining tranches of an IMF loan, is decided in the following (fifth) phase of the process.

2.5 MONITORING

Monitoring is the longest and probably most important phase of IMF-supported programs, covering a one- to three-year period when the bulk of the IMF loan is usually scheduled to be disbursed. Monitoring involves much more than periodically checking compliance with the numerical and structural performance criteria and benchmarks of the arrangement;

it entails a *continuous* assessment by the staff of developments in the borrowing country and of their implications for the attainment of the main goals of the program. Monitoring requires keeping track of the timely implementation of the policy measures agreed by the authorities and of the behavior of variables beyond the authorities' control that impinge on the macroeconomic projections on which the arrangement was based.

Monitoring acquires a formal dimension at the so-called *test dates* at which performance criteria need to be met in order for tranches of the IMF loan to be disbursed. Test dates are typically set at quarterly intervals (though recently some Fund arrangements have used monthly test dates) and can be of two types: those where performance is assessed in an essentially backward-looking manner, mainly in terms of numerical performance criteria, and those which, in addition, require the satisfactory completion of a program review that assesses the forward-looking potential for the program to meet its primary objectives. Both monitoring techniques share "the positive function of ensuring a member's access to Fund resources when the conditions are met, and the negative function of interrupting access when the country has failed to meet them" (Polak, 1991, p. 14).

Performance of a country under an IMF-supported program can follow four possible tracks (Figure 1): (1) The country may comply with all performance clauses established at the beginning of the arrangement and with relatively minor updates of the clauses made in program review(s) and hence be eligible to receive all the disbursements from the IMF loan according to the original schedule. (2) The country may be unable to comply with one or more performance clauses at some point during the arrangement, but a waiver of the unmet criterion may be granted or a modification in the program may be rapidly agreed on which allows the arrangement and its disbursements to proceed without interruption. (3) Substantial deviations from performance clauses may lead to a situation where it is not possible to agree rapidly on a modification of the program and on policy actions to bring the program back on (modified) track, thereby prompting the interruption of disbursements from the IMF. In many of these cases, following a new round of negotiations, a revised program can be agreed on and disbursements can be resumed; sometimes, the amounts of disbursements, their phasing, and the length of the arrangement are modified. (4) The country may be unable to comply with one or more performance clauses at some point during the arrangement, and in the ensuing negotiations the staff and the authorities may not reach agreement on a revised program; the arrangement then becomes inoperative and disbursements cease.

Programs that comply fully with all the initial performance clauses are

Table 1 IMF ARRANGEMENTS 1973-1997^a

	1973-77	1978-82	1983-87	1988-92	1993-97	Total	No. of countries
Number of arrangements approved during the period (cumulative flows)							
Total	85	124	139	126	141	615	
Standby	82	99	110	75	75	441	
Extended Fund facility	3	25	7	10	18	63	
SAF/ESAF			22	41	48	111	
Number of arrangements, by type of country							
Total	85	124	139	126	141	615	126
Industrial countries	6	2	1			9	5
Developing countries, by region:							
Africa	19	60	84	55	46	264	45
Asia	25	20	16	14	17	92	20
Central and eastern Europe	2	5	3	17	33	60	17
Central Asia and other	4	5	3	1	16	17	8
Middle East and Europe				3	8	23	6
Western hemisphere	29	32	32	36	21	150	25
Amounts committed under arrangements (SDR billion) (cumulative flows)							
Total	9.1	29.5	29.2	35.5	73.4	176.6	
Stand-By	8.3	13.8	18.8	15.8	53.9	111.1	
Extended Fund facility	0.8	15.7	9.2	15.4	13.2	54.2	
SAF/ESAF			1.2	4.3	6.3	11.8	

Countries with nine or more Fund arrangements approved between 1973 and 1997, by region

Country	No. of programs	No. of programs
Africa:		
Kenya	12	
Senegal	12	
Madagascar	11	
Congo, Dem. Rep. of	10	
Mauritania	10	
Togo	10	
Liberia	9	
Malawi	9	
Morocco	9	
Uganda	9	
Zambia	9	
Asia:		
Pakistan		13
Philippines		12
Korea		9
Western Hemisphere:		
Panama		13
Haiti		12
Jamaica		12
Uruguay		12
Costa Rica		10
Guyana		10
Argentina		9

Source: IMF, *Transactions of the Fund* (1998).

^aIncludes standby arrangements, EFF arrangements, and arrangements under the SAF and ESAF. Excludes STF arrangements and drawings under the first credit tranche and the CCFE.

not the norm. The majority of IMF arrangements follow one of the three other tracks. This is not surprising, when one considers the assumptions about the behavior of external and domestic variables and about the timeliness of policy implementation that need to be made when setting numerical values for the intermediate variables chosen as performance criteria and agreeing on the pace of structural reforms. Indeed, recognizing the need to give Fund arrangements sufficient flexibility to withstand departures from their initial assumptions, IMF conditionality became gradually equipped with a number of technical provisions—e.g., adjusters, waivers, rephrasing, modifications, extensions—that facilitated making midcourse revisions to the arrangements approved by the Executive Board (see Polak, 1991, and International Monetary Fund, 1998).

Typically, revisions of IMF programs are triggered by the authorities' (actual or imminent) failure to comply with one or more performance clauses. When large deviations are detected or foreseen, a mission travels to the borrowing country to negotiate possible revisions to the arrangement, based on an updated blueprint that outlines the conditions that would justify maintaining or resuming lending from the IMF. Key issues are whether deviations were caused primarily by slippages in the implementation of agreed policies or by factors beyond the authorities' control, and what remedial policy measures are needed to correct the situation. If the staff and the authorities agree on a revised program, the staff (with management approval) presents a report to the Executive Board indicating the revisions to the arrangement. The country becomes eligible to resume access to the IMF loan immediately after the Board's approval of the report. If the staff and the authorities are unable to reach agreement, however, disbursements from the IMF loan remain suspended and the arrangement stays permanently off track, until it expires.

The data in Table 2 show that more than a third of all Fund arrangements approved between 1973 and 1997 ended with disbursements of less than half of the initially agreed support. In a few of these cases, the program was so successful (or conditions improved so rapidly) that the member needed to use only a fraction of the committed IMF financing. Mainly, however, these were cases where the program went off track because policies deviated significantly from those agreed with the IMF and subsequent negotiations failed to reach agreement on a modified program. Cases where 50 to 75% of the initially agreed support was disbursed (17.6% of all IMF arrangements) are more of a mixed bag: some highly successful, some canceled programs that were followed rapidly by new arrangements, and some that went permanently off track. Cases where 75% or more of the IMF loan was disbursed (45.5% of all arrangements) are generally those where the authorities adhered

Table 2 FRACTION OF IMF LOAN ACTUALLY DISBURSED UNDER EACH ARRANGEMENT, DISTRIBUTION BY QUANTILES
(x = fraction of total IMF loan disbursed under each arrangement)^a

	Percent of Total Arrangements					Fully disbursed ($x=1.0$)	Number of arrangements
	$x < 0.25$	$0.25 \leq x < 0.50$	$0.50 \leq x < 0.75$	$0.75 \leq x < 1.0$			
All arrangements ^b							
1973-1977	36.5	7.1	5.9	5.9	44.7	85	
1978-1982	19.4	16.1	10.5	12.9	41.1	124	
1983-1987	12.9	15.8	19.4	7.9	43.9	139	
1988-1992	17.5	15.1	20.6	14.3	32.5	126	
1993-1997 ^c	27.0	19.1	26.2	11.3	16.3	141	
Full period (1973-1997) ^c	21.6	15.3	17.6	10.7	34.8	615	
of which:							
Stand by ^c	23.1	13.4	15.0	9.5	39.0	441	
EFF ^c	33.3	22.2	19.0	15.9	9.5	63	
SAF/ESAF ^c	9.0	18.9	27.0	12.6	32.4	111	

Source: IMF, *Transactions of the Fund* (1998).

^aCalculated as the ratio of the total purchases made to the full amount of IMF resources committed under each arrangement.

^bIncludes standby arrangements, EFF arrangements, and arrangements under the SAF and ESAF. Excludes STF arrangements, and drawings under the first credit tranche and the CCFE.

^cThe distribution of the ratio x for the 1993-1997 period is biased (downward) by the inclusion of arrangements with expiration date posterior to 1997. The bias is also present in the distributions reported for the full period (1973-1997).

more closely to the policies they agreed to over the course of the arrangement. Even among these cases, however, rare were the instances where every performance criterion and numerical objective of the program was met as originally envisaged. The "success" of IMF programs in these cases signifies that it was possible to sustain an adjustment effort acceptable to both the countries' authorities and the IMF during the program period, not that programs attained the numerical targets of the original arrangement.

2.6 COMPLETION

Formally, IMF programs are completed when the borrowing country becomes eligible for the last tranche from the IMF loan. Because of revisions during the course of the program, that date may be later than the original expiration date of the arrangement and the disbursement may add to a total that can be higher or lower than the amount contemplated in the original arrangement. Table 3 provides a general indication of the relative frequency of these outcomes. For the total of all 615 Fund arrangements, 73 were extended beyond their original durations. By and large, these were cases where substantial progress was made toward the main program objectives but more time was allowed for the adjustment effort. The 70 arrangements that were canceled early but were followed promptly by a successor arrangement are most likely cases where weak policy implementation or large unforeseen shocks rendered unattainable the original program objectives, but where it was possible to reach understandings fairly rapidly on a new adjustment blueprint. The 44 arrangements that were canceled before their expiration date and were not soon followed by a new arrangement, represent mainly a subset of the programs that went permanently off track during the monitoring phase.

Completion of an IMF arrangement does not usually imply that the numerical targets for the main economic objectives of the country's program originally approved by the Executive Board were met. Completion does not even ensure that the country met the revised numerical targets agreed on at the last program review. Completion of an IMF-supported program does imply that, in the IMF's view, the country made substantial and satisfactory progress toward the primary objectives of its adjustment program (especially toward external viability), and that the policies of the authorities were broadly in line with the (often revised) understandings reached with the IMF during the life of the arrangement.

The relationship between the IMF and the borrowing country following completion of a Fund arrangement generally depends on the progress in eliminating the macroeconomic and structural imbalances that gave rise to the expiring IMF program and on the external environment

Table 3 DURATION OF IMF ARRANGEMENTS

	Number of arrangements	Original duration (average, in months)	Program extensions		Early cancellations		
			Number of extensions	Extension length (average, in months)	Number of early cancellations	Length of cancelled segment (average, in months)	o.w.: followed by successor arrangement (no. of arrangements) ^a
By type of arrangement (1973-1997):							
Standby	441	13.8	33	5.3	63	2.2	43
Extended Fund facility	63	29.3	7	16.2	28	9.7	16
SAF	38	30.7	2	9.3	10	9.9	10
ESAF	73	40.0	31	6.5	13	5.2	1
Total	615		73		114		70
By subperiod (all arrangements):							
1973-77	85	12.4	—	—	7	3.9	7
1978-82	124	15.2	—	—	36	1.0	26
1983-87	139	17.8	10	1.0	28	1.9	13
1988-92	126	24.7	38	13.2	14	8.1	13
1993-97	141	24.6	25	9.7	29	0.8	11

Source: IMF, *Transactions of the Fund* (1998).^aSuccessor arrangement approved up to one month following the cancellation of a prior arrangement.

at the time of completion. When progress has been substantial and the external environment is not seen as a threat, monitoring of the country's performance usually reverts to the preprogram mode—i.e., to IMF surveillance. When conditions are less favorable the country authorities may request a successor arrangement to help consolidate the (partial) gains from the previous program. Because of the recurrent nature of the shocks affecting many members and the gravity of their structural imbalances, such requests are not uncommon (see Table 1, lower panel). Typically, a successor arrangement will have a medium-term orientation and a goal of deepening structural reforms initiated during the previous program. The authorities' request for a successor arrangement sets in motion a multistaged process very similar to that followed in their prior request for IMF support.

3. *The Economics of IMF-Supported Programs*

3.1 CORE COMPONENTS

Despite differences imparted to IMF programs by country-specific characteristics, blueprints of adjustment prepared by Fund staff contain important common elements. These elements are closely linked to the IMF mandate established in the Articles of Agreement, and range from eligibility criteria for securing access to IMF resources—i.e., a situation of actual or potential balance-of-payments need—to priority in the programs for orderly restoration of external viability (see Guitián, 1995). In their practical application over time, these common elements have produced a three-pronged approach for confronting external payments problems: (1) securing sustainable external financing; (2) adoption of demand-restraining measures—especially in the early stages of a program; and (3) implementation of structural reforms (see Schadler et al., 1995). The relative importance of those components depends crucially on the specific circumstances of the member country. The blueprint for a country whose international reserves are depleted as a result of unsustainable fiscal imbalances will place considerably more (initial) emphasis on demand-restraining measures than that for a country whose balance of payments was adversely affected by external shocks. Likewise, the blueprints for countries with less pressing balance-of-payments problems often place more emphasis on structural measures aimed at hastening the pace of output growth.

Care should be taken, however, not to exaggerate the degree of substitutability among the three core components of the approach. In the midst of an external payments crisis the scope for, say, relying more heavily on additional external financing than on restraint of aggregate demand, or

for further delaying structural reforms likely to have a bearing on the success of the stabilization program, is usually quite limited. Hence, it is often more appropriate to regard the three components of the general IMF approach to economic stabilization as complements, especially in the early stages of a program. As noted, once the crisis has been contained and confidence restored, external financing constraints often become less pressing and the macroeconomic policy stance can become more supportive of domestic demand and of structural reforms. It should be stressed, however, that the role of the IMF is to contribute to design the adjustment strategy, help the country secure external financing, and monitor the progress in overcoming the external crisis, but that it is up to the country's authorities to implement in a timely and credible manner the policy measures contemplated in the strategy.

The availability of external financing, the first component of the strategy, determines the magnitude and pace of the necessary adjustment effort. The amount and terms of the new foreign borrowing obtainable by a country experiencing balance-of-payments problems are largely predetermined—and typically scarce and onerous—at the outset of a program. Hence, in practice, there is little scope for treating the prospective external financing from official and private lenders as a “slack variable” when preparing the blueprint of the adjustment program, as has been suggested by some IMF critics (e.g., Killick, 1995, and Harrigan, 1996). Financial support from the Fund, of course, can help reduce the country's financing gap for a limited period. However, limits on the Fund's resources—limits which the membership establishes as reasonable and prudent in view of the IMF's mandate and which place upper bounds on IMF support to individual countries⁶—significantly constrain the extent to which the Fund can substitute for other sources of financing. Indeed, in the large financial support packages arranged for Mexico in 1995 and for Thailand, Indonesia, and Korea in 1997, the IMF provided less than half the announced funding, with the rest being promised by the World Bank, the regional development banks, and bilateral sources. And notwithstanding these exceptionally large packages, the four countries nonetheless had to make large and rapid adjustments to meet the pressures of their external financing constraint.

Precisely because the external financing constraint is often severe, Fund-supported programs aim at restoring the country's access to a sustainable flow of foreign financing as rapidly as possible. Gauging that sustainable flow, as well as the time it may take to secure it, is a

6. For a discussion of the access limits applicable to the various IMF facilities and of the criteria regulating access by individual member countries see International Monetary Fund (1998).

matter of judgement. General conditions in international financial markets and those specific to the program country (the level, composition, and maturity of its external liabilities, its debt service profile, and its access to private capital markets) play an important role. Of necessity, however, the estimates of net external financing incorporated in the (initial) adjustment program are tentative, are subject to considerable uncertainty, and undergo significant revisions over the course of an arrangement. That uncertainty is much higher in countries where the lion's share of foreign borrowing is undertaken by the private sector (including private banks), a situation that has become increasingly common in the 1990s.

The main guidelines of the approach followed by IMF staff when gauging the prospective external financing date back several decades, but have been applied more systematically and uniformly since the debt crisis of the 1980s (see Finch, 1989). Those guidelines require that the country not show an *ex ante* external financing gap, that it remain current in its debt service commitments, and (with some exceptions in special circumstances) that it eliminate external debt arrears it may have accumulated prior to the program approval. In practice, the guidelines require the staff to produce "reasonable" estimates of net financing flows from official and private sources, and to assume a coordinating role with the country's creditors in various fora—i.e., the Paris Club, the London Club, and special consultative groups of donors. This "concerted lending approach"—which required several modifications to the Fund's guidelines on foreign borrowing, notably the policy of *financing assurances*⁷—proved instrumental in dealing with the debt crisis of the 1980s, and continues to be useful for countries with limited access to private capital markets. However, the concerted approach has proved less useful for dealing with the complex external debt problems posed by a more diversified set of lenders and borrowers in countries with relatively unrestricted access to global capital markets—for example, for producing "reasonable" forecasts of redemption rates of domestic bonds and equities or of rollover rates of foreign credit lines to private-sector borrowers. Recent experience with these problems has generated calls for more effective ways of involving the private sector in forestalling and ameliorating financial crises, but no comprehensive solution, such as a world bankruptcy court, seems likely in the near future.

7. The policy of financing assurances reduced the Fund programs' reliance on judgmental estimates of voluntary financing from foreign creditors—which often failed to materialize—and made the securing of a critical mass of commitments of external assistance from the country's creditors a prerequisite for an IMF arrangement (see Polak, 1991, and Guitián, 1995).

Demand-restraining measures, the second component of the approach, comprise the macroeconomic policies that seek to restore and preserve viable equilibrium between aggregate expenditure and aggregate income in the program country. These measures are probably the best-known ingredient of IMF-supported programs, and are typically regarded as the cornerstone of the "traditional IMF package."⁸ The measures normally contemplate a tightening of fiscal and monetary policies by an amount deemed necessary to bring aggregate demand in line with the staff's estimates of prospective output and available external financing and, hence, with a sustainable current account. Sometimes, though not as often as is commonly thought, the measures also contemplate changes in the (level or rate of crawl of the) nominal exchange rate as a means to facilitate external adjustment.

Conceptually, ascribing to fiscal and monetary policies the key task of restoring and preserving viable external balance can be readily understood in terms of a large class of theoretical models based on, or consistent with, the *absorption approach*—e.g., the dependent-economy model, the Mundell–Fleming model, and the monetary approach to the balance of payments.⁹ In this regard, the macroeconomic policies normally recommended by the IMF are not significantly different from what most economists would recommend to countries experiencing severe balance-of-payments problems, allowing for differences over the specific advice in particular situations.¹⁰ This is especially so when a large fiscal imbalance and/or excessively rapid credit expansion are at the heart of a country's balance-of-payments difficulties, and when a large exchange-rate devaluation or the adoption of an unfettered floating-rate regime are not seen as desirable means for adjusting the external payments position. In contrast, as in the recent Asian crisis, when an unsustainable fiscal position is not the main underlying problem, but a loss of confidence combined with domestic financial weaknesses induces sudden reversals of

8. This characterization can be found in numerous studies and accounts of IMF programs. See, for example, Edwards (1989), Killick (1995), and Feldstein (1998).
9. The absorption approach is discussed in (almost) every textbook of international economics. The interested reader is referred to the seminal article by Alexander (1952) and to the insightful (and complementary) presentations of the approach in Kenen (1985), International Monetary Fund (1987), Buitier (1990), and Cooper (1992).
10. In this connection, the well-known (and often cited) conclusion reached by Richard Cooper at a 1982 conference on IMF conditionality, namely, that any five people chosen randomly from the diverse group of participants at the conference would, if confronted with an external crisis from a position of authority, produce an adjustment program "that would not differ greatly from a typical IMF program," seems as pertinent and valid today as it was then (see Williamson, 1983). The assessment of the Fund's macroeconomic advice in a recent survey article by Anne Krueger (Krueger, 1998), seems to support this conjecture.

capital flows and domestic capital flight, leading to a *currency crash*, the macroeconomic policy emphasis should not be on tighter fiscal policy but on a temporary tightening of monetary policy. Although controversial, a monetary tightening in those circumstances would help resist massive currency depreciations that themselves tend to crush the domestic economy and induce a huge turnaround in the current account.

The third component of the general framework in the design of IMF-supported programs is the understandings on structural reforms. These comprise all types of policies aimed at reducing government-imposed distortions and other structural and institutional rigidities that impair an efficient allocation of resources in the economy and hinder growth. The reforms cover a wide spectrum of activities beyond the domain of macroeconomic policy, including measures related to trade liberalization, price liberalization, foreign exchange market reform, tax reform, government spending reform, privatization, pension reform, financial-sector reform, banking system restructuring, labor-market reform, and the strengthening of social safety nets.¹¹ Moreover, in many cases, and increasingly so in recent years, Fund arrangements are designed in close coordination with programs of the World Bank and/or the regional development banks.¹² As a result, the conditionality on structural aspects of IMF-supported programs often relates to issues that are under the more direct purview of other international financial institutions, but are included in the Fund arrangement to give a comprehensive picture of the reform effort.

Of course, the specific structural reform content in any arrangement depends on the characteristics and circumstances of the country requesting IMF support. One reason for this is the wide differences in levels of income and stage of development among member countries. For example, in the Asian crisis, the structural reform content of Fund-supported programs focused particularly on the financial sector because this was a critical problem area (Lane et al., 1999); in the arrangements for transition economies, privatization and the building of basic institutions of a market economy were key structural priorities (de Melo et al., 1996); and arrangements under the ESAF normally attach structural conditionality on a number of areas where distortions are particularly damaging (International Monetary Fund, 1997). Growing emphasis on structural issues

11. For general discussions of the rationale for structural reforms see International Monetary Fund (1987), Williamson (1990), and Krueger (1993). For an overview of the record on structural reforms in recent Fund arrangements see Schadler et al. (1995) and International Monetary Fund (1997).

12. This happens not only for arrangements under the ESAF (the Fund's concessional facility for low-income countries), where such coordination is formally required, but for other Fund arrangements as well.

in IMF-supported programs also reflects the (not so linear) evolution of the profession's views about the prerequisites for a well-functioning market economy.¹³ Moreover, structural reforms differ from the other core components of IMF programs in the difficulties for monitoring progress in implementation, in their long gestation periods, and in their particularly strong political-economy ramifications. The confluence of these factors has resulted in a gradual but steady rise in the structural-reform content of IMF programs, a trend that has sparked strong, but often disparate, criticisms from many quarters.¹⁴

3.2 CRITICISMS OF THE IMF APPROACH

There is no shortage of criticisms of the basic IMF approach, some many years old, others relatively new. Some focus on one of the core components of the approach, others take issue with all of them. Not surprisingly, the number, diversity, and intensity of the criticisms increase when the international financial system faces a crisis, as with the breakdown of the Bretton Woods system, the debt crisis of the 1980s, the collapse of the centrally planned economies of Eastern Europe and the (former) Soviet Union, and, most recently, the financial crises in Mexico and Asia.

A driving force behind most criticisms of the IMF approach is the *visible disjunction* between its three core elements and what virtually everyone sees as the desirable objectives of economic policy. As noted before, those objectives normally include a high rate of growth and a low rate of inflation, alleviating poverty and avoiding social unrest, and ensuring an adequate supply of public goods. These broad objectives are relevant for program design (in terms of what should be achieved in the medium and long term), and so is the goal of minimizing damage to the international community from a balance-of-payments adjustment in any given country. But it cannot reasonably be argued that the immediate effect of IMF-supported programs is (or should be) always positive in all the desirable dimensions of economic policy and performance. Economic adjustment and reform are costly and difficult endeavors, and especially so in the crisis or near-crisis conditions in which member countries normally come to the Fund to request support (see Santaella, 1996). In those circumstances, there will generally be no quick and easy

13. Compare, for instance, the structural reform policies discussed in International Monetary Fund (1987) and Williamson (1990) with those stressed by Williamson (1994) and Burki and Perry (1998).

14. Polak (1991) and Killick (1995) document the increase in the structural-reform content of IMF programs; see also Schadler et al. (1995), International Monetary Fund (1997), and Lane et al. (1999).

solutions that will make everyone everywhere feel a lot better both immediately and forever after.

A (slight) variation of this general criticism is the view that the *macroeconomics* underlying the IMF approach to stabilization is fundamentally wrong. This is the position taken, often without much analysis, by many critics of the Fund in several nongovernmental organizations and in the popular press. Some academics, such as Lance Taylor and other neostructuralists (Taylor, 1988, 1993), also advance this criticism. In response, one should stress that any country experiencing severe balance-of-payments difficulties and a shortage of external financing must, eventually, confront and redress its aggregate imbalances. This in turn generally requires a contraction of domestic spending, usually facilitated by a tightening of fiscal and monetary policies; in addition, when external disequilibria are large, a real depreciation of the currency may be needed. The analytical and empirical support for these basic facts of economic adjustment is overwhelming. To be sure, there are serious issues concerning whether, in specific cases, the policies recommended by IMF staff are the most appropriate, taking account of all of the relevant circumstances and constraints; these issues deserve to be debated, and it should not be expected that the professional consensus will always be that the Fund got it exactly right. But it is simply wishful thinking to believe that there *generally* is some better and easier way to secure, or avoid, macroeconomic adjustment in the midst of an external payments crisis.

Another common criticism stems from the belief that IMF-supported programs not only contain the same *type* of policy recommendations, but that they actually contemplate an adjustment of (approximately) the same *size* for all countries. This perception is surprisingly widespread, even among academics, but is also absolutely false. As noted before, every cross-country analysis of the experience with IMF-supported programs, conducted either by IMF staff or by outsiders, shows unequivocally that the size of the adjustment in those programs—as measured by the projected decline in the fiscal deficit, the projected improvement in the external current account, or the projected fall in the rate of inflation—varies considerably across programs and is, by and large, a monotonic function of the size of the (preexisting or prospective) imbalances.¹⁵ For example, in several of the debt-crisis countries of the 1980s, massive and unsustainable fiscal deficits were major problems and lay at the heart of balance-of-payments difficulties and chronic inflation; objec-

15. For evidence on this point see the references cited in footnote 1; see also Lane et al., 1999.

tives for fiscal consolidation in Fund-supported programs, correspondingly, had to be very ambitious. This was much less so for the programs with Mexico and Argentina in the tequila crisis and for those with Indonesia and Korea in the Asian crisis, but was again a more critical issue in recent arrangements with Russia and Brazil.

Other criticisms take issue with the *structural-reform* component of Fund-supported programs. Here, the focus has shifted over time; whereas the debates in the 1980s revolved around IMF conditionality in trade reform, exchange-rate unification, and interest-rate liberalization, those of the 1990s have dealt mostly with privatization, pension reform, and, most recently, capital-account convertibility and banking-sector reform. There are, however, common themes to the criticisms. Prominent are those related to the "ownership" of the reforms; the horizon, sequence, and pace of their implementation (especially as they are seen as conflicting with the relatively short duration of Fund arrangements); and the lack of expertise, and mandate, of Fund staff to impart advice and design conditionality on structural issues.¹⁶ We believe that it is pertinent to highlight two facts often forgotten in discussions of these issues: First, the inclusion of structural reforms in Fund-supported programs was largely a response to requests from the IMF membership for a broadening of the scope (and duration) of Fund arrangements to make them more suitable for tackling structural impediments to sustained growth and external viability (see International Monetary Fund, 1987, and Polak, 1991). Second, Fund conditionality typically takes account of the difficulties and delays inherent in a process of structural adjustment, most notably by monitoring "progress" in these areas, mostly through periodical assessments of the authorities' willingness and (oftentimes constrained) capacity to comply with specific measures, rather than in terms of the realization of the benefits expected from full implementation of the reforms.

Yet another strand of criticisms questions whether the *intellectual doctrine* underlying Fund-supported programs is sufficiently responsive to changing conditions in the global economy and the evolution of professional thinking. Specifically, in dealing with the collapse of the centrally planned economies of Eastern Europe and the (former) Soviet Union, and with the financial crises of Mexico in 1995 and Thailand, Indonesia, and Korea in 1997–1998, many critics argued that the "traditional IMF approach" was ill suited for the (widely different) challenges posed by these

16. Recent studies by Killick (1995), Calomiris (1998), Feldstein (1998), and James (1998) discuss these themes in some length. For earlier criticisms see Group of Twenty-Four (1987), Dornbusch (1991), and Cooper (1992).

fundamentally new types of problems.¹⁷ That the IMF approach to these recent problems was in fact quite different from earlier IMF-supported programs seems to have escaped notice. For example, the Fund arrangements for Mexico during the debt crisis of the 1980s consisted mostly of sizable fiscal adjustments, modest official financing, and concerted roll-over of commercial bank credits, whereas the 1995–1996 standby arrangement involved modest fiscal adjustment and very large official financing.

The controversy about the recent Fund arrangements for Thailand, Indonesia, and Korea is a prime example of the accusation that IMF programs are based on a misguided and dogmatic approach to macroeconomic stabilization. Interestingly, given other differences among the critics, a sort of consensus emerged that the fiscal and monetary policies recommended—or, as some critics prefer to say, imposed—by the Fund in those countries was “too tight.” For fiscal policy, as documented in the study by Lane et al. (1999) and in the IMF’s *World Economic Outlook* of December 1997 and May 1998, the adjustment called for in the initial programs was fairly small for Indonesia and Korea, and was moderate, by Fund standards, for Thailand. The economic assumptions for these initial programs—which the authorities were reluctant to see downgraded—envisioned slower but still significantly positive growth for all three countries in both 1997 and 1998 and contemplated only moderate exchange-rate depreciations. Under these assumptions, the initial fiscal policy prescriptions were reasonable and were accepted as such by the authorities. For Thailand, which entered the crisis with a current account deficit of 8% of GDP (much larger than the current-account imbalances of Indonesia or Korea), a larger fiscal effort seemed appropriate. As it became clear, to the Fund and everyone else, that the crises would be much deeper than originally expected, programs were revised and prescriptions for fiscal policy shifted from small or moderate restraint to significant stimulus, including the provision of social safety nets. This shift did not involve a change in Fund dogma, but rather a normal application of the flexibility to respond to unforeseen events embedded in the process described in Section 2.

17. Developments in the Asian and subsequent emerging market crises of 1997–1998 have given rise to a broad debate about reforming the “architecture” of the international monetary and financial system; see Eichengreen (1999) for an excellent overview of the issues. See also Minton-Beddoes (1995), Calomiris (1998), Krueger (1998), and Folkerts-Landau and Garber (1999). Although most of the issues in this debate do not directly concern the subject matter of this paper—the Fund’s approach to economic stabilization—it is interesting that many of the reform proposals that do touch on this subject run counter to many criticisms of Fund conditionality. In particular, suggestions for reform generally push for less financing from the Fund and/or stricter conditionality for members accessing Fund resources.

In the case of monetary policy, the IMF advice at the outset of those programs stressed the need for a significant initial and temporary tightening to arrest excessive exchange-rate depreciations that threatened both an acceleration of domestic inflation and the spread of contagion to other countries. Some prominent economists have argued that the weak financial systems and faltering domestic demand in those economies called for an easing rather than a tightening of monetary policy; some have even suggested that an easier monetary policy would have led to a nominal appreciation of those currencies. Clearly there are circumstances where the tightening of monetary policy to resist some (perhaps significant) exchange-rate depreciation is not desirable, for example, after the United Kingdom exited from the Exchange Rate Mechanism in September 1992 or for Singapore and China in 1997–1998. Also, even when monetary tightening is appropriate to resist massive and unwarranted exchange-rate depreciations, the “right” degree and duration of monetary tightening is a difficult issue of judgement. Nevertheless, when a currency suddenly loses half its value amidst massive capital outflows and collapsing confidence, as was the case for Indonesia, Korea, and Thailand, monetary easing is not a sensible policy, and some significant temporary tightening is generally warranted. The ill effects of high interest rates on a weak economy and a fragile financial system must be weighed against the probable consequences of a large depreciation on the burden of foreign-currency indebtedness and on the unleashing of inflationary pressures.

In fact, in Thailand and Korea, where the IMF advice on monetary policy was followed after some initial hesitation, exchange rates were stabilized and subsequently recovered to more reasonable levels, and nominal interest rates were then progressively reduced to below pre-crisis levels. There was nothing bizarre in these cases suggesting a perverse relationship between monetary policy and the exchange rate; the behavior observed followed the pattern seen in earlier episodes of severe exchange-rate pressures, such as Mexico in 1995 or the Czech Republic in 1997 (see Lane et al., 1999, Chapter 6). In Indonesia, monetary policy was tightened only briefly before massive injections of liquidity to banks facing deposit runs, along with policy switches, political uncertainty, and social unrest, led to a massive 80% depreciation of the rupiah and to widespread default on private-sector debts. Again, the pattern was what one would expect from the large body of empirical evidence on the relation between monetary policy and the exchange rate. All things considered, the notion that in the context of the Asian crisis easings of monetary policy would have induced exchange-rate appreciations is nonsense.

3.3 WHY FUND PROGRAMS TEND TO LOOK ALIKE

Although many criticisms of the Fund lack a firm basis, there remains the impression that the IMF approach to economic stabilization is too rigid and dogmatic to accommodate the differing and changing circumstances of member countries that encounter balance-of-payments difficulties. This impression is not entirely without foundation. The IMF is a highly disciplined bureaucracy that operates in accord with well-established, and only gradually evolving, policies and procedures. Key IMF staff involved in program operations typically have long tenure in the Fund. There is a legal framework for IMF operations, based on the Articles of Agreement and established policies of the Executive Board, which imposes constraints on what is and what is not acceptable in Fund arrangements. All of this imparts a degree of conservatism to the IMF approach which is both bad and good. Bad because it implies a lesser degree of flexibility in Fund conditionality than would be desirable in some ideal world. Good because IMF members that may wish to make use of the Fund's resources or members who may be called upon to supply those resources have expressed a desire to have a reasonable understanding of the circumstances, conditions, and terms under which IMF financing may be made available. There must be reasonable assurance of equality of treatment; members encountering similar balance-of-payments problems and willing to undertake similar adjustment measures should have similar access to Fund resources. The IMF cannot act with unbridled discretion. As with any powerful institution, there is an unavoidable tension between giving to (and asking from) the IMF too much or too little flexibility.

The general impression of inflexibility in the Fund's actions, policies, and doctrine, however, is seriously exaggerated, in part because of the way in which the IMF has described its own activities. When Fund arrangements are announced (or leaked) to the public, they appear to present a rigid blueprint for a country's economic policies and for their expected results, including numerical performance criteria for key macro-economic aggregates. All arrangements contain numerical targets for output growth, the inflation rate, and the current account for one to three years ahead; and all contain quantitative performance criteria for fiscal and monetary policy variables, usually for quarterly test dates covering the first six to twelve months of the arrangement.¹⁸ The natural, but incorrect, perception for many outsiders is that if the quantitative

18. Interestingly, numerical performance criteria were not always a component of Fund arrangements, and their general adoption in the 1960s was in large part a response to the *borrowing countries'* demand for more predictability in the access to the (phased) IMF resources allocated in support of their adjustment programs—see Finch (1989).

criteria are met, the program is on track and disbursements of IMF resources continue, whereas if the criteria are not met, the program is off track and disbursements cease. The flexible process described in Section 2, with the possibility of waivers or modifications of performance criteria or of revisions and renegotiations of the adjustment blueprint to strengthen policy actions and minimize the interruptions to the flow of Fund disbursements, is not normally presented or perceived as an integral part of IMF arrangements—even though the member and the Fund fully understand these possibilities.

The impression of unreasonable uniformity in the macroeconomic conditionality of Fund-supported programs is reinforced by the apparent similarity in the numerical performance criteria in the critical areas of fiscal and monetary policy. Specifically, the main fiscal performance criterion in Fund arrangements is normally specified as (quarterly) ceilings on the nominal value of the fiscal deficit or on the portion of that deficit financed with domestic credit.¹⁹ For monetary policy, performance criteria are typically specified as (quarterly) ceilings on the expansion of net domestic credit of the central bank and as (quarterly) floors on net international reserves (see Guitián, 1994).

On the substance of these performance criteria, it is straightforward to see why an upper limit on the fiscal deficit (or on credit to finance it) should generally be an element of IMF conditionality. For a country facing balance-of-payments difficulties, external credit to the government (as well as to the private sector) is usually tightly constrained. Resort to domestic credit to finance the government also has limits, particularly when credit conditions are tight and when additional monetary financing to the public sector (from the central bank or the banking system) may unleash inflationary pressures. Furthermore, in many cases a tightened fiscal stance is important, even central, to assist in redressing imbalances in the external current account. Of course, the degree of fiscal tightening should and does vary greatly across individual cases, depending not just on the size of the initial fiscal disequilibrium but also on the (expected) availability of sustainable and noninflationary means of deficit financing. Mistakes in setting fiscal targets will be made in individual cases, especially when the key assumptions on which a program is based are falsified by actual developments. But this cannot reasonably be an argument that Fund arrangements should refrain from an explicit requirement for fiscal restraint, especially considering that the arrangements place more emphasis on the adoption of policy measures that appear necessary to redress the existing fiscal imbalance than on

19. The rationale for this specification is explained in Tanzi (1987) and Guitián (1995).

attaining a given deficit target. By and large, if the measures adopted are judged appropriate but the bottom line is missed for reasons beyond the authorities' control, compliance with fiscal conditionality is often granted, provided that performance in other areas remains satisfactory.

While the rationale for fiscal conditionality may be recognized, greater controversy surrounds monetary-policy conditionality, especially the standard procedure of specifying quarterly quantitative targets on domestic credit and on the stock of net international reserves. The conceptual basis for this procedure is perceived to be deeply rooted in the monetary approach to the balance of payments, a theory of the adjustment process in an open economy that IMF staff contributed to developing.²⁰ Much criticism of IMF prescriptions for monetary policy in program countries has centered on the theoretical underpinnings and empirical validity of the monetary approach to the balance of payments and, in particular, of the "Polak model." Specifically, critics have emphasized the large body of evidence that documents the pervasive instability of money demand and the poor performance of operational frameworks for monetary policy that depends on targeting of monetary aggregates, especially over the short horizons used for setting performance criteria in Fund arrangements.²¹ Notwithstanding these criticisms, the specification of monetary policy in IMF-supported programs has remained essentially unaltered. Until recently, the few justifications for this resilience that were given by Fund staff consisted either of highlighting the "encompassing character" of the monetary approach²² or of restating the "strong association that is known to exist between an excess of domestic credit and an excess of aggregate spending over aggregate income." With some basis, those arguments were regarded by critics as symptoms of denial and dogmatism.²³ Nonetheless, when account is taken both of

20. The studies by Polak (1957) and Prais (1961) are widely regarded as modern precursors of the monetary approach, a theory that was further formalized and brought to the forefront of the academic debate by a group of economists from the University of Chicago in the 1970s. See Frenkel and Johnson (1976); see also International Monetary Fund (1977).
21. For these and other critiques to the (alleged) reliance of Fund programs on the monetary approach to the balance of payments see Dell (1982), Taylor (1988), Edwards (1989), Dornbusch (1991), Jager (1994), and Killick (1995).
22. For example, when discussing the design of monetary policy in Fund-supported programs, International Monetary Fund (1987) states that "[the monetary] approach can be considered a relatively general theory of long-run behavior that encompasses a variety of models of short-term adjustment. The fundamental equation . . . is thus an outcome of an adjustment process, not a description of the channels through which the policy variables affect changes in net foreign assets" (p. 18).
23. Two articles by Manuel Guitián, former director of the Monetary and Exchange Affairs department and distinguished IMF official, illustrate this point. There is in fact no substantive change in the theoretical justification he provides for focusing on domestic

the economic situation with which Fund arrangements are typically designed to deal and of the institutional process associated with those arrangements, there is a rationale for setting numerical performance criteria in terms of floors on net international reserves and ceilings on net domestic credit.

The primary rationale for setting a performance criterion for the floor on net international reserves actually has little to do with monetary policy, or especially with the monetary approach to the balance of payments. When a member requests a program, it usually has run down its international reserves and is anticipating continued downward pressures. Even if the exchange rate has been devalued or allowed to float, further substantial declines in reserves are usually undesirable. The policies associated with IMF arrangements are supposed to address this problem by reducing the external payments imbalance and helping to restore confidence; and the financial support of the IMF provides a desired supplement to the member's (gross) international reserves. Fund-supported programs, however, do not always make rapid progress towards their agreed objectives, and oftentimes this reflects (at least partly) the failure of the member to tighten its macroeconomic policies with sufficient resolve. In such situations, if substantial reserve losses continue, there is a clear signal that the adjustment program is not working as intended in an area of critical importance to the IMF. A performance criterion that sets a floor on net international reserves hence assures that when those reserves fall below an agreed threshold, a reconsideration of the program is triggered, with the range of possible outcomes described in Section 2. The legal mandate for IMF arrangements and the associated responsibility of the Fund to not put at (too much) risk the revolving character of its resources thus provide a distinct rationale for conditionality focused on the level of reserves.

Quantitative performance criteria for monetary policy come into play primarily in the setting of ceilings on net domestic credit of the central bank (or the banking system).²⁴ In the balance sheet of the central

credit as an indicator of monetary policy in IMF programs between his 1973 seminal article on the subject (Guitián, 1973) and an article written more than twenty years later (Guitián, 1994), at a time when many IMF members had abandoned fixed exchange rates, and financial innovation and capital-market integration had wreaked havoc with the stability of monetary aggregates in many industrial and emerging market economies. Tellingly, the conference discussant of the second paper, Henk Jager, expresses uneasiness and surprise at Guitián's unqualified presentation of the monetary approach to the balance of payments as a suitable framework for analyzing monetary policy in the short and medium term in the 1990s (Jager, 1994).

24. Whether the ceilings are set on net domestic credit from the central bank or from the banking system is a decision that depends, primarily, on the degree of financial

bank, the sum of net domestic credit and net international reserves determine, as fact of accounting, the quantity of base money.²⁵ Hence, given the floor on net international reserves set by the performance criterion on this component of the monetary base, setting a ceiling on net domestic credit establishes a quasiceiling on base money. Base money can be above this quasiceiling and still be in conformance with the performance criteria, but only to the extent that net international reserves are above their specified floor. Why should quantitative performance criteria for monetary policy be set in this way? Many times the reason a country gets into balance of payments difficulties and suffers reserve losses and exchange-rate pressures is that monetary policy has been too expansionary; base money has been allowed to expand too rapidly relative to the growth of sustainable demand, and net domestic credit of the central bank has grown at an even faster rate to offset (sterilize) losses of reserves. In other cases—for example when there is a sharp reversal of foreign capital inflows or a sudden bout of capital flight—reserve losses may not derive primarily from excessive money creation, but central banks typically will resist a large monetary contraction by sterilizing reserve losses through an offsetting expansion of net domestic credit. In either circumstance, under a Fund arrangement it is important to provide some assurance that expansionary monetary policy will not continue to be, or become, a problem that undermines external viability.

A performance criterion that sets ceilings on net domestic credit of the central bank is an admittedly crude way of attempting to provide such assurance. The ceilings are typically set by first estimating (or guessing) a reasonable path for base money under the program's assumptions regarding output growth, inflation, exchange rates, seasonal factors, and the behavior of velocity and the money multipliers.²⁶ Subtracting the floor on net international reserves yields the ceiling on net domestic

development of the country requesting Fund support. Ceilings at the banking-system level are considered more appropriate in countries where the financial system is relatively underdeveloped and the central bank resorts to direct controls or other distortionary means to influence credit conditions. Ceilings at the central-bank level are generally used in countries where the authorities rely on indirect instruments of monetary control—see International Monetary Fund 1987 and Guitián 1994. The discussion that follows is confined to the latter cases; however, the thrust of the argument also applies to the other cases.

25. Suitable definitions of these aggregates, with adjustments for other items on the balance sheet and other factors affecting reserves (which comprise what Fund staff calls "other items net"), assure that this statement is true.
26. For a fuller discussion see International Monetary Fund (1987) and Polak (1997); see also Fischer (1997).

credit that is consistent with this path for base money.²⁷ Notably and desirably, this procedure does not impose a ceiling or a floor on the monetary base.²⁸ The rationale for this is quite clear. If the demand for base money turns out to be higher than projected, putting upward pressure on the currency and international reserves, the central bank can accommodate the higher demand by allowing the international-reserves component of the monetary base to expand. Granting this flexibility, what about the uncertainties in forecasting the demand for base money? Here, there is no escape from assuming some degree of predictability of the demand for money, in accord with some quantifiable model. In particular, the numerical quasic ceiling for base money will normally require a judgement about how the demand for money will behave over the coming two to four quarters, given program assumptions about the course of national income, capital flows, the price level, interest rates, the exchange rate, and (very importantly in most cases) seasonal factors. This involves, at least implicitly, numerical values for the short-run point elasticities of money demand. The estimates of what will happen to money demand must then be translated into judgements about base money by taking account of the likely behavior of the money multiplier relationships, which are often unstable in environments of economic and financial difficulty. The result is essentially an educated guess about how the economically appropriate supply of base money should be expected to evolve over the following six to twelve months, given the program's economic and policy assumptions. This educated guess, embodied in the performance criteria, is typically an outcome of the negotiations with the authorities, not the result of rigorous statistical estimation.

Admittedly, forecasts of the demand for base money obtained from this procedure can be far off the mark. But the saving grace is the flexibility in the process behind Fund-supported programs. Breaching the ceiling on net domestic credit or the floor on net international reserve triggers a reconsideration and possible revision of the Fund arrangement, not its termination. What happens depends on an assessment of why the performance criterion was breached, on implications going forward,

27. In some cases, the baseline path for net international reserves used to calculate the path for net domestic credit may lie above the performance criterion for the floor on net international reserves. The issue then arises of the extent to which discrepancies between the baseline and the floor should be sterilized through increases in net domestic credit.
28. A number of Fund arrangements have in fact included as performance criteria ceilings on the monetary base rather than on domestic credit. The staff's evaluation of monetary policy in those arrangements, however, by and large has followed the same logic as the one described in the text—particularly when reducing inflation was not the primary goal of the Fund arrangement and the rate of disinflation envisaged in the program was not particularly large.

and on the capacity to agree on suitable policy adjustments. While this process does not guarantee perfection, it is surely very different from a rigid application of a simplistic version of the monetary approach to the balance of payments.

To ensure minimal consistency among the numerical performance criteria for fiscal, monetary, and external-debt policy contained in every Fund arrangement it is necessary to employ a quantitative framework. As mentioned before, the framework that IMF staff developed and continues to use for this purpose is called *financial programming*. Financial programming is not a formal economic model, but rather a simple flow-of-funds framework that combines basic macro-accounting identities and balance-sheet constraints which the staff uses to gauge the size of the adjustment effort required from a country experiencing balance-of-payments difficulties, *given* assumptions about prospective external financing, output growth, inflation, and exchange rates.²⁹ Even in its simplest form, financial programming does involve a small number of behavioral equations and arbitrage conditions—e.g., a demand for money, a demand for imports, uncovered interest parity. Furthermore, the solution for the values of key performance criteria requires (approximate) knowledge of several key elasticities and policy multipliers. However, values for these key parameters are generally not estimated by formal econometric techniques. Because of the predominance of unstable relationships and unreliable data in the countries requesting Fund support, the estimates that are used mainly represent plausible judgments, based on rough statistical work.

In view of the errors that inevitably infect this process—or any alternative process for setting numerical performance criteria—the usefulness of financial programming depends not so much on the accuracy of its forecasts as on the *flexibility* for revising the main numerical targets as new information becomes available. In fact, all performance criteria in Fund-supported programs are set *conditional* on assumptions about the behavior of a number of variables. The assumptions are rarely kept unchanged for the duration of the program. During the monitoring phase, assumptions are revisited using the latest information for the key exogenous variables, projections about their future behavior are modi-

29. The seminal pieces on financial programming were written by E. Walter Robichek, former director of the IMF's Western Hemisphere Department (Robichek, 1967, 1971, 1985). Oral tradition and training manuals prepared by the IMF's Institute (e.g., International Monetary Fund, 1981, 1996) helped disseminate the financial-programming methodology. Working papers of Fund staff (e.g., Chand, 1987; Barth and Chadha, 1989; Mikkelsen, 1998) have served the same purpose. For a critique of the increasing, and in his view unwarranted, "sophistication" of financial programming in many of the latter pieces see Polak (1997).

fied, and, if necessary, numerical performance criteria are revised. The scope that this open-loop feature of the approach affords for exercising judgement when assessing the country's performance under the Fund arrangement is what explains why IMF financial programming has proved so resilient. The superficial uniformity that financial programming imparts to all Fund arrangements is hence a far cry from the view that portrays it as a standard and rigid economic model that is mechanically applied to all program countries.³⁰

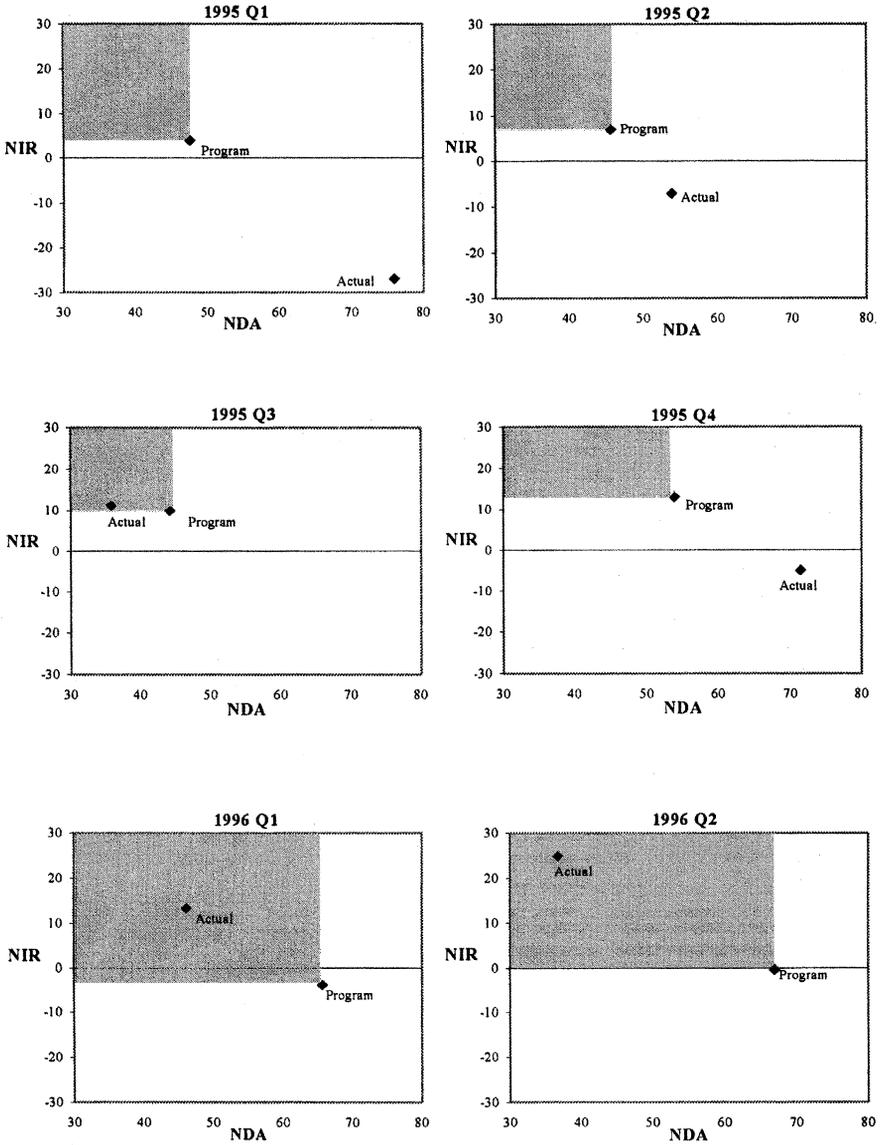
3.4 IMF PROGRAMS IN ACTION: MEXICO, 1995–1996

The Fund-supported program for Mexico in 1995–1996 provides a notable example of how the process of IMF programs works in practice. During 1994, Mexico was running a current-account deficit of 8% of GDP and suffered large reserve losses (which were sterilized by the Banco de Mexico) when a variety of internal and external disturbances helped to undermine confidence (see Annex I in the May 1995 *World Economic Outlook*). The Mexican authorities did not approach the Fund for an arrangement until after the peso had been devalued and subsequently allowed to float. At the insistence of the authorities, the arrangement agreed in January 1995 was based on economic assumptions that were quite optimistic, especially in hindsight. Real GDP growth was projected to slow from 3.5% in 1994 to 1.5% in 1995 and then recover. Exchange-rate depreciation was assumed to be contained with the assistance of moderately tight monetary policy. Inflation, on a December-to-December basis, was projected to rise from 7% to 19% and then decline. With support from fiscal measures to improve the primary government balance by 1.1 percentage points of GDP (very modest by the standards of earlier Fund arrangements with Mexico), the current account deficit was projected to shrink from 8% to 4% of GDP—a deficit assessed to be financeable with capital inflows and moderate use of official reserves. Performance criteria for the initial program were set on the basis of these assumptions.

Confidence, however, was not restored by this initial program. Massive capital outflows, especially by holders of *tesobonos*, led to large reserve losses and pushed the peso down to half its precrisis value by early March. Inflation soared; the December-to-December rate reached 52%.

30. In a recent paper dealing with the legacy of “his” model, Jacques Polak explains why it is mistaken to portray financial programming as a fully specified economic model; specifically, he notes that “the Fund has had to forego the comfort of its old model and base its conditionality on a set of ad hoc instruments that seemed plausible in the circumstances. . . . *Without much of a model to go by*, the Fund has in recent years tended to adopt an ‘all risk’ policy . . . reserving for periodic reviews a judgment as to the need for additional . . . action” (Polak, 1997, pp. 15–16; italics added).

Figure 2 Mexico: Domestic Credit (NDA) and International Reserves (NIR) in the 1995–1996 Standby Arrangement: Program Targets and Outcomes (In billions of pesos)



Sources: Fund staff estimates.

Output crashed; real GDP ultimately fell 7% in 1995, and real domestic demand fell more than double that amount. The current account improved by 7.6 percentage points of GDP, reaching near-balance by year end. To contain the depreciation of the peso and regain monetary control, in March the Banco de México had to raise overnight interest rates temporarily above 80%.

What of the program's performance criteria? The fiscal targets were met scrupulously, despite the unexpectedly deep recession. In fact, the March 1995 program review tightened the annual fiscal target, and this target was more than met. For the monetary program, base money ran significantly below its quasiceiling through most of 1995, reaching the ceiling at year end. However, as illustrated in Figure 2 (where the shaded areas show the acceptable range of performance), the actual performance criteria for the floor on net international reserves and the ceiling on net domestic credit were both very badly breached on the test dates corresponding to the ends of the first, second, and fourth quarters of 1995. At the Fund, it was understood that in the face of very large and unexpected capital outflows and reserve losses, the Banco de México had to expand net domestic credit well beyond the agreed ceiling to avoid a catastrophic decline of base money. Given the determination shown by the Mexican authorities in the fiscal area, in interest-rate policy, and in the behavior of base money, violations of the performance criteria for net international reserves and net domestic credit during 1995 were waived. The program proceeded without interruption. By late 1995 confidence was clearly recovering. In 1996 growth jumped to 5%, and inflation fell by 25 percentage points. All performance criteria of the program for the first half of the year were met, by wide margins in the monetary area, and Mexico regained access to private capital markets and decided not to draw the remaining tranches of the IMF loan.

4. Conclusion

The example of Mexico illustrates how IMF-supported programs work in practice, in accord with the iterative process described in Section 2 and involving the substantive elements and quantitative approach to macroeconomic policymaking discussed in Section 3. In this particular case, given the urgency of the situation, the phases of inception, blueprint, negotiation, and approval proceeded very rapidly and concluded with an agreement on a Fund arrangement that involved an exceptionally large financial support. However, the economic assumptions of the initial program proved overly optimistic, and the quantitative performance criteria for net domestic credit and net international reserves were seri-

ously breached. In the monitoring phase of the arrangement this was handled, first, by revising the main assumptions of the 1995 program and, more substantively, by granting waivers for the breached performance criteria, as it was judged that the policy efforts of the Mexican authorities had been forceful and appropriate to meet the extremely adverse circumstances they confronted.

Other IMF-supported programs follow somewhat different courses. For instance, in the recent Fund arrangements for Thailand and Korea, initial program assumptions envisioned slowdowns in growth but not the severe recessions that actually ensued. During the monitoring phase, prescriptions for fiscal policy needed to be substantially modified, from moderate restraint to significant support. With these and other agreed modifications, the programs proceeded without interruption. In the case of Indonesia, in contrast, the efforts of the authorities to meet the macroeconomic and structural performance requirements of the initial program approved in November 1997 and of the revised program agreed on with the staff in February 1998 were judged to be inadequate, and the Fund arrangement went off track. Subsequent agreement with a new government on a substantially modified program has proved much more successful and has generally proceeded without serious delay. In the case of Brazil, the interval between inception (involving internal discussions of Fund staff and management) and approval of the IMF program in November 1998 was somewhat longer than in the other cases. The initial program featured significant fiscal consolidation to boost confidence in the continuation of the Real Plan and to contain and curtail a rapidly rising public-debt ratio. When the exchange-rate policy proved unsustainable in the face of large reserve losses, the arrangement went off track. A revised program, still with fiscal consolidation at its core but with a flexible exchange rate and a monetary policy geared toward low inflation, has so far proved more auspicious.

Other cases show an even wider range of experience with the actual evolution of Fund-supported programs through their six operational phases. Indeed, while the IMF maintains a general policy of uniformity of treatment of its members, the fact is that Fund-supported programs are far from uniform—notwithstanding their superficial resemblance. The reason for this is simply that IMF members have quite different economies, face different problems necessitating adjustments in their balance of payments, and display a variety of policy regimes and different ability and willingness to implement policies to correct external payments imbalances and their underlying causes. IMF programs need to be, and are, flexible instruments for addressing those problems, within a general framework that has a quantitative dimension and imposes a

necessary degree of consistency and discipline across users of Fund resources.

REFERENCES

- Alexander, S. (1952). Effects of a devaluation on a trade balance. *IMF Staff Papers*, 2(April):263–278.
- Barth, R., and B. Chadha (1989). A simulation model for financial programming. Washington: International Monetary Fund. IMF Working Paper WP/89/24.
- Bernstein, B., and J. Boughton. (1993). Adjusting to development: The IMF and the poor. IMF Paper on Policy Analysis and Assessment 93/4.
- Buiter, W. (1990). Some thoughts on the role of fiscal policy in stabilization and structural adjustment in developing countries. In *Principles of Budgetary and Financial Policy*, W. Buiter, (ed.). Cambridge, MA: MIT Press, pp.407–448.
- Burki, S., and G. Perry. (1998). *Beyond the Washington Consensus*, World Bank Latin American and Caribbean Studies. Washington: The World Bank.
- Burton, D., and M. Gilman. (1991). Exchange rate policy and the IMF. *Finance and Development* 28(3):18–21.
- Calomiris, C. (1998). The IMF's imprudent role as lender of last resort. *The Cato Journal* 17(3, Winter):275–294.
- Chand, S. (1987). Toward a growth-oriented model for financial programming. Washington: International Monetary Fund. IMF Working Paper WP/87/10.
- Cooper, R. (1992). *Economic Stabilization and Debt in Developing Countries*. Cambridge, MA: MIT Press.
- Dell, S. (1982). Stabilization: The political economy of overkill. *World Development* (Oxford) 10(August):597–612.
- de Melo, M., et al. (1996). Patterns of transition from plan to market. *World Bank Economic Review* 10(3):397–429.
- Dicks-Mireaux, L., et al. (1995). The macroeconomic effects of ESAF-supported programs: Revisiting some methodological issues. Washington: International Monetary Fund. IMF Working Paper WP/95/92.
- Dornbusch, R. (1991). Policies to move from stabilization to growth. Washington: The World Bank. World Bank Research Report.
- Edwards, S. (1989). The International Monetary Fund and the developing countries: A critical evaluation. *Carnegie-Rochester Conference Series on Public Policy* 31:7–68.
- Eichengreen, B. (1999). *Towards a New International Financial Architecture*. Washington: Institute for International Economics.
- Feldstein, M. (1998). Refocusing the IMF. *Foreign Affairs* 77(2):20–23.
- Finch, C. (1989). The IMF: The record and the prospect Princeton University. Princeton Essays in International Finance 175.
- Fischer, S. (1997). Applied economics in action: IMF programs. *American Economic Review, Papers and Proceedings* 87(2):23–27.
- Folkerts-Landau, D., and P. Garber. (1999). The new architecture in official doctrine. In *Global Markets Research*. London: Deutsche Bank.
- Frenkel, J., and H. Johnson. (1976). *The Monetary Approach to the Balance of Payments*. London: Allen & Unwin.
- Goldstein, M., and P. Montiel. (1986). Evaluating Fund stabilization programs with multicountry data: Some methodological pitfalls. *IMF Staff Papers* 33 (June):304–344.

- Group of Twenty-Four. (1987). *The Role of the IMF in Adjustment with Growth*, Report of Working Group. Washington: Group of Twenty-Four.
- Guitián, M. (1973). Credit versus money as an instrument of control. *IMF Staff Papers* 20(November):785–800.
- . (1994). The role of monetary policy in IMF programs. In *A Framework for Monetary Stability*, J.A.H. de Beaufort Wijnholds et al. (eds.). Dordrecht, The Netherlands: Kluwer Academic Publishers, pp.185–209.
- . (1995). Conditionality: Past, present, future. *IMF Staff Papers* 42(4, December):792–835.
- Gupta, S., et al. (1998). *The IMF and the Poor*, IMF Pamphlet Series 52. Washington: International Monetary Fund.
- Haque, N., and M. Khan. (1998). Do IMF-supported programs work? A survey of the cross-country empirical evidence, International Monetary Fund. IMF Working Paper WP/98/169.
- Harrigan, J. (1996). Review article—the Bretton Woods institutions in developing countries: bêtes noires or toothless tigers? *The World Economy* 19(2):765–779.
- Heller, P., et al. (1988). The implications of Fund-supported adjustment programs for poverty: Experiences in selected countries. Washington: International Monetary Fund. IMF Occasional Paper 58.
- IMF Assessment Project. (1992). *IMF Conditionality 1980–1991*. Arlington, VA: Alexis de Tocqueville Institution.
- International Monetary Fund. (1977). *The Monetary Approach to the Balance of Payments*, Washington: International Monetary Fund.
- . (1981). *Financial Programming Workshops: The Case of Kenya*, Washington: IMF Institute.
- . (1987). Theoretical aspects of the design of Fund-supported adjustment programs. Washington: International Monetary Fund. IMF Occasional Paper 55.
- . (1996). *Financial Programming and Policy: The Case of Sri Lanka*. Washington: IMF Institute.
- . (1997). The ESAF at ten years: Economic adjustment and reform in low income countries. Washington: International Monetary Fund. IMF Occasional Paper 156.
- . (1998). *Financial Organization and Operations of the IMF*, IMF Pamphlet Series 45, 5th ed. Washington: International Monetary Fund.
- Jager, H. (1994). Comment on Manuel Guitián: The role of monetary policy in IMF programs. In *A Framework for Monetary Stability*, J.A.H. de Beaufort Wijnholds et al. (eds.). Dordrecht, The Netherlands: Kluwer Academic Publishers, pp.217–220.
- James, H. (1998). From grandmotherliness to governance: The evolution of IMF conditionality. *Finance and Development* 35(4):44–47.
- Johnson, O., and J. Salop. (1980). Distributional aspects of stabilization programs in developing countries. *IMF Staff Papers* 27(March):1–23.
- Kenen, P. (1985). Macroeconomic theory and policy: How the closed economy was opened. In *Handbook of International Economics*, Vol. 2, R. Jones and P. Kenen (eds.). Amsterdam: North-Holland, pp.625–677.
- Khan, M. (1990). The macroeconomic effects of Fund-supported adjustment programs. *IMF Staff Papers* 37(June):195–231.
- Killick, T. (1995). *IMF Programmes in Developing Countries: Design and Impact*, London and New York: Routledge.

- Knight, M., and J. Santaella. (1997). Economic determinants of IMF financial arrangements. *Journal of Development Economics* 54:405–436.
- Krueger, A. (1993). *Political Economy of Policy Reform in Developing Countries*. Cambridge, MA: MIT Press.
- . (1998). Whither the World Bank and the IMF? *Journal of Economic Literature* 36(December):1983–2020.
- Lane, T., et al. (1999). *IMF-Supported Programs in Indonesia, Korea, and Thailand: A Preliminary Assessment*. Washington: International Monetary Fund. IMF Occasional Paper 178.
- Mikkelsen, J. (1998). A model for financial programming. Washington: International Monetary Fund. IMF Working Paper WP/98/80.
- Minton-Beddoes, Z. (1995). Why the IMF needs reform. *Foreign Affairs* 74(3): 123–133.
- Mussa, M. (1997). IMF surveillance. *American Economic Review, Papers and Proceedings* 87(2):28–31.
- Nashashibi, K., et al. (1992). The fiscal dimensions of adjustment in low-income countries. IMF Occasional Paper 95.
- Polak, J. J. (1957). Monetary analysis of income formation and payments problems. *IMF Staff Papers* 5(November):1–50.
- . (1991). The changing nature of IMF conditionality. Princeton Essays in International Finance 184. Princeton University.
- . (1997). The IMF monetary model at forty. Washington: International Monetary Fund. IMF Working Paper WP/97/49.
- Prais, S. J. (1961). Some mathematical notes on the quantity theory of money in an open economy. *IMF Staff Papers* 8(May):212–226.
- Robichek, E. W. (1967). Financial programming exercises of the International Monetary Fund in Latin America. Rio de Janeiro. Manuscript.
- . (1971). Financial programming: Stand-by arrangements and stabilization programs. Washington: International Monetary Fund. Manuscript.
- . (1985). Financial programming as practiced by the IMF. Washington: The World Bank. Manuscript.
- Santaella, J. (1996). Stylized facts before IMF-supported macroeconomic adjustment. *IMF Staff Papers* 43(September):502–544.
- Schadler, S., et al. (1993). Economic adjustment in low-income countries: Experience under the enhanced structural adjustment facility. Washington: International Monetary Fund. IMF Occasional Paper 106.
- , et al. (1995). IMF conditionality: Experience under stand-by and extended arrangements. Parts 1 and 2. Washington: International Monetary Fund. IMF Occasional Papers 128, 129.
- Shultz, G. (1995). Economics in action: Ideas, institutions, policies. *American Economic Review, Papers and Proceedings* 85(2):1–8.
- Tanzi, V. (1987). Fiscal policy, growth, and the design of stabilization programs. In *External Debt, Savings, and Growth in Latin America*, A. Martirena-Mantel (ed.). Washington: International Monetary Fund, pp.121–141.
- Taylor, L. (1988). *Varieties of Stabilization Experience*. Oxford: Clarendon Press.
- , ed. (1993). *The Rocky Road to Reform*. Cambridge, MA: MIT Press.
- Williamson, J., ed. (1983). *IMF Conditionality*. Cambridge, MA: MIT Press.
- . (1990). What Washington means by policy reform. In *Latin American Adjustment: How Much Has Happened?*, J. Williamson (ed.). Washington: Institute for International Economics.

Williamson, O. (1994). The institutions and governance of economic development and reform. In *Proceedings of The World Bank Annual Conference in Development Economics*. Washington: The World Bank, pp.171–197.

Comment

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This paper will be of value to anyone interested in IMF stabilization programs. But it is not an easy paper to discuss, as it contains neither a theoretical model nor new empirical results. Instead the paper expounds and defends, in broad terms, the IMF approach to economic stabilization. By this the authors mean the Fund's short-term tactics for stabilizing currency crises. The paper succeeds in defending the Fund from a subset of its critics. My main criticism of it is that it does not address the Fund's most serious critics: those who charge that the IMF's short-term tactics for stabilizing currency crises raise the likelihood of future crises. My comment lays out one version of this critique and urges the authors to reply in future research.

As laid out by the authors, the objectives of their paper are to (1) summarize the process by which IMF programs are set up, (2) explain why the IMF conditions aid on various monetary and fiscal policy targets, and (3) defend the IMF from charges that its programs are excessively rigid and based on an outmoded economic model. To varying degrees the paper succeeds in accomplishing all three objectives.

A little more than half of the paper is devoted to (1). I have little to add here. Surely describing the details of how the Fund sets up its programs is the authors' comparative advantage, not mine. Also, with one important exception, I have little to argue with regarding (2). The exception is that I would like to see *much* more detail about how the Fund calculates its monetary and fiscal targets. After all, God is in the details. And I don't understand the details of these calculations any better having read the paper.

Turning to the paper's third objective, I come to my major complaint. The paper never grapples with the charge that the IMF's successful short-term tactics for stabilizing currency crises increase the likelihood of future crises occurring. The Fund has many critics. Some deserve to be taken seriously. Others don't. In the latter group I include those who charge that (1) the IMF staff blindly applies the same simplistic formula to all crises, (2) the IMF should abandon conditionality, and (3) the IMF

has perversely encouraged countries that are in the throes of a currency crisis to pursue contractionary monetary and fiscal policy. The evidence against the first charge is overwhelming. The second charge is tantamount to urging the IMF to abandon its charter. Finally, there is no firm scientific basis for criticizing the Fund on the basis of the third charge. In the midst of a currency crisis, one way or another, you need to stabilize a country's current account. In practice this means securing sustainable external financing for the country and generating current-account surpluses. The most effective way to do that is contractionary monetary and fiscal policy. Like the authors, I don't know of any evidence to the contrary.

By focusing on the Fund's least persuasive critics, the authors have missed a valuable opportunity to defend the IMF from its most persuasive ones, whose position I summarize as follows.¹ In its search for a post-Bretton Woods mission, the IMF is trying to become an international lender of last resort. The Fund cannot successfully play this role. Even if the IMF had the mandate and the resources to move decisively in the midst of a crisis, it would not have the regulatory powers normally associated with successful lenders of last resort. Anticipating this problem, the Fund has tried to develop new forms of conditionality which involve detailed structural and institutional reforms in client countries. Increasingly these pertain to the structure of the financial sectors in those countries.

There are at least two reasons to be skeptical of these new forms of conditionality. First, it is far more difficult for the Fund to monitor and regulate the financial sector of sovereign states than it is for central banks. Given political realities and the limited enforcement mechanisms at its disposal, the Fund is unlikely to be able to reform a banking system *before* a crisis occurs. Second, banking reforms take longer to implement than the horizon of a typical IMF program period. So IMF funds are inevitably disbursed after a crisis occurs but before reforms actually happen.

According to the critics, because the Fund cannot credibly impose structural reforms on client countries, it has become an unwilling participant and facilitator of bank bailouts and loan guarantee schemes—the proximate causes of many, although not all, of the post-1980 currency crises. True, the IMF does not directly bail out banks or countries. But it does provide loans at below-market rates. More importantly, the Fund helps provide the political cover for governments to raise the resources required to pay off loans and carry out bank bailouts. Unfortunately, the people who benefit from the bailouts aren't the ones whose taxes are

1. See for example Calomiris (1998), Chari and Kehoe (1998), and the references therein.

ultimately raised. So, at least indirectly, the Fund contributes to the moral-hazard problems that are pervasive in the financial sectors of emerging (and other) market economies.

To the extent that one takes the previous critique seriously, the key question becomes: How can the Fund achieve the benefits of short-term interventions without exacerbating the perverse incentives faced by lenders in emerging markets and their foreign creditors? Presumably the answer to the previous question depends on what causes currency crises. According to many of the Fund's critics, the quasiliberalization of world financial markets that has occurred has led to new kinds of currency crises, of a type not anticipated by standard macroeconomic models. Some believe that these "new" currency crises are essentially self-fulfilling prophecies unrelated to moral-hazard issues or the fundamental health of the countries involved (see for example Chang and Velasco, 1999). From this perspective, the Fund's actions in Asia punished the victims of the crime, not the perpetrators. Tight monetary and fiscal policy just damaged otherwise sound financial systems.

Other researchers argue that the roots of many recent currency crises can be traced to moral-hazard problems associated with financial deregulation, the end of capital controls, and ongoing implicit guarantees to corporations, banks, and their foreign creditors. In fact, substantial evidence supports the view that banking crises have become increasingly severe and are now more closely linked to currency crises. Since 1982, there have been over ninety episodes of severe banking crises. The worst of these involve losses to taxpayers of unprecedented magnitude. For example, in more than twenty of the post-1982 cases, bailout costs exceeded 10% of the affected country's GDP. In roughly half of those cases, including the recent Southeast Asian episodes, the losses have been in the range of 25% of GDP.² Finally, currency crises are more correlated with banking crises in the post-1980 era than in the pre-1980 era.³

The increase in the rate and severity of banking crises reflects three factors: currency controls were far less pervasive in the post-1980 era, governments didn't subsidize risktaking by banks nearly as much as they do now, and international agencies, like the IMF, didn't help to insulate foreign creditors from default risk as much.

But why should banking crises be linked to currency crises? Here there are at least two possibilities: fundamental shocks to the banking sector, and self-fulfilling expectational links. To illustrate the first channel, sup-

2. To put this figure into perspective, the losses to U.S. taxpayers from the savings-and-loan crises was roughly 3% of U.S. GDP. Losses from bank failures during the Great Depression years of 1930–1933 equaled roughly 4% of U.S. GDP. See Calomiris (1998).
3. See Kaminsky, Lizondo, and Reinhart (1998) and Kaminsky and Reinhart (1999).

pose that real shocks to an economy cause higher bankruptcy rates in the banking sector that trigger large fiscal obligations on the part of the government. These shocks could reflect shifts in either the supply or the demand for the products of the banks' customers. One concrete example is provided by Thailand, where banks made substantial loans to firms that invested heavily in real estate projects that began to yield negative rates of return prior to the currency crises. Under these circumstances a banking crisis could lead to a currency crisis because of large *prospective* deficits associated with implicit bailout guarantees to failing banks. To the extent that market participants expect that future deficits will be financed, at least in part, by higher seignorage revenues, future monetary policy would be perceived as being inconsistent with the maintenance of fixed exchange rates. This would lead to a currency crisis before the deficits actually begin to be monetized.⁴ From this perspective, government guarantees are the key conduits by which real shocks transform a banking crisis into a currency collapse.

The second connection between banking and currency crises is that the presence of government guarantees opens up the possibility of self-fulfilling twin banking–currency crises. Suppose that for extraneous reasons market participants come to expect that the government will pursue a monetary policy that is inconsistent with the maintenance of fixed exchange rates. These beliefs can be self-fulfilling in the sense that they lead to a successful currency attack and a future monetary policy that actually is inconsistent with the maintenance of fixed exchange rates.

To see how this might work, suppose that because of government guarantees, banks are unhedged against exchange-rate risk. Burnside, Eichenbaum, and Rebelo (1999) argue that a bank's optimal strategy is to be unhedged when its foreign creditors are insulated from the default risks associated with a devaluation.⁵ Many banks would therefore go broke after a devaluation. This in turn triggers the government's obligations to banks' creditors. Under these circumstances, the government would have to meet its fiscal obligations, at least in part, via seignorage revenues. So if market participants believe that the government will

4. Burnside, Eichenbaum, and Rebelo (1998) argue that this connection between banking and currency crises was operative during the recent Thai and Korean currency crises.

5. In fact, in their model, it is optimal for banks to magnify exchange-rate risk by entering into forward positions which lose money when there is a devaluation. See also Mishkin (1996) and Obstfeld (1998), who argue that a government's promise to maintain a fixed exchange rate is often interpreted by the financial industry as an implicit guarantee against the adverse consequences of a devaluation. Consistent with this hypothesis, many researchers argue that firms and financial intermediaries borrow extensively from abroad prior to the onset of a currency crises but do not completely hedge exchange-rate risk. See for example, IMF (1998, p. 17) for a discussion of the recent crises in Indonesia, Korea, and Thailand.

meet future fiscal obligations by seignorage revenues, then they will take actions that trigger these fiscal obligations and the need to raise seignorage revenues. So there will be a self-fulfilling, apparently rational run on the currency, followed by a devaluation, a banking crisis, transfers to bank creditors, and a partial monetization of the debt. Indeed, the attack may set off a chain of self-fulfilling attacks on different currencies, i.e. contagion.

Note that under either the fundamental or the self-fulfilling-expectations scenario discussed above, currency crises are tightly linked to banking crises. Actions taken by domestic governments or international agencies that exacerbate the moral-hazard problem faced by banks raise the probability of future currency crises. To the extent that one takes this problem seriously, the task confronting the IMF is to assess the extent to which their successful short-run strategies for stabilizing currency crises affect the likelihood of future crises. On this issue Mussa and Savastano's paper is silent. That is a pity. No doubt they have much to say on this, *the* critical issue confronting policymakers at the Fund.

I conclude by reiterating that I learned a lot from this paper. The fact that I've urged the authors to write a sequel doesn't detract from what they have done. They have forcefully responded to a subset of the Fund's critics. The reader must wait for the sequel to see how the authors respond to the other critics.

REFERENCES

- Burnside, C., M. Eichenbaum, and S. Rebelo. (1998). Prospective deficits and the South East Asian currency crises. Cambridge, MA: National Bureau of Economic Research. NBER Working Paper 6758.
- , ———, and ———. (1999). Hedging and financial fragility in fixed exchange rate regimes. Cambridge, MA: National Bureau of Economic Research. NBER Working Paper 7143.
- Calomiris, C. (1998). The IMF's imprudent role as lender of last resort. *The Cato Journal* 17(3):275–294.
- Chang, R., and A. Velasco (1999). Liquidity crises in emerging markets: Theory and policy. Cambridge, MA: National Bureau of Economic Research. NBER Working Paper 7272.
- Chari, V. V., and P. Kehoe. (1998). Asking the right questions about the IMF. *The Region*, 1998 Annual Report Special Issue. Federal Reserve Bank of Minneapolis.
- International Monetary Fund (1998). *International capital markets: developments, prospects, and key policy issues*. Washington, DC: IMF.
- Kaminsky, G., S. Lizondo, and C.M. Reinhart. (1998). Leading indicators of currency crises. *International Monetary Fund Staff Papers* 45(1):1–48.
- , and C. M. Reinhart. (1999). The twin crises: The causes of banking and balance-of-payments problems. *American Economic Review* 89(3):473–500.

- Mishkin, Frederic. (1996). Understanding financial crises: A developing country perspective. In *Annual World Bank Conference on Development Economics 1996*, Michael Bruno and Boris Pleskovic (eds.) Washington, DC: World Bank.
- Obstfeld, Maurice. (1998). The global capital market: Benefactor or menace? *Journal of Economic Perspectives* 12:9–30.

Discussion

In reply to the comments of the formal discussants, Michael Mussa emphasized that the scope of their paper is the IMF approach to economic stabilization, which is why they did not address issues relating to moral hazard and the international-lender-of-last-resort function. He noted, however, that the problem of fragility of financial systems in emerging market economies had led, even prior to recent crises, to attempts by international institutions to create a set of standards that countries would be encouraged to adopt. Morris Goldstein of the IMF led this effort in 1996, and the Bank for International Settlements took over the project subsequently. This initiative illustrates that the IMF was trying to act preemptively on financial fragility and not just after the fact.

Mussa also expressed skepticism about the heavy weight being attached to the moral-hazard issue. He noted that in Mexico the problem was not just banking instability but the possibility of default on the tesobonos. If Mexico had defaulted on the tesobonos, it would have lost access to international capital markets on a sustained basis, imposing large costs on the country. The IMF's efforts to avert sovereign default in Mexico were thus necessary, even though creditors were also helped. He added that the IMF is not paying for the Mexican banks' losses and that the Mexican taxpayers are stuck with that bill. Mussa also used the examples of Thailand and Indonesia to point out that external creditors have not been made whole in every case. The decision to stop providing bailouts to Russia should have sent the powerful message that, no matter how important a country is, international support including IMF loans is conditional on reasonable policy performance and in any case is not unlimited. It is thus incorrect to characterize the IMF as being excessively prone to bailing out countries and institutions in trouble.

Martin Feldstein said that issues pertaining to the denomination of private debts were not mentioned in the paper. He noted that the typical problem of countries seeking IMF help is a current-account deficit that needs to be reduced, and the traditional formula is to devalue and deflate. However, devaluation is actually very contractionary in countries like Thailand in which corporate foreign-currency borrowing has been

so massive that corporations (and ultimately also their creditor banks) find themselves bankrupt when there is a large devaluation. Feldstein added that in such a case the last thing that is needed is contractionary fiscal and monetary policies to further reduce aggregate demand. He asked whether the IMF explicitly takes into account the deflationary impact of devaluation through the foreign-debt channel when designing its programs. Mussa responded by saying that debt issues of this type are viewed as central to Fund programs. For example, getting the international banks to roll over Korean external debt was essential to the success of stabilizing the won and bringing it back to a reasonable level. Indeed, financial weakness in Asia was a major motivation for the Fund's recommendations to raise interest rates, because rate increases help to prevent devaluation by reducing capital outflows.

Michael Hutchison commented that in Korea many people think that some of the restructuring in IMF programs seems to be more relevant to the government's own agenda for change than to the need for macroeconomic reforms. Essentially, the government uses IMF backing to push through programs that otherwise do not have domestic political support. Mussa agreed that the IMF sometimes effectively plays what amounts to a political role, but added that governments should not be viewed as unitary actors. For example, the IMF often works with the finance ministries and central banks against the spending ministries and other constituencies. In the case of Korea, independently of domestic political concerns, corporate restructuring was a concern of the Fund because high precrisis corporate leverage ratios had made the Korean financial system extremely fragile. The Fund pursued corporate restructuring because it was viewed as being very important for avoiding future difficulties.