

Evaluation Report

# The IMF and Recent Capital Account Crises

Indonesia, Korea, Brazil



International Monetary Fund

2003

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The following symbols have been used throughout this report:

- between years or months (e.g. 2000–01 or January–June) to indicate the years or months covered, including the beginning and ending years or months;
- / between years (e.g. 2000/01) to indicate a fiscal (financial year).

“Billion” means a thousand million.

Minor discrepancies between constituent figures and totals are due to rounding.

Some of the documents cited and referenced in this report were not available to the public at the time of publication of this report. Thus, they have not been listed in the bibliography. However, under the current policy on public access to the IMF’s archives, some of these documents will become available five years after their issuance. They may be referenced as EBS/YY/NN and SM/YY/NN, where EBS and SM indicate the series and YY indicates the year of issue. Certain other documents are to become available ten or twenty years after their issuance depending on the series.

# Foreword

This report, *The IMF and Recent Capital Account Crises*, is the second evaluation report produced by the Independent Evaluation Office (IEO). The report focuses on the role of the IMF in three recent currency crises in Indonesia (1997–98), Korea (1997–98), and Brazil (1998–99).

The three cases exemplify the new type of balance of payments crisis, characterized by a sudden reversal of capital flows, which are increasingly seen as posing special risks for emerging market countries. All three cases have been the subject of considerable debate both within and outside the IMF and, in revisiting these episodes, this report covers ground that will be familiar to many readers. However, it also brings a fresh perspective because of the IEO's access to internal IMF documents which cast new light on various aspects of each crisis, both in the buildup to the crisis and in the crisis management phase.

The primary purpose of the evaluation, in keeping with the IEO's mandate, is to draw lessons for the future. The report therefore recommends a number of steps aimed at making the IMF's surveillance and program design more effective in the prevention and management of future capital account crises. The report recognizes that many important lessons have already been learned from the cases studied and a number of changes have been made in IMF procedures and policies. The recommendations in the IEO report seek to build on the many steps already taken.

The preparation of the report followed the IEO's established procedures. A draft issues paper was posted for comments on the IEO's website ([www.imf.org/ieo](http://www.imf.org/ieo)) and was later revised, on the basis of inputs from a range of groups and individuals, to form the final terms of reference for the evaluation. This was posted on the website and interested parties were invited to submit material relevant to items included in the terms of reference. Several seminars were held to interact with outside experts and stakeholders and comments on early drafts were obtained from staff. The final IEO report, as approved by the Director, was submitted to management for comments and also circulated simultaneously to Executive Directors. The report was discussed in the Executive Board on May 30, 2003, along with comments from management and staff.

In line with IEO procedures, the report, as discussed in the Board, is being published along with the Summing Up of the Executive Board discussion by the Acting Chair and the statements by management and staff to the Board. The staff statement draws attention to positive developments in Indonesia and Brazil in the period following the end of the programs covered by this report. The IEO was precluded from evaluating these developments because our mandate does not allow us to review ongoing programs.

Montek S. Ahluwalia  
Director  
Independent Evaluation Office



### **The IMF and Capital Account Crises: Indonesia, Korea, Brazil**

The report was prepared by a team headed by Shinji Takagi and including Ali Mansoor, Kevin Barnes, and Benjamin Cohen. The team was assisted by Afonso Bevilaqua, Stephen Grenville, Mohamad Ikhsan, Jai-won Ryou, and Takashi Shiraishi; sections of the report have also benefited from comments and other inputs from Jeffrey Frankel, Takatoshi Ito, Yung Chul Park, and David Peretz. However, the final judgments are the responsibility of the IEO alone. Research assistance from Misa Takebe, Shauqie Azar, Minkyung Kim, and Leandro Rothmuller; administrative support by Annette Canizares, Arun Bhatnagar, and Florence Conteh; and editorial work by Ian McDonald and Esha Ray are gratefully acknowledged.

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The Independent Evaluation Office (IEO) was established by the International Monetary Fund's Executive Board in July 2001. The office operates independently of IMF management and at arm's length from the IMF's Executive Board. Its mission is to provide objective and independent evaluation of issues related to the IMF's mandate and thereby support the Executive Board in its governance and oversight responsibilities, to contribute to enhancing the learning culture of the IMF, and to promote understanding of the IMF's work.

# Abbreviations and Acronyms

ADB	Asian Development Bank
APD	Asia and Pacific Department (IMF)
APEC	Asia-Pacific Economic Cooperation
ASEAN	Association of South East Asian Nations
BCBS	Basel Committee on Banking Supervision
BI	Bank Indonesia
BIS	Bank for International Settlements
BLBI	Bank Liquidity from Bank Indonesia
BOK	Bank of Korea
BPK	Supreme Audit Agency (Indonesia)
CBA	Currency board arrangement
CCL	Contingent Credit Line (IMF)
CD	Certificate of deposit
CPMF	Financial transactions tax (Brazil)
EFF	Extended Fund Facility (IMF)
EMEAP	Executives' Meeting of East Asia-Pacific Central Banks
ERM	Exchange rate mechanism
FDI	Foreign direct investment
FSAP	Financial Sector Assessment Program (IMF)
FSC	Financial Supervisory Commission (Korea)
FSS	Financial Supervisory Service (Korea)
G-7	Group of Seven countries
GDP	Gross domestic product
IBRA	Indonesian Bank Restructuring Agency
ICM	International Capital Markets Department (IMF)
IDB	Inter-American Development Bank
IEO	Independent Evaluation Office (IMF)
IFI	International financial institution
IIF	Institute of International Finance
IMF	International Monetary Fund
INDRA	Indonesia Debt Restructuring Agency
ITC	Investment trust company (Korea)
JIBOR	Jakarta interbank offered rate
KAMCO	Korea Asset Management Corporation
KDB	Korea Development Bank
KDIC	Korea Deposit Insurance Corporation
LIBOR	London interbank offered rate
LOI	Letter of intent (IMF)
LOLR	Lender of last resort
MAE	Monetary and Exchange Affairs Department (IMF) <sup>1</sup>
MEFP	Memorandum on economic and financial policies (IMF)

<sup>1</sup>Effective May 1, 2003, name was changed to Monetary and Financial Systems Department.

MOF	Ministry of finance
MOFE	Ministry of Finance and Economy (Korea)
NDA	Net domestic assets
NIR	Net international reserves
NPL	Nonperforming loan
OECD	Organization for Economic Cooperation and Development
PC	Performance criteria (IMF)
PDR	Policy Development and Review Department (IMF)
PEDT	Private External Debt Team (Indonesia)
PIN	Public Information Notice (IMF)
PSBR	Public sector borrowing requirement
PSI	Private sector involvement
RES	Research Department (IMF)
ROSC	Report on the Observance of Standards and Codes (IMF)
SBA	Stand-By Arrangement (IMF)
SBI	Bank Indonesia certificate
SDDS	Special Data Dissemination Standard (IMF)
SDR	Special drawing right (IMF)
SME	Small and medium-sized enterprise
SRF	Supplemental Reserve Facility (IMF)
URV	Unit of real value (Brazil)
VAT	Value-added tax
WHD	Western Hemisphere Department (IMF)
WTO	World Trade Organization

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# **The IMF and Recent Capital Account Crises: Indonesia, Korea, Brazil**

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# Executive Summary

**T**his report evaluates the role of the IMF in three recent capital account crises, in Indonesia (1997–98), Korea (1997–98), and Brazil (1998–99). These crises have been the subject of extensive external commentary and have also been studied in detail by IMF staff. A number of important lessons have already been learned and corresponding corrective steps taken in the form of revised IMF policies and procedures. Nevertheless, it is appropriate for the Independent Evaluation Office (IEO) to conduct an independent assessment of the role of the IMF in these crises, taking advantage of its unique access to internal IMF documents while also taking note of earlier work where relevant. The evaluation seeks to draw lessons for the IMF, supplementing those that have already surfaced, and also to contribute to transparency by evaluating the internal processes by which important decisions were made.

The findings of this evaluation report are subject to three important limitations. First, any evaluation inevitably benefits from hindsight and while this can be an advantage in drawing lessons for the future, much of what we know now may not have been known at the time to those who had to make the relevant decisions, often under extreme pressure. These considerations must be borne in mind in determining accountability. Second, any evaluation implies a comparison with a counterfactual, that is, what might have happened with alternative policies. This is very difficult to establish rigorously. Third, the behavior of an economy is always subject to uncertainty, and the uncertainties are much greater in crisis situations. In the face of uncertainty, a program cannot be judged to represent a mistaken choice *ex ante* just because it failed *ex post*. The relevant criterion is whether the *ex ante* probability of success was high enough.

The report consists of two parts. The main report presents our assessment of the role of the IMF in the three crises and the lessons to be drawn from the experience, with some specific recommendations going beyond the steps already taken. The annexes contain the three country studies that form the basis for our judgments in the main report.

## Overall Assessment of the Role of the IMF

The three country cases studied share several features common to capital account crises; in each case the crisis was triggered by massive reversal of capital flows, short-term flows played a prominent role, and contagion was an important factor. However, there were also notable differences. The nature of the crisis differed in the three cases, with Indonesia and Korea exemplifying “twin crises” in which the external crisis coincided with a banking crisis. There were also differences in the policy mix advocated, the political environment in which the crisis was managed, and the effectiveness of policy implementation. All three programs failed in their initially stated objectives, but the subsequent experience under the revised programs was very different. Our overall assessment of the role of the IMF in each of the three crises is as follows.

### Indonesia

IMF surveillance did identify the vulnerabilities in the banking sector that would later become crucial to the evolution of the crisis, but it underestimated the severity and the potential macroeconomic risks posed by them. In designing its crisis management strategy during October 1997, the IMF misjudged the extent of ownership at the highest political level and underestimated the resistance to reform likely to be posed by vested interests. This underestimation of political constraints was perhaps a reflection of the earlier failure of surveillance in recognizing the changing nature of corruption and cronyism.

The single greatest cause of the failure of the November 1997 program was the lack of a comprehensive bank restructuring strategy, which led to a rapid expansion of liquidity to support weak banks. The resulting loss of monetary control in turn contributed to a weaker exchange rate and greater distress in the corporate sector. The crisis became intensely political, following the illness of the President in early December, making crisis management even more difficult. At this stage, the IMF negotiated a revised

program in January 1998, which focused heavily on structural conditionality to signal a clean break with the past. The focus on structural conditionality was based on the assumption that this was necessary to restore confidence. It failed to do so, partly because of visible lack of political commitment to the policies promised and partly because of the failure to address the critical banking and corporate debt problems.

The Indonesian crisis was clearly the most severe of the three under review, with GDP declining by 13 percent in 1998 and a large increase in poverty. This devastating outcome cannot be attributed solely to shortcomings on the part of the IMF. The lack of firm implementation of the November program, and especially the reversal of some of the critical steps at a very early stage, eroded market confidence and the situation soon got out of control as political uncertainty increased and riots occurred against the ethnic Chinese community. These exceptional circumstances explain much of the severity of the crisis experienced by Indonesia. However, our evaluation suggests that the IMF's response to the failure was also inadequate in many respects.

## Korea

In Korea, IMF surveillance failed adequately to identify the risks posed by the uneven pace of capital account liberalization and the extent of banking sector weaknesses, owing to the adoption of a conventional approach that focused on macroeconomic variables. There were gaps in the data needed to make a full assessment, though available data on short-term debt and financial market indicators were not fully used. While concerns over Korea's weak banking sector had prompted international banks to review their lending to some Korean institutions even before the onset of the Asian crisis in July 1997, the IMF was optimistic until virtually the last minute.

The first Korean program was clearly underfinanced, but this was due primarily to the unwillingness of major shareholder governments either to take concerted action to involve the private sector or to provide the necessary financing upfront to resolve what, of all the three cases, was most clearly a liquidity crisis. When this strategy failed, the major shareholder governments moved quickly to initiate concerted action to involve the private sector—an approach that eventually worked well. It could be argued that the first strategy needed to be tried and proven to have failed before the rollover agreement of December 24, 1997 could be secured. The IMF played a useful role as crisis coordinator in drawing attention to the problem and later facilitating information exchange among major governments and helping to set up a monitoring system to ensure compliance.

The Korean adjustment process involved a severe downturn, with GDP declining by 6.7 percent in 1998, compared with a forecast of positive growth. However, unlike Indonesia, this was followed by a robust recovery in 1999. The greater-than-expected downturn reflected the impact of negative balance sheet effects, which were clearly underestimated. In retrospect, the fiscal tightening in the program was unnecessary, as the IMF staff has itself concluded.

## Brazil

In Brazil, IMF surveillance was successful in identifying the key vulnerabilities that were at the core of the crisis, in part owing to the fact that they were largely macroeconomic in nature. However, it progressively downplayed the scale of overvaluation, and had little impact in persuading the Brazilian authorities to take sufficient corrective action even in areas where the diagnosis was correct. When Brazil faced intense speculative pressure on its foreign exchange reserves from mid-1998, the IMF reluctantly supported the authorities' preference for maintaining the existing exchange rate regime. However, intense pressure on the real developed in December 1998, and the program soon failed with the collapse of the peg in January 1999.

A major justification for defending the exchange rate was that an exit from the peg at that time would have unsettled international financial markets already nervous after the Russian default and the Long-Term Capital Management crisis. With the benefit of hindsight, it can be argued that this concern was overplayed. An earlier exit from the peg, widely perceived to be unsustainable, probably would not have had major systemic effects if it had been made under an IMF-supported program. The hedge provided to the private sector by the government, through the use of foreign exchange reserves and exchange rate-indexed bonds, ensured that the sharp depreciation that followed the floating of the real in January 1999 had little adverse effect on the Brazilian economy. However, this was at the cost of a substantial increase in the stock of public debt, which stored up problems for the future.

The revised 1999 program fared fairly well in the short run. Contrary to program expectations of negative growth in 1999, Brazil actually experienced positive growth of 0.8 percent. This was largely because of the healthier state of the banking system, combined with the provision of the hedge, which mitigated balance sheet effects on the private sector. The IMF played a useful role in facilitating Brazil's transition to an inflation-targeting monetary regime as well as a more disciplined fiscal policy regime, but in retrospect, fiscal vulnerabilities were not fully eradicated.

## Precrisis Surveillance

IMF surveillance was more successful in identifying macroeconomic vulnerabilities than in recognizing and analyzing in depth the risks arising from financial sector and corporate balance sheet weaknesses and the governance-related problems that contributed to those weaknesses. Insufficient candor and transparency limited the impact of surveillance on policy, even in areas where the diagnosis was broadly accurate.

In Indonesia, the IMF did identify banking sector weaknesses as a problem, but surveillance reports underestimated the potential adverse macroeconomic consequences of these weaknesses. Surveillance also paid insufficient attention to the changing nature of corruption and the macroeconomic risks it posed, and surveillance reports were less candid on these issues.

In Korea, the IMF failed adequately to recognize the vulnerabilities created by the uneven sequence of capital account liberalization and the risk that a change in investor sentiment could cause a severe drain on foreign exchange reserves. While the crisis also came as a surprise to many other observers, the IMF was slow to catch the rising concerns of international banks over Korea's banking sector problems, which had begun to surface several months before the onset of the full-blown crisis. In retrospect, surveillance proved too sanguine about these growing risks.

IMF surveillance effectively diagnosed the major vulnerabilities in Brazil, largely because Brazil's vulnerabilities manifested themselves primarily as macroeconomic phenomena, such as the rising stock of public debt and real exchange rate appreciation, which were part of the IMF's traditional tool kit.

In all three countries, the IMF's role as confidential advisor was not very effective in persuading countries to modify their policies even when key vulnerabilities were identified. The IMF was not provided with much sensitive information required for effective surveillance. While it is difficult to generalize from three cases, or to test the counterfactual concretely, the IMF probably could have been more effective in influencing policy if it had made its analyses public so as to contribute to a wider policy debate.

## Program Design and Implementation

### Macroeconomic framework and projections

In all three cases, macroeconomic outcomes turned out to be very different from program projections. In Indonesia and Korea, the initial projections were overly optimistic, leading to a design of macroeco-

omic policies that turned out to be too tight given the outcome in aggregate demand and output. In contrast, the initial projections for Brazil in 1999 were too pessimistic, which contributed to fiscal adjustment that turned out to be insufficient, in light of that country's adverse public debt dynamics.

Part of this problem arises because macroeconomic projections in an IMF-supported program are necessarily the outcome of negotiation. However, there were also analytical weaknesses since forecasts were not derived from an analytical framework in which the key determinants of output, and their likely behavior during the crisis, could be dealt with adequately. In particular, there was insufficient appreciation of (1) the large currency depreciation which might occur in view of the possibility of multiple equilibria, and (2) the severe balance sheet effects that might result. It is inherently difficult to forecast macroeconomic outcomes reliably, especially in crisis situations, but these problems could have been reduced if there was a more explicit focus on the key factors affecting aggregate demand, particularly private investment.

In light of the considerable uncertainties, a more explicit discussion in program documents of the major risks to the macroeconomic framework, with a clear indication of how policies would respond if the risks materialized, would have been helpful. In practice, subsequent program reviews on Indonesia and Korea did show flexibility, but an upfront recognition of risks would have sent a more transparent signal on the expected stance of policies.

### Fiscal policy

All three programs involved fiscal tightening. The extent of tightening was mild in Indonesia and Korea, while it was fairly strong in Brazil. In view of output developments, the initial tightening of fiscal policy in Indonesia and Korea was not warranted, and it was in fact relaxed quickly when the extent of output collapse became evident. In any event, in both countries, the initial fiscal tightening was not the cause of the output collapse. This was the result of balance sheet effects, which were not factored into program design. In Brazil, fiscal tightening was much sharper. This was appropriate because fiscal sustainability was a major issue driving the evolution of the crisis. However, it turned out to be insufficient to achieve the objective of stabilizing, and then reducing, the debt-to-GDP ratio.

### Monetary policy

The stance of monetary policy in all three countries was initially set tight, with an explicit recognition of the trade-off between higher interest rates and



a weaker exchange rate. However, the experience of the three countries varies and does not provide a definitive answer to the ongoing debate on the effectiveness of high interest rates in stabilizing the exchange rate.

In Indonesia, the maintenance of tight monetary policy envisaged in the program was simply not implemented, as the monetary base expanded rapidly and real interest rates became increasingly negative during the early months of the program. The assertion by some critics that the tight monetary policy advocated by the IMF was a cause of the output collapse is not warranted for the simple reason that it was not implemented for most of the crisis period. Exchange rate stability returned in March 1998, when the rupiah had sufficiently depreciated and interest rates were raised and monetary control regained.

In contrast, Korea implemented the tight monetary policy envisioned in the initial program by raising domestic interest rates and the penalty rate charged to banks for central bank foreign currency advances. These moves were appropriate to defend the currency, but they were not by themselves sufficient to stabilize the exchange rate, because much of the capital outflow was in fact driven by credit considerations rather than yield. It can be argued that real interest rates were kept higher than might have been necessary in early 1998, when the exchange market had stabilized. However, the still uncertain situation understandably called for some caution. Given the contractionary impact of bank restructuring on credit flows, the few months of higher than necessary interest rates could not have been the dominant cause of the recession.

In Brazil, the excessive easing of interest rates—over the IMF’s objections—may have contributed to the timing, if not the eventuality, of the collapse of the crawling peg. A decisive tightening of monetary policy in March 1999 coincided with the restoration of stability in the foreign exchange market. However, one must be careful about the causality, given the fact that an informal agreement by major international banks to maintain credit lines to Brazil was reached around the same time. High interest rates did not have a major negative impact on the private sector, because of the sound state of the banking system and the low leverage of the corporate sector, compared with the situations in Asia. Subsequently, the IMF supported Brazil’s transition to an inflation-targeting regime, which allowed for price stability and a rapid reduction in interest rates.

### **Official financing and private sector involvement**

The size and format of the official financing package were inadequate in Korea and contributed to the

failure of the first program. The ambiguity over the availability of US\$20 billion in bilateral assistance pledged as a “second line of defense” in Korea created uncertainty in the market about the ability of the program to meet the country’s immediate liquidity needs.

In the other two countries, the programs failed for other reasons. The failure of the initial Indonesian program was due, not to inadequate financing, but to other factors, including nonimplementation of the key elements of the program by the authorities and the subsequent explosion of liquidity because of the failure to resolve the banking crisis. Once the program had failed, the crisis became intensely political, leading to a large amount of capital flight by domestic residents, and the sharp depreciation of the rupiah began to create solvency concerns. No reasonable amount of official financing could have restored confidence at that time. In the case of Brazil, the initial program failed because the key policy, namely, that of supporting the crawling peg, was not credible with the markets.

In Korea and Brazil, the IMF’s role as crisis coordinator in organizing private sector involvement (PSI) was limited by the unwillingness of major shareholder governments to use nonmarket instruments to influence the behavior of private sector institutions and concerns that such action might precipitate an exodus of capital from emerging markets. However, when a decision was made by the major shareholders to involve the private sector, the IMF played a useful role in facilitating information exchange among major governments and helping to set up systems of monitoring compliance.

An earlier attempt to involve the private sector in Korea would have been warranted, but given the initial unwillingness of the IMF’s major shareholder governments to take concerted action, there was probably little the IMF could do. The agreement by major international banks to roll over interbank debt on December 24, 1997 was a turning point in the crisis. The success of this approach owed much to the fact that most of the short-term external debt was interbank credit. The Brazilian experience in the second program suggests that a program with a high degree of credibility is necessary for the “voluntary” approach to PSI to work. In Indonesia, the IMF provided technical assistance for corporate debt restructuring, but its role was limited.

### **Bank closure and restructuring**

The experiences of Indonesia and Korea suggest that a successful bank closure and restructuring program must include a comprehensive and well-communicated strategy in which transparent rules are consistently applied. The Korean program by and large



achieved its objectives, largely because a comprehensive strategy was developed at the outset. The Indonesian banking sector program, by contrast, initially suffered from the lack of a comprehensive strategy and the failure to communicate the logic and outline of the policy to the public. As a result, the closure of 16 banks in November 1997, with subsequent reversals exacerbated, rather than dampened, the crisis. Bank closures in Indonesia in April 1998, however, were more successful because they were done as part of a comprehensive strategy that was well communicated to the public and was based on the consistent application of uniform and transparent criteria.

The issue of whether a blanket guarantee, instead of the partial guarantee actually offered, should have been introduced in Indonesia in November deserves careful consideration. Our evaluation suggests that the banking crisis was not yet systemic in November, so that the partial guarantee was appropriate. In the end, the blanket guarantee introduced in January was subject to abuse and consequently raised the fiscal cost of bank restructuring. The problem in bank restructuring was more with the initial lack of a comprehensive and well-communicated strategy, and not the nature of the guarantee.

### Structural conditionality

All three programs involved structural conditionality, but the experience with conditionality was very different. The Indonesian and Korean programs were characterized by extensive structural conditionality (especially the January 1998 Indonesian program) covering several areas that were not macro-critical. The scope of structural conditionality in the Brazilian program was limited to structural fiscal reform and prudential regulation. Part of this difference reflected the absence in Brazil of many of the distortions that had been present in Asia.

Measures to rehabilitate and reform the financial sector were necessary in both Indonesia and Korea and were appropriately included in the programs. In Indonesia, it was also important to tackle corporate restructuring by reforming the legal system, but this element was missing in the first two programs. As for the various nonfinancial structural reform measures included in the Indonesian and Korean programs, many of these may have been beneficial in improving long-run economic efficiency, but they were not necessary.

In Indonesia, many governance-related measures were included in the January 1998 program at the urging of some of the IMF's major shareholders in the belief that confidence could only be restored by signaling a clean break with the past. However, the evaluation suggests that the proliferation of nonfinancial structural conditionality led to a loss of

focus on critical reforms in the banking sector which was more important for restoring stability. Proliferation of structural conditionality may also have led to lack of ownership at the highest political level and nonimplementation, both of which damaged confidence.

### Communications strategy

A program for restoring confidence must include a strategy to communicate the logic of the program to the public and the markets, in order to enhance country ownership and credibility. None of the three programs initially contained such a strategy.

Effective public communications are essential to build broad support for the program. Likewise, effective dialogue with the markets would improve program design through understanding the expectations of market participants, and also help build credibility for the program. For this purpose, it is important for the IMF to explain clearly the logic and strategy of the program, including spelling out the major risks, with a broad indication of how policies would respond to them.

### Internal IMF Governance and the Mode of Operations

The evaluation identified a number of weaknesses in the IMF's internal governance and mode of operations. In the area of *human resource management practice*, the effectiveness of surveillance was reduced by the lack of sufficient internal incentives to make judgments that were frank and potentially unpopular (with country authorities), resulting in a tendency for sharper elements of a diagnosis to be diluted in final Executive Board papers. In crisis management, the quality of the IMF's response was compromised by a delay in the reallocation of staff resources to the Asia and Pacific Department (APD) whose staff was overstretched by multiple regional crises; the insufficient integration of staff from the Monetary and Exchange Affairs Department (MAE) and the area department; insufficient utilization of available internal knowledge; and the failure to mobilize staff members with up-to-date country knowledge.

*The role of the Executive Board and the IMF's major shareholders* was particularly prominent during the crises, when major decisions needed to be made quickly, calling for close collaboration with staff and management. While the close involvement of the Board and the major shareholders was proper and necessary, close contacts at multiple layers unnecessarily subjected staff to micromanagement and political pressure, contributing to a blurring of tech-

nical and political judgments. For example, the visible presence of major country officials close to the IMF negotiating teams sometimes created a misperception of the motives behind IMF involvement, thus weakening the sense of country ownership.

In all three programs, the IMF collaborated, both in financing and technical work, with *other international financial institutions* (IFIs). When there was a clear separation of responsibilities, as in Brazil, no major problems occurred. In Asia, however, where the IMF and the other IFIs all worked in the financial sector, tensions developed over the role they should play in an IMF-supported program. While a good working relationship eventually developed, it depended too much on personalities, and not on a well-defined procedure. Moreover, existing procedures to resolve differences of view between the IMF and the World Bank on key policy matters were not effective in avoiding public criticism by the Chief Economist

of the World Bank; indeed, as far as the evaluation team can tell, these procedures were not utilized.

### Recommendations

Since these crises, the IMF has taken numerous initiatives to strengthen surveillance and program design. Many of the weaknesses in surveillance and program design identified by the evaluation have already been addressed by the IMF in its revised policies and procedures. Nevertheless, additional steps will be necessary to further enhance the effectiveness of the IMF in surveillance and crisis management. We make six broad recommendations, which are set out in the final chapter of the report along with their rationale. Rather than summarize them again here, we suggest that Chapter 6 be read in conjunction with this Executive Summary.

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## Main Report

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The decade of the 1990s saw a succession of currency crises in emerging market economies, against the background of the increasing integration of these economies with global capital markets. These crises were preceded by large private capital inflows and triggered by sudden shifts in market sentiment, which led to massive capital flow reversals. They are often described as capital account crises to distinguish them from the more conventional crises which have their origins mainly in the current account. The IMF was called in to help in several cases, and its role has been the subject of much study and comment. Contrary to the expectation that IMF support would serve to certify the effectiveness of an adjustment program and help achieve a smooth adjustment, many of the IMF-supported programs failed to achieve their initially stated objectives. Capital outflows continued, leading to severe exchange rate depreciation and, in some cases, an exceptionally large contraction in output. Not surprisingly, the IMF was widely criticized both for its failure to anticipate vulnerabilities through surveillance and for the subsequent failure to restore market confidence quickly.

This evaluation seeks to throw light on the role of the IMF in three capital account crises, in Indonesia (1997–98), Korea (1997–98), and Brazil (1998–99). In undertaking this evaluation, we recognize that we are entering into grounds that are unusually well-trodden. These crises have been extensively studied by numerous outside observers and also by IMF staff. A number of lessons have been learned and many corrective steps have been taken in the form of revised IMF policies and procedures, as well as broader initiatives related to the international financial architecture. Nevertheless, it is appropriate that the Independent Evaluation Office (IEO) should revisit these cases in order to provide an independent assessment. In keeping with the IEO's terms of reference, the principal focus of the evaluation is to draw lessons for the IMF in its future operational work. It will also contribute to transparency by evaluating the internal processes by which important decisions were made.

Three aspects of the evaluation that limit the scope of its conclusions must clearly be stated at the outset:

- (i) Any evaluation necessarily benefits from hindsight. This can be useful in drawing lessons for the future but, in evaluating the past and especially determining accountability, it must be kept in mind that much of what we know now may not have been known to those who had to make the relevant decisions. It is important to distinguish cases in which critical information was not available from those in which the wrong conclusions were drawn from the available information. In the former case, the evaluation should highlight gaps in data availability which need to be corrected. In the latter, it may suggest a need to reexamine and improve analytical approaches and assumptions.
- (ii) To be meaningful, evaluation of an IMF-supported program must imply comparison with an alternative set of policies that may have produced better results. However, it is extremely difficult to establish rigorously such a counterfactual. This is especially so in areas where there is lack of consensus in academic and policymaking communities. We indicate areas where this appears to be the case, and the learning process in such cases must proceed on the basis of best judgment.
- (iii) The behavior of an economy is always subject to uncertainty, but the uncertainties are much greater in crises. A program cannot be judged to represent mistaken decisions *ex ante* just because it failed to restore confidence as envisaged. The relevant criteria for judging such decisions *ex post* are: (1) was there a reasonable *ex ante* assessment of the probabilities, with the information available at the time; (2) could more useful information have been obtained if different procedures had been used; and (3) could different policies have enhanced the probability of

success. These problems are especially difficult to handle if the crisis involves the possibility of multiple equilibria where it is difficult to predict the circumstances under which one or the other equilibrium can come into being.

The evaluation makes extensive use of primary information made available to the IEO. This includes staff reports for Article IV consultations,<sup>1</sup> briefing papers and back-to-office reports for staff missions and visits, internal memoranda exchanged among staff or between staff and management, minutes of Executive Board meetings, comments by management and review departments on briefing papers, and policy papers prepared by staff for the Board.<sup>2</sup> The IEO, however, is not given automatic access to documents that are purely internal to management or that cover management's exchanges with national authorities, except when such documents were shared with staff.<sup>3</sup> Inevitably many policy decisions during the crises were made by management in close consultation with its major shareholder governments and the records available to us do not cover these

consultations. Our judgments on certain policy matters are therefore based on limited information.

The evaluation team has extensively interviewed those involved in decision making in the IMF (including former IMF staff and management) as well as some current and former officials of member countries. Statements made in the text about positions or views of IMF staff and management are based on the evidence from internal documents and interviews. The team has also interacted with a number of individuals who have expressed views on the IMF's role in these cases. The list of those interviewed by the evaluation team appears in Appendix 2.

The report comprises two parts. The main report presents a summary of our major findings on the role of the IMF in the precrisis surveillance phase and the crisis resolution phase in each country and our recommendations. The annexes contain three detailed country case studies that form the basis for our judgments in the main report.

The main report is organized as follows. Chapter 2 presents a brief overview of the IMF's involvement in Indonesia, Korea, and Brazil. The subsequent three chapters summarize major findings from the country case studies. Chapter 3 presents our assessment of precrisis surveillance. Chapter 4 discusses our assessment of the IMF experience in seven central areas of program design and implementation, that is (1) the macroeconomic framework and projections, (2) fiscal policy, (3) monetary policy, (4) official financing and private sector involvement, (5) bank closure and restructuring, (6) structural conditionality, and (7) communications strategy to enhance ownership and credibility. Chapter 5 addresses internal governance issues within the IMF. Finally, Chapter 6 presents conclusions and recommendations.

<sup>1</sup>Under Article IV of the Articles of Agreement, the IMF holds consultations, usually every year, with each of its member countries on the country's economic policies and potential vulnerabilities. This "surveillance" function of the IMF is conceptually distinct from its role in providing financial support for adjustment programs.

<sup>2</sup>Some of these Board policy papers have been published, including on the IMF's website. These papers are cited in footnotes except when they are also available in print form, in which case they are listed in the bibliography.

<sup>3</sup>Management refers to the group of senior IMF officials consisting of the Managing Director, the First Deputy Managing Director, and two Deputy Managing Directors.

## The Three Crisis Cases

**T**he three cases covered by this evaluation share several features common to capital account crises. In each case the crisis occurred because of massive reversals of capital flows triggered by a shift in market sentiment. Short-term flows played a prominent role in the process, and contagion was an important factor. All three crises led to IMF-supported programs involving large amounts of IMF resources (see Appendix 1), supplemented by bilateral and other sources.

There were also notable differences that are worth summarizing at the outset. In **Indonesia and Korea, IMF surveillance failed to signal alarm because the crisis occurred against the background of sound macroeconomic fundamentals, including good export growth performance, relative price stability, and broad fiscal balance.** There were vulnerabilities in both cases in the form of financial sector weaknesses, highly leveraged corporate balance sheets, weak public and corporate sector governance, and rising short-term unhedged external indebtedness. These potential vulnerabilities were in varying degrees identified in IMF surveillance but their seriousness or their implications were not adequately appreciated, because these vulnerabilities were rooted in the private sector and the financial system in particular, which were not yet core areas of IMF surveillance. **The fragile state of the financial sector in both Indonesia and Korea meant that the crisis in each case was a “twin crisis,” in which a balance of payments crisis takes place simultaneously with a banking crisis.**

Brazil, on the other hand, showed clear evidence of critical macroeconomic imbalances in the form of a chronic deficit in the fiscal account, rising public sector debt, and real exchange rate appreciation. The IMF’s surveillance was much more effective in identifying these vulnerabilities because they were rooted in macroeconomic policies and the public sector, the areas of its traditional focus. Unlike the case in Indonesia and Korea, banking sector weakness was not a serious problem in Brazil at the time of the crisis.

All three original programs failed in their initially stated objectives, but the subsequent experience of crisis management was very different. All three countries experienced sharp declines in currency

values, but the fall of the Indonesian rupiah far exceeded that of either the Korean won or the Brazilian real, reflecting the exceptional nature of the Indonesian crisis (Figure 2.1). Output fell sharply in Korea and even more so in Indonesia, where there was also a significant increase in the incidence of poverty. While in Korea there was a strong rebound in the second year, the recovery in Indonesia was delayed and in some ways has not yet been fully achieved. Brazil appeared to weather the crisis better than expected, with the economy showing positive growth in the year following the crisis, but underlying vulnerabilities resulting from unfavorable debt dynamics were not eradicated and surfaced again in 2002.

The political environment in the three cases was also very different, and this had a profound impact on the effectiveness of crisis management in each country. In **Brazil and also in Korea, after some initial uncertainty, there was strong political commitment to the program, which helped to achieve credibility. In Indonesia, on the other hand, political commitment was lacking over a prolonged period, rendering crisis management ineffective.**

In the following sections, we present a brief summary of the crisis and the role of the IMF in each country, drawing on the detailed case studies in the annexes.

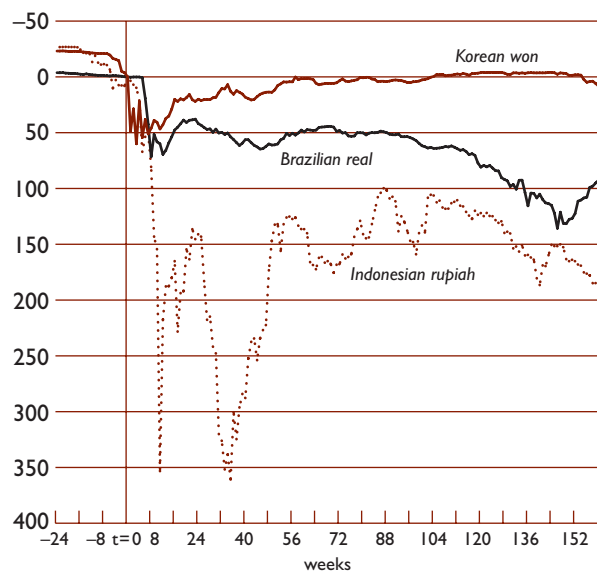
### Indonesia

#### The background to the crisis

Before the 1997 crisis, the Indonesian economy was characterized by strong economic performance (Table 2.1). From 1989 to 1996, annual real GDP growth averaged 8 percent, led by strong investment behavior. Macroeconomic fundamentals also appeared to be strong. The overall fiscal balance was in surplus after 1992 and public debt fell as a share of GDP as the government used privatization proceeds to repay a large amount of foreign debt. Inflation, at near 10 percent a year, was a little higher than in other East Asian economies, but it was still low by developing country standards. Credit growth was



**Figure 2.1. Indonesia, Korea, and Brazil:  
Exchange Rate Movements Against the  
U.S. Dollar Under IMF-Supported Programs**  
(Percentage change from the date of program approval)



Source: Datastream.

Note: In each case,  $t = 0$  refers to the week in which the program was approved, that is, the week of 11/5/97 for Indonesia, 12/4/97 for Korea, and 12/2/98 for Brazil.

strong, however, and asset prices rose steadily during the 1990s and kept rising until their peak in early August 1997.

IMF surveillance in the precrisis period generally applauded the strong performance but it did identify some areas of vulnerability: (1) large capital inflows and the associated foreign debt; (2) the fragile state of the banking system, which was linked to governance problems; and (3) a creeping return to more interventionist policies that restrained the free operation of markets and created rent-earning opportunities for the well-connected. However, the amount of short-term debt was underestimated, and the extent of the weaknesses, particularly in the banking sector, but also more generally because of cronyism and corruption, was not adequately recognized. The IMF staff also perceived medium-term risk to be the political uncertainty associated with the eventual succession to President Suharto.

### Indonesia's response to the crisis before the program

The crisis began in July 1997 with contagion from Thailand, which led to pressure on the rupiah.

On July 11, 1997, the central bank, Bank Indonesia (BI), surprised the markets by widening the intervention margins of the crawling peg regime from 8 percent to 12 percent.<sup>1</sup> Speculation continued, however, and the authorities responded by tightening liquidity, raising interest rates, and intervening in the foreign exchange market. In mid-August, BI decided to float the currency, a step that the IMF strongly endorsed.

Following the float, BI raised the interest rate on one-month central bank certificates (SBI) to 30 percent from 11.625 percent and also tightened liquidity by transferring a large amount of public sector deposits out of commercial banks.<sup>2</sup> In early September, the government announced a delay in infrastructure projects with a total cost of US\$13 billion. Despite these measures, the exchange rate continued to depreciate and moved beyond Rp 3,000 per U.S. dollar, more than 20 percent below the average value for the first six months of the year (Figure 2.2).

Worried by these developments, in mid-September 1997, the Indonesian authorities opened discussions with the IMF on a "precautionary" arrangement to restore confidence.<sup>3</sup> On their way to the IMF Annual Meetings held in Hong Kong SAR in October, the First Deputy Managing Director and a senior staff member visited Jakarta to see the economic team and President Suharto.<sup>4</sup> The economic team saw some worrying parallels to Thailand and hoped that an IMF-supported program would help to push decisions on dealing with the troubled banks and also to accelerate structural reform in the areas that the team felt were important and that IMF surveillance had earlier identified as needing correction. The First Deputy Managing Director impressed on the President the urgency of dealing with financial sector problems, further trade and agricultural reforms, deregulation, and governance issues that had led to perceptions of an uneven playing field. President Suharto acknowledged the need for substantial policy adjustments and said that some banks would

<sup>1</sup>See Soesastro and Basri (1998) and Djiwandono (2000) for details.

<sup>2</sup>From September 4 to September 22, the rate was reduced to 21 percent in several steps.

<sup>3</sup>In IMF terminology, a financing arrangement is classified as "precautionary" if the authorities indicate an intention not to draw on the resources provided. However, there is no legal distinction between precautionary and regular arrangements since the authorities have the right to use the available resources, should circumstances change.

<sup>4</sup>In the academic literature on Indonesia (e.g., Cole and Slade, 1996; Booth, 2001), a group of Western-trained economists in the government are generally called the "technocrats" as opposed to the "technologists" who favored big state-sponsored projects. In this report, we use the term "economic team" to refer to the group of senior officials in the Ministry of Finance and Bank Indonesia, as the direct counterparts of the IMF staff.



**Table 2.1. Indonesia: Key Economic Indicators<sup>1</sup>**

	1994	1995	1996	1997	1998	1999	2000	2001
Real GDP growth (percent)	7.5	8.2	7.8	4.7	-13.1	0.8	4.9	3.4
Real private consumption (percent)	7.8	12.6	9.7	7.8	-6.2	4.6	1.6	4.4
Real fixed investment (percent)	13.8	14.0	14.5	8.6	-33.0	-18.2	16.7	7.7
Real private fixed investment (percent)	13.8	18.9	16.6	5.4	-33.0	-40.3	...	...
Inflation (CPI, Dec./Dec., percent)	9.6	9.0	6.0	10.3	77.6	1.9	9.3	12.5
Base money (end-period, percent)	22.0 <sup>2, 3</sup>	34.0 <sup>2, 3</sup>	13.9 <sup>2</sup>	68.1 <sup>2</sup>	32.5 <sup>2</sup>	35.5	22.8	2.1
Broad money (M2, end-period, percent)	20.2	27.6	29.6	23.2	62.3	11.9	15.6	13.0
Current account balance (US\$, billion)	-2.8	-6.4	-7.7	-4.9	4.1	5.8	8.0	6.9
Export growth (US\$, percent)	8.8	13.4	9.7	7.3	-8.6	-0.4	27.7	-16.1
Import growth (US\$, percent)	12.9	27.0	5.7	-2.9	-34.4	-12.2	39.6	-7.5
External debt (US\$ billion, end-period)	100.9	113.7	121.1	146.6	159.8	158.4	149.6	139.8
International reserves (US\$ billion, end-period)	12.1	13.7	18.3	16.6	22.7	26.4	28.5	27.2
Exchange rate (Rp/US\$, end-period)	2,198	2,294	2,362	4,375	7,850	6,988	9,675	10,450
Real effective exchange rate <sup>4</sup>	100.2	100.0	103.9	62.1	65.8	72.7	62.9	66.3
Central government balance (percent of GDP) <sup>5</sup>	0.2	0.9	1.1	-1.3	-2.3	-1.5	-1.1	-3.7

Sources: IMF database, supplemented by APD staff estimates; and Datastream.

<sup>1</sup>Calendar years, unless noted otherwise.

<sup>2</sup>Fiscal years.

<sup>3</sup>Foreign currency stocks measured at constant exchange rates to avoid valuation changes.

<sup>4</sup>End-period; average of 1990 = 100.

<sup>5</sup>Fiscal years. Fiscal year 2000 covers nine months from April to December, as Indonesia's fiscal year changed from April–March to a calendar year in April 2000. The fiscal balance excludes privatization proceeds and includes the interest rate cost of bank restructuring.

be closed or merged to protect the solvency of the financial sector. In a memorandum to the Managing Director, the First Deputy Managing Director indicated that the President seemed interested in IMF advice but not in its financial assistance.

In early October 1997, against the growing perception of a major crisis in Southeast Asia, parallel missions from the Asia and Pacific Department (APD) and Monetary and Exchange Affairs Department (MAE) were sent to Jakarta to work on the content of a program to be supported under a precautionary arrangement. En route, however, the mission was notified that the Indonesian authorities, alarmed by the continuing depreciation of the rupiah, had signaled a desire for a regular (nonprecautionary) arrangement. A deputy director of APD was sent to join the staff already working in the field.

### The November 1997 Program

During October, the IMF negotiated a 36-month Stand-By Arrangement (SBA) for about US\$10 billion, which was approved by the Executive Board on November 5.<sup>5</sup> Disbursements would be front-loaded, with two tranches of US\$3 billion each by the end of

March 1998.<sup>6</sup> The program also assumed US\$8 billion in lending from the World Bank and the Asian Development Bank (ADB). The press notice also made a reference to the availability of additional financing from bilateral sources, if required, without including it in the headline figure.

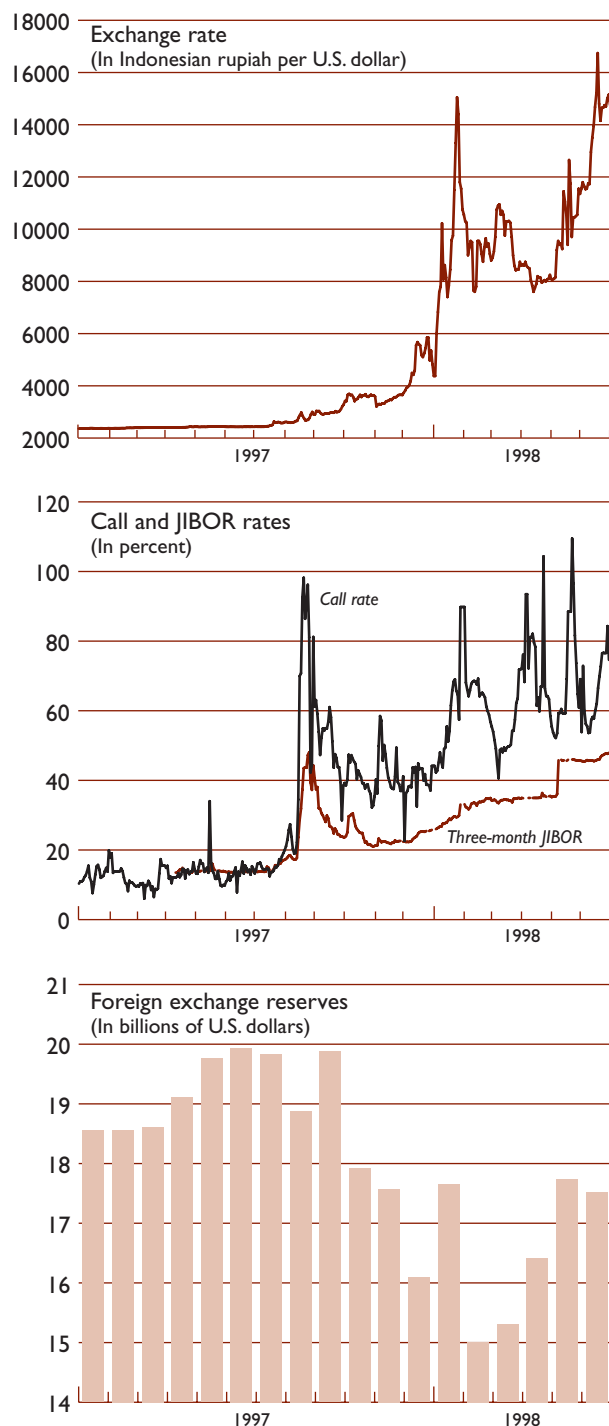
At this stage, the IMF believed that the crisis was a moderate case of contagion in which the exchange rate had overshot, so the program's key macroeconomic objective was to correct this overshooting.

The staff recognized that, if one questioned this basic assumption, an entirely different approach would be necessary, though it never explored comprehensively what that alternative would imply. Internal documents show that both staff and management perceived the crisis as an opportunity to assist the reformist economic team in carrying out financial sector reform and deregulation, both areas that were earlier emphasized in IMF surveillance.

The November program aimed to restore market confidence by (1) maintaining already prudent macro-

<sup>5</sup>SDR 7,338 million or 490 percent of quota.

<sup>6</sup>The front-loading factor of the Indonesian SBA was similar to that of the 18-month SBA agreed with Mexico in February 1995, in which 63 percent of the funds were disbursed in the first six months. However, the duration of the Indonesian program was three years. Thus, one can argue that it was even more front-loaded than the Mexican program.

**Figure 2.2. Indonesia: Key Economic Variables**

Sources: Datastream; Bloomberg; and IMF database.

economic policies through a mild increase in the targeted fiscal surplus combined with a limit on base money expansion; (2) addressing fundamental weaknesses in the financial sector, including the closure of 16 banks (along with a partial deposit guarantee) as a prior action; and (3) undertaking structural reforms that would enhance economic efficiency and transparency. In line with the judgment that Indonesia was facing a moderate case of contagion, the program assumed that growth would remain positive, though it would decelerate to 5 percent in 1997/98 and 3 percent in 1998/99. Continuing the tight monetary policy already in place, combined with limited foreign exchange market intervention, was expected to bring about an appreciation of the rupiah to a soft-edge target zone of Rp 3,000 to Rp 3,500 per U.S. dollar, compared with the average of about Rp 3,600 per dollar over the period of the negotiation and about Rp 2,400 per dollar for the first six months of the year. Because of the staff assessment that the problems in the private banking system were limited to a small segment, the program did not include a comprehensive bank restructuring strategy.

The initial market reaction was positive. The rupiah strengthened strongly in the first two days after the program was announced, in part owing to coordinated foreign exchange market intervention with Japan and Singapore, but this rise was short-lived. Public confidence was undermined when the President's family publicly challenged the bank closure and one of his sons effectively reopened his closed bank by transferring assets to another bank he had acquired. The government also reversed earlier decisions on projects that were to be delayed or canceled, including a power project involving the President's daughter. Moreover, the government announced, apparently at the behest of the President, that no more banks would be closed. This effectively reversed an earlier announcement by the Finance Minister that bank managements must put their house in order or face the consequences. Instead, it ensured that the central bank would provide liquidity to keep banks afloat.

These sudden reversals of decisions that were earlier seen as critical elements of the program called into question the commitment of the government and undermined the program's credibility. There were sporadic runs on some of the private banks in mid-November, which progressively became widespread. The decision that banks would not be closed meant that BI continued to provide unlimited liquidity support, leading to a loss of monetary control.<sup>7</sup> By the end of November, base

<sup>7</sup>Much of this liquidity support was later determined by official audits to have been used for questionable purposes.

money had exceeded the end-December target by 45 percent and inflationary pressure began to build. Disagreement over policies between the close associates and family of the President on the one hand and the reformist economic team and the IMF on the other gave the impression that the government was not committed to the program.

### The changing nature of the crisis

The IMF became aware at a very early stage that the November program was not going well, and the Managing Director used a previously planned mid-November visit to draw the attention of President Suharto to the reversal of the program's early gains. He urged the President not to ease interest rates prematurely, in view of intense pressure on the rupiah, and also emphasized to the President the importance of pressing ahead with reforms that would adversely affect his family and associates.<sup>8</sup> The IMF staff also pressed the authorities to raise interest rates, but to no avail.

The illness of the President in early December added a new dimension to the crisis. It not only reminded the markets that succession might take place earlier rather than later, but also changed the way presidential decisions were made. As the President was confined to his private residence, those lacking close ties to the family—including the economic team—were effectively cut off from access to the President. Increasingly frequent riots directed at the ethnic Chinese minority further weakened business confidence. By end-December, it was evident not only that the IMF-supported program had failed but also that the Indonesian crisis was much worse than those elsewhere in the region. The rupiah had depreciated beyond any of the East Asian currencies that experienced regional contagion and was continuing to fall.

The collapse of the program, and especially the backtracking on individual reforms affecting vested interests close to the President, created a climate in which public attention focused on corruption and cronyism as defining characteristics of the economic system that had evolved in Indonesia. This aspect of the Indonesian economy had received increasing attention in the press and some academic writing but had been underplayed in IMF surveillance, because of the prevailing institutional conventions that constrained such governance issues to be discussed only obliquely. The Executive Board, reflecting prevailing opinion in some of the IMF's major shareholder governments, pressed the staff to push for extensive

structural reform measures with greater specificity and a definite timetable.

As a mark of the importance assigned to resolving the growing crisis, the staff team in Indonesia negotiating the revised program in January 1998 was joined by the First Deputy Managing Director. There was also a presence of senior officials from some of the IMF's shareholder governments. With the heightened focus on governance problems, the strategy adopted was to strengthen structural conditionality as a signal of change in the belief that this was necessary to restore confidence. The World Bank's Jakarta office, which felt that it had played only a limited role in formulating the November 1997 program, was actively involved in designing the conditionality on structural reform in the revised program.

On January 15, 1998, in a widely publicized ceremony attended by the Managing Director, President Suharto personally signed a new letter of intent (LOI) outlining a strengthened structural reform program.<sup>9</sup> Recognizing the ongoing decline in economic activity, the revised program relaxed the fiscal targets for the 1998/99 budget from the surplus of 1.3 percent of GDP envisaged in the November program to a deficit of 1 percent. The revised program also included a much more detailed structural reform agenda, with a specific timetable for implementation. However, the announced package did not include any new strategy to deal with bank or corporate debt restructuring. It was only at the end of January that the measures in the LOI were supplemented by a comprehensive bank-restructuring strategy, including the introduction of a blanket guarantee on bank liabilities and the creation of an Indonesian Bank Restructuring Agency (IBRA) to take over banks facing liquidity problems. Initial measures to deal with corporate debt were also announced at this later date.

The January program was never presented to the Executive Board because it failed to halt the collapse of the exchange rate. The rupiah continued to depreciate to levels that made the revised budget targets almost immediately irrelevant.<sup>10</sup> The rapid expansion in the monetary base, to levels far exceeding program targets, also continued. These failures were compounded by actions of the President in January indicating lack of commitment to the program. He was

<sup>8</sup>As reported by the Managing Director to the Executive Board upon his return to Washington.

<sup>9</sup>The ceremony, intended to demonstrate the commitment of President Suharto to the program, turned out to be a public relations disaster. The much publicized photograph of the President signing the LOI under the gaze of the Managing Director became the subject of hostile comment as exemplifying a humiliating loss of sovereignty.

<sup>10</sup>By January 17, the rupiah had already reached Rp 5,000 per U.S. dollar, but there were news reports that unless the rupiah stabilized at Rp 4,000, there would be widespread corporate bankruptcies, which obviously would have systemic consequences.

reported to have indicated that (1) he would wage a “guerrilla war” against the IMF; (2) he would not necessarily fulfill all agreed conditions in the LOI; and (3) he would adopt an “IMF-Plus” strategy centered on a currency board arrangement (CBA). The protracted CBA controversy not only added uncertainty but also served to distract the Indonesian authorities and IMF staff from moving ahead with implementing reforms and regaining monetary control.

Amid the worsening crisis, President Suharto was reelected for a seventh term in mid-March 1998 and appointed a new cabinet, which included his daughter and close associates. Thereafter, there was a change in the government’s stance. With the rupiah trading at around Rp 10,000 per U.S. dollar, the new Economic Coordinating Minister and some close associates of the President were able to convince him that there was no alternative to vigorous implementation of the IMF-supported program. Dialogue with the IMF was reestablished, with a focus on regaining monetary control and implementing structural reforms to underpin recovery. As a result of pressure from the IMF and its major shareholders,<sup>11</sup> as well as with some opposition from within the government, the CBA proposal was finally abandoned and a revised program agreed in April 1998.

The April 1998 program differed from the January program in two respects. The fiscal stance was substantially more relaxed, as by then the extent of output collapse was more evident. There was also a major change in the monetary stance. Interest rates were raised sharply for the first time since the start of the IMF’s involvement. Monetary control was regained, as IBRA began taking over troubled banks, thus limiting the provision of BI liquidity support. Real interest rates remained negative, however, as inflation continued to soar. The IMF switched its performance criterion for monetary policy from base money (with partial adjustment for reserve loss) to a more conventional target for net domestic assets (NDA) in order to better control liquidity support.

However, political developments soon came to a boil, as fuel price increases introduced in early May sparked civil unrest. This ultimately led to the resignation of the President on May 21.<sup>12</sup> Vice President Habibie took over the presidency in accordance with

the Constitution and he maintained continuity by retaining the Economic Coordinating Minister, who was responsible for implementing the IMF-supported program. The rupiah continued to depreciate through June 1998, reaching Rp 15,250 per dollar, but it began to strengthen thereafter, and inflation began to stabilize.

A new program was negotiated with the government of President Habibie in August 1998, supported under the Extended Fund Facility (EFF). The 26-month EFF arrangement covered the remaining undrawn amount under the initial SBA, equivalent to US\$6.3 billion. The authorities took decisive measures to deal with the banking sector problems and successfully secured relief for the corporate sector from foreign creditors and a rescheduling of external public sector debt through the Paris Club.

The policies adopted after the spring of 1998 brought Indonesia back from the brink of hyperinflation, and led to a significant appreciation of the rupiah. However, progress was uneven and bank and corporate restructuring proved difficult, owing to the continued influence of powerful vested interests. Output continued to contract until the second half of 1998, primarily because of a collapse in private investment. The combination of the earlier massive exchange rate depreciation and financial sector weakness, along with violence against the minority Chinese community, led to a collapse in business confidence which was reflected in a 33 percent decline in private investment in 1998/99. This in turn led to a decline of 13 percent in GDP, making the Indonesian downturn the most severe of all the East Asian crisis countries.

## Korea

### The background to the crisis

The crisis in Korea occurred when most of the country’s key macroeconomic indicators—growth, inflation, and the public sector deficit—pointed to an economy in robust health (Table 2.2). Real GDP growth was around 7 percent and was projected to continue its rapid pace in 1998. Inflation was low. The budget was expected to be in surplus and sovereign debt, both domestic and external, was small relative to GDP. The current account deficit had widened in 1996 with the decline in high-tech exports, but had narrowed again in the first half of 1997. The exchange rate did not seem overvalued by most measures.<sup>13</sup>

<sup>11</sup>From early March to early April, frequent visits in support of the IMF-supported program were made by political leaders and senior economic officials from the IMF’s major shareholder governments, including Germany, Japan, and the United States.

<sup>12</sup>Internal documents indicate that the decision to accelerate the fuel price increase was against the advice of the IMF, which had agreed a gradual approach with the economic team. A senior Indonesian official interviewed by the evaluation team explained that this action, taken against IMF advice, reflected the President’s renewed confidence that he was fully in charge of the economic and political situation.

<sup>13</sup>Chinn (2000) concluded that the won was either 9.2 percent (using producer prices) or 2.4 percent (using consumer prices) undervalued relative to purchasing power parity in May 1997. An investment bank study cited by Goldfajn and Baig (1998)

**Table 2.2. Korea: Key Economic Indicators**

	1994	1995	1996	1997	1998	1999	2000	2001
Real GDP growth (percent)	8.3	8.9	6.8	5.0	-6.7	10.9	9.3	3.1
Real private consumption (percent)	8.2	9.6	7.1	3.5	-11.7	11.0	7.9	4.7
Real fixed investment (percent)	10.7	11.9	7.3	-2.2	-21.2	3.7	11.4	-1.8
Inflation (CPI, Dec./Dec., percent)	5.6	4.8	4.9	6.6	4.0	1.4	2.8	3.2
Reserve money (end-period, percent)	9.2	16.3	-12.2	-12.5	-8.1	37.6	-0.9	16.3
Broad money (M2, end-period, percent)	21.1	23.3	16.7	19.7	23.7	5.1	5.2	8.1
Current account balance (US\$, billion)	-3.9	-8.5	-23.0	-8.2	40.4	24.5	12.2	8.2
Export growth (US\$, percent)	16.8	30.3	3.7	5.0	-2.8	8.6	19.9	-12.7
Import growth (US\$, percent)	22.1	32.0	11.3	-3.8	-35.5	28.4	34.0	-12.1
External debt (US\$ billion, end-period)	97.0	127.1	164.4	159.2	148.7	137.1	131.7	118.8
International reserves (US\$ billion, end-period)	25.6	32.7	33.2	20.4	52.0	74.0	96.1	102.8
Exchange rate (W/US\$, end-period)	789	776	845	1,695	1,204	1,138	1,265	1,314
Real effective exchange rate <sup>1</sup>	95.2	99.1	97.3	62.5	76.0	80.7	81.3	82.3
Central government balance (percent of GDP)	0.1	0.3	0.0	-1.7	-4.3	-3.3	1.3	0.6

Sources: IMF database, supplemented by APD staff estimates; and Datastream.

<sup>1</sup>End-period; average of 1990 = 100.

There were structural weaknesses below the surface and some of them were identified during IMF surveillance, but their seriousness, as a potential trigger for an external crisis, was not fully analyzed or stressed in surveillance reports. The large conglomerates (*chaebol*) that dominated the economy were very heavily leveraged, mostly through long-term borrowing from local banks.<sup>14</sup> The banking system also suffered from serious problems. For many years, the banks' lending decisions had been heavily influenced by the policy choices of government officials rather than by commercial considerations of risk and return. Bank prudential controls and their regulatory enforcement were lax, particularly in the areas of provisioning, concentration of lending risks, and liquidity management. In the absence of effective oversight by shareholders or creditors, managers of *chaebol* made excessive investments in "prestige" industries such as automobiles and semiconductors. The result was an accumulation of questionable loans on bank balance sheets. Because of limitations on capital account transactions (see the Korea country annex), a large part of the banks' liabilities took the form of short-term obligations denominated in foreign currencies.

estimated that the won was 3.3 percent overvalued in June 1997. In October 1997, the IMF Article IV consultation mission determined that the won's real effective exchange rate was close to its five-year average.

<sup>14</sup>The debt-equity ratio for the manufacturing sector averaged some 400 percent in 1997, and that for the top 30 *chaebol* more than 500 percent (Chopra and others, 2002).

There were some early warning signals in 1996 and early 1997. A shock to the country's terms of trade (reflecting in part a fall in semiconductor prices) led to a widening of the current account deficit to 4.75 percent of GDP in 1996, much of it financed through short-term debt. Several *chaebol* went bankrupt in the early months of 1997, culminating in the failure of the Hanbo Group. In early 1997, Korean banks began to experience some difficulty in rolling over their short-term credit lines with international banks, causing the Bank of Korea (BOK) to provide advances of foreign exchange to their overseas branches. Nevertheless, the crisis conditions that hit Thailand and other Southeast Asian economies starting in June 1997 did not immediately spread to Korea, at least in a visible way.

Confidence began to be shaken more openly in August 1997, as evidence of problems in the banking system grew and regional contagion from Thailand became more evident. Some foreign banks chose not to renew credit lines to Korean institutions, not only because of the earlier worries over their health but also because they now found this to be the easiest way to reduce their overall exposure to the East Asian region. In an attempt to provide stability, the authorities at the end of August announced a guarantee of foreign currency-denominated bank debt. However, this guarantee was not backed by any specific measures approved by the National Assembly, so its legal status remained ambiguous.

IMF management and staff shared many of these concerns. The Article IV consultation mission that visited the country in October 1997 included a bank-



ing expert who examined carefully the vulnerabilities in the financial sector, to a degree that was unusual for such missions at that time. Nevertheless, the mission concluded that Korea would avoid being seriously affected by the crisis then spreading through Southeast Asia, provided that the authorities moved promptly to address the problems in the financial sector and demonstrated a firm commitment to reform.<sup>15</sup>

### The onset of the crisis

Two events in October 1997 helped to transform growing unease about Korea into a full-fledged crisis. One was the bankruptcy and government-supported debt rescheduling of the Kia Group. Investors, particularly inside Korea, perceived the authorities' actions as excessively interventionist and, in view of the approaching presidential elections in December, politically motivated. This dented confidence in the authorities' ability to pursue sound reform-oriented policies or to avoid potentially huge exposures to other troubled conglomerates. The second event was the failed speculative attack on the Hong Kong dollar and dramatic decline in the Hong Kong SAR stock market at the end of October. These events accompanied an increase in the perceived riskiness of Korea in the eyes of many international investors, particularly bank lenders. The Korean stock market fell by more than a quarter in the month of October, and the won came under increased pressure.

The authorities reacted by supporting the won through intervention in the spot and forward foreign exchange market in the early weeks of November, and by moderately increasing overnight interest rates (from about 13.5 percent to 16 percent). The BOK accelerated its advances of foreign exchange to the banks' overseas branches. Despite these efforts, the won weakened further. An increasing number of foreign banks chose not to roll over their short-term loans to Korean institutions and instead reduced their credit lines. The maturity of existing lines was shortened, and interest rates on longer-term loans were raised.

Faced with the rapid depletion of foreign exchange reserves, the authorities quietly contacted officials from the United States, Japan, and the IMF in an attempt to secure emergency financing. At the authorities' request, the Managing Director of the IMF secretly visited Seoul for discussions with the Minister of Finance and Economy and the BOK Governor on November 16. At this meeting, the Managing Director indicated that the IMF would be willing to provide support in exchange for appropriate policy commitments by the authorities.

<sup>15</sup>The staff report for the 1997 Article IV consultation was prepared but never presented to the Executive Board, as it was overtaken by events.

In an effort to demonstrate its commitment to financial sector reform, the government also pressed the National Assembly to approve a bill implementing some of the recommendations of the Presidential Commission on Financial Reform. This bill was effectively rejected when no action was taken during the final parliamentary session on November 17, prompting the resignation of the Minister of Finance and Economy the following day. His successor initially denied the government's intention to approach the IMF, but on November 21, as conditions continued to deteriorate, the authorities officially requested IMF support. This announcement was followed by further dramatic declines in the currency and the stock market, and further downgrades from the major credit rating agencies. The fact that the announcement of the approach to the IMF came so soon after the authorities had denied making such an approach gave the impression of a government in disarray.

The IMF team that arrived in late November had planned to conclude an agreement on an SBA by around mid-December. The team very soon discovered that the position was much worse than it appeared. Official foreign exchange reserve figures included advances that had been made to the overseas branches of Korean institutions and were highly illiquid. Korea's "usable reserves"—calculated by excluding deposits in overseas bank branches—were only around US\$7 billion, which was very small in relation to maturing short-term debt and other obligations (Figure 2.3). Unless new financing was provided quickly, Korea might have to impose a standstill on foreign exchange payments, a move that staff, management, and key shareholders feared would have serious regional and international implications. The program was negotiated and agreed in record time, under the exceptional procedures of the Emergency Financing Mechanism.<sup>16</sup>

### The December 1997 program

On December 4, the IMF's Executive Board approved the program to provide about US\$21 billion under a three-year SBA.<sup>17</sup> The disbursements were to

<sup>16</sup>The Emergency Financing Mechanism, introduced in 1995 following the Mexican crisis, is a set of exceptional procedures for close communication with the Executive Board when management intends to bring a proposed arrangement to the agenda more quickly than under the usual procedures.

<sup>17</sup>SDR 15.5 billion, equivalent to 1,939 percent of Korea's quota. This was a record size in relation to quota, reflecting the fact that Korea's quota was small in relation to its weight in the world economy. After the Supplemental Reserve Facility (SRF), then under consideration by the Executive Board, was put in place, disbursements were provided through that channel. The SRF was approved on December 17, 1997.

be substantially front-loaded, with US\$5.6 billion available immediately and an additional US\$5.6 billion released during the following seven weeks. In addition, the World Bank and the ADB were to lend US\$14 billion in support of restructuring efforts in the financial sector, and a group of bilateral donors indicated that, if necessary, they would be willing to lend a further US\$20 billion as a “second line of defense.”

The second line of defense was a controversial element in the program. The balance of payments projection in the approved program did not actually show that this financing would be necessary but, as pointed out in the Korea country annex, this presentation was a relatively late decision responding to the instructions conveyed to the staff that the program should not rely on this source of financing. The staff therefore arbitrarily reduced the financing gap by increasing the assumed rollover rate for short-term debt to unrealistically high levels. In this respect, the program as presented was clearly underfinanced, although this fact was not explicitly acknowledged.

The program incorporated a tight monetary policy, a small fiscal surplus, a comprehensive strategy to restructure, recapitalize, and reform the financial sector, and measures to reform corporate governance, trade, and the labor market. Nine of the most troubled merchant banks were closed, with their depositors protected by a newly established deposit insurance scheme. Seoul Bank and Korea First Bank, the two most troubled of the large commercial banks, were to be placed under “intensive supervision” and were required to submit a rehabilitation plan within four months.

The initial market response was moderately positive, but after a few days the situation took a turn for the worse.<sup>18</sup> Confidential program documents, leaked to the Korean press, revealed the critical data on Korea’s reserves and short-term debt, which the IMF and the authorities had been keeping from the markets for fear of damaging confidence. The documents showed that usable reserves were even lower than the market had feared and were declining rapidly. The political environment also created uncertainty since elections were being held. The three major presidential candidates had stated their support for the program at the time it was announced, but subsequent statements led many to question their commitment. As the market absorbed these developments, rollovers of short-term debt continued to fall, and the won weakened further, falling by 39 percent in the two weeks after the program was approved (see Figure 2.3).

**Figure 2.3. Korea: Key Economic Variables**



Sources: Datastream; IMF database; and Bank of Korea.

<sup>18</sup>The won moderately appreciated from W 1,249 to W 1,156 per U.S. dollar from December 4 to December 5, followed by a renewed slide.

After winning the presidential election on December 18, President-elect Kim Dae-jung announced his determination to carry out the IMF-supported program and his subsequent actions helped build credibility. A transitional team, including representatives of the outgoing and incoming administrations, began to negotiate a strengthened program involving accelerated disbursement of funds and a more aggressive timetable for restructuring the financial system.

### **The rollover agreement**

The IMF staff and management had earlier conveyed to the IMF's major shareholders that, in the absence of sufficient financing, it might be necessary to consider some initiative to persuade banks to roll over lines of credit. This was not accepted at the time but, with the evident failure of the earlier strategy, the authorities in the IMF's major shareholder governments began to contact their banks and urged them to announce jointly that they would maintain their credit lines to Korea. It was hoped that a joint public announcement by the largest international banks would stabilize markets by eliminating the fear that Korea would soon run out of foreign exchange.

Three initiatives—the strengthened reform program, the accelerated disbursements, and the coordinated private sector rollover of short-term debt—were announced on December 24, 1997. The IMF played a useful role in the more concerted approach to maintaining private sector exposure by setting up systems to monitor daily exposure and facilitating information exchange among the major governments.

Markets remained volatile for several weeks thereafter but, in retrospect, December 24 proved to be the turning point of the Korean crisis. The international banks by and large kept to their rollover agreement, which was renewed in mid-January 1998 and extended to the end of March. Shortly thereafter, the banks agreed to exchange their short-term claims for sovereign debt of between one and three years maturity. With the success of the rollover and maturity extension and moves by the authorities to implement the financial and corporate reform programs, the market's view of Korea improved dramatically. The won recovered from an all-time low of W 1,965 to the dollar on December 24, 1997, to a range of W 1,600–1,800 in January 1998, W 1,400 by the end of March, and W 1,200 at the end of the year. In April, Korea issued US\$4 billion in international bonds, cementing the country's return to international capital markets. The IMF facility would never be fully drawn, and would eventually be paid back ahead of schedule.

The macroeconomic effects of the crisis turned out to be severe but short-lived. Real GDP declined

by 6.7 percent during 1998, and unemployment rose to 7.4 percent by year-end. Yet signs of recovery were already visible by the end of 1998 and growth rebounded to 10.9 percent in 1999, belying fears expressed by many that the recovery would be L-shaped.<sup>19</sup> The authorities moved quickly to rebuild reserves, which totaled US\$52 billion at the end of 1998. Following the peak in early 1999, unemployment began to decline steadily, and the growth of real wages picked up strongly.

In retrospect, the Korean experience can be characterized as one in which the original program failed because it was underfinanced, given the absence of a coordinated rollover agreement and the immediate nonavailability of the second line of defense. However, the basic macroeconomic stance of the program was sufficiently credible to restore confidence quickly, once the immediate liquidity pressure was eased. The strong political commitment of the new government of President Kim to the adjustment program, which was in sharp contrast to what was seen in Indonesia, was critical in restoring confidence.

## **Brazil**

### **The background to the crisis**

The origins of the Brazilian crisis of 1998–99 can be traced to the set of policies adopted following the start of the Real Plan, a stabilization program launched in 1994 (see Box A3.1 in the Brazil country annex). High inflation was successfully reduced, but other problems emerged both as an inherent outcome of the disinflation strategy and as a result of policy decisions. Fiscal deficits widened sharply, as a result of asymmetric indexation of expenditures and revenue (which increased the nominal value of expenditures faster than that of revenue) and the loss of control mechanisms that had relied on high inflation to erode the real value of budgeted expenditures. The mix of loose fiscal policy combined with tight monetary policy led to a real appreciation of the currency and, coupled with a strong increase in domestic demand resulting from initial rapid credit expansion and the loss of the inflation tax, to the emergence of large current account deficits (Table 2.3).

The policy mix had implications for the sustainability of fiscal policy. High interest rates had a severe impact on state and municipal government accounts and, despite moderate economic growth,

<sup>19</sup>The IMF's quarterly review, dated November 18, 1998, projected that Korea's GDP would decline by 1 percent in 1999. Likewise, the World Bank's projection for 1999, released in December 1998, was for moderate growth of 1 percent (World Bank, 1999a).



**Table 2.3. Brazil: Key Economic Indicators**

	1994	1995	1996	1997	1998	1999	2000	2001	2002
Real GDP growth (percent)	5.9	4.2	2.7	3.3	0.1	0.8	4.4	1.4	1.5
Real general consumption (percent)	5.5	6.9	4.6	3.1	0.4	1.2	2.5	4.2	...
Real fixed investment (percent)	13.9	3.2	-3.7	6.5	-0.7	-3.2	6.5	5.2	...
Inflation (IPCA, Dec./Dec., percent)	916.6	22.4	9.6	5.2	1.7	8.9	6.0	7.7	12.5
Base money (Dec./Dec., percent, in real)	3,322.4	22.6	-8.7	60.8	23.1	23.6	-1.5	11.7	37.6
Broad money (M2, Dec./Dec., percent, in real)	1,196.7	34.8	5.6	27.0	6.3	7.8	3.3	13.1	24.0
Current account balance (US\$, billion)	-1.8	-18.4	-23.5	-30.5	-33.4	-25.3	-24.2	-23.2	-7.8
Export growth (US\$, percent)	12.9	6.8	2.7	11.0	-3.5	-6.1	14.7	5.7	3.7
Import growth (US\$, percent)	31.0	51.1	6.8	12.0	-3.4	-14.7	13.4	-0.4	-15.0
External debt (US\$ billion, end-period)	148.3	159.3	179.9	200.0	241.6	241.5	236.2	209.9	212.9
International reserves (US\$ billion, end-period)	38.8	51.8	60.1	52.2	44.6	36.3	33.0	35.9	37.8
Exchange rate (R\$/US\$, end-period)	0.844	0.971	1.039	1.116	1.208	1.788	1.955	2.320	3.533
Real effective exchange rate <sup>1</sup>	137.7	141.6	144.1	145.6	133.0	96.8	98.2	89.8	68.4
Public sector borrowing requirement (percent of GDP)	44.3	7.1	5.9	6.1	7.9	10.0	4.6	5.2	4.7
Primary balance (percent of GDP)	4.3	0.3	-0.1	-1.0	0.0	3.2	3.5	3.7	3.9
Net public debt (percent of valorized GDP) <sup>2</sup>	30.0	30.6	33.3	34.4	41.7	48.7	48.8	52.6	56.5

Sources: IMF database; Datastream; and Central Bank of Brazil.

<sup>1</sup>Central Bank, INPC-based, end-period, June 1994 = 100.

<sup>2</sup>Valorized GDP is expressed in prices of December of each year.

caused the public sector net debt to increase to 34.4 percent in December 1996 from 30.0 percent of GDP in December 1994. By early 1998, some academic observers saw the fiscal stance as unsustainable in terms of making the public debt-to-GDP ratio converge to some predetermined level.<sup>20</sup>

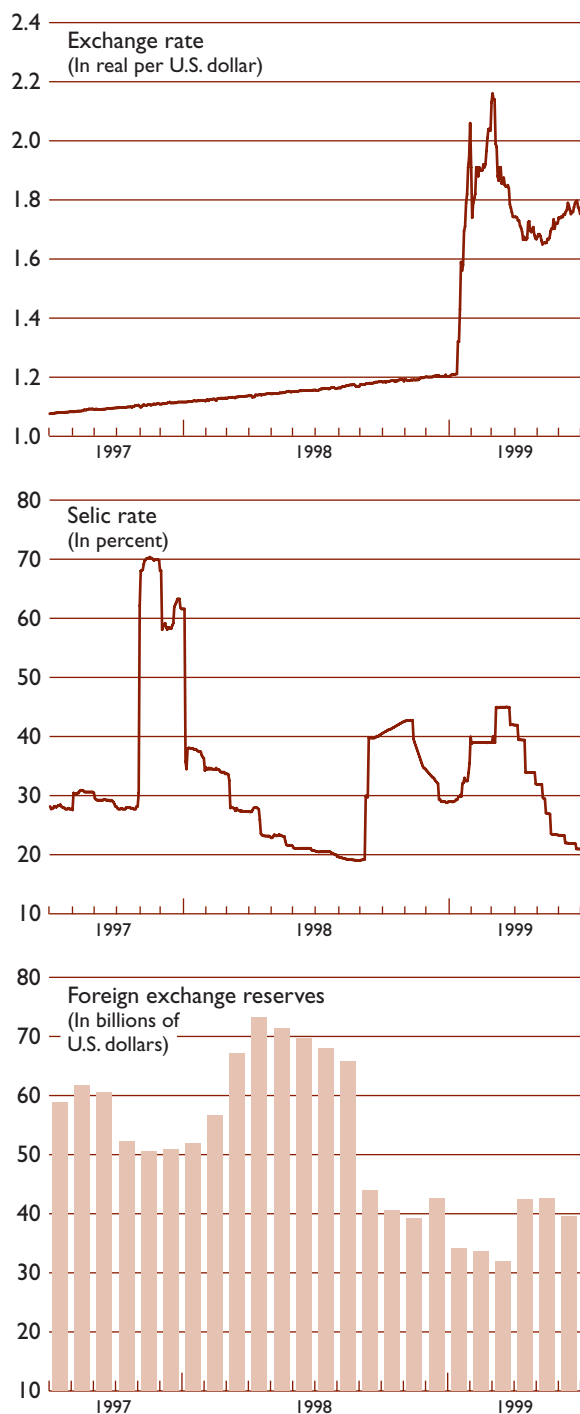
Another consequence of the policy mix was an overvaluation of the real. Following the nominal appreciation to R\$0.84 per U.S. dollar in late 1994, the real was managed in a narrow range around R\$0.85 from October 1994 to March 1995, when a crawling peg was adopted with a band. Although inflation came down dramatically during the early months of the Real Plan, it remained higher than that in Brazil's major trading partners. According to a contemporary IMF staff estimate, the real appreciated in real effec-

tive terms by 33 percent between June 1994 and February 1995, in terms of the general price index. While the introduction of a new currency under the Real Plan made it difficult to measure Brazil's real exchange rate, there was a broad consensus that the real was overvalued throughout the post-stabilization period.

The IMF's surveillance in the precrisis period correctly identified the overvaluation of the real and other vulnerabilities associated with Brazil's policy mix in the post-stabilization era and argued for faster exchange rate depreciation. The IMF's leverage was limited during the precrisis period and had little impact on policy but, from about 1997, dialogue between the IMF and the Brazilian economic team began to improve. As a way to improve the relationship, the IMF was actively engaged in technical assistance work in Brazil, particularly in the areas of debt management, fiscal statistics, and fiscal accounting. In the process, however, there was increasing accommodation of the Brazilian position that downplayed the possible overvaluation of the currency.

After mid-1997, turbulence in the global economy and presidential election politics limited the options of the Brazilian government in addressing fis-

<sup>20</sup>For example, Bevilacqua and Werneck (1998a) presented a scenario in which the debt-to-GDP ratio would explode from less than 40 percent in 1998 to over 55 percent by 2002. They emphasized the difficulty of growing out of fiscal problems because of the growth-inhibiting effect of the tight fiscal stance through public investment deficiencies and a likely gradual reduction in interest rates during transition to tighter fiscal policy (see also Cardoso and Helwege, 1999).

**Figure 2.4. Brazil: Key Economic Variables**

Sources: Datastream; and IMF database.

cal and exchange rate issues. Following the onset of the Asian crisis in the fall of 1997, the real came under intense pressure, which prompted the authorities to raise interest rates to defend the exchange rate and to intervene heavily in the spot and futures exchange markets. They also announced a package of fiscal adjustment measures. At this time, the IMF explored with the Brazilian authorities the possibility of supporting the package with an IMF arrangement. The authorities, however, were unwilling to seek an arrangement at this stage, in part because they feared that it might weaken domestic political support for the measures.

Early 1998 saw strong capital inflows, including foreign direct investment (FDI), and short-term flows attracted by the opportunity to arbitrage between high domestic and low international interest rates, given the widespread presumption that the crawling peg would be maintained at least until the presidential election in October. Reserves increased from US\$52 billion at the end of 1997 to US\$75 billion in April 1998 (Figure 2.4). However, markets also became increasingly concerned about the fiscal outlook as the administration's implementation of the fiscal package faltered in the face of electoral pressures.

In the summer, market pressures on Brazil greatly intensified, following the Russian crisis and the difficulties of Long-Term Capital Management in the United States, which led to a sharp decrease in liquidity in international capital markets. Spreads on Brazil's external debt rose steeply along with those for most other major emerging market borrowers. The central bank doubled interest rates in early September (Figure 2.4), but failed to stem capital outflows.

### The December 1998 Program

Preliminary work began on the main components of an IMF-supported program in early September 1998, based on Brazilian proposals which emphasized fiscal tightening.<sup>21</sup> As Brazil still had over US\$50 billion in foreign exchange reserves, the Brazilian authorities were initially interested in a precautionary arrangement or a Contingent Credit Line (CCL), which was then in the process of being formulated.<sup>22</sup> However, this gave way to the view that, in order to convince the markets, real money was needed.

<sup>21</sup>In late September, just before the presidential election, President Cardoso gave a high-profile speech outlining the tough fiscal measures that would need to be undertaken early in his second term.

<sup>22</sup>CCLs are designed to provide, in the absence of an existing need to use IMF resources, a precautionary line of credit to a member country with an agreed package of policies.

Contacts intensified after the presidential election in early October, in which President Cardoso was re-elected for a second term. The most controversial issue was the Brazilian economic team's desire to maintain the crawling peg, despite the fact that there was a widely held perception in the markets that the real was substantially overvalued. The IMF staff shared this view and had indicated as much in surveillance reports, though its estimates of the extent of overvaluation were moderated over time and were considerably lower than those of most market participants. The Brazilian economic team, on the other hand, believed that any overvaluation was modest and that the real appreciation that might have occurred was offset by strong productivity gains. Moreover, the team held a strong belief in the need to maintain the peg as a nominal anchor. Given the history of inflation in Brazil, they feared a rekindling of inflationary expectations and reindexation, if the peg was let go.

A preliminary understanding between the IMF and the authorities had already been reached during the Annual Meetings that the existing exchange rate regime could be maintained, provided that reserves did not fall too low. Nevertheless, the IMF staff and management pressed the authorities for a faster monthly depreciation, a wider band, or both, to achieve greater real depreciation within the crawling peg regime. However, the authorities remained strongly opposed to any modification of the regime. The Brazilian position was supported by some major shareholders, who were concerned that a change in the exchange rate regime at that time might have severe regional and global consequences. Many members of the IMF's Executive Board, however, remained unconvinced of the sustainability of the crawling peg, and some expressed dissatisfaction that there had not been a more comprehensive discussion, in the Board, of alternative options (see the Brazil country annex).

The program, approved by the Board in early December 1998, envisaged maintenance of the existing exchange rate regime, but did not specify any immediate change in the rate of crawl.<sup>23</sup> The possibility that exchange rate policy might be modified at subsequent program reviews was left open. The program included strong, front-loaded fiscal adjustment (amounting to over 4 percent of GDP) and a commitment to supportive monetary policy. Conditionality

on structural measures was limited mainly to critical areas in public finance and financial sector regulation. There was a very limited effort to coordinate the actions of private creditors, as the authorities feared that any stronger action would likely have adverse consequences for future flows. They only sought the voluntary support of private lenders for the program in meetings in a number of international financial centers. There was a generally favorable response to these requests, but rollover rates for international bank credits averaged only 65–70 percent.

### **Collapse of the peg and the revised March 1999 program**

The IMF's decision to support the crawling peg involved significant risks. The business community was not entirely in favor of the peg and had been putting pressure on the President to correct the overvaluation of the currency. Moreover, the IMF decision did not fully impress the markets, and some international investors took this as an opportunity to pull out of Brazil, if they had not done so already. General skepticism prevailed in the media coverage of the IMF decision. Contemporary Brazilian observers doubted "if the package . . . [would] suffice to prevent a devaluation" (Garcia and Valpassos, 1998, p. 39).

Soon after the program was approved and announced to the public, the exchange rate came under renewed pressure following setbacks in securing congressional approval for some of the fiscal measures in the program. Interest rates were also eased despite IMF misgivings and contrary to an understanding that there would be consultation with the IMF on interest rate policy, and the program's NDA target was exceeded by a wide margin. Fiscal tensions between the federal government and the states surfaced, and in early January 1999 the governor of the state of Minas Gerais publicly stated that there would be a moratorium of 90 days on state debt payments. In mid-January 1999, the Central Bank Governor, who had been adamantly opposed to any change in the exchange rate regime, was replaced by a new Governor, who then introduced a complex exchange rate system incorporating a wider exchange rate band in an attempt at a smooth exit from the crawling peg (see the Brazil country annex for details). IMF management was only informed of this decision the night before the action was to take place, and its efforts to dissuade the authorities were unsuccessful. After losing about US\$14 billion of reserves in two days, Brazil moved to a de facto floating exchange rate regime on January 15.

The collapse of the peg signaled that the original program had clearly failed in its central objective. In

<sup>23</sup>The financing package supporting the program provided IMF resources of SDR 13.6 billion (about US\$18 billion, or 600 percent of quota). In addition, bilateral loans arranged through the Bank for International Settlements (BIS) and a bilateral loan from Japan amounted to a further US\$15 billion, and the World Bank and the Inter-American Development Bank (IDB) offered additional loans of about US\$4.5 billion each.

an emergency weekend meeting between the Brazilian economic team and IMF management in Washington, it was decided that the best policy was to float the real, effective January 18. Both sides then began to revise the program in the light of the change in the exchange rate policy. To arrest and reverse the depreciating trend, the IMF encouraged the Central Bank to raise interest rates sharply. An increase in interest rates to nearly 40 percent at the start of February was followed by a further increase in the overnight rate to 45 percent in March.

A revised program was agreed in March 1999. The new program, which pioneered the use of inflation targeting as the basis for conditionality in IMF-supported programs, also tightened fiscal policy further, with the aim of ensuring debt sustainability. The indicative target of 2.6 percent of GDP for the primary balance in 1999 was replaced by a target of 3.1 percent as a performance criterion in the revised program. Major international banks voluntarily agreed to maintain trade and interbank lines to Brazil at end-February levels for six months. The IMF played a facilitating role in this by monitoring credit lines and participating in “road shows” designed to explain the IMF-supported program to the international banks. Against the background of high interest rates, stepped-up sales of foreign exchange in the market, and greater market confidence generally, the exchange rate stabilized. This allowed interest rates to be eased relatively quickly.

Progress was also made on structural reforms, although the pace was slower than envisaged in the program. While there were no structural performance criteria, a number of structural benchmarks were included in the program, most notably submission to Congress of draft legislation for the Fiscal Responsibility Law (by end-December 1998) and its enactment (by end-December 1999).<sup>24</sup> In the event, the Fiscal Responsibility Law was not passed until 2000, but it contributed significantly to fiscal discipline by establishing a general framework to guide budgetary planning and execution, including the financial relationship between the federal and state governments. Through the program, the IMF played a constructive role in Brazil’s transition to a more disciplined fiscal regime.

The revised program of March 1999 was unexpectedly successful in terms of its impact on the price level and output. A takeoff in inflation, which was greatly feared following the depreciation, was averted, and consumer price inflation was held at 9 percent during 1999. Stronger-than-expected exter-

nal financing, particularly larger FDI inflows, facilitated a smoother external adjustment. In contrast to pessimistic projections of a decline in GDP of 3.8 percent in 1999, real output grew by 0.8 percent. The financial sector weathered the crisis well, in part owing to the extensive hedge against depreciation provided by the public sector, which also bore the brunt of temporarily increased interest rates.

Given strong ownership by the authorities, sharply higher primary fiscal surpluses were achieved in line with program targets. However, the program did not achieve its central declared aim of reducing the ratio of net public debt to GDP, in large part owing to the greater-than-expected depreciation of the currency, which increased the domestic currency value of external and foreign currency-linked domestic debt. There was also unexpected slowdown in growth in 2001, because of an electricity crisis.

The financial support package was largely repaid ahead of schedule, and the arrangement was treated as precautionary from March 2000. Before the program could be completed, however, concerns over the external environment, including developments in Argentina, led the authorities to draw again on the arrangement and to request a further SBA. The arrangement was canceled in mid-2002, and replaced by a new arrangement, as worries over the continuity of policy following the approaching elections led to a large increase in spreads on Brazil’s external debt and exchange rate depreciation. These factors in turn contributed to renewed concerns over the sustainability of Brazil’s public debt burden.

While the public image of the December 1998 program is largely colored by its failure to defend the crawling peg, the IMF’s overall strategy can be judged to have been a success in many respects. Although contrary to the program’s own pessimistic expectations, the adverse impact of the crisis on output and prices was limited. Through the program, which was revised to take account of the floating of the real, the IMF facilitated Brazil’s transition to a more disciplined fiscal regime and a new monetary regime based on inflation targeting. One aspect of the December program, however, proved to be a source of later vulnerabilities: it maintained the large transfer of exchange rate risk from the private to the public sector, which had resulted from issuing a large amount of foreign currency-linked debt. The central declared objective of fiscal adjustment—to reduce the ratio of public debt to GDP—was undermined by the large fiscal cost—amounting to as much as 10 percent of GDP—of providing this hedge and defending the crawling peg. Subsequently, the exchange rate depreciated more than anticipated, while the IMF’s efforts to encourage the authorities to reduce the proportion of exchange rate-linked debt had limited impact.

<sup>24</sup>See Box 4.1 in Chapter 4 for the operational difference between structural performance criteria and structural benchmarks in IMF-supported programs.

## Precrisis Surveillance

In this chapter, we present our assessment of IMF surveillance in the precrisis period in the countries covered in this evaluation, focusing on two aspects: how informative was surveillance about the risks that each country faced, and how much impact did it have on the authorities' policies.

### The Diagnosis Role of Surveillance

Predicting a crisis accurately is inherently difficult, especially in circumstances where there are possibilities of multiple equilibria. Surveillance should therefore be evaluated not in terms of its ability to predict the crisis, but rather in terms of effectiveness in identifying the vulnerabilities that could lead to a crisis. Judging from this perspective, our evaluation indicates that the IMF staff was, in varying degrees, aware of most of the vulnerabilities in all three cases. Surveillance was particularly effective when the vulnerabilities were of macroeconomic nature, reflecting the fact that the focus of IMF surveillance during the precrisis period was on macroeconomic issues. The extent of the problems in some cases, however, was seriously underestimated and the surveillance reports failed to link perceived vulnerabilities to an accurate assessment of the risk and the likely dynamics of a crisis.

In Indonesia, staff reports in the period before the crisis noted that the weakness of the banking sector and the buildup of external debt had increased the country's vulnerability to external shocks. But the true extent of problems in the banking sector, and the degree to which financial system weaknesses had contributed to the poor quality of private investment, were not fully appreciated. While the growth of total external debt was noted, the magnitude of short-term debt and the associated vulnerability were not adequately recognized. The IMF also did not focus attention sufficiently clearly on the increasingly rampant corruption and cronyism that characterized the Indonesian economy. Admittedly, this phenomenon was difficult to document using the usual sources on which surveillance reports rely, but it was a subject of growing concern in academic writing and in the

press, as documented in the Indonesia country annex. Downplaying of these issues may have reflected the prevailing approach to governance issues at the time, but it clearly led to an inadequate appreciation of underlying vulnerability.

In Korea, while many of the vulnerabilities that would later contribute to the crisis were identified, the overall assessment turned out to be excessively optimistic. In large part, this was due to the poor quality of the data provided by the authorities on bank loan quality, reserves, and external debt. However, the data that existed, such as those available from the Bank for International Settlements (BIS), were also not adequately utilized.<sup>1</sup> At the same time, the surveillance team (in common with most observers in the public and private sectors at the time) was overly sanguine in its interpretation of the data. In particular, there was insufficient appreciation of the risks introduced by Korea's financial liberalization strategy, which encouraged the buildup of short-term external borrowing by weak, poorly regulated financial institutions. Some internal staff communications raised concerns over the level of short-term external debt. The maturity structure of external debt was an issue raised in discussions with the authorities, but efforts to clarify these concerns, for example by pressing the authorities more forcefully for the appropriate data, do not seem to have been pursued until the crisis had already broken out.

In contrast with Indonesia and Korea, surveillance for Brazil was essentially accurate in assessing most of the elements of the eventual crisis. From as early as 1995, the staff had recognized the vulnerability of the crawling peg to a shift in market sentiment. The staff was critical of the loose fiscal stance and consequent excessive burden on monetary policy, while acknowledging the political obstacles to

<sup>1</sup>While coverage was imperfect, both residency-based and nationality-based data on loans extended by banks based in major countries were available from the BIS. On the borrowing side, the data were classified according to the country of residence and therefore excluded, in the case of Korea, the liabilities of Korean overseas affiliates. Some of this information, however, was available from the U.K. and U.S. national sources.



tightening fiscal policy. Over time, the staff increasingly downplayed the degree to which the real was overvalued relative to historical levels, but continued to advocate accelerating the rate of downward crawl. Until 1998, however, relatively little attention was paid to capital account issues.

The following shortcomings were found to be common to surveillance exercises in two or all three of the countries studied:

- In Indonesia and Brazil, staff reports for Article IV consultations were often insufficiently candid about potential vulnerabilities, which were raised in a more pointed manner in internal documents and the internal review process—reflecting a tendency to give the authorities the “benefit of the doubt” on issues where assessments of risk were inevitably of probabilistic nature. Internal incentives, which were generally not seen to reward candor if it led to contentious relations with the authorities, contributed to this tendency (see below and also Chapter 5).
- In Indonesia and Brazil, surveillance reports were not sufficiently frank in bringing to the attention of the Executive Board political factors that might influence the ability of the authorities to implement agreed policy measures. In the case of Indonesia, this reflected a general hesitancy at that time by the Board to delve deeply into governance issues.<sup>2</sup>
- In all three cases, crucial data, particularly on the size and composition of external debt and on the health of the financial sector, were not available or could not be relied on. In some cases, this was because key information was withheld or not collected by the authorities. In other cases, available data were not adequately utilized.
- In Indonesia and Korea, not enough attention was paid to the underlying fragility of the financial sector and the likely impact on capital flows. While some in the IMF expressed concerns in these areas, particularly in internal reviews and through multilateral surveillance exercises (mainly, *World Economic Outlook* and *International Capital Markets* reports), these concerns were not fully incorporated into the assessments contained in staff reports for Article IV consultations.
- In Indonesia and Korea, balance sheet risks, including those arising from currency and maturity mismatches, were not sufficiently explored.

This shortcoming was corrected to some extent in Brazil, as the staff correctly analyzed the balance sheet effects of possible devaluation.

- In all three cases, but particularly in Korea, the possibility that a shock elsewhere in the international financial system could be transmitted to the country in question through global portfolio shifts or changes in risk tolerance (as opposed to more conventional channels such as trade links) was recognized, but surveillance failed to explore the consequences for the specific country being analyzed if such transmission were to occur.
- In Korea and Indonesia, the IMF drew too much comfort from analyses indicating that the exchange rate was not overvalued or was only moderately so. The possibility of multiple equilibria, that is, the possibility that a change in market sentiment could cause a sharp depreciation even without a major initial overvaluation was not investigated. In Brazil, the IMF did identify significant overvaluation but moderated its own assessment over time.
- In all three cases, there was not generally enough engagement with the private sector, either regarding its analysis of country conditions or regarding factors influencing their global portfolio allocations and appetite for risk. (In this respect, the dialogue with the private sector in the case of Brazil seems to have been greater than in the Asian cases.) Since country-level dialogue was necessarily concentrated on a small group of senior economic officials, the staff did not always recognize the broader range of views prevalent among current and potential policy-makers which would condition policy choices.
- In all three cases, more effort was put into estimating the likelihood of shocks occurring than into exploring the consequences if a shock were to occur. This reflected an understandable desire on the part of staff members to present management and the Executive Board with a “bottom line” risk assessment as an output of the surveillance process. Yet, once a crisis had begun, the staff’s previous characterization of a crisis as “likely” or “unlikely” in a given country under given circumstances was not of much use to decision makers at the IMF or its shareholder governments. While the surveillance reports produced for the three cases studied here contained elements of a stress test-oriented analysis, and did lead to efforts to improve data collection on areas of potential vulnerability, there were also many topics about which the staff found itself ill-prepared once the crisis had begun, both ana-

<sup>2</sup>As discussed in the section “Structural Conditionality” in Chapter 4, the Executive Board adopted a revised approach to governance issues in mid-1997.

lytically and in terms of the availability of crucial information.

## The Impact of Surveillance

Even where vulnerabilities were identified, the IMF's surveillance in the period leading up to the crisis tended to have little practical influence on critical policies and was generally not successful in promoting remedial action to address these vulnerabilities. This should not be interpreted necessarily as a shortcoming. As previous internal and external reviews have noted, IMF surveillance is only one influence on economic policies in member countries, and generally not the predominant one.<sup>3</sup> While it is too much to expect IMF surveillance to achieve more than it is capable to do, evidence from the three case studies is nevertheless useful in pointing out several factors that contributed to the limited impact of surveillance.

First, *surveillance suffered from a reluctance to state candidly difficult or embarrassing facts and views*, for fear that this would alarm the markets or generate conflict with national authorities. As documented in the country annexes, the evaluation team has identified a number of occasions when important concerns were raised in internal documents or during the internal review process, but these issues were not adequately reflected or were discussed only in an oblique manner in the documents later prepared for the Executive Board (e.g., concerns raised by the Research Department on banking sector problems in Korea, or identification by MAE of serious governance problems in the Indonesian banking sector). Interviews with staff members suggest that there was a perception that frank, critical assessments, in situations where information was inevitably partial and required an element of judgment, would not receive backing from management or the Board should the authorities object strongly.<sup>4</sup> Even if members of the staff or the Board knew of and discussed these issues off-the-record, the fact that these discussions were not contained in written reports hindered effective diagnosis and decision making and made it difficult to transfer country-based knowledge among staff members.

Second, *in some cases country authorities were not receptive to the IMF's policy advice*, typically reflecting domestic political constraints (e.g., dereg-

ulation in Indonesia). When an issue of highly sensitive nature was involved, such as exchange rate policy in Brazil, there were honest differences of view.

Third, *the impact of IMF advice was necessarily limited when no program was involved*. This meant that the IMF's influence was particularly limited by the general strength of capital flows to emerging markets in the period preceding the crisis. The IMF's views did not figure strongly until the crises were at hand.

Fourth, *information weaknesses affected not only the quality of surveillance, but also its impact*. As a 1999 review of surveillance by an IMF-commissioned group of outside experts (Crow and others, 1999, henceforth "the Crow Report") noted, the absence of hard numerical evidence on financial sector weaknesses, reserves, and external debt limited the staff's ability to make a forceful case to the authorities about the vulnerabilities in Korea. The same also applied to Indonesia, particularly in the area of banking data.

## The Role of Transparency

In practice, few of the IMF's assessments during the precrisis period entered the public domain, apart from generally muted references in multilateral surveillance reports such as the *World Economic Outlook* and *International Capital Markets* reports. One reason is that the IMF was wary of the risk of precipitating a crisis through too public a discussion of vulnerabilities. Furthermore, there is a potential conflict between the IMF's role as "confidential advisor" to the authorities and its role as an information provider and "watchdog" for the international financial community, if its assessments are published.

Although it is not possible to test the proposition rigorously, the evaluation team is of the view that the IMF's influence would have been strengthened if staff reports for Article IV consultations had been published, so as to influence the public policy debate and promote better risk assessment by private investors and lenders.<sup>5</sup> The vulnerabilities that brought about all three crises were widely recognized, if generally underappreciated, in the public and private sectors, so an open discussion would not have come as much surprise to the markets. Instead, the fact that the IMF did not publicize its concerns may have contributed to the market's tendency toward excessive optimism. Regarding the IMF's role as a confidential advisor, in practice, in none of the three

<sup>3</sup>See, for example, "Biennial Review of the Implementation of the Fund's Surveillance over Members' Exchange Rate Policies and of the 1997 Surveillance Decision," SM/97/53, February 1997.

<sup>4</sup>The existence of perverse internal incentives was also noted in the IEO's evaluation of prolonged use of IMF resources (IEO, 2002).

<sup>5</sup>Under current policy, the IMF encourages the publication of staff reports for Article IV consultations, but the ultimate decision on publication is left to the authorities.

country cases—except perhaps Brazil in late 1997 and in 1998—was the IMF effective in this area in its surveillance (as opposed to program negotiation) role. Thus, by not publishing its assessments, the IMF had the worst of both worlds. In some cases, the sensitivity of the authorities to the public dissemination of IMF staff views also diminished the staff's incentives or ability to undertake analytical work, further reducing the impact of surveillance on policy. While it is difficult to generalize from the three cases examined here, the evidence suggests that the benefits of making the IMF's views public outweigh the costs.

Since the crises, each of the three countries has agreed to the publication of Public Information Notices (PINs)<sup>6</sup> and background Selected Issues papers following their Article IV consultations, as well as LOIs and supporting documents when IMF-supported programs have been operative. Nevertheless, up to 2002, none of the three countries covered in this study had agreed to the publication of staff reports, a step that remains voluntary under the IMF's transparency policy.<sup>7</sup> While the publication of PINs represents considerable progress in putting IMF surveillance assessments in the public domain, these notices typically remain somewhat anodyne. Without the publication of staff reports, the full argumentation and nuanced judgments of IMF surveillance are not available to the public.

### Recent Initiatives and Further Steps to Strengthen Surveillance

Previous internal and external reviews of the role of surveillance in crisis cases have highlighted many of the same issues discussed above. In particular, a review of surveillance in Mexico before the 1994–95 crisis, which was discussed in the 1995 IMF *Annual Report*,<sup>8</sup> stressed the need for improved data collection; more constructive dialogue with national authorities, including more candid assessment of potential risks; greater frankness at the Board level in assessing member policies; and more attention to financial sector issues. Following the Asian crisis,<sup>9</sup> in 1999, the

Crow Report recommended, among other things, an increased emphasis on the domestic financial sector, the capital account, and global market conditions; improvements in cross-departmental information exchange; and a focus on identifying vulnerabilities.

The IMF has moved to address many of these concerns in the last several years.

- Procedures have been put in place to alert management to, and promote greater cross-departmental discussion of, prospects faced by countries identified as particularly vulnerable. In this connection, analytical work has been done on the design and use of various types of early warning systems, although it has not yielded an operationally robust tool for surveillance purposes. Nevertheless, the findings of this work have sharpened the diagnostic capacity of the IMF in the context of surveillance, such as financial soundness indicators, external vulnerability indicators, and, more recently, debt sustainability analyses.
- The IMF has strengthened its analysis of country-level financial sector issues, most notably through the Financial Sector Assessment Program (FSAP) in collaboration with the World Bank.
- Reports on the Observance of Standards and Codes (ROSCs) are regularly prepared, and generally published. These reports examine national authorities' adherence to internationally accepted standards and codes in a number of areas, including especially financial supervision, corporate governance, and data dissemination.
- The International Capital Markets Department (ICM) was formed, and efforts have been made to recruit staff with financial market experience, in order to give a more prominent role to the analysis of global financial market conditions and of the capital account.
- A Capital Markets Consultative Group has been established to provide a formal channel for consultations with the private sector, though these discussions currently do not cover conditions in specific countries. According to staff members interviewed by the evaluation team, informal contacts with private sector analysts have also become more common and accepted in the past five years.

<sup>6</sup>Publication of PINs began in May 1997.

<sup>7</sup>Beginning with the 2002 Article IV consultation, however, Korea agreed to the publication of staff reports. Some 60 percent of staff reports for Article IV consultations have been published in recent years.

<sup>8</sup>The underlying confidential report "Mexico—Report on Fund Surveillance, 1993–94," EBS/95/48, was prepared in March 1995, and is generally referred to within the IMF as the Whittome Report after its author.

<sup>9</sup>At the height of the Asian crisis in March 1998, there was a preliminary internal review of surveillance in countries affected by the crisis, including Thailand, Indonesia, and Korea ("Review

of Members' Policies in the Context of Surveillance—Lessons from Surveillance from the Asian Crisis," EBS/98/44). This review identified five key lessons, namely, the importance of timely available data, the need to extend focus beyond core macroeconomic issues, the need to pay attention to policy interdependence across countries, the importance of policy transparency, and the benefits of supportive peer pressure.



- Quarterly vulnerability assessment experiences were initiated in May 2001 to provide an operational framework for assessing crisis vulnerabilities in emerging market countries, by integrating bilateral and multilateral surveillance as well as market intelligence and IMF-wide country knowledge.
- Revised guidelines for surveillance were issued in September 2002. Among other things, the new guidelines emphasize the importance of candid discussions of exchange rate issues, comprehensive assessments of crisis vulnerabilities, and measures to alleviate the vulnerabilities that are identified. The guidelines also mandate fuller discussions of the capital account, governance issues, data deficiencies, and the authorities' responsiveness to previous consultations.

These are valuable steps. However, the current evaluation suggests that the following additional steps would enhance further the role of surveillance in crisis prevention:

- *Surveillance should be oriented toward looking for points of vulnerability, and developing and analyzing stress test scenarios, rather than toward simply trying to predict the future.* A full discussion of the real and financial consequences of a menu of possible shocks—such as a worsening of the global macroeconomic environment, a terms of trade shock, a large domestic bankruptcy, or a financial crisis in a neighboring country—would clarify the risks ahead, and would be a useful input to later decision making. If and when one of the identified shocks occurs, the groundwork will have been laid for a more informed exploration of options on the part of IMF management and the Board, as well as the country authorities. A full discussion of scenarios can also help to expose gaps in information and analysis that staff would then attempt to close in advance of a potential crisis. Some IMF surveillance exercises have already begun to use such an approach, for example debt sustainability analyses and stress-testing undertaken in a number of FSAP exercises.<sup>10</sup>
- *IMF surveillance should identify those structural policies that are most critical to crisis prevention and mitigation and present an assessment in Article IV consultations of the quality of the dialogue with the authorities in these areas, including progress made over time.* In many

countries, there is an extensive outstanding reform agenda but relatively little effort is made until a crisis occurs to assign priorities to specific reform measures. While continuing to encourage policies that contribute to long-term growth, which may range over a wide area, IMF surveillance should put special emphasis on those policies that would reduce the likelihood and seriousness of a crisis. The revised surveillance guidelines suggest that policy discussions should focus on such issues if “crisis vulnerabilities are non-negligible.” However, it can be argued that such crisis-prevention measures should have a high priority in surveillance of all countries with significant access to international financial markets, since, as the country cases studied here indicate, the seriousness of potential vulnerabilities often do not become apparent until a crisis is imminent.

- *Analysis of balance sheet positions and mismatches* has become increasingly common in surveillance reports, but this is not yet done in a systematic or standard fashion. The staff, in Allen and others (2002), has analyzed the role of balance sheet effects in financial crises, and outlined the different mismatches that are most relevant. This could serve as a guide for more systematic analysis of these issues in surveillance reports. More explicit guidelines should be established for the kinds of mismatches that should be examined at the levels of the public, private, and external sectors. This, in turn, would guide the development of statistical reporting systems in support of surveillance and improvements in the timeliness of statistics.
- *Procedures should be introduced to ensure that staff assessments are as candid as possible.* To the extent that the staff avoids controversial statements out of fear of a negative response, either directly from national authorities or at the Board level, the Executive Board must play a key role in changing the environment in which surveillance assessments are generated and received. This may mean improving the incentives to produce candid surveillance reports (see Chapter 5). A sharper delineation of the issues surveillance is expected to cover in this area (see above) will also help to promote candor.

While these efforts will undoubtedly reduce the probability of surveillance failing to recognize the risks of a crisis that materializes, the same efforts may also increase the probability of surveillance exaggerating the risks of a crisis that does not materialize. It is important that, with these efforts, surveillance remains realistic in assessing the likelihood of a crisis.

<sup>10</sup>A framework for assessing external and fiscal sustainability is suggested in “Assessing Sustainability,” SM/02/166, May 2002.

## Program Design and Implementation

**G**iven the nature of capital account crises, the primary objective of crisis-management programs in such cases should be to restore confidence as quickly as possible in order to restore normalcy to the capital account. This was indeed the approach adopted in all three cases. In each case, the crisis-management strategy relied upon a mix of fiscal and monetary policies combined with a range of structural reform measures, supported by a large financing package. In this chapter, we present a summary assessment of the critical elements of program design and implementation in the three country cases.

### Macroeconomic Framework and Projections

Adjustment programs are designed to achieve particular macroeconomic outcomes, and several policy measures are calibrated around these outcomes. However, the key determinants of macroeconomic outcomes are not always well understood and are in any case subject to large uncertainty. This can lead to macroeconomic outcomes that are very different from program projections. This was evident in both Indonesia and Korea, where the initial projections were overly optimistic, leading to the design of macroeconomic policies that turned out to be tighter than necessary (Table 4.1).<sup>1</sup> In contrast, the initial projections for Brazil in 1999 were too pessimistic, which contributed to fiscal adjustments that turned out to be insufficient, in light of that country's adverse public debt dynamics.

In Indonesia, the November 1997 program projected GDP growth in 1998/99 at 3 percent. This was then revised downward to zero percent in January 1998 and to -5 percent in April, while the actual outcome was even worse at -13 percent. The original

optimism was due to the assumption that the crisis was a moderate case of contagion in which the exchange rate had overshot. It was thought that, with a combination of tight macroeconomic policies and structural reform, the exchange rate would appreciate quickly. This did not happen, and the resulting currency collapse had severe negative effects on the balance sheets of corporations and banks. Such negative balance sheet feedback was further exacerbated by the political developments affecting the minority Chinese community, which had a dominant role in business. Fixed investment in Indonesia, which was expected to decline by only 0.4 percent in 1998/99 in the November program projection, actually declined by a massive 33 percent, explaining much of the turnaround in GDP performance.

In Korea, the IMF was of the view that the macroeconomic outcome would be worse than projected, but the government was reluctant to accept a lower figure for GDP growth. Growth in 1998 was therefore projected at 2.5 percent in the initial program, whereas it actually declined by 6.7 percent. Investment, which was projected to decline by 14.2 percent, actually fell by 21.2 percent, again indicating that the negative balance sheet impact was underestimated.

In the case of Brazil, the IMF staff correctly identified a number of the elements that proved critical in the country's relatively strong growth performance after the exit from the exchange rate peg, such as a relatively strong financial sector, and a corporate sector with limited leverage and little foreign exchange exposure. In part reacting to the overoptimistic projections in East Asia, the projections for output were deliberately cautious, although in line with outside forecasts and considered by some to be on the optimistic side. It was felt that this would help persuade the markets that the targeted path of the primary surplus was consistent with sustainable debt dynamics even under relatively adverse developments in output.

Part of the problem arises because macroeconomic projections in an IMF-supported program are necessarily the outcome of a negotiation. In the case of Korea, the authorities were reluctant to accept a growth projection lower than 2.5 percent for 1998; in

<sup>1</sup>Overoptimism appears to be a feature of most large IMF-supported programs. Musso and Phillips (2001) find a significant optimistic bias in real GDP projections for the first year of adjustment programs for which access is large or where the economy is large. This bias, however, is not present in their sample of IMF-supported programs as a whole.

**Table 4.1. Real GDP and Investment Projections and Outturn in Crisis Countries**

	Original Projections	Revised Projections <sup>1</sup>	Outturn
Indonesia (1998/99)			
GDP	3.0	-4.7	-13.6
Fixed investment	-0.4	-26.8	-33.0
Korea (1998)			
GDP	2.5	...	-6.7
Fixed investment	-14.2	...	-21.2
Brazil (1999)			
GDP	-1.0	-3.8	0.8
Fixed investment	-9.5	-18.2	-3.2

Sources: Various IMF staff reports.

<sup>1</sup>March 1999 for Brazil, April 1998 for Indonesia.

Brazil, the authorities deliberately wanted to be cautious. More important, forecasts were not derived from an analytical framework in which the key determinants of output and their likely behavior during the crisis could be dealt with adequately. In particular, there was insufficient appreciation of (1) the large currency depreciation which might occur in view of the possibility of multiple equilibria and (2) the severe balance sheet effects that might result, which would affect macroeconomic outcomes adversely. In retrospect, these can be called analytical weaknesses in light of the new type of crises. Balance sheet analysis was not yet in the tool kit of most macroeconomists in the economics profession, let alone in the IMF, at the time.<sup>2</sup>

### Assessment

In both Indonesia and, to a lesser extent, Korea, much attention has focused on whether the initial stance of fiscal policy was appropriate in view of the output collapse that subsequently occurred. Fiscal tightening was said to have been unnecessary and have damaged market confidence when output was beginning to fall, and we turn to this issue in the next section. However, this was the direct consequence of

the overoptimistic projection of output for the reasons indicated above. Thus, the key questions in this respect are: (1) were the initial macroeconomic projections a good guide for judgments on the fiscal policy stance? (the answer is no in the case of Indonesia and Korea); and (2) was program design sufficiently flexible to respond reasonably quickly to a different macroeconomic situation? (in our view, the answer, as discussed further in the next section, is a qualified yes. However, the flexibility was not sufficiently transparent and gave mixed signals, especially in Indonesia). These problems did not arise in Brazil because the projections were deliberately pessimistic and the outcomes were actually better, which was probably less damaging to market confidence. However, routinely making pessimistic projections cannot be the answer, not least because the markets would then quickly learn to discount the pessimistic bias in IMF projections.

Growth projections that are overoptimistic not only call into question the credibility of the IMF, but they can also lead to macroeconomic policies that are either too tight or too loose. It is inherently difficult to forecast macroeconomic outcomes reliably, most of all in crisis situations. However, these problems could be reduced if there was a more explicit focus on the key factors that will have significant impact on aggregate demand, particularly private investment. It is well known that forecasting private investment over a business cycle is extremely difficult even under normal conditions. This difficulty is compounded by greater uncertainty during a capital account crisis, making accurate projections difficult even with best practice. It is thus important that quantitative targets and benchmarks in an IMF-supported program should incorporate that uncertainty. In particular, a more explicit discussion was needed

<sup>2</sup>Balance sheet analysis began to figure more prominently in the thinking of the economics profession after the East Asian crises, with the emergence of the so-called third-generation model of currency crisis (Allen and others, 2002). However, the idea that devaluation could have contractionary output effect when there is net external debt denominated in foreign currency was well-known in the academic literature for at least 35 years, most frequently associated with the works of Carlos Diaz-Alejandro (1963, 1965). Similar balance sheet issues, such as unhedged foreign currency exposure and their effects on private aggregate demand, were raised following the Mexican crisis of 1994–95.

in the program documents of the major risks to the macroeconomic framework, with a clear indication of how policies would respond if the risks materialized. This could have helped facilitate subsequent program reviews (which did show flexibility) and would also have sent a more transparent signal on the expected stance of policies.

## Fiscal Policy

Some critics have accused the IMF of mechanically applying to East Asia the tight fiscal policies that it had traditionally recommended in Latin America. The three countries studied suggest that the approach adopted was more nuanced. In both Indonesia and Korea, the staff recognized that the underlying fiscal position was sound, and the fiscal tightening envisaged was therefore mild. The November 1997 program in Indonesia targeted an increase in the fiscal surplus from 0.5 percent in the budget for 1997/98 to 0.75 percent, with a further tightening to yield a surplus of 1.3 percent in 1998/99. The initial program therefore involved a turnaround of 0.8 percent of GDP over an 18-month period. For Korea, the program incorporated only a small fiscal surplus of 0.2 percent of GDP for 1998, compared with a deficit of 0.2 percent of GDP projected for 1997, that is, a fiscal turnaround of only 0.4 percent of GDP. In sharp contrast, the Brazilian program involved a turnaround of over 4 percentage points of GDP for 1999, relative to the fiscal position expected to prevail in the absence of adjustment measures.

The IMF staff justified the mild tightening of fiscal policy in Indonesia and Korea on the grounds that countervailing measures were needed to lessen the burden of the private sector in external adjustment and to cover the carrying cost of the public-debt burden arising from recapitalizing the financial sector. Moreover, fiscal tightening has traditionally served as a signaling device, indicating the government's resolve to take corrective action. The signaling role was particularly pertinent in Indonesia, where the tightening largely reflected the elimination or postponement of prestige projects linked to the family of the President. The need for a fiscal correction to cover the cost of bank restructuring cannot be disputed, because the potential quasi-fiscal costs of the banking crisis were very high. Nevertheless, with the benefit of hindsight, it can be argued that, certainly in Korea, this adjustment could have been deferred by accepting a slightly higher public debt profile in the medium term, which would not have been a problem given the relatively low initial debt position. There was less justification for deferring the adjustment in Indonesia, where the cost of bank restructuring was higher.

The real problem with the fiscal targets in Indonesia and Korea was the growth assumptions built into the program, which proved unrealistic because of the contractionary forces generated by the sharp exchange rate depreciation and the resulting balance sheet effects. In Indonesia, these were compounded by a developing political crisis. Failure to take these influences sufficiently into account led to unnecessary fiscal tightening. Better anticipation on this count would have called for a more countercyclical stance in fiscal policy.

The fiscal targets in both countries were quickly adjusted as the contractionary effects became evident.

- In the case of Indonesia, the January 1988 LOI relaxed the fiscal policy target from the surplus of 1.3 percent of GDP initially envisaged to a deficit of 1 percent for 1998/99, and this was further relaxed in April (at the start of the fiscal year) to a deficit of 4.7 percent, on the assumption that GDP would decline by 5 percent. The actual deficit achieved in 1998/99 was only 2.1 percent of GDP, indicating that the fiscal target was not a binding constraint. The lack of automatic stabilizers, such as social safety nets, and the weak capacity of the government to achieve the increases in expenditure that were targeted in a number of social sectors made it difficult to use fiscal policy countercyclically even within the limit permitted by the revised program.
- In Korea, as early as late December 1997, within a month of the approval of the program, the staff recommended that the authorities should not adhere to the fiscal targets but let automatic stabilizers work. However, the Korean authorities were reluctant to deviate from their balanced budget philosophy despite urging from the IMF staff, who favored a more expansionary fiscal policy once the extent of the economic downturn became apparent. In the event, government consumption expenditures fell by 0.4 percent in real terms in 1998, but Korea ended up running a budget deficit of 4.3 percent of GDP in 1998, because tax revenues fell even further.

Fiscal policy was much more restrictive in Brazil, where the fiscal adjustment of over 4 percent was programmed for 1999 relative to the outcome projected to prevail in the absence of adjustment measures.<sup>3</sup> This was appropriate, as fiscal sustainability was a factor driving the evolution of the crisis. The

<sup>3</sup>According to the November 1998 program document, the fiscal balance for 1999 was expected to deteriorate on account of several factors, including the "disappearance of once-off tax revenues," "retroactive wage increases," and "the effects on the social security finances of the acceleration of early retirements."



main objective of the 1998 program was to stabilize the ratio of net public debt to GDP, in order to ensure medium-term debt sustainability. To achieve this, a performance criterion was set for the public sector borrowing requirement (PSBR), with an indicative target for the primary surplus that involved an increase of 2.5 percentage points over the previous year. The depreciation of the real following the collapse of the program in early 1999 raised the debt-to-GDP ratio from 43 percent at the end of 1998 to 52 percent in February 1999 because of the revaluation of external debt and high levels of foreign exchange-indexed domestic debt.

The revised March 1999 program set a performance criterion on the primary surplus, with an indicative target for the net debt of the public sector, and an informal target for the proportion of domestic debt indexed to the U.S. dollar that would be rolled over. Moreover, it raised the primary surplus to 3.1 percent of GDP in 1999, 3.25 percent in 2000, and 3.35 percent in 2001. While all the primary balance targets were achieved, the targeted debt-to-GDP ratios were not achieved, in large part owing to the greater-than-expected depreciation of the currency, which raised the local currency value of external and foreign currency-linked domestic debt.

### Assessment

The three country experiences studied for the report suggest that the fiscal policies recommended by the IMF did differ depending on the initial position, but the real reason for the inappropriateness of the fiscal policy in Indonesia and Korea was the failure to take account of the key factors that would affect aggregate demand during a crisis, notably the impact of balance sheet effects and confidence factors on private investment. The fiscal stance in Korea, given the low initial stock of public debt, can be said in retrospect to be too contractionary. The government could have drawn on its spare borrowing capacity to offer its obligations in exchange for those of the troubled financial sector—as eventually happened. In contrast, the similarly low outstanding stock of debt in Indonesia probably did not present a strong case for an ambitious countercyclical fiscal policy because the banking sector was much weaker than in Korea, with serious solvency rather than mainly liquidity problems, and posed large contingent liabilities for the government. The absence of a bond market also limited the ability of the government to finance expenditures without resorting to inflationary means. There was little scope for a substantially expansionary fiscal policy.

The Indonesian and Korean programs have been criticized for pursuing tight fiscal policy in Indonesia and Korea, on the grounds that this was unneces-

sary and may have been partly responsible for the severe output contraction that followed (Furman and Stiglitz, 1998; Sachs, 1998). Our evaluation suggests that, while the initial fiscal tightening may have been misguided, the severe output contraction experienced by these countries was not due to the fiscal stance but to the operation of other contractionary forces, linked to the impact of balance sheet effects and confidence factors on private aggregate demand, which were clearly underestimated.

The fiscal correction in the Brazilian program was much stronger, but this was appropriate under the circumstances, since fiscal weakness and debt sustainability were critical issues driving the evolution of the crisis. A balance sheet perspective, however, suggests a weakness in another area of the program. In Brazil, from late 1997, the government was effectively providing the private sector with a hedge for exchange rate risk by issuing foreign currency-linked debt, intervening in the foreign exchange futures market and, latterly, by selling foreign exchange reserves. While the exchange rate policy maintained in the 1998 program thus helped mitigate any adverse balance sheet impact of exchange rate depreciation, it was a form of expansionary fiscal policy in the face of an impending currency crisis. Unlike the case of Korea, however, this policy had serious consequences for Brazil's medium-term debt sustainability.

### Monetary Policy

Some of the strongest criticisms of the role of the IMF in the capital account crises of the 1990s have been in the field of monetary policy. The IMF has been criticized for requiring countries to pursue an excessively tight monetary policy, thereby damaging the balance sheets of banks and corporations, disrupting the flow of credit to small and medium-sized enterprises, and constraining aggregate demand unduly at a time of recession (Furman and Stiglitz, 1998; Sachs, 1998). The IMF and its defenders have responded that a tight monetary policy was necessary in the crisis countries in order to support the exchange rate (at least in part through a signaling effect), combat inflationary pressure from depreciation, and limit the external financing gap through a combination of reduced capital outflows and a lower current account deficit (Lane and others, 1999; Corsetti and others, 1999).

Internal documents reveal that, in all three cases, monetary policy targets were set on the basis of an explicit consideration of the trade-off between higher interest rates and a weaker exchange rate. The cases differed, however, in the emphasis placed on monetary policy in program strategy and the perceived impact of high interest rates on the private financial and nonfinancial sectors (see Table 4.2 for

**Table 4.2. Real Interest Rates in Selected Countries<sup>1</sup>**

Country		Average	High	Month of Highest
January 1990–June 2002 (except where indicated)				
United States		1.9	3.7	Nov. 97
United Kingdom		3.8	8	Aug. 92
Japan		1.1	3.6	Aug. 91
Italy		4.6	13.6	Sep. 92
Germany		2.8	7.7	Aug. 90
France		4.2	9.8	Jan. 93
Canada		3.7	9.3	Apr. 90
Sweden <sup>2</sup>		4.6	15.2	Sep. 92
Indonesia		4.9	49.1	Aug. 97
Korea		6.2	18.1	Jan. 98
Brazil <sup>3</sup>		18	40.6	May. 95
Philippines		5.5	17	Oct. 97
Malaysia		2.6	8.6	Jul. 97
Thailand		3.9	15	Sep. 97
Mexico		5.5	29.6	Mar. 95
In the first six months after the adoption of an IMF-supported program <sup>4</sup>				
Mexico	1/95–6/95	11.5	29.6	Mar. 95
Philippines	7/97–12/97	9.4	17	Oct. 97
Thailand	8/97–1/98	8.3	15	Sep. 97
Indonesia	11/97–4/98	–8.4	0.5	Jan. 98
Korea	12/97–5/98	14.8	18.1	Jan. 98
Brazil	11/98–4/99	33.7	37.5	Mar. 99

Source: IMF database.

<sup>1</sup>Interest rates are 3-month treasury bill rates for G-7 (except for Japan) and Sweden; 60-day government securities rate for Japan; 3-month interbank rates for the Philippines, Malaysia, Korea, and Thailand; overnight interbank rate for Indonesia; overnight Selic rate for Brazil; and Cetes 90-day rate for Mexico. Real interest rates are calculated as the difference between the average daily nominal interest rate during a given month and the rolling 12-month CPI inflation rate centered on that month.

<sup>2</sup>Until December 2001.

<sup>3</sup>From January 1995.

<sup>4</sup>For each country, the starting month of the program is the month in which the letter of intent was signed by the authorities. For the Philippines, this represented the extension and augmentation of an existing arrangement.

the comparative level of real interest rates in these countries).

In Indonesia, the November 1997 program did not call for a substantial monetary tightening, mainly because monetary policy had already been tightened prior to the program. Internal documents and staff interviews make clear that there were considerable differences of view on this issue within the IMF, with some arguing for a further tightening of monetary policy, and some arguing that the initial tightening was sufficient to send the necessary signal, taking into account the potential impact on leveraged balance sheets. In the event, and given the political constraints faced by the authorities, the strategy adopted in the program was to maintain the relatively tight monetary stance, with the understanding that it would be tightened further if necessary. No explicit target was specified for interest rates. To allow the authorities to intervene in the foreign exchange market without affecting the overall liquidity position, the November program had the unusual feature of including a base money tar-

get as a performance criterion, instead of a more conventional NDA ceiling combined with a floor for net international reserves (NIR).

In practice, the monetary policy envisaged in the program was never implemented. A significant loosening of monetary policy took place almost immediately, with extensive unsterilized liquidity assistance to troubled banks, leading to increasingly negative real interest rates. The IMF staff objected strenuously to this loosening of monetary policy, with little effect. While this calls into question the quality of the IMF's dialogue with the government, it cannot be said that the overall stance of monetary policy was tight through the early months of the program.<sup>4</sup> Monetary

<sup>4</sup>Higher nominal interest rates, however, affected different sectors of the economy differently, because sharp changes were taking place in relative prices, even though real interest rates measured using average inflation were negative. These issues of monetary policy in Indonesia are explored in greater detail in the Indonesia country annex.

control and exchange rate stability were only reestablished after March 1998 when a sharp interest rate increase was specified under the new program, base money targets were replaced by NDA targets as performance criteria, and the new cabinet acted decisively to end the central bank's liberal liquidity support to the financial sector. At that stage the rupiah had depreciated to Rp 10,000 per U.S. dollar, arguably a sufficiently overshot level at which the restoration of monetary control was likely to yield the results that it did in terms of exchange rate stability. Although the economy undoubtedly suffered enormous damage in November and December 1997, the blame cannot be put on the tight monetary policy advocated by the IMF since this was not implemented.

The Korean experience with monetary policy is very different. In this case, a substantial increase in the central bank's main policy rate was a key component of the IMF-supported program approved in early December 1997. Despite initial resistance by the authorities, significant increases in interest rates were implemented, though with a delay at one point because of the need to repeal an interest ceiling set by an anti-usury law. A penalty rate was also set on central bank advances of foreign exchange to the banking sector. While the monetary targets included an NDA ceiling, it was the specification of interest rate increases that had the central role to play in the Korean program. An inflation target was also included, but it was not part of formal conditionality.

The application of higher interest rates did not initially produce the desired results in terms of halting the capital outflow and easing pressure on the exchange rate. Foreign banks continued to reduce credit lines to Korean institutions and the exchange rate remained weak and volatile. The authorities expressed concerns at this time about the impact of high interest rates on heavily indebted corporations and, through them, on the banking sector, but the IMF staff assigned a higher priority to the immediate need to stabilize the exchange rate. In the months after the revised program was adopted in late December 1997, the policy rate was slowly but steadily lowered, as currency market conditions stabilized and inflation proved quiescent.

In retrospect, it would appear that, while high rates were necessary in December 1997 to prevent a complete collapse of the exchange rate, they were certainly not sufficient to resolve the crisis, as stability did not begin to be restored until after the rollover agreement was reached. Hindsight also suggests that, in the early months of 1998, interest rates were maintained too long at high levels, at a time when corporate sector balance sheets were fragile and a looser policy might have supported a faster recovery in domestic demand. However, the period of time when real interest rates may have been higher than they

needed to be was at most a few months, and it is difficult to believe that this delay contributed significantly to the recession. Besides, the speed with which markets stabilized in early 1998 came as a surprise, and some caution was therefore understandable, given the unsettled market situation in East Asia and the need to ensure that price and exchange rate stability would not be put at risk from lower interest rates.

In Brazil, the December 1998 program prescribed a tight monetary policy to support the crawling peg regime, but the prescribed policy was not followed initially. Instead, interest rates were reduced toward the end of 1998—excessively and prematurely in the view of the staff—and the programmed target for central bank credit was substantially exceeded. This is not to say that pursuit of the prescribed policy would have succeeded in maintaining a peg that was widely seen to be overvalued.

Interest rates were increased again after the exchange rate peg was abandoned in early 1999—tentatively at first but later more decisively—in an effort to stabilize the exchange rate and prevent the exchange rate depreciation from sparking reindexation and a takeoff in inflation. As in Korea, rates were eventually brought down again (though at a somewhat quicker pace) as it became evident that the exchange rate had stabilized and the pass-through to inflation was modest. In contrast to Korea, the impact of high interest rates on investment through their effect on corporate balance sheets turned out to be limited, because of the low degree of leverage in the corporate sector. However, the public sector, which had issued increasing amounts of floating rate debt, was exposed to an excessive degree of interest rate risk.

The contrasting cases of Korea and Brazil point to the importance of having a clear framework to guide monetary policy in the poststabilization period. In Korea, the high interest rate policy was subject to public criticism in early 1998 because the criteria for maintaining it—exchange rate and price stability—were not clearly defined. In Brazil, by contrast, the guiding principles of monetary policy were clearly communicated by the Central Bank. Once the formal inflation targeting framework was put in place, it provided a measurable benchmark that could be used both to guide monetary policy and to explain it to the market and to public opinion. These experiences illustrate the value of straightforward, publicly stated frameworks guiding the return to a less restrictive monetary stance in helping to clarify expectations and improve public acceptance.

## Assessment

Most economic policymakers at the time of the 1997–99 crises accepted the existence of a positive



link between interest rates and exchange rates. This approach conformed to the practice in other countries that faced currency crises in the 1990s, notably those affected by the European exchange rate mechanism (ERM) crisis of 1992. During the Asian crisis, economies with IMF-supported programs, such as Indonesia, Korea, the Philippines, and Thailand, and those without IMF-supported programs, such as Malaysia and Taiwan Province of China, used high interest rates to try to reduce downward pressure on their currencies. Interest rates in Hong Kong SAR rose sharply on several occasions in 1997 and 1998, owing to both deliberate policy actions and the automatic provisions of its currency board arrangement.<sup>5</sup>

Since the Asian crisis, a large theoretical and empirical literature has reexamined the question as to when, and under what conditions, high interest rates can be effective in defending the exchange rate. Theoretical work has tended to show that effects in both directions are plausible.<sup>6</sup> Empirical research has been unable to settle the matter.<sup>7</sup> However, researchers have established that the relevant issues and relationships differ depending on whether one is defending an exchange rate in the midst of a crisis, or attempting to manage real appreciation in the aftermath of an episode where the exchange rate has overshot its equilibrium level. If it is judged that there has been an excessive real depreciation, one function of monetary policy is to ensure that the subsequent real appreciation occurs through nominal appreciation rather than through inflation (Goldfajn and Gupta, 1999). This would argue for maintaining a tight monetary policy. Yet the resolution of a crisis in the financial sector would call for a loose monetary policy.

This highlights the fact that interest rate policy poses special problems in situations of “twin crises,” in which a balance of payments crisis triggered by capital outflows takes place simultaneously with a

banking crisis. As Krueger (2002) put it: “To confront a balance of payments crisis, the appropriate policy responses entail an exchange rate change, tightening of monetary policy, and tightened fiscal policy. To stem a financial crisis, by contrast, entails loosening of monetary policy, maintenance (or even appreciation) of the nominal exchange rate, and financial restructuring. . . . To a significant degree, in the presence of twin crises, whatever is done to address one will, in the short run, make the other worse.” [parentheses in original]. In the light of these considerations, it is difficult to pronounce definitively on the appropriateness of monetary conditionality in the three crisis countries. The IMF was aware that tight monetary policy designed to stabilize exchange rates could have an adverse impact on the corporate and banking sectors, if they were highly leveraged. However, it was also concerned about the adverse impact on the economy of excessive exchange rate depreciation if the corporate sector had a large unhedged debt position in foreign currency. In a twin crisis, it remains an unresolved issue how to reconcile the two conflicting objectives of monetary policy.

## Official Financing and Private Sector Involvement

The size of financing needed in a capital account crisis is inherently difficult to determine for two reasons. First, the *ex ante* estimate of the financing gap depends upon the speed with which confidence is restored and capital flows return to normalcy, which is difficult to predict. Confidence is a psychological phenomenon and depends on both the technical soundness of the adjustment program and also on whether the markets believe it will be implemented and be effective. Second, the financing requirement in a capital account crisis is typically very large, exceeding what the IMF can provide from its own resources, given the role of quotas in limiting access and also the constraints on total resources available to the IMF. Fischer (1999) has pointed out that the IMF, therefore, has to perform two functions: to act as a “crisis lender” providing financing from its own resources, and also to act as a “crisis manager” arranging supplementary resources from other sources, for example, multilateral and bilateral official financing, and encouraging private sector involvement to the extent possible. This is indeed the approach it adopted in all three cases.

## The scale of IMF financing

In all three cases, the IMF was able to provide a large volume of its own financing combined with a

<sup>5</sup>Subsequently, Hong Kong SAR and Malaysia resorted to less conventional measures: purchases of stocks in the secondary market and controls on capital outflows, respectively.

<sup>6</sup>Lahiri and Végh (2002), for example, show that high domestic interest rates can induce a portfolio shift towards the domestic currency under the right circumstances but there is a range in which sufficiently high interest rates can also weaken the currency by contracting domestic output and by raising the government’s debt-servicing costs.

<sup>7</sup>For example, Kraay (1998) finds that tighter monetary policy does not have a statistically significant impact on whether speculative currency attacks succeed or fail, even when one controls for the endogeneity of the policy response. Goldfajn and Gupta (1999) find some evidence that tighter monetary policy in the *aftermath* of currency crises helps to ensure that an undervalued real exchange rate returns to its equilibrium level through nominal appreciation rather than higher inflation. But their results are not robust to different specifications and do not hold when a currency collapse is accompanied by a banking crisis.

substantial recourse to official financing from other international financial institutions (IFIs) and bilateral sources (Table 4.3). The scale of total official financing in each case was comparable in terms of GDP to the financing provided to Mexico in 1994. All three programs involved highly front-loaded disbursements, reflecting the need to make resources available quickly.<sup>8</sup> As a proportion of quota, IMF assistance to Korea was exceptionally large, made possible by the introduction of the SRF at that time. Nevertheless, all three programs failed to restore confidence initially.<sup>9</sup>

In Indonesia and Brazil, it is difficult to argue that the failure of the initial program was due to the financing package. The failure in Indonesia resulted largely from the evident lack of commitment of the government to implement the program and the rapid emergence of a major political dimension to the crisis, which accelerated not only the reversals in capital flows but also capital flight by domestic residents. The first Brazilian program failed because the initial objective of maintaining the crawling peg was not perceived as credible, particularly given the lack of sufficiently supportive policies and the overvaluation of the real.

In Korea, however, the initial failure of the program was more directly related to deficiencies on the financing side. The package as announced in the press note included US\$20 billion of bilateral assistance as a second line of defense, but there was considerable lack of clarity as to whether this amount was really available. The program was originally based on the assumption that this amount would be needed to fill the estimated residual financing gap, but it was communicated to the staff at a fairly late stage that it should not count on this amount being available. The estimated financing gap was, therefore, reduced by arbitrarily increasing the assumed rollover rate of short-term debt.

There was lack of transparency in dealing with the problem, since details of the residual financing gap, and the rollover assumptions on which it was based, were not made public, and the second line of defense was included in the press announcements to give the impression that the actual resources being made available were larger than they were. However, the markets doubted the availability of the second line of defense and perceived the program to be underfinanced. The IMF recognized this fact and immediately pressed its major shareholder governments to

achieve a rollover of bank credit lines, but to no avail (see “Private sector involvement” below). Outflows continued unchecked, and it was only when a rollover agreement with the banks was reached that the financing problem was effectively resolved. The conclusion is that if a rollover was not feasible, the amounts included in the second line of defense should have been made more readily available.

Critics have argued that large front-loaded packages of the sort used in these crises are subject to moral hazard, in that future investors may consequently lend imprudently in the expectation that they will be bailed out by the public sector in the event of adverse developments. This is possible in principle, but the empirical evidence is mixed.<sup>10</sup> Certainly, private capital flows to emerging market economies have been very subdued since these capital account crises, a trend that may partially reflect the perception that the official sector will be less amenable to large packages and more insistent on private sector burden sharing in the future. This suggests that the moral hazard impact of official support in these cases was at best very limited.

### Private sector involvement

The three country experiences provide some indication of the potential role for private sector involvement (PSI) in different circumstances. In Korea, the effort to encourage PSI in the second program was highly successful, because the short-term interbank credits covered by the agreement accounted for a large proportion of potential outflows. The direct involvement of the authorities of the major industrialized countries made it possible to orchestrate the rollover. The IMF was involved in consultations with the authorities and played a useful role in establishing quickly the comprehensive reporting system that enabled compliance with the rollover agreement to be monitored.

In Indonesia, the scope for PSI was more limited because the predominant form of capital inflows was foreign exchange borrowing by private nonfinancial firms. The need for an initiative in this area to establish a framework for negotiations and workout of such debts by the private sector was noted by the staff at an early stage but no action was taken. At a later stage, the authorities, with IMF technical assistance, tried to facilitate restructuring by establishing

<sup>8</sup>In the fast-moving crises of Indonesia and Korea, the procedures under the Emergency Financing Mechanism were invoked to allow the IMF to agree on a program quickly.

<sup>9</sup>These experiences confirm the conclusion of earlier studies that the “catalytic” effect of IMF programs on private capital flows is typically small (Cottarelli and Giannini, 2002).

<sup>10</sup>See Ghosh and others (2002) for a brief summary of the literature. Essentially, empirical work has focused on the presence or absence of significant market reactions (typically measured by bond spreads) to actions or decisions that are expected to affect the expectations of private investors that they will be “bailed out,” including the announcement of a large IMF-supported financing package, a large-scale default, and a sovereign debt restructuring.

**Table 4.3. Official Financing Assumed in Initial IMF-Supported Programs***(In millions of U.S. dollars)*

	Date of Arrangement	IMF	World Bank and Other Multilaterals	Other	Total
Indonesia	November 1997	10,083	8,000	18,000 <sup>1</sup>	36,083
Korea	December 1997	20,990	14,200	23,100 <sup>2</sup>	58,290
Brazil	December 1998	18,262	9,000	14,538 <sup>3</sup>	41,800
Memorandum item: Mexico	February 1995	17,843	0	33,957	51,800

Source: Ghosh and others (2002).

<sup>1</sup>Not included in the financing assumptions.<sup>2</sup>Including US\$20 billion in the second line of defense, which was included in the press release, but was not part of the programmed package.<sup>3</sup>BIS-coordinated bilateral financing and Japanese assistance.

a voluntary framework for negotiations between creditors and corporations that could not service their debts, but progress was hampered by the absence of an effective bankruptcy system and other weaknesses in the legal system. Dealing with the external debt of nonfinancial firms is understandably much more difficult, but earlier attempts could have been made, at a minimum, to initiate the collection of data. Efforts should also have been made to protect the financing of exports and essential imports through official guarantees and other schemes for key trade credits, as was done in the summer of 1998 with Japanese bilateral assistance.

By the time of the Brazilian program, the potential role of coordinated private sector action in mitigating the impact of capital account crises was widely recognized. The Brazilian authorities, however, were extremely reluctant to appear to coerce the private sector, fearing that such action might accelerate the capital outflows and have adverse consequences on Brazil's future access to international capital markets. The IMF made clear that its support would depend in part on the private sector response, but limited its role to helping to develop information systems and presenting the program to private creditors. Coordinated action was kept "voluntary," and only informal pressure was exerted on international banks to maintain credit lines. The response from private creditors under the original program was only moderate but a renewed effort in the context of the more credible revised program proved much more effective. This suggests that a program with a high degree of credibility is necessary for the "voluntary" approach to PSI to work.

### Assessment

Despite initial failures, the large official packages were helpful in easing the adjustment to normalcy in

both Korea and Brazil. In Indonesia, on the other hand, the depth of the collapse makes it difficult to argue that things would have been worse without the IMF, but the evolving circumstances made the size of access immediately irrelevant. In Korea and Brazil, official support was quickly repaid, in part ahead of schedule.

The role of the IMF in promoting PSI was fairly limited in all three cases. In Korea, the rollover agreement was a decisive factor, but this was only possible when initiated by the major shareholders. Under the circumstances, there was probably little alternative to the case-by-case approach to PSI actually adopted. Establishment of clear rules in this context might encourage an exit of capital in the early stages of the crisis. It may be useful for the IMF to have a menu of several well-defined options to use in a way most appropriate to the circumstances of each crisis, but some constructive ambiguity about the action to be followed in each case is desirable.

The three country cases thus suggest the following lessons:

- The IMF can play a critical coordinating role in capital account crises, including vis-à-vis other providers of official and private financing. The ability of the IMF to perform this task, however, is limited by the reluctance of major shareholder governments to provide large bilateral financing and to use nonmarket instruments to influence the behavior of private investors in the absence of well-established rules. In other words, the lack of a clear mandate or framework for how the IMF should operate in such circumstances forced an ad hoc response. While a case-by-case approach may be to some extent inevitable, the lack of clear rules of the game create uncertainty.

- Large access is difficult to justify when the program being supported lacks credibility in the markets in terms of policy sustainability. The decision to support Brazil's unsustainable crawling peg, justified on the basis of global systemic considerations, is one example.
- Markets tend to discount the availability and additionality of official financing from other IFIs and bilateral sources during the time of crisis, particularly if the non-IMF resources are subject to separate and vague conditionality and the country concerned already maintains ongoing financial relationships with the IFIs and the additionality is difficult to establish.<sup>11</sup> Use of non-IMF resources in these circumstances to boost the "headline" size of the official financing package can damage the credibility of the program and distract attention from addressing the issue of involving the private sector, if necessary.
- A dialogue with the private sector is necessary for the IMF to serve its facilitating role in involving the private sector. The Korean case illustrates that a more concerted approach to overcome "collective action" can work in some circumstances (e.g., when the relevant obligations are relatively concentrated), but it is not possible to say, within the context of the evaluation, how far such a conclusion can be generalized to other cases. Even when full-scale PSI is not feasible or necessary, concerted efforts should be made at the outset to make sure that trade credits for creditworthy firms are protected through official guarantee and other schemes.

## Bank Closure and Restructuring

In both Indonesia and Korea, a weak banking system greatly contributed to the onset as well as the severity of the crises. Problems in the banking sector in these countries were further compounded by the distress of the highly leveraged corporate sectors brought about by sharp currency depreciations and the associated interest rate hikes.

<sup>11</sup>In the case of Indonesia, while the ADB agreed to provide US\$2.8 billion in quick-disbursing loans, it also canceled existing loans amounting to about US\$900 million in 1998 and about US\$660 million in 1999–2000 in view of "the reduced availability of counterpart funds and the changed priorities after the crisis" (ADB, 2001a). In Brazil, the emergency loans to be provided by the IDB included a loan of US\$1.2 billion that had already been approved in September 1998 but had not yet been disbursed (IDB, 2001).

## Lessons from the East Asian experience

An important difference in how the banking crises were handled in Korea and Indonesia was the speed and decisiveness with which a comprehensive strategy began to be implemented. In Korea, a full guarantee for deposits and other bank liabilities was introduced before the IMF agreement, which was then immediately followed by the announcement of a comprehensive strategy, with appropriate enabling legislation. The functions of the Korea Asset Management Corporation (KAMCO) were enhanced, and a new consolidated system of supervision was established under the new Financial Supervisory Commission (FSC), which included a unit specially charged with bank restructuring. Even with best efforts, bank restructuring was a complex and prolonged process. It took Korea three months to establish the FSC and a full year to complete the setting up of the new regulatory framework. Bank restructuring is still an ongoing process. Nevertheless, the existence of a comprehensive strategy that was implemented, albeit with slippages in the timetable, helped ensure that there was no loss of monetary control and probably helped contain the magnitude of the crisis.

The restructuring effort in Indonesia was much less effective. A partial deposit guarantee was initially introduced for deposits of the closed banks, covering most of the accounts but only 20 percent of total deposits; this was followed three months later by a blanket guarantee for all bank liabilities, covering both depositors and creditors. The failure to introduce a full guarantee has been much discussed (and we return to this subject below), but the more important lacuna was the failure to adopt a comprehensive strategy for bank restructuring that was well-defined and well-communicated, and to apply consistently uniform and transparent intervention criteria to deal with problem banks. In the absence of such a strategy, the public saw inconsistency in the November 1997 closure of 16 banks (representing 3 percent of total banking sector assets), correctly believing that there were other banks in similar difficulty. Indeed, the IMF itself had identified 10 more banks that needed to be closed. The authorities' insistence on secrecy, particularly regarding the 10 banks under BI-supervised rehabilitation that were not closed, prevented the public from understanding the whole picture.

Given weak implementation capacity and the rushed process, the logic and content of the bank closure were not well communicated to the public, and execution was less than satisfactory. As discussed, public confidence in the banking strategy was undermined by conflicting signals from the government. In contrast, the April 1998 action was com-



petently executed by the IBRA, which took over the assets of 7 banks (representing 16 percent of total) and closed 7 smaller banks without causing any disruption. This was done under a comprehensive strategy in which uniform and transparent criteria were applied, and was accompanied by a professionally managed public relations campaign, better arrangements for meeting depositors' claims, and a blanket guarantee. The failure to implement such an approach effectively in November 1997 proved to be one of the major weaknesses of crisis management.

### **The blanket guarantee**

The issue of whether a blanket guarantee should have been offered in Indonesia in November 1997 deserves careful consideration. The lesson drawn by the IMF staff from the Indonesian experience is that "a blanket guarantee, rather than a limited deposit guarantee, is needed to restore confidence in the financial system" (Lindgren and others, 1999). Elsewhere in the same report, however, the staff recognizes that a blanket guarantee involves large contingent liabilities of uncertain value for the government, and that it can have regressive implications for wealth distribution—as taxpayers' money is used to protect large depositors and even foreign creditors. The report concludes that the benefits of the blanket guarantee must be weighed against its potential costs.

In the case of Indonesia, the partial guarantee did not lead to a general loss of confidence in the banking sector. A large share of the banking system was accounted for by foreign banks as well as by state banks that enjoyed an implicit government guarantee, and the flight to quality in late 1997 took the form of a shift of deposits from private banks to foreign and state banks within the banking system (Enoch and others, 2001). The banking crisis was, therefore, not yet systemic (in the sense of affecting the whole banking system), and a blanket guarantee was, therefore, not essential. Under these circumstances, a partial guarantee was reasonable, though arguably the amount of the guarantee could have been increased, particularly to cover some institutional deposits, and extended to all banks at that time. Besides, in a corrupt banking system, where well-connected insiders had benefited both from high deposit rates and from questionable lending practices, a blanket guarantee would have given the same insiders an additional means of benefiting from abusive and corruptive practices. This is exactly what eventually happened with unlimited liquidity support.

In the end, the blanket guarantee was subject to abuse and consequently raised the fiscal cost of bank restructuring, which is now estimated at over 50 per-

cent of GDP. The blanket guarantee in Indonesia was introduced as an act of desperation when the banking crisis seemed to be going out of control. Given the lack of adequate preparation, the guarantee was ill-conceived and was even made to cover some insider claims and interbank credits extended with full professional judgment and risk taking, including exposure in derivatives. It can be argued that the initial partial guarantee was too low. However, a higher guarantee introduced within the context of a well-communicated comprehensive strategy could have yielded a similar outcome without the fiscal cost and regressive distributional implications of the blanket guarantee.

### **The institutional setup for bank restructuring**

The Asian experience also offers no clear lessons on the appropriate modality of government involvement in bank restructuring. Different institutional approaches were taken in Korea and Indonesia. In Korea, responsibility for bank restructuring (given to the FSC) was separated from that for asset management (given to the KAMCO). In Indonesia, the functions of bank restructuring and asset management were consolidated in a new agency.

In establishing the IBRA, the IMF staff believed that (1) BI needed to be protected from the fiscal cost of bank restructuring and the associated political pressure, in order not to impair its ability to conduct monetary policy, and (2) the new agency needed to be protected from the allegations of corruption plaguing BI. As a centralized public asset-management company, moreover, the IBRA offered the advantage of consolidating scarce financial expertise and the prospect of giving special legal powers to expedite loan recovery (Lindgren and others, 1999). As it turned out, however, the IBRA was plagued by problems from the outset. As a new agency, it was not given a clear mandate and was initially handicapped by lack of legal and regulatory powers. Moreover, the centralization of bank restructuring and asset management functions in one agency subjected the IBRA to tremendous political pressure and accusations of corruption; as a characteristic of a centralized public asset management company, there was also little incentive to maximize recovery values for the acquired impaired assets. On the other hand, the KAMCO was made to operate on commercial principles and, as a specialized agency, it could focus its sole attention on that function and was effective in rapidly selling the impaired assets.

Given the weak legal system and prevailing corruption in Indonesia, it may well be that no alternative could have worked better than the IBRA. In the light of the Korean experience, however, the fact that a better outcome was achieved after the establish-

ment of the IBRA than previously cannot be used to conclude that the IBRA solution was the best strategy, something that should be adopted in all similar situations.

### Assessment

When bank restructuring was launched with the immediate closure of the least viable institutions in Indonesia and Korea in the fall of 1997, there was no internationally accepted best practice for handling bank restructuring in emerging market economies. The IMF staff (and others for that matter) had only limited experience in dealing with a banking crisis, particularly within the context of an IMF-supported program designed to deal with a capital account crisis. The contrasting outcomes of the Indonesian and Korean experiences have since formed an important basis for the IMF staff's emerging views of best practice in dealing with a systemic banking crisis, as articulated in a recent policy paper by MAE.<sup>12</sup> As this paper clearly states, the experience of East Asia suggests that a successful bank closure and restructuring program must include a comprehensive and well-communicated strategy in which uniform and transparent intervention criteria are consistently applied.

The experience of Indonesia and Korea, however, is less clear on the exact modality of public sector involvement in the restructuring process (i.e., consolidated versus nonconsolidated restructuring supervision), nor is it definitive in suggesting that a blanket guarantee, rather than a limited deposit guarantee, must be introduced at the outset of a banking crisis. A blanket guarantee may not stop runs motivated by wider confidence concerns than just banking sector problems, while it involves large contingent liabilities for the government with serious regressive implications for burden sharing. Its benefits must therefore be carefully weighed against its potential costs, within the specific context of the economy in question. In either case, the coverage of any guarantee scheme must be well designed and, particularly in a weak legal and supervisory system, early steps to preserve and correctly value assets are essential.

### Structural Conditionality

Structural conditionality was present in all three cases, and has been the subject of much controversy (see Box 4.1 for how structural conditionality is typically included in an IMF-supported program). One

view holds that the structural reform measures in the IMF-supported programs with Indonesia and Korea were unrelated to the immediate problem of crisis resolution; they distracted attention from the core macroeconomic and financial issues; and they were widely felt to be an encroachment into domestic decision making, creating an unnecessary opposition (Feldstein, 1998). Some have even argued that the extensive structural adjustment agenda had a perverse effect on confidence by signaling to the markets that the situation was much worse than they had feared (Radelet and Sachs, 1998a and 1998b). However, there is an alternative view, which holds that restoring market confidence required addressing the structural cause of the problem (Summers, 1999; Goldstein, 2002).

In the case of Indonesia, structural conditionality was linked primarily to governance-related objectives. It has been argued that this was essential to signal a clean break with the past, namely, that a new way of doing business was being established (Khan and Sharma, 2001). A guidance note issued by the IMF Executive Board in July 1997 indicated that IMF involvement in governance issues was justified when “poor governance [would] have significant current or potential impact on macroeconomic performance. . . . and on the ability of the government to credibly pursue policies aimed at external viability and sustainable growth.”<sup>13</sup> This certainly provided a somewhat open-ended mandate to pursue governance reforms if they had a significant impact on “potential” macroeconomic performance or on the credibility of policies aimed at external viability. The critical question is whether the scope of conditionality prescribed for Indonesia was indeed necessary.

### Critical versus noncritical measures

One way of determining whether structural conditionality was excessive is to distinguish those structural measures that were critical to crisis resolution from other measures that, while potentially useful in eliminating distortions, were not critical to crisis resolution. In both Indonesia and Korea, as already discussed, deficiencies in the financial sector were central to the crises, and tackling these was crucial to regaining market confidence. They were correctly a major focus of the programs, though in Indonesia implementation was flawed and there were also design deficiencies, particularly, the absence of a comprehensive strategy for bank restructuring.

<sup>12</sup>“A Framework for Managing Systemic Banking Crises,” SM/03/50, February 2003. Also see Andrews and Josefsson (2003).

<sup>13</sup>“The Role of the Fund in Governance Issues,” EBS/97/125, July 1997. According to Goldstein (2002), some IMF staff interpreted this guidance note to imply that the Executive Board would not support programs that did not address serious and widespread governance and corruption problems.

### Box 4.1. Conditionality for Structural Reforms in an IMF-Supported Program

IMF-supported programs treat structural reform measures in one of four ways. We use the Indonesian program of November 1997 to illustrate how structural measures are included in a program. Some conditions are short term in nature (i.e., they must be met before the next review, while others are longer term (i.e., they should be completed by the end of the program).

- **Measures** are targets with no conditionality attached. For example, the program envisaged a broad range of structural reforms, many linked to issues of governance, including elimination of export taxes and restrictions, dismantling of domestic monopolies, and greater private sector participation in the provision of infrastructure.
- **Structural benchmarks** do not directly govern disbursement but trigger discussion on corrective action if not met. These included the introduction of full tax-deductibility of loan loss provisions, completion of a public expenditure review and audits of state-owned banks by internationally recognized accounting firms, and the reduction of tariffs.
- **Performance criteria** govern disbursement (i.e., if they are not met, disbursements are automatically interrupted). These included the closure of certain unviable banks under central bank-supervised rehabilitation, establishment of quantitative performance targets for state-owned banks together with monitoring mechanisms, issuance of implementation regulations on procurement and contracting procedures, and elimination of subsidies by raising electricity and petroleum prices.
- **Prior actions** are measures required before a program request or review can be considered by the Executive Board. The Indonesian program included the closure of 16 banks as a prior action.

Instead of limiting conditionality to these critical areas, the Indonesian programs, especially the revised January 1998 program, included a large number of additional structural reforms. The rationale for adopting extensive structural conditionality in the January program was that it was necessary to restore confidence—the problems of cronyism and corruption, which had not been explicitly dealt with thus far, were brought to the forefront both by extensive press commentary and by major shareholder governments. It was an atmosphere in which it came to be believed that confidence could only be restored if the Suharto regime demonstrated a radical change in its way of doing business.

It is difficult to establish the counterfactual as to whether confidence would indeed have been restored had all the reforms identified been implemented. What is known is that there was no positive announcement effect. Despite affirmation by President Suharto in the form of a public signing ceremony, the markets remained unconvinced about his personal commitment. Besides, the January program did not address the macro-critical areas of bank and corporate debt restructuring. In retrospect, the basic approach of loading the programs with an overly large agenda of structural reforms, however desirable they may have been on merit, seems ill-advised

from a standpoint of restoring confidence. The elaboration of such an extensive agenda, much of which did not seem critical for stabilization, may have hurt confidence, once it became clear that the measures were not owned at the highest political level. It would have been better to concentrate on macro-critical areas, along with greater insistence on credible upfront action in those core areas.

In Korea, too, the agenda of reform was broader than seemed necessary, covering not only financial sector reforms but also trade liberalization, corporate governance, and labor market reform. Stabilization was achieved well before the reforms could be implemented and indeed the pace of structural reform in nonfinancial areas slowed when the economy rebounded from the crisis. It is difficult to say whether the authorities' initial commitment to the broad reform agenda helped to restore market confidence, but certainly immediate progress in reform in some areas was not perceived by the markets to be necessary. This is not to say that these reforms did not have a significant longer-term beneficial effect on the economy. They may well have done so. But they were not critical to resolving the crisis.

The program in Brazil did not suffer from these problems. The focus of structural conditionality was on macro-critical reform, particularly covering struc-



tural fiscal reform and prudential supervision. The paucity of extensive structural measures in other areas reflected the fact that many of the distortions relevant in Asia did not exist in Brazil, at least to the same extent. There was also strong ownership by the authorities. The Fiscal Responsibility Law was particularly helpful in establishing a general framework to guide budgetary planning and execution, with disciplinary mechanisms for any failure to observe its targets and procedures, and contributed to the greater credibility of fiscal policymaking in that country.

### Assessment

Two important lessons to be drawn from these cases are now well recognized within the IMF:

- First, ownership defined as broadly as possible (but especially at the highest political level) is key to the successful implementation of a structural reform program. But assessments of ownership can be very complex, requiring a good understanding of the political economy context. Even highly symbolic acts—such as the President signing the LOI—may be misleading.
- Second, detailed and extensive structural conditionality, particularly in areas that are not macro-critical, is not helpful to crisis resolution. This is so because it is more difficult to demonstrate commitment in the short term to an extensive agenda and because the risks of subsequent disputes on implementation, which blur the message of commitment to a coherent strategy, are greater. Perhaps more important, a detailed structural program also tends to distract attention from the immediate macroeconomic issues. This conclusion supports the recent initiatives by IMF management to streamline conditionality and enhance ownership by applying conditionality more sparingly to “structural measures that are relevant but not critical, particularly when they are not clearly within the IMF’s core areas of responsibility and expertise.”<sup>14</sup>

The evaluation also suggests the following additional messages:

- When action in areas that are not macro-critical is nevertheless deemed to be important, a “second-best” policy package that is strongly owned may be more likely to help restore confidence than a “first-best” package that is painfully negotiated and over which there are substantial do-

mestic reservations. The possibility of such trade-offs needs to be recognized.

- The crisis should not be used as an opportunity to seek a long agenda of reforms just because leverage is high, irrespective of how justifiable they may be on merits. This should be the approach even if reformist groups within the government are keen to use the leverage of the program to push reforms. When significant distortions are known to exist, and the government is committed to reform, laying out a road map for these reforms as an indicative direction by the government is appropriate, but these measures do not need to be the focus of IMF conditionality. The principle of parsimony should guide IMF conditionality in such situations. In large part, this was the approach taken in the Brazilian program.

### Communications Strategy to Enhance Ownership and Credibility

Restoring confidence involves more than just program design. It is also necessary to have an effective communications strategy to enhance country ownership (with the public) and credibility (with the markets). All three programs initially suffered from the failure to communicate their logic to the public and the markets.

#### Building country ownership

Country ownership generates domestic political support for an agreed program, hence making it more likely to be implemented. Ownership, however, is a broad concept. While program negotiations must necessarily be conducted with a small group of senior officials in the finance ministry and the central bank, successful implementation depends on the support from other stakeholders, including the head of government, key officials from other ministries, the bureaucracy that must implement the program, the parliament that must approve the necessary legislation, and civil society at large (Khan and Sharma, 2001; Boughton and Mourmouras, 2002). An effective public communications strategy is needed to build broader public support, hence stronger country ownership, during a crisis, when speed is of the essence and wider consultation is therefore not feasible.

#### Building credibility

Given the need to restore market confidence, the communications strategy must also address the need to build the credibility of a crisis management pro-

<sup>14</sup>“Managing Director’s Report to the International Monetary and Financial Committee—Streamlining Conditionality and Enhancing Ownership,” IMFC/Doc/4/01/6, November 6, 2001.

gram with the markets. In designing a program to restore confidence, the IMF must understand what the markets are looking for in a program and to explain the logic of the program. Particularly in a capital account crisis, the IMF may not necessarily have more information on critical issues than the markets, necessitating some dialogue with the markets (Cottarelli and Giannini, 2002). For example, the markets may become nervous if there is a perception that concerted action may be taken to involve the private sector, including a restructuring of sovereign debt. In such cases, it is important to disclose the financing assumptions when explaining the logic of the program. When concerted action is taken, of course, communication with the markets is the crucial ingredient.

At the time of the East Asian crises, the publication of LOIs was not yet customary. The failure to publish the LOI in a timely fashion in Indonesia in late 1997 undermined the potential impact of the program in restoring confidence, as private investors began to speculate on the details of the program. This lesson was quickly learned, and subsequent LOIs were published in all three cases. However, the staff reports supporting the requests for use of IMF resources were not published. The publication of such reports could have been particularly effective in communicating the logic of programs to the markets, hence helping to build credibility.

In building credibility, transparency can be a powerful tool. In the repeated game in which the IMF is engaged, relevant information should be disclosed even if it may cause negative shifts in market sentiment because, in the long run, the IMF cannot expect to be effective if it is perceived as willing to go along with hiding information from the markets. In Korea, a confidential staff report was leaked to the Korean press a few days after the program was approved, revealing that the level of usable reserves was very low and that the stock of short-term external debt was substantially higher than generally believed. Although this undermined the initially positive market response, it would have been better publicly to acknowledge these facts at the outset and to design the program accordingly.<sup>15</sup>

<sup>15</sup>In this context, the former First Deputy Managing Director of the IMF has acknowledged the need for transparency, citing the loss of credibility that occurred in a similar situation in Thailand (Fischer, 2001).

## Assessment

Given the high degree of uncertainty regarding both economic and political developments during a crisis, events often do not develop as planned. The right communications strategy can ensure that this does not cause damage to credibility. For example, an effective communications strategy is necessary to make sure that the markets do not misinterpret the degree to which the authorities' policy actually conforms to their commitments under the program. In Indonesia, the January 1998 announcement of a 1998/99 budget confused the markets, because it appeared to violate the programmed fiscal target (see the Indonesia country annex). Such confusion could have been avoided, if the content of the program had been explained to the investors, and if the IMF and the authorities had agreed on a public communications strategy to be followed when program-related information would be announced.

As discussed earlier, such a communications strategy would be facilitated if Board papers were to spell out the major risks to a program and the broad direction in which policies would respond under different scenarios. It is sometimes argued that explicit discussion of the risks could itself undermine confidence. We do not find this argument convincing since (as the experience of the three country cases shows) financial market participants will usually be well aware of them. To the contrary, a communications strategy that explains how policies would respond to key risks is likely to enhance credibility.

Since the crises, the IMF has come to recognize the importance of public communications in its role as crisis coordinator. Important steps have been taken in recent years by the IMF, particularly through its External Relations Department, to improve the effectiveness of its "external" communications strategy, designed to enhance country ownership and transparency.<sup>16</sup> While these steps are valuable, it is also necessary to emphasize the need to design an effective communications strategy to be followed in a capital account crisis, including appropriate ways in which public communications expertise—especially with financial markets—can be integrated quickly into the program negotiation and implementation process.

<sup>16</sup>See, for example, "A Review of the Fund's External Communications Strategy," SM/03/69, February 2003.

## CHAPTER 5

# Internal Governance

**T**he evaluation of experiences in the three cases studied reveal some important lessons relating to internal process issues. These involve human resource management, the role of major shareholders and the Executive Board, and relations with other international financial institutions. Many of these issues are general in nature and also arise in other cases.

### Human Resource Management

Our evaluation revealed a tendency for the sharper, more candid elements of a diagnosis to be diluted in final Board papers—whether in the context of an assessment of vulnerabilities during the surveillance process or judgments of the potential risks and the probability of success in program-related documents. This problem, which has been noted in other contexts including in the recent IEO evaluation report on prolonged use of IMF resources, raises the issue of greater internal incentives to encourage frank presentations of problems. Interviews with staff members indicated a perception among some that it was difficult to make assessments on issues that were inevitably of a probabilistic nature and could not, therefore, be easily proved or disproved, especially in the short term. They feared that efforts at candor were unlikely to be supported fully within the institution if the authorities concerned were to object strongly.<sup>1</sup>

Second, APD's staff was overstretched by the crises simultaneously occurring through the region, but the IMF's system of internal budgetary and human resource management delayed the reallocation of resources to APD. A reallocation did eventu-

ally occur, but only once the crises were already well under way.

Third, there was a tendency to split responsibilities without clear lines of command, as manifested in the insufficient integration of APD and MAE in their country work during the crises. In particular, staff with special expertise should have been integrated more fully into the negotiating missions. The lack of full integration was most costly in the case of Indonesia. The idea of having a single MAE/area department team in crisis situations has been noted in a recent review of MAE by a Managing Director-appointed panel of outside and inside experts.<sup>2</sup> This review has resulted in a broader reorganization of MAE, one of the aims of which is to provide a strengthened center of expertise responsible for banking crisis management and resolution issues.

Fourth, available internal knowledge was not fully used in formulating the programs, particularly in Indonesia and Korea, in part owing to the reorganization of the Asia-Pacific operations of the IMF in early 1997.<sup>3</sup> Only a relatively small number of participants in the missions, including those assigned from outside APD, had previous experience with Indonesia or Korea. Although the problems were less pronounced in Brazil, because of the continuity maintained at the senior level, short tenure also characterized staff assignments with that country in both the surveillance and the program phases. These examples are a reflection of a broader problem with the excessive turnover of country teams within the IMF,

<sup>1</sup>Several staff members referred to previous occasions (not involving any of the three country cases under study here) where, in their view, staff had made candid assessments but had not been supported by the Executive Board when the country concerned objected. While the IEO makes no judgment on the validity of such assertions, the perception that there is insufficient backing for candor clearly does matter. These issues have also surfaced in previous evaluations of surveillance, including the Whittome Report and the Crow Report.

<sup>2</sup>"Review of the Monetary and Exchange Affairs Department," November 2002. This review also flagged some more general concerns about the role of MAE in supporting area departments in tackling financial crisis situations and resolving problems in distressed banking systems. Issues raised, which go beyond the three country cases evaluated here, included: (1) MAE tended to move too slowly in reaching a firm position on policies that were needed to address urgent problems; and (2) there were problems with the consistency of advice between different crisis countries. See also "Report of the Task Force on the Review of the Monetary and Exchange Affairs Department," December 2002.

<sup>3</sup>The Central Asia Department and the South Asia and Pacific Departments were merged to form what is now APD, effective January 1, 1997.

as has previously been noted by a report of the Office of Internal Audit and Inspection as well as by the IEO's evaluation of prolonged use of IMF resources (IEO, 2002).

While these managerial issues need to be tackled for the sake of improving performance, however, most of the weaknesses in program design and implementation identified by the evaluation did not arise primarily from human resource management problems. Thus, the evaluation team does not believe that these issues fundamentally altered the outcome of the programs.

### **The Role of Major Shareholders and the Executive Board**

The need to respond quickly to deal with the crises required close collaboration of staff and management with the Executive Board, particularly in the cases of Indonesia and Korea where the accelerated procedures under the Emergency Financing Mechanism were invoked. Frequent informal sessions served to facilitate a flow of information, and provided Executive Directors with opportunities to voice their inputs into the program at different stages. Such close consultation was necessary for the Executive Board to fulfill its governance role in these large-access cases, in which political judgment played an even greater role than usual and speed was critical.

The major shareholders also interacted directly with management during the negotiation phase on what should be the key elements of program design and also with the authorities in the country concerned. This involvement is entirely understandable and appropriate given the exceptional size of access involved and the concern about possible systemic effects, the fact that any strategy is risky, and also the fact that bilateral support may have to be provided. In the case of Korea, the close involvement of the United States in the earlier stages probably facilitated the later U.S. decision to take a leadership role in organizing a rollover agreement among international banks. Likewise, it was the close earlier involvement of the other major shareholders that allowed them to respond promptly to that U.S. initiative by exercising moral suasion on banks based in their countries.

However, in order for the IMF to undertake its role as crisis coordinator effectively, two elements are critical. First, Executive Directors (and, through them, key shareholders and other potential sources of official financing) need to be given candid assessments of the probability of success of the proposed strategy, including frank feedback when parts of the strategy favored by some shareholders lower

this probability. Second, it is important that the technical assessments of the staff and political judgments by the Executive Board not be blurred. It is legitimate and important for the Executive Board and shareholders to communicate their expectations to management and also to interact with management on what might be the contours of an acceptable program. In certain situations, shareholders concerned with an evolving crisis may wish to deal directly with the authorities, as the authorities may also wish to deal directly with them, and there were examples of such interactions in all three cases. However, any appearance of shareholders dealing directly with IMF missions in the field can be misinterpreted.<sup>4</sup>

In the case of Indonesia, interviews with staff and internal documents indicate that there was extensive feedback from members of the Executive Board on the need to strengthen structural conditionality. This was not inconsistent with the framework envisaged by the July 1997 guidance note, which explicitly stated that the IMF “should collaborate with other multilateral institutions and donors in addressing economic governance issues” and also endorsed use of informal channels of interaction with Executive Directors to keep them “informed on a timely basis of developments in significant cases involving governance issues, including those in which third parties’ governance concerns have implications for program financing.”<sup>5</sup> However, our assessment reveals that this feedback from the Board may have contributed to the excessive structural conditionality built into the Indonesian program. This suggests that, while greater involvement by the Board in these cases is appropriate, ways must be found to ensure that it does not lead to micromanagement of operational details.

### **The Relations with Other International Financial Institutions**

In its role as crisis coordinator, the IMF supplemented its own resources with additional financing from other IFIs, including the World Bank, the ADB, and the IDB, and also drew upon the analyses of these institutions in specific areas of their expertise. The relationship was not always smooth, however, and public disagreements sometimes erupted, developments that could not have been supportive of the efforts to restore confidence.

<sup>4</sup>The country annexes provide some examples where such interaction did take place and had some adverse effects.

<sup>5</sup>“The Role of the Fund in Governance Issues,” EBS/97/125, July 1997.



Very little difficulty arose in this respect in Brazil, where both the World Bank and the IDB worked almost exclusively in the social sector. In Asia, the working relationship with the World Bank and the ADB was more difficult, as all three institutions worked in the financial sector and their areas of responsibility necessarily overlapped. While good working relationships eventually developed as the areas of responsibility became more clearly defined over time, much depended on the personalities of the mission members. The lack of an effective mechanism to resolve differences of view led the ADB to suspend temporarily its collaborative relationship with the IMF in Indonesia in late January 1998 because of a disagreement over the establishment of the IBRA.

This experience suggests that when future arrangements call for similar collaborative efforts with regional development banks, it is important that the terms of reference for their engagement in IMF-supported programs be agreed at the very outset, so that there is a clear understanding of the demarcation of responsibilities. Staff from these IFIs should be given access to all relevant information that is at the disposal of the IMF and be invited to comment on the content of the program in areas where these institutions have particular expertise and are expected to provide financing.<sup>6</sup> A procedure should also be established to resolve any difference of views, so that all relevant IFIs can speak with one voice on matters of substantive policy.

In the case of IMF–World Bank collaboration, there were significant frictions in the case of Indonesia. The IMF initially obtained information from the World Bank as inputs into structural conditionality, without having the Bank staff’s direct involvement in

the drafting and negotiation of the program documents. Given its preference for more direct involvement, the January 1998 program ensured that the World Bank, and especially its Indonesia-based staff, was actively involved in formulating the detailed structural conditionality. In the future, it will be necessary to have a clearer understanding on the role of the World Bank in the structural component of an IMF-supported crisis-management program. The managements of the IMF and World Bank have already acted to put in place strengthened procedures.<sup>7</sup>

Despite the active involvement of World Bank staff in the IMF-supported programs in Asia, there was public criticism of the IMF strategy (especially on fiscal and monetary policy) from the Chief Economist of the World Bank, which attracted considerable attention. It is relevant to ask whether these criticisms were appropriately considered within the IMF. The IMF and the World Bank had earlier agreed, in the so-called Concordat on Fund-Bank Collaboration, on a general procedure to resolve differences of view between the two institutions on economic issues. The evaluation team has not been able to uncover any evidence of dissenting opinions from the World Bank surfacing formally through the procedures established under the Concordat. It is possible that this may be because differences of view on strategy did not follow a simple IMF–World Bank divide.<sup>8</sup> It is difficult for the evaluation team to draw any general conclusion except to say that the established collaborative procedures clearly broke down at one of their major tests, with significant adverse consequences.

<sup>6</sup>For example, the Indonesian case study notes complaints from ADB staff that it was not sufficiently informed and consulted about the evolution of the strategy in areas where it was involved. Some IMF staff suggested that this reflected confidentiality concerns as well as the fast-moving nature of the negotiations, which created time pressures that led to incomplete communication among the IFIs.

<sup>7</sup>See “Strengthening IMF–World Bank Collaboration on Country Programs and Conditionality,” SM/01/219, August 2001; “Strengthening IMF–World Bank Collaboration on Country Programs and Conditionality—Progress Report,” SM/02/271, August 2002; and “Staff Guideline Note on Operationalizing Fund-Bank Collaboration in Country Programs and Conditionality,” April 2002.

<sup>8</sup>In this context, the World Bank’s Operations Evaluation Department provides its own analysis of the Bank’s crisis response in Indonesia, showing that there were differences between the assessment of the Office of the Chief Economist and that of the Bank’s regional staff (World Bank, 1999b).

## CHAPTER 6

# Conclusions and Recommendations

In this final chapter, we first present our conclusions on major issues discussed in this report. We then draw from our findings *six recommendations*, designed to enhance the ongoing efforts to improve the effectiveness of IMF surveillance and program design in a capital account crisis.

## Conclusions

### Precrisis surveillance

The effectiveness of IMF surveillance varied in the three countries. Surveillance identified the central problems in Brazil reasonably accurately, but it was less effective in Indonesia and Korea. It identified specific weaknesses in these countries, but underestimated their seriousness and thereby failed to provide sufficient warning. This difference in effectiveness partly reflected the fact that Brazil suffered from macroeconomic imbalances, a traditional focus of IMF surveillance, whereas in Indonesia and Korea the problems lay in the weaknesses in the financial and corporate sectors. Surveillance identified these weaknesses, but it did not produce an accurate assessment of the extent of vulnerabilities they posed. Surveillance reports were insufficiently candid about potential vulnerabilities, especially those related to governance issues. In part, these problems reflected weaknesses in data availability that subsequent initiatives have made a major effort to correct, but they also reflected internal incentives that discouraged candor. More generally, there was an insufficient appreciation of the fact that weak balance sheets can pose substantial macroeconomic risks, even when most macroeconomic indicators suggest no obvious major problems.

The impact of surveillance was generally limited, because of (1) a reluctance to state difficult or embarrassing facts and views, for fear that this would alarm markets or generate conflict with national authorities, especially when hard evidence on some of these issues was lacking; (2) lack of receptiveness of country authorities to the policy advice of the IMF, when there were political constraints or honest differences

of view; (3) limited IMF leverage in a nonprogram setting, particularly in an environment of buoyant capital flows to emerging markets; and (4) failure to influence the public policy debate or promote better risk assessment by private creditors by not making the IMF's views better known to the public.

### Macroeconomic framework and projections

The three country cases illustrate the enormous difficulties in designing macroeconomic policy in capital account crises, which stem from (1) the possibility of multiple equilibria which implies the potential for large exchange rate changes; and (2) the negative impact of balance sheet effects on aggregate demand. These difficulties are intrinsic to the nature of a capital account crisis, and the IMF's conventional approach was not well-suited to dealing with them.

In all three country cases, at least part of the program design problems resulted from growth projections that turned out to be incorrect. In both Indonesia and Korea, the initial projections were overly optimistic. In contrast, the initial projections for Brazil were too pessimistic. In Brazil, overpessimism resulted in insufficiently ambitious fiscal targets. The main cause of these problems was the absence of an analytical framework in which all key factors that likely affect aggregate demand during a crisis are considered, notably the impact of balance sheet effects and confidence factors on private investment. These negative forces were very strong in Indonesia and Korea and led to a sharp decline in private investment, which had a severe contractionary impact. These effects were not present in Brazil because private sector balance sheets were well hedged and hence less vulnerable to a change in the exchange rate.

Even if macroeconomic projections for program design are improved in this way, the problem of uncertainty will remain. The nature of this uncertainty is particularly difficult to handle when there are possibilities of multiple equilibria leading to bimodal distributions of outcomes. This in turn implies that the mere fact that an IMF-supported program failed does not necessarily mean that the decision to provide financial support was unreasonable *ex ante*. However,



in each of the three cases studied, it does appear that there were important elements of the initial strategy that lowered the probability of success—either because the program was perceived by the markets as underfinanced (e.g., the first Korea program), or not fully owned by the authorities (e.g., Indonesia), or having an unsustainable policy package (e.g., the exchange rate regime in the first Brazil program).

### **Fiscal policy**

Fiscal policy was tightened in response to the crisis in all cases, but to different degrees and with different effects. The initial tightening of fiscal policy in Indonesia and Korea was moderate and was proposed on the assumption that growth would remain positive. It was justified on the grounds that some tightening was necessary to lessen the burden on the private sector in external adjustment and to pay for the interest cost of bank restructuring. This reasoning proved to be mistaken, as the IMF has itself acknowledged, given the severe collapses that followed in aggregate demand and output. The low initial stock of government debt also made it unnecessary for the interest cost of bank restructuring to be translated immediately into an improvement in the fiscal position.

In Korea, there was scope for a “debt for debt” swap in which the government could draw on its spare borrowing capacity to offer its obligations in exchange for those of the troubled financial sector. In Indonesia, the weak banking sector presented large contingent liabilities to the government, which in turn faced severe financing constraints. There was thus less scope for substantially expansionary fiscal policy. However, the initial fiscal tightening was not the primary cause of the contraction in either country. The contraction was largely due to balance sheet effects that had not been taken into account in making macroeconomic projections. In any event, the targeted tightening was quickly reversed as it became clear that aggregate demand and output expectations were way off the mark.

In Brazil, the fiscal adjustment was much more substantial than in Indonesia or Korea, and this was appropriate because public debt sustainability was indeed the major factor driving the evolution of the crisis. However, it turned out to be insufficient in achieving the objective of stabilizing and then reducing the debt-to-GDP ratio, leaving Brazil vulnerable to further shocks that materialized soon after the period covered by our evaluation.

### **Monetary policy**

Monetary policy under the IMF-supported programs shared similar objectives, but ultimately dif-

fered in implementation and impact in each country. In Indonesia, the program envisaged a continuation of already tight monetary policy, but this intention was completely reversed in actual implementation. The open-ended provision of liquidity support to troubled banks led to a substantial loosening of monetary policy, resulting in increasingly negative real interest rates. In Korea, monetary policy was tightened as intended, but this proved ineffective until after a rollover agreement was put in place. It can be argued with hindsight that the tight monetary policy in Korea was continued for too long in face of the unexpectedly sharp output contraction. However, the period in which rates may have been higher than necessary was relatively short and the delay in monetary loosening was not the major factor causing the recession. In Brazil, there was an initial failure to tighten monetary policy to protect the peg as envisaged in the program, but policy was tightened again after the currency was floated and proved effective in stabilizing the situation. The relatively sound condition of corporate and financial sector balance sheets in Brazil meant that there was only a limited impact on investment and aggregate demand. However, a disproportionate share of the interest rate burden was borne by the public sector, which had seen a large increase in the share of the public debt linked to short-term interest rates.

It is difficult to draw simple conclusions about the efficacy of an interest rate defense of the exchange rate in a capital account crisis from these country experiences. This is not surprising since the broader theoretical and empirical literature has also not provided a definitive answer on the question. As is now well recognized, the health of the banking sector is a critical factor, and the effectiveness of interest rates in stabilizing exchange rates is reduced when a twin crisis is involved. This was the case in both Indonesia and Korea.

### **Official financing and private sector involvement**

Our evaluation suggests that availability of official financing can potentially lead to better outcomes in capital account crises, provided that underlying trends and policies are sustainable. The chance of success is always uncertain, but the IMF should not limit itself only to backing “sure things”—indeed, IMF financing would not be needed if the probability of success of adjustment programs were near 100 percent, since markets would respond very rapidly to such situations.

The scale of financing needed in a capital account crisis is often very large, making it difficult for the IMF to meet the entire financing requirements on its own. In such cases, it is possible to supplement IMF

resources with financing from other IFIs or bilateral sources. However, it is important to ensure that the predictability of such financing meet the scrutiny of the markets. Including in the financing package resources that are not perceived to be available on an assured basis can actually reduce the credibility of the program. This has implications for the conditions under which bilateral or other multilateral financing can be relied upon.

The role of the IMF in promoting PSI was fairly limited in all three cases, largely reflecting the prevailing rules of the game that did not give the IMF any special mandate to be proactive in this area. In Korea, the rollover agreement was a decisive factor, but this was essentially initiated by the major shareholders, with the IMF playing an important role by setting up systems to monitor changes in exposure on a daily basis, thereby facilitating information exchange among governments. The IMF performed a similar role in Brazil. However, exhortations for “voluntary” PSI (as in the case of the first Brazil program) had limited impact when the program lacked credibility.

### Bank closure and restructuring

The three country cases reaffirm the importance of having a sound banking system in order both to minimize vulnerability to crisis and to mitigate the adverse impact of a crisis when it does occur. In Indonesia and Korea, a weak banking system significantly contributed to the onset as well as the severity of the crises. The experiences of both countries suggest that successful bank restructuring requires a comprehensive and well-communicated strategy, in which uniform and transparent criteria are consistently applied to bank closure and other intervention decisions. The Indonesian experience in particular shows that, where the legal system and bank supervision are weak or corrupt, early steps to preserve and correctly value assets are essential. The experience of the two countries is less clear on the exact modality of public sector involvement in the restructuring process (i.e., consolidated versus nonconsolidated restructuring supervision).

The nature of the deposit guarantee to be introduced during a crisis requires careful consideration. A blanket guarantee may be *sufficient* to stop runs prompted by a perceived weakness of the banking sector, but it involves large contingent liabilities for the government, and can have serious regressive implications for burden sharing. In a poorly regulated banking system where governance problems are serious, a blanket guarantee can also lead to abuse if it is extended to banks that are left under the control of existing managements. In introducing a blanket guarantee, benefits must be weighed carefully against po-

tential costs, and country-specific factors must be fully taken into consideration.

### Structural conditionality

Our review of the three country cases reaffirms the need for structural conditionality to focus on critical areas and the importance of country ownership of the resulting policy measures. This conclusion supports the recent initiatives by IMF management to streamline conditionality and enhance ownership by applying conditionality more sparingly to “structural measures that are relevant but not critical, particularly when they are not clearly within the IMF’s core areas of responsibility and expertise.”<sup>1</sup>

Reform in macro-critical areas is usually essential to restore market confidence, as in the case of financial sector reform in Indonesia and Korea, as well as fiscal policy reform in Brazil. The crisis should not be used as an opportunity to seek a long agenda of reforms with detailed timetables just because leverage is high, even though such reforms may be beneficial to long-run economic efficiency. If reform in areas that are not generally regarded as macro-critical is required (in the sense that they are not directly linked to domestic and external sustainability)—when for example widespread distortions are well known and the authorities are committed to reform—the principles of parsimony and focus should apply. This implies a broad approach of identifying such areas of reform, but providing maximum flexibility to the authorities on implementation details as a means of enhancing ownership.

### Communications strategy

Restoring confidence involves more than just program design and must include an effective communications strategy to enhance country ownership and credibility. Effective communications with the public are necessary to build broad support during a capital account crisis, when time is of the essence and wider consultation to build ownership is therefore not feasible. Communication is also needed with the markets, in order to understand what they are looking for in a program and to explain the logic of the program. In this effort of building credibility, transparency can be a useful tool. In a capital account crisis, the IMF does not necessarily have more information than the private sector. Without disclosure of critical information for the investors, for example concerning the financing assumptions, or how policies might be adjusted to

<sup>1</sup>“Managing Director’s Report to the International Monetary and Financial Committee—Streamlining Conditionality and Enhancing Ownership,” IMFC/Doc/4/01/6, November 6, 2001.

evolving developments, it is difficult to expect the markets to perceive the program to be credible.

### Internal governance

The IMF's mode of surveillance, as well as its crisis response, particularly in Asia, revealed some internal process weaknesses. These are of general relevance but emerged particularly strikingly in these cases. First, there were insufficient incentives for the staff to be forthright in discussing risks and governance issues in a candid manner. Second, the organizational structure prevented the expeditious deployment of human resources or a sufficient integration of the work and views of technical departments with those of area departments. Third, as a reflection of the broader problem with excessive turnover of country teams within the IMF, very few staff members with previous country experience worked on the crisis-related programs in each of the three countries.

In a crisis of confidence, when it was desirable for all to speak with one voice, the failure to resolve differences of view among IFIs was damaging. This seems to have reflected a lack of clear procedures for resolving disputes (in the case of the Asian Development Bank) or because such procedures were not followed (in the case of the World Bank).

### Recommendations

Since the three crises reviewed in this report, a great deal of learning has already taken place within the IMF. New guidelines have been issued, or are being discussed, to incorporate that learning into policies and operational procedures, particularly in the areas of surveillance, conditionality, access policy, bank restructuring strategy, IMF–World Bank collaboration, and external communications strategy. These initiatives will help to improve the effectiveness of IMF surveillance and program design. Nevertheless, our evaluation suggests some specific areas where these initiatives could be enhanced. These are set out below as *six recommendations*, covering precrisis surveillance, program design, and the role of the IMF as crisis coordinator.

#### Precrisis surveillance

*Recommendation 1.* To increase the effectiveness of surveillance, *Article IV consultations should take a “stress-testing” approach to the analysis of a country’s exposure to a potential capital account crisis.* The current guidelines, revised in September 2002, already suggest that surveillance should include “comprehensive assessments of crisis vulnerabilities,” covering “economic fundamentals that may

have an impact on market sentiment,” “risks arising from global market developments,” and “factors affecting a country’s ability to deal with a sudden shift in capital flows.” We recommend extending and systematizing this approach.

- Staff reports for Article IV consultations could itemize the major potential shocks that the economy could face in the near future, explore the likely real and financial consequences of each of these shocks—including balance sheet effects—and discuss the authorities’ plans for dealing with them should these shocks arise.<sup>2</sup> Such discussion should cover the effectiveness of any existing social safety nets both as automatic fiscal stabilizers and as a means of mitigating the impact of a crisis on the most vulnerable sections of society.
- Staff should try to develop a greater understanding of the political constraints that may affect policymaking and of market perspectives on policy. Article IV consultation missions to systemically important countries should therefore seek a wider dialogue with individuals beyond senior economic officials, including especially those in the domestic and international financial communities. This is already done in “best practice” cases, but it would be desirable to formalize the process. In this context, it would be useful to include separate sections in staff reports where market views and political economy analyses are provided. Expertise available in ICM could be tapped on the former. Resident Representatives should also be incorporated into the preparation of staff reports in a more systematic way.

*Recommendation 2. Management and the Executive Board should take additional steps to increase the impact of surveillance, including through making staff assessments more candid and more accessible to the public, and providing appropriate institutional incentives to staff.*

- The recently revised surveillance guidelines call for Article IV consultation reports to contain a more systematic assessment of what happened as a result of the IMF’s previous policy advice (along with an opportunity for the authorities to comment on the advice). To make such assessments more operationally relevant, *management could develop modalities for escalated signaling when key identified vulnerabilities are*

<sup>2</sup>Allen and others (2002) set out much of the framework that would be necessary for such an analysis.

*not addressed over several rounds of surveillance.* While it is beyond the scope of this evaluation to spell out a detailed proposal on how this would be achieved, the aim should be to provide the Executive Board with a vehicle for signaling when failures to address identified vulnerabilities have become an increasing source of concern. In this context, escalated signaling would help strike a right balance between the role of the IMF as confidential advisor and its role as a vehicle for transmitting peer reviews on members' policies and for providing quality information to markets. Escalated signaling would give member countries enough time to address underlying vulnerabilities, while also progressing toward greater candor as a means of increasing the effectiveness and impact of surveillance. It would also help to create an environment in which there is a clearer perception of the major vulnerabilities that would need to be suitably addressed as part of program design, should a crisis occur and IMF support be requested.

- *Management and the Board should explore the possibility of seeking "second opinions" from outside the IMF as part of the surveillance process when the authorities disagree with the staff's assessment on issues that are judged to be of systemic importance.*<sup>3</sup> This would improve the degree of objectivity with which contentious issues are handled in the surveillance process and may enhance the impact of surveillance. It would also serve as a building block for the idea of escalated signaling.
- While we recognize that there are risks in generalizing from a small number of cases, the experience of the three countries supports the case for a *presumption that staff reports for Article IV consultations should be published.*<sup>4</sup> Publicizing such information will help to generate a more informed debate on the need for structural reforms oriented toward crisis prevention. The public would also be better informed about the underlying rationale of the reforms that the IMF might subsequently deem necessary in the event of a program. Concerns have been expressed that publication of staff reports may compromise candor in terms of both what the authorities are willing to share with the IMF and what staff is willing to disclose in public. But the

country experiences discussed in this report suggest that, without publication, there is also a risk that the IMF can have the worst of both worlds—with limited impact as a "confidential advisor" and limited scope for making its views known in the broader policy debate.

- Encouraging publication of country-level analytical work by staff will contribute to the quality of IMF advice and public policy debate. Existing guidelines are ambiguous about whether *publication, with the appropriate disclaimers, of country-related Working Papers by staff* requires clearance by the relevant Executive Director. It is desirable to create a presumption that publication is encouraged.
- To encourage greater candor in the assessment of country risks and vulnerabilities, *management and the Executive Board should agree on a systematic plan of action to provide staff with appropriate institutional incentives, possibly including measures to give greater independence to teams conducting surveillance.* The recently modified guidelines call for greater candor in surveillance reports, but such guidelines are unlikely to yield fundamental change unless they are compatible with internal incentives.
- *The biennial reviews of surveillance should, inter alia, focus on assessing the impact of surveillance on key systemic issues in member countries.* As part of this assessment process, the existing Surveillance Guidelines should be made public, so that the criteria against which the IMF expects to judge its own performance are clear to all.

### Program design

*Recommendation 3. A comprehensive review of the IMF's approach to program design in capital account crises should be undertaken.* The IMF's own internal reviews have already generated many important lessons for program design and this evaluation has highlighted a number of others. The proposed review or redesign should be oriented around two key elements: (i) the objective of a crisis management program is first and foremost to restore confidence; and (ii) the interaction of balance sheet weaknesses and key macroeconomic variables is critical to how the economy will respond. This broad approach suggests the following specific initiatives:

- *It is necessary to pay much greater attention to balance sheet interactions and their consequences for aggregate demand, especially in capital account crises where possibilities of*

<sup>3</sup>The Executive Board has already indicated its acceptance in principle of such an approach in the discussions following the evaluation of the prolonged use of IMF resources.

<sup>4</sup>The Crow Report also recommended routine publication of all staff reports for Article IV consultations.



multiple equilibria exist. With the associated prospect of a large change in the exchange rate, an obvious message from the case studies is that designing programs around a single real GDP growth projection, which is inevitably the result of negotiation, can lead to significant problems in macroeconomic program design. It is not easy to ensure that all relevant determinants of growth are adequately taken into account, but a more systematic framework should be elaborated to ensure that program design should take account of how the status of balance sheets would influence aggregate demand, as well as the role of interest rates and exchange rates in particular cases.

- *Program design should allow for a sufficiently flexible response, in case unfavorable outcomes materialize.* Although reviews and waivers can be said to serve this purpose in a conventional crisis, large potential changes in key variables in a capital account crisis may render the original program irrelevant very quickly, and the appearance of persevering with a failed program can be damaging to market confidence. This suggests that the major risks to the program should be identified explicitly, along with a broad indication of how policies will respond. In the area of fiscal policy, for example, if public sector debt sustainability is not a constraint, program design could allow for countercyclical fiscal policy—either by adjusting quantitative fiscal targets automatically to allow explicitly for the operation of automatic fiscal stabilizers or by targeting the level of discretionary expenditures rather than the fiscal deficits per se. More generally, program documents should spell out explicitly how macroeconomic policies will respond in the event of sharper-than-programmed economic downturns, and this should be clearly communicated to the public.
- *The conventional framework of conditionality based on financial programming (including quantitative monetary targets) should be reviewed to see if, and how, it should be adapted to the circumstances of capital account crises.* Quantitative performance criteria (PCs) are often not useful as a guide to policy in a capital account crisis when the behavior of key economic variables can be highly uncertain and volatile and large deviations can develop, which may be difficult to correct later. It may be preferable to agree, in addition to performance criteria, to a mechanism of triggering consultations on monetary and fiscal policy, with some understanding on how the mix of policy needs

to change in light of evolving circumstances. Just such an approach was taken in Korea in December 1997 in the setting of interest rates and in Indonesia in March 1998 when specific interest rate actions were specified. The approach to program conditionality in countries with formal inflation targeting frameworks for monetary policy is also evolving in this direction.

- *A crisis should not be used as an opportunity to force long-outstanding reforms, however desirable they may be, in areas that are not critical to the resolution of the crisis.* When political judgment necessitates addressing significant distortions that are known to exist, and the government is committed to reform, it should be sufficient to lay out a road map for these reforms as an indicative direction outside IMF conditionality, and this fact should be communicated to the public. Parsimony and focus should be the principles to guide the design of structural conditionality in a program whose objective is to restore confidence quickly. In this respect, we endorse the current initiatives of the IMF to streamline conditionality, while stressing that, in a capital account crisis, the critical test of a particular measure involves whether or not it helps to restore confidence.
- *Program design should include an agreed strategy to communicate the logic of the program and any subsequent program-related information to the public and the markets.* Such a strategy should be characterized by a high degree of transparency, including the immediate publication of LOIs and early disclosure of any unfavorable information.

### The IMF as crisis coordinator

*Recommendation 4.* Since restoration of confidence is the central goal, *the IMF should ensure that the financing package, including all components, should be sufficient to generate confidence and also of credible quality.*

- *Financing packages prepared by the IMF should not rely on parallel official financing, unless the terms of access are clear and transparently linked to the IMF-supported strategy.* Attempts to inflate the total amount of financing by including commitments made under uncertain terms would risk undermining the credibility of the rescue effort. This implies that if the IMF is to play an effective role as crisis coordinator, either it must have adequate financial resources of its own or the availability of

additional official financing should be made subject to a single, predictable framework of conditionality.

- *When parallel financing is sought from other IFIs, the terms of reference for their engagement should be specified at the very outset, including mechanisms to resolve differences of view and the manner in which their inputs are reflected in program design. This is particularly important in the case of collaboration with regional development banks, for which no established procedures exist.*

*Recommendation 5. The IMF should be proactive in its role as crisis coordinator.* Such a proactive role would include the following elements:

- Management should provide candid assessments of the probability of success and a frank feedback to the Executive Board and shareholders if some elements of the strategy are significantly lowering the probability of success.
- While involvement of shareholders is necessary and appropriate, particularly in large access cases, management should ensure that the technical judgment of staff be protected from excessive political interference.
- While decisions on the nature of private sector involvement will have to be made on a case by case basis, the IMF should play a central role in identifying circumstances where more concerted efforts (as was eventually undertaken in Korea) can be useful in overcoming “collective action” constraints. This should be based on a meaningful dialogue with the private sector, building on the new mechanisms for such a dialogue that have been established in recent years.

*Recommendation 6. Human resource management procedures should be adapted further to promote the development and effective utilization of country expertise within the staff, including political economy skills, and to ensure that “centers of expertise” on crisis management issues allow for a rapid application of relevant expertise to emerging crises.* Some important steps are already being taken in this area (including encouraging greater training in political economy), but a broader effort, based on long-term strategic planning, is needed. It is also desirable to formalize the procedure for encouraging candor in country work.

- *New institutional arrangements* within the IMF should be established to ensure that the IMF is in a position to deliver a rapid response, in terms of policy advice, to member countries facing

crises and to assist in program design in such cases. A variety of organizational approaches could be used to achieve this objective, and we do not propose to suggest a specific structure. However, the aim should be to ensure that dedicated resources are maintained to respond to crisis management situations and to learn from past experience. This is precisely the approach proposed by management in the reorganization of MAE. The same principles should be adopted on an IMF-wide basis to deal with crisis cases involving large access.

- The length of staff assignments to country desks should be monitored to ensure that sufficiently recent country expertise is maintained within the staff. This information should be reported periodically to the Board.
- The terms of reference of Resident Representatives should be modified to encourage them to play a more central role in surveillance and program design (see also Recommendation 1, above). This already happens in some, but not all, cases.
- Internal guidelines and human-resource procedures should be modified to protect mission chiefs and others who raise uncomfortable issues through any authorized channel and thereby attract complaints from the authorities. For example, the internal Annual Performance Review exercise could be enhanced to give greater weight to the ability and willingness to make independent, candid judgments.<sup>5</sup> Ex post assessments of surveillance (see Recommendation 1, above) could be used as a basis for evaluating senior staff performance in this regard.
- A medium-term IMF-wide program should be established to develop a critical mass of staff members with significant country expertise in each of the emerging market economies that have been identified as systemically important, including mechanisms to allow staff to make visits to these economies for professional development and systematic efforts to assign relatively junior members as Resident Representatives. An information system to track this expertise should be established.<sup>6</sup>

<sup>5</sup>The Annual Performance Review form for IMF managers already contains sections calling for the assessment of competencies that are relevant to this issue (e.g., sound judgment/analytical skills, and strategic vision) but does not address it directly.

<sup>6</sup>For example, at present there is no central system that would allow management to ascertain easily which staff members have worked on particular countries in the past.



## APPENDIX

# The IMF's Financial Arrangements with Three Crisis Countries, 1997–2002<sup>1</sup>

### Overview

	Board Approval	Expiration or Cancellation	Amount Agreed	Percent of Quota	Amount Drawn	Amount Outstanding
<b>Indonesia</b>						
Stand-By Arrangement	11/5/1997	8/25/1998	7,338 <sup>2</sup>	490	3,669	367
Extended Arrangement	8/25/1998	2/4/2000	4,669 <sup>3</sup>	312	3,798	3,798
<b>Korea</b>						
Stand-By Arrangement	12/4/1997	12/3/2000	15,500	1,938	14,413	0
Of which Supplemental Reserve Facility	12/18/1997	12/17/1998	9,950	1,244	9,950	0
<b>Brazil</b>						
Stand-By Arrangement	12/2/1998	9/14/2001	13,025	600	9,471	2,687
Of which Supplemental Reserve Facility	12/2/1998	3/10/1999	9,117	420	6,512	0
Stand-By Arrangement	9/14/2001	9/5/2002	12,144	400	11,385	8,068
Of which Supplemental Reserve Facility	9/14/2001	9/5/2002	9,951	328	9,951	6,634

### Disbursements

Indonesia		Korea		Brazil	
Date	Amount	Date	Amount	Date	Amount
11/10/1997	2,201	12/5/1997	3,843	12/15/1998	543
5/7/1998	734	12/8/1997	257	12/15/1998	2,876
7/20/1998	734	12/19/1997	1,570	2/1/1999	0
8/28/1998	706	12/22/1997	750	4/6/1999	3,636
8/31/1998	28	12/23/1997	280	12/9/1999	814
9/30/1998	684	12/30/1997	800	6/28/2001	1,602
11/12/1998	634	12/31/1997	700	9/28/2001	3,317
11/13/1998	50	1/9/1998	1,320	9/28/2001	359
12/18/1998	684	1/12/1998	180	6/21/2002	6,634
3/30/1999	337	2/20/1998	1,407	6/21/2002	1,076
6/10/1999	337	2/27/1998	93		
8/6/1999	337	5/29/1998	935		
		6/3/1998	465		
		8/28/1998	250		
		9/2/1998	475		
		12/17/1998	725		
		4/12/1999	181		
		5/20/1999	181		

Source: IMF database.

<sup>1</sup>Financial positions are as of January 31, 2003. The figures refer to millions of SDRs.

<sup>2</sup>The arrangement was augmented by SDR 1 billion for a total of SDR 8,338 million on July 15, 1998.

<sup>3</sup>The arrangement was augmented by SDR 714 million for a total of SDR 5,383 million on March 25, 1999.

## APPENDIX

# 2

## List of Interviewees

We have spoken to more than seventy current and former members of IMF management, staff, and the Executive Board. In addition, the following individuals have provided their views to the IEO, mostly through personal interviews but also through semi-

nars and workshops. We express our gratitude for their generosity in making their time available to us, and apologize for any errors or omissions. They assume no responsibility for any errors of fact or judgment that may remain in the report.

### International Organizations

#### World Bank

Sri-Ram Aiyer	Laura Ard	Mark Baird
Shahid Javed Burki	Lily Chu	Denis de Tray
Bert Hoffman	Masahiro Kawai	Lloyd Kenward
Anupam Khanna	Gobind Nankani	Vikram Nehru
Guillermo Perry	Richard Roulier	David Scott
Joseph Stiglitz		

#### Asian Development Bank

Robert Boumphrey	V.V. Desai	David Edwards
Srinivasa Madhur	Khaja Moinuddin	Aftab Qureshi

#### Inter-American Development Bank

Ricardo Santiago

#### Organization for Economic Cooperation and Development

Yutaka Imai	Val Koromzay	Pierre Poret
Eva Thiel		

### Member Country Officials

#### Indonesia

Saleh Afiff	Heri Akhmadi	Moh Arsjad Anwar
Boediono	Hendro Budiyo	Dorodjatun Kuntjoro-Jakti
Miranda Goeltom	Djunaedi Hadisumarto	Ginandjar Kartasasmita
Bacharuddin Jusuf Habibie	Sri Hadi	Cyrrillus Harinowo
Kwik Kian Gie	Jimly Asshiddiquie	Mar'ie Muhammad
Moerdiono	Anwar Nasution	Benny Pasaribu
Radius Prawiro	Putu Gede Ary Suta	Rizal Ramli
Sjahril Sabirin	Bambang Soedibjo	Soedradjad Djiwandono
Bambang Subianto	Surjadi Sudirdja	Ali Wardhana
Bambang Widianto	Widjojo Nitisastro	Agus Widjojo
Wiranto	Glenn Yusuf	

#### Korea

Il-Sang Bae	Soonhoon Bae	Yangho Byeon
Buhm-Soo Choi	Joong-Kyung Choi	Duck-Koo Chung
Kyuyung Chung	Myung-Chang Chung	Jaesung Hur
Kyung Wook Hur	Kyong Shik Kang	In-Ho Kim
Jae Chun Kim	Kihwan Kim	Tae-Dong Kim
Hun-Jai Lee	Kyu Sung Lee	Jang-yung Lee
Kyungsik Lee	Chang-Yuel Lim	Jaehong Suh
Jae-Hoon Yoo		

### Member Country Officials (concluded)

#### Brazil

Pérsio Arida	Edmar Bacha	Fábio Barbosa
Amaury Bier	Clovis de Barros Carvalho	Antônio Delfim Neto
Arminio Fraga	Gustavo Franco	Daniel Luiz Gleizer
Ilan Goldfajn	Antonio Kandir	Joaquim Levy
Francisco Lopes	Gustavo Loyola	Pedro Malan
Aloizio Mercadante	Arno Meyer	Hélio Mori
Alkimar Moura	Maílson da Nobrega	Marcos Caramuru de Paiva
Pedro Parente	Beny Parnes	Affonso Pastore
Demosthenes Pinho	Paulo Yokota	

#### Other countries

Hiroshi Akama	Kenji Aramaki	Caroline Atkinson
Jenny Bates	Terrence Checki	John Clark
Stephen Collins	Gerard Dages	John Drage
Tim Drayson	Karen Ellis	John Garrett
Doris Grimm	Andrew Haldane	Takuma Hatano
Tadashi Iwashita	Takatoshi Kato	Andrew Kilpatrick
Haruhiko Kuroda	David Lipton	Colin Miles
Adrian Penalver	Eisuke Sakakibara	Rintaro Tamaki
Kok Peng The	Edwin Truman	Haruko Watanabe
Tatsuo Watanabe	Lindsey Whyte	John Young

### Academics and Other Private Sector Individuals

Tony Addison	Sri Adiningsih	Arif Arryman
Marcos Arruda	Tadahiro Asami	Shinji Asanuma
Orley Ashenfelter	Haryo Aswicahyono	Raymond Atje
Rodrigo Azevedo	Iwan Aziz	Dominic Barton
Faisal Basri	Mohamad Chatib Basri	Paul Blustein
Anne Booth	Charles Calomiris	Yunje Cho
Gongpil Choi	Susan Collins	Charles Dallara
Tenji Dobashi	Michael Dooley	Martin Feldstein
Austregésilo Ferreira	Kristin Forbes	Naoto Fujita
Yukiko Fukagawa	Mayling-Oey Gardiner	Edimon Ginting
Rachmat Gobel	Morris Goldstein	Anton Hermanto Gunawan
Steve Hanke	Koichi Hamada	Hartojo Wignjowijoto
Bara Hasibuan	Ricardo Hausmann	Shinichi Ichimura
Raja Iyer	Hasung Jang	Paul Murray John
Joseph Joyce	Fikri Jufri	Ceci Vieira Jurua
Chungwon Kang	Soedjai Kartasasmita	Hasan Katadjoemena
Yuzuru Kato	Kazunari Kawashima	Peter Kenen
Taejoon Kim	Toshihiko Kinoshita	Nobutaka Kitajima
Takeshi Kohno	Masataka Komiya	Bayu Krisnamurthi
Fabian Lefrancois	Jongwha Lee	Keat Lee
Kyu-Hwang Lee	Muhammad Lutfi	Nono Anwar Makarim
Rajeev Malik	Suhadi Mangkusuwondo	Carlos Mariani Bittencourt
Peter McCawley	M. Bert McPhee	Yasuhiro Morita
Riefgi Mura	Nopirin	Cherie Nursalim
Kenichi Ohno	Raden Pardede	Jae Ha Park
Celso Pinto	Farid Prawiranegara	Teddy Rachmat
Changyong Rhee	William Rhodes	Sung-tae Ro
David Roland-Holst	Nouriel Roubini	Kurya Rusad
Mohamad Sadli	Felia Salim	Pedro Moreira Salles

**Academics and Other Private Sector Individuals (concluded)**

Sam Santoso	Shahputra Sekarjati	Roberto Setubal
Palgunadi Setyawan	Jeffrey Shafer	Takuya Shikatani
Sayuri Shirai	Pande Radja Silalahi	Djisman Simandjuntak
Davinder Singh	Douglas Smee	Natalia Soebagjo
Hadi Soesastro	Steve Sondakh	Ernest Stern
Henry Stipp	Ana Maria Stuart	Nancy Suhut
Hariyadi Sukamdani	Widigdo Sukarman	H. Tjuk Kasturi Sukiadi
Suryo B. Sulisto	Sudarno Sumarto	Anton Supit
Atmono Suryo	Tugagus	Mangara Tambunan
Tulus Tambunan	Petrus Tjandra	Andres Velasco
Jeremy Wagstaff	Mark Walker	Sofjan Wanandi
Yunjong Wang	Thee Kian Wie	Dooyong Yang
Junssok Yang	Masaru Yoshitomi	

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## Annexes

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## Introduction

This annex presents the detailed assessment of the role of the IMF in Indonesia's capital account crisis of 1997–98, which forms the basis for the analysis in the main report. It covers the role of the IMF in the precrisis surveillance phase and the crisis management phase. Issues related to the ongoing program with Indonesia, which began in February 2000, are outside the scope of our enquiry.

The Indonesian crisis was particularly severe and prolonged, compared with the other crisis cases reviewed in this report. GDP fell by 13 percent in 1998 and there was a substantial increase in the percentage of the population in poverty. Subsequent recovery was slow, with an average annual growth rate of just above 3 percent from 1999 through 2002, so that at the end of 2002, GDP remained about 2 percent below the 1997 level. It is useful to recall that the crisis, which largely started out as economic, became increasingly political. Particularly, between December 1997 and the spring of 1998, while it was apparent that the first program had failed, political issues related to the succession of President Suharto and growing social unrest made it difficult to design a credible alternative. Our evaluation suggests that the exceptional severity of the Indonesian crisis is in large part a reflection of the confluence of economic and political crises, which limited the ability of conventional policy tools to address economic problems.

This annex is organized as follows. It first evaluates the effectiveness of surveillance prior to the crisis. It then discusses issues of program design, including (1) fiscal policy, (2) interest rate policy and monetary targets, (3) exchange rate policy and capital controls, (4) official financing, (5) bank closure and restructuring, (6) deregulation, (7) corporate debt restructuring, and (8) the initial strategy and its adaptation. The following section discusses the IMF's mode of operations, covering such issues as country ownership, the decision-making process, human resource management, and the role of major shareholders and collaboration with the World Bank and the ADB. The final section presents conclusions and an overall assessment.

## Precrisis Surveillance

This section discusses the effectiveness of IMF surveillance in three areas of potential vulnerability: macroeconomic performance, banking sector weaknesses, and corruption and cronyism. The IMF broadly identified the potential vulnerabilities in all these areas, but it failed adequately to recognize their seriousness and adverse implications.<sup>1</sup>

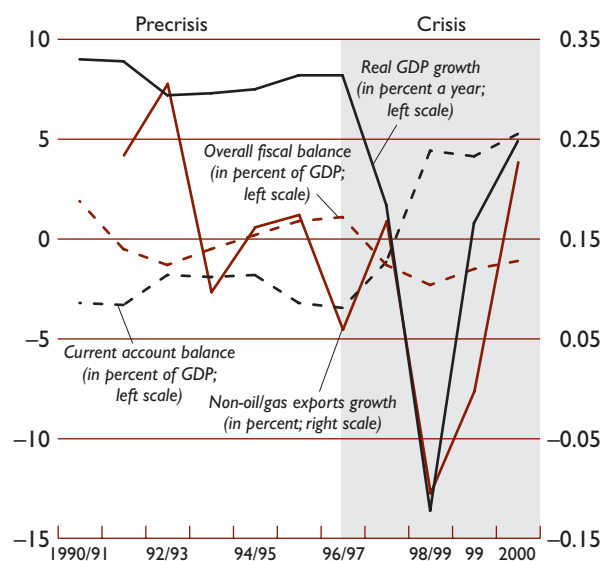
### Macroeconomic performance

Indonesia's performance before the 1997 crisis was characterized by strong economic growth and apparently sound macroeconomic fundamentals (Figure A1.1). IMF surveillance, however, noted the risks associated with the large capital inflows, which averaged 6 percent of GDP during 1992–96. As a result, the stock of private foreign debt increased rapidly from about US\$38 billion in 1995 to US\$65 billion just before the crisis and US\$82 billion at the end of 1997. Moreover, short-term private foreign debt was a large proportion of the total, reaching US\$33 billion, just before the crisis in 1997, equivalent to 1.5 times the stock of gross international reserves. However, IMF surveillance grossly underestimated the magnitude of short-term debt, hence the vulnerability of capital flows to a shift in market sentiment.<sup>2</sup>

Both the IMF and the Indonesian authorities recognized that the volume of capital inflows was uncomfortably large. This was a frequent subject of discussion at official meetings (e.g., the EMEAP Central Bank Governors' meeting in early 1995) and in the academic literature (Radelet, 1995). As a counterpart of the increasing capital inflows, the

<sup>1</sup>At a meeting of the Indonesia Consultative Group held in Tokyo on July 16–17, 1997 for example, the IMF representative stated that “financial market confidence in Indonesia [remained] strong,” while noting the “need to guard against changes in market sentiment, weaknesses in the banking system, relatively high external debt and increased financial market turbulence in the region.”

<sup>2</sup>Although no precise figure is given, the staff report for the 1997 Article IV consultation noted that the stock of short-term debt was “low,” suggesting a range of US\$10 billion.

**Figure AI.1. Indonesia: Selected Macroeconomic Indicators**

Source: IMF.

current account deficit widened from 1.8 percent of GDP in 1992/93 to 3.3 percent in 1995/96, and to 3.5 percent in 1996/97.

The policy advice from the 1996 Article IV consultation mission, endorsed by the Executive Board, was that the authorities should follow tight fiscal and monetary policies, combined with faster external debt repayment. According to a former senior Indonesian official, Bank Indonesia (BI) made attempts to measure the capital inflows, an idea also endorsed by the Executive Board. This, however, sparked protests from the financial community, fearing that it was a precursor to imposing capital controls. Limitations were placed on the overseas borrowings of state enterprises, but the effectiveness of this initiative was uncertain.

The 1997 Article IV consultation report noted that the country was vulnerable to external shocks, and warned that excessive demand pressures were contributing to higher inflation and a wider current account deficit. The IMF advocated a tighter fiscal and monetary policy stance, greater exchange rate flexibility, and accelerated structural and banking sector reforms to maintain progress in reducing inflation, contain current account deficits, and minimize external risks. The IMF argued for a smaller current account deficit than the amount considered acceptable by the Indonesian authorities, who thought that a deficit of up to 4 percent of GDP was sustainable.

The authorities' views were based on the following factors:

- There were no strong indications of exchange rate overvaluation and non-oil exports were registering robust growth;<sup>3</sup>
- The current account deficit remained smaller than those in most ASEAN countries and was no higher than in 1991/92 and was significantly lower than the levels in Thailand (5–8 percent of GDP) and Mexico (6–7 percent) in the three years prior to the crises in those countries;
- The counterpart of the higher current account deficit was an increase in private sector investment to 27 percent of GDP in 1996 from 20 percent in 1992, likely contributing to faster economic growth; and
- Although debt was high by regional standards, it was evolving favorably with a stable and relatively low debt-service ratio of just over 30 percent, accompanied by a reduction of total external debt to under 50 percent of GDP in 1996/97 from 56 percent in 1991/92.

In retrospect, the elements that were missed in the authorities' analysis—and underemphasized by IMF surveillance—were the macroeconomic implications of short-term capital flows that were vulnerable to a sudden shift in market sentiment and the underlying weakness of seemingly buoyant private investment, much of which was in fact supported by imprudent lending and of questionable productivity.

### Banking sector weaknesses

The risks from large and potentially volatile capital inflows were amplified by the poor quality of domestic financial intermediation and governance problems in the corporate and banking sectors. The fragile state of the banking system mainly resulted from the rapid deregulation following the so-called Pakto reform of 1988, which allowed a substantial increase in the number of banks without adequate prudential regulations.<sup>4</sup> Entry to the banking industry was made possible with a small amount of capital, but there were no adequate provisions for weak banks to exit.

A reasonable structure of prudential regulations had been put in place, in part with extensive techni-

<sup>3</sup>According to IMF data, the annual average real effective exchange rate was 97 in 1994/95, 99 in 1995/96, and 105 in 1996/97, with the base of 100 for 1990.

<sup>4</sup>In this context, Pincus and Ramli (1998) argue that Indonesia's fundamental mistake was to deregulate the banking sector in "deeply entrenched patrimonial state structures."

cal assistance received over the years from the World Bank, but this had little impact on the quality of banking, because enforcement was poor. Apart from the general problem of weak public administration, attempts to impose rules ran into stiff opposition from politically well-connected vested interests. This was demonstrated most clearly in the removal of the head of prudential supervision at BI in 1993, when he attempted to enforce connected lending limits on the largest of the private banks, which had close political connections. With this precedent, banks flouted prudential rules with impunity. The easy flow of financial resources to conglomerates through the banking system was facilitated by an international environment that encouraged flows of foreign capital into emerging markets.

Some academic researchers have argued that the Pakto reforms were designed to provide the well-connected with access to cheap money and created a process of financial flows closely approximating a “Ponzi” game (Cole, 2002). Indeed, banks affiliated with large conglomerates owned by the well-connected tapped the large pool of household savings and used the deposits to fund their own affiliated firms, often in risky or questionable ventures. Many of the loans were never repaid, while the owners paid themselves high interest rates on their deposits (Gie, 1993). BI dealt with the resulting insolvency by “nursing” the banks to health through long-term low-interest loans. The maturity of these loans could be as long as 30 years, with a grace period as long as 10 years and an interest rate as low as 1 percent.

The IMF correctly perceived that there were major problems in the state banking sector, an area where the World Bank was in the lead in the efforts to promote reform.<sup>5</sup> In several surveillance reports, the IMF staff alerted the Executive Board to the serious governance issues in the state banks and encouraged the authorities to move forcefully in this area. It is understandable against this background that the staff perceived the shift from public- to private-sector banks as a positive contribution to dealing with the problems of the banking sector. However, the dangers of poor governance in private sector banks appear to have been underplayed.

There were serious governance problems in the private sector banks. These problems first came to the knowledge of the IMF in 1994, when a technical assistance mission from MAE visited Indonesia. Upon examining the supervision data provided by

BI, the MAE mission identified serious solvency problems in a number of private banks and learned that the problem banks were being effectively recapitalized with subsidized loans provided by BI, creating enormous moral hazard. The mission also came to view the “losses” of the banking system as largely representing transfers to conglomerates run by the well-connected. Despite these suspicions of corruption, however, there were no hard data to make the link between balance sheet weaknesses in the banks and governance failures. The confidential nature of technical assistance work meant that it was never presented to the Executive Board or widely discussed within the staff. However, the area department also did not explore the implications of warnings made by RES during the interval review process that there would be serious macroeconomic consequences from these vulnerabilities if there were confidence shocks.

These concerns were noted in surveillance reports but they were not adequately addressed, for example, by stress testing or exploring their potential policy implications. Drawing on the work of MAE, the background paper for the 1997 Article IV consultation observed that the main problems of the Indonesian banking sector were reflected in a high share of NPLs, incomplete compliance with prudential requirements by some banks, concentrated bank ownership and connected lending, continued operation of problem banks, and large exposure of banks to property loans. While the paper offered precise technical measures to address these problems, the governance and moral hazard issues identified by the earlier MAE missions were understated. A deposit insurance scheme, an idea recommended by MAE as a measure to increase confidence in the banking system, was taken up by the Selected Issues paper but was not followed up in the staff report.

In short, the nature of the main problem was identified and signaled to the Executive Board, but in a muted fashion. In line with the prevailing convention of the time that corruption should not be directly discussed, Board papers did not present an explicit assessment of the cronyism and corruption that created moral hazard in the banking sector. They also failed adequately to analyze the potential macroeconomic impact of shifts in market sentiment.

IMF surveillance noted that a number of reforms were being initiated by the authorities. For example, in 1996, six private banks were merged into three, and the authorities were considering merging the seven state banks. BI was encouraging problem banks to address their NPLs and the President issued a decree in December 1996 on the procedures for revoking the business licenses of banks and their dissolution and liquidation. In February 1997, the President approved the closure of seven banks to be

<sup>5</sup>The World Bank became engaged in the restructuring of large state banks through a Financial Sector Development Project. While the purpose of the World Bank project was to recapitalize and improve the operations of the problem state banks, the Bank became aware of serious governance problems in the summer of 1996 and eventually decided to suspend the project.

implemented after the elections, and BI strengthened the prudential regulations by requiring (1) a gradual increase of the capital-adequacy ratio to a minimum of 12 percent by 2001 and a minimum Rp 150 billion (around US\$60 million) of paid-up capital for each foreign exchange bank; (2) rating of commercial paper issued and traded through banks; and (3) tougher selection standards for bank management positions. However, with the benefit of hindsight, the IMF appears to have been overly impressed by the initiatives that did not contribute substantively to addressing the underlying problems.

The weak banking system proved highly vulnerable to external shocks. Once the Thai crisis prompted a reassessment of potential risks throughout the region, foreign investors began to pull out of Indonesia, thereby drying up the previously plentiful source of low-cost financing to the corporate sector. The heavily indebted corporate sector found itself facing liquidity problems,<sup>6</sup> which were then compounded by a sharp exchange rate depreciation that raised the cost of servicing foreign debt. Conglomerate after conglomerate stopped servicing their loans, as the value of foreign currency debt doubled and then quadrupled in value. Foreign lenders rushed to close their exposure to Indonesia. At the time of the crisis, the banking system thus faced a huge portfolio of potential NPLs. This risk was on top of the system's own severe internal difficulties.

Of course, it is not possible to say with any certainty that the banking system would have been able to survive the massive exchange rate shocks of 1997–98, even if it had been stronger financially and with more robust governance. Nor is it possible to say that a more candid discussion of these issues as part of surveillance would have significantly affected domestic policies. Nevertheless, it is the case that the potential risks were not sufficiently flagged or analyzed. As a consequence, the knowledge of the underlying balance sheet vulnerabilities was relatively limited, when the crisis did hit.

### Corruption and cronyism

Indonesia's vulnerability to crisis was greatly increased by the increase in corruption and its changing nature (Pincus and Ramli, 1998; Kenward, 2000; Lee, 2000; Booth, 2001; Cole, 2002). In the 1990s, there emerged a creeping return to restrictive business practices and rent-creating opportunities for the President's family and well-connected businessmen, with a corresponding weakening of regulatory and supervisory controls. For example, in 1996, the palm oil sector was closed to foreign investment, export bans and

restrictions were introduced in a wide range of products, and impediments were placed on intraregional trade in livestock; in April 1997, the preshipment inspection system, a customs procedure designed to prevent corruption and managed by a foreign firm, was canceled although it had proved highly effective.

Originally, corruption in Indonesia was akin to a tax on the cost of a project, charged by and paid through established channels to maintain the stability of the political system (Charap and Harm, 1999). Even such corruption raises moral and equity concerns, but its impact on efficiency was said to be limited by the certainty and relatively low levels of the charge. In the early 1990s, however, the media began to see a change in the system of corruption, and to draw links with the empire building of the President's children and well-connected businessmen.<sup>7</sup> Corruption was being transformed into an ever-widening system of deliberate rent-creation for the well-connected, including the creation of monopolies and monopsonies, and exclusive rights to large industrial or infrastructure projects, such as the National Car Project.

These issues surfaced in discussions with the authorities in the precrisis period, and the staff consistently supported the World Bank's view that slippages in structural areas were damaging Indonesia's medium-term prospects. As noted, much of it involved favored treatment given to the First Family and close associates of the Palace, but some simply represented a continuation of the dirigiste tendencies that were still the way of doing business in Indonesia. The staff reports for the 1996 and 1997 Article IV consultations recommending renewed deregulation received broad support within the IMF, including from the Indonesian chair on the Executive Board. The 1997 report identified a list of structural reform measures that would later become the core elements of structural conditionality in the IMF-supported program (see Appendix A1.1).

It is difficult to determine the extent to which the staff was aware of the growing scale of corruption and its deleterious effects because it was customary at the time for governance issues to be dealt with only obliquely and indirectly in surveillance reports and Executive Board discussions. The staff took a technocratic approach of dealing with symptoms (i.e., creeping regulation) without explicitly addressing their underlying causes (i.e., cronyism), thereby blunting their analysis and Board discussion. An ex-

<sup>6</sup>Indonesia's average debt to equity ratio was high at 250 percent (Ghosh and others, 2002).

<sup>7</sup>See, for example, articles that appeared in the *Asian Wall Street Journal*, April 13 and October 24, 1994, and June 29 1995; and in the *Far Eastern Economic Review*, July 11, 1991, June 23, 1994, and February 9, 1995. The topic of changing business practices, particularly in Asia, also began to receive an increasing focus of attention in the academic literature (e.g., Fukuyama, 1995; Weidenbaum and Hughes, 1996).



PLICIT focus and candid Board discussions might have brought out more clearly the changing nature of corruption in Indonesia, and the macroeconomic risks it posed. Whether it would have had an impact in Indonesia is an open question, but at least it would have better prepared the IMF to deal with the crisis when it broke out.

## Program Design

This section reviews major elements of program design in the IMF-supported programs in 1997 and 1998, with a focus on how the emphasis in program design changed from November 1997 to January 1998. The initial program was designed on the assumption that the crisis was essentially a moderate case of contagion and the implementation of a relatively conventional IMF-supported program would bring the rupiah back into a reasonable range. These expectations were belied and, toward the end of December, it became clear that the crisis in Indonesia was much more severe than elsewhere in the region. The crisis at this stage had become intensely political and there were doubts about whether the government was committed to the program. This led to the renegotiation of the program in January and a new LOI. The emphasis in program design switched to the establishment of structural conditionality to signal a new way of doing business in the hope that this would restore confidence.

## Fiscal policy

Prior to approaching the IMF, the Indonesian authorities had already responded to the crisis by cutting public spending on low-productivity projects. This was meant both to facilitate the required current account adjustment and, more important, to help rebuild international confidence by signaling the authorities' determination to reduce dependence on capital inflows while improving governance.

The November 1997 program broadly endorsed this approach. In internal discussions, the First Deputy Managing Director moderated the fiscal targets proposed by staff and rejected proposals to increase the value-added tax (VAT), in order to avoid fiscal overkill at a time when output developments were uncertain. The program planned for a modest improvement in the fiscal position in fiscal year 1998/99 to cover partially the unknown carrying cost of bank restructuring (Table A1.1).<sup>8</sup> Specifically, the

initial program, based on growth assumptions of 5 percent for 1997/98 and 3 percent for 1998/99, targeted:

- An overall budget surplus of 0.75 percent of GDP for 1997/98, compared with a surplus of 0.5 percent projected during the 1997 Article IV consultation, and a surplus of 1.3 percent during 1996/97;
- An overall budget surplus of 1.3 percent of GDP for 1998/99, though this was to be reviewed later in the light of developments before being fixed as a performance criterion;
- A reduction of capital spending amounting to 0.5 percent of GDP in 1997/98 and a further 0.5 percent cut in 1998/99 through postponing or canceling low-productivity projects (such as inter-island bridges);
- Cuts in operations and maintenance expenditures amounting to 0.25 percent of GDP in 1997/98 and a reduction in fuel subsidies amounting to 0.5 percent of GDP in 1998/99; and
- Various tax and expenditure measures, including higher excise taxes on tobacco and alcohol; lower transfers to state-owned enterprises and improved tax administration.

The Indonesian program has been extensively criticized for an overly contractionary fiscal and monetary stance which, according to some critics, actually made matters worse. As far as fiscal policy is concerned, the tightening proposed for 1997/98 was modest and reflected the basic assumption that Indonesia was suffering from a moderate case of contagion. The implementation of the program was expected to bring about a quick restoration of confidence and a recovery of the exchange rate, while growth would decelerate but still remain respectable.

The growth assumption on which the November program was based turned out to be far too optimistic and this was a fundamental weakness of the initial program design. While GDP growth in 1997/98 was 4.8 percent, only marginally lower than the 5 percent rate projected in the program, there was a collapse in 1998/99 with GDP declining by 13 percent instead of growing by 3 percent as projected. Some critics have attributed the collapse in output to the pursuit of tight fiscal and monetary policies in circumstances where these were not warranted, but the problem arguably lay elsewhere. The output collapse in 1998/99 was driven not by the stance of fiscal policy but by the near-collapse of private investment in the first and second quarters of 1998. Private investment is difficult to forecast over a business cycle and earlier studies have shown that IMF-supported programs tend to be overoptimistic about

<sup>8</sup>Until fiscal year 2000 (April–December), Indonesia's fiscal year ran from April 1 to March 31 of the following year. Thereafter, it corresponded to the calendar year.



**Table A I.1. Indonesia: Fiscal Outcomes and Targets**  
(In percent of GDP)

	1997/98					1998/99							
	1996/97 Outcome	Budget	Article IV projection	November 1997		November 1997 program	Outcome	November 1997 program	January 1998 program	April 1998 program	June 1998 review	November 1998 review	Outcome
				without measures	November 1997 program								
Revenue	15.2	14.0	14.7	15.1	15.2	16.2	14.7	...	12.6	14.1	12.6	15.3	
Expenditure	13.9	14.2	14.2	15.4	14.4	17.2	13.7	...	17.3	24.2	18.6	17.4	
Of which:													
Subsidies	0.3	0.0	0.3	0.7	0.7	3.1	0.2	...	2.3	6.2	4.3	4.2	
Capital	5.7	5.9	5.3	6.2	5.6	6.6	5.2	...	5.7	7.1	7.1	5.1	
Overall balance	1.3	-0.2	0.5	-0.3	0.8	-1.0	1.0	-1.0	-4.7	-10.1	-6.0	-2.1	
Memorandum item: GDP growth	8.0	8.0	8.0	5.0	5.0	4.6	3.0	0.0	-5.0	-12.1		-13.6	

Sources: IMF staff reports; and IEO staff estimates.

private investment (Goldsbrough and others, 1996). In Indonesia, the collapse of private investment was especially severe because of (1) the unexpectedly large exchange rate depreciation in a situation where corporations had borrowed heavily in foreign exchange, and (2) the impact of political developments—including especially rioting against the ethnic Chinese community—on business confidence.

The role of fiscal policy in the Indonesian crisis needs to be evaluated in this broader context of larger forces driving developments in the real economy. The November 1997 program implied modest tightening in 1997/98 and further tightening in 1998/99, but it also stated that the fiscal target for 1998/99 would be updated and converted to a performance criterion at the time of the first review in January 1998, taking into account, *inter alia*, output developments (see Appendix A1.1). Unfortunately, these provisions incorporating flexibility were not made public. The 1998/99 draft budget presented by the government on January 6, 1998, which proposed zero deficit, appeared to violate the terms of the agreement with the IMF and triggered speculation in the press that it might signal a possible withdrawal of IMF support.<sup>9</sup> In fact, by the time the 1998/99 draft budget was put together in the latter part of December, it was known that the growth forecast for 1998/99 would need to be revised downward and internal documents and interviews make clear that a consensus had emerged within the IMF that a surplus was not appropriate under the conditions that were then prevailing or were likely to prevail in Indonesia.<sup>10</sup> The IMF did issue a statement of support for the announced budget within two days. The confusion could have been avoided if the authorities had consulted with the IMF before they released the draft budget, explaining that the overall balance differed from that in the November program because the situation had changed and that this was done in full consultation with the IMF.

The second LOI agreed in mid-January 1998 reduced the earlier 3 percent growth projection to zero growth and provided for a relaxation of the fiscal stance to a deficit of 1 percent of GDP for 1998/99. The third LOI signed in April 1998, which was the operationally relevant one for the 1998/99 budget, further raised the programmed overall deficit to 4.7

percent of GDP, acknowledging the need for temporary subsidies to protect the poor, while proposing a further cut in low-priority projects in the development budget. As the sharper output decline became more evident in the following months, the subsequent LOI in June 1998 further relaxed the fiscal target to a deficit of 10.1 percent of GDP, the largest in any IMF-supported program.

The actual budget deficit in 1998/99, at 2.1 percent of GDP, was much smaller than programmed. Fiscal policy was therefore much more contractionary than allowed under the program. In part, this resulted from institutional inflexibilities in using fiscal policy in a countercyclical manner, in the absence of preexisting social safety nets that would automatically be activated in an economic downturn. The failure of the authorities to use all the fiscal room provided in the program also reflected the fiscal conservatism of the Ministry of Finance and the limited implementation capacity of the Indonesian government in general. The absence of a government bond market also limited the ability of the authorities to finance expenditures through noninflationary means, imposing another constraint in operating fiscal policy countercyclically. Thus, the main countercyclical element realized was on the revenue side, as the targeted increases in spending were not met (Table A1.1).

In retrospect, the IMF was slow to recognize that the decline in GDP was being driven in large part by the collapse in investment. In April 1998, when the sharp contraction in investment should have been clear, the staff report for the first review simply noted that economic activity had fallen off “markedly” during the second half of 1997/98, “especially in construction and services,” without mentioning the behavior of private investment. It is only in August 1998 that this feature was noted and the EFF request projected a remarkable decline of private investment from an estimated 22.5 percent of GDP in 1997/98 to 9.2 percent of GDP in 1998/99. Even then, there was no explanation of why investment had collapsed to this extent, suggesting that the IMF may not have focused sufficiently on one of the key forces driving the adverse macroeconomic outcome.

### Interest rate policy and monetary targets

Contrary to the widespread image that the IMF mechanically pushed for high interest rates, internal documents make clear that there was in fact considerable debate among staff on the best way to deal with the situation. The staff was fully aware of the basic dilemma: a large exchange rate depreciation would bankrupt many firms (and thereby adversely impact the banking system), while any interest rate high enough to support the exchange rate was also likely to have similar adverse effects on balance sheets.

<sup>9</sup>A *Washington Post* article of January 7, 1998 emphasized the lack of commitment to the reform program and only mentioned in passing that analysts perceived that the budget unveiled by the authorities had made suspension of the program more likely.

<sup>10</sup>In late December 1997 and early January 1998, the staff expected no growth in 1998/99 and did not yet anticipate collapse of output in the first and second quarters of 1998. The output collapse was in large part driven by political developments. There were also negative balance sheet effects on investment, resulting from the sharp depreciation of the rupiah.

### Interest rate policy

The Policy Development and Review Department (PDR) and MAE argued for tight monetary policy with high interest rates. PDR argued that the corporate and banking sectors could not bear the added costs from any further depreciation, and recommended foreign exchange market intervention supported by tight monetary policy. Interest rates were to be raised temporarily at the outset of the program to signal the commitment of the authorities to exchange rate stability and to encourage nominal appreciation of the exchange rate following the intervention. MAE supported high interest rate policy to achieve an early exchange rate appreciation, but expressed reservations on the benefit of extensive early foreign exchange market intervention.

On the other hand, RES and APD argued against further tightening monetary policy and raising interest rates. RES was concerned that an interest rate defense was not feasible with a weak banking system and a vulnerable corporate sector. It pointed out that if confidence remained low, the agreed intervention limits would be reached and higher interest rates would be required to defend the exchange rate. But higher interest rates would damage the corporate and banking sectors, thereby further eroding confidence.

During the program negotiations, the APD mission argued that it would not be desirable to support the exchange rate solely through monetary tightening, especially because monetary conditions were already tight. Instead, it advocated a policy of giving the authorities more flexibility to intervene when necessary, without further tightening monetary conditions. The mission also pointed out that, on a practical level, BI was reluctant to raise SBI rates, when it had already done so unsuccessfully in August 1997. The mission noted that, as early as September, the central bank Governor had begun to reduce interest rates and was still talking in terms of further reducing the rates.

The business community in Indonesia was calling for lower interest rates, and market participants were discussing the problems associated with maintaining high interest rates for a long period. By early September 1997, market commentary was suggesting that the balance sheets of Indonesian firms had been severely damaged by high interest rates and the weaker exchange rate. By the end of the month, tight liquidity was a serious concern for the banking sector, as the banks' portfolios had deteriorated rapidly as a result of their exposure to corporate borrowers with a large amount of unhedged foreign currency-denominated debt.<sup>11</sup>

<sup>11</sup>See, for example, investors' comments reported in the Bloomberg News on September 4, 1997 (quoting analysts at

The differences between RES and APD, on the one hand, and PDR and MAE, on the other, reflect the dilemma of designing crisis management policies in the face of a twin crisis affecting both the external sector and the banking sector, with policies aimed at addressing one problem causing problems in the other. However, while the problem was posed, there was no satisfactory way of resolving the dilemma. The policy that finally emerged from the debate represented a compromise: to keep monetary policy tight without setting specific interest rate targets. BI would maintain the one-month SBI rate at 20 percent but would raise it if needed to support foreign exchange market intervention. In approving the program, no Executive Director explicitly opposed the strategy; several Directors, however, expressed strong dissatisfaction with the lack of specific and sufficiently tight monetary action.

Less than a week after the program was launched, the staff was alarmed by the apparent loosening of monetary policy reflected in a fall in interbank rates and urged BI not to lower interest rates prematurely. Initially, during the first week of November, the rupiah had appreciated from Rp 3,600 to Rp 3,250–3,300 per U.S. dollar, supported by coordinated foreign exchange market intervention (with Japan and Singapore), and the Jakarta interbank offered rate (JIBOR) began to rise. These gains, however, were not supported by sustained high interest rates, with the SBI rate remaining virtually constant (Figure A1.2).<sup>12</sup>

BI argued that JIBOR was not a good measure of the stance of monetary policy. The interbank market had become more segmented than usual between foreign and state banks with adequate liquidity positions, on the one hand, and private banks with increasingly difficult liquidity positions, on the other. BI was urging first-tier banks to lend to other banks with assurances that there would be no second round of bank closures. At the same time, BI was providing liquidity to second- and third-tier banks at a rate lower than JIBOR. Staff was concerned that the injection of liquidity might cause monetary targets to be breached. In the second half of November, a mission was dispatched to assess the situation.

The strategy of intervening in foreign exchange markets presented a further complication, given the already tight liquidity situation caused by the mone-

Peregrine in Jakarta and Hong Kong SAR) and September 26, 1997 (quoting an analyst at Merrill Lynch Asia Pacific).

<sup>12</sup>In fact, BI took only a small interest rate action. What happened was that interbank interest rates rose sharply when BI only partially sterilized intervention. When BI found some banks failing to clear at settlement, it injected liquidity, causing interbank rates to decline.

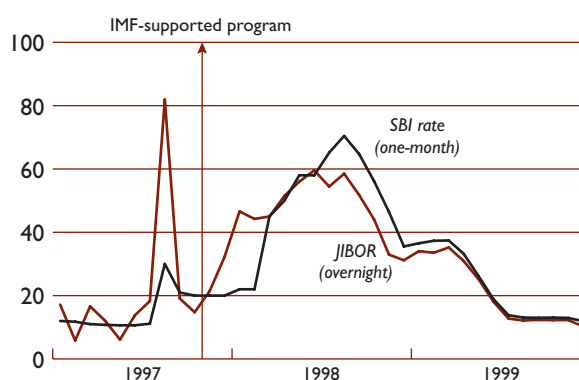
tary squeeze of August.<sup>13</sup> Intervention of some US\$5 billion in the last quarter of 1997 was equivalent to one-third of the stock of base money at the end of September 1997. As the intervention was to be only partially sterilized, this left a large segment of the banking sector short of liquidity when settlement came. BI claimed to have no alternative but to provide liquidity but, as a result, the rupiah only strengthened for two days before sliding, by the end of November, to its level of October.

With the exchange rate sliding almost continuously, it was clear that the original expectation of a quick recovery would not be realized. The IMF urged an immediate rise in the SBI rate by 5 percentage points as a first step and by more if needed, in accordance with the understanding on which the program was based. The IMF also urged that, as agreed in the program, liquidity support should only be offered at market rates and against collateral and that additional banks should be closed if necessary. However, President Suharto ordered an immediate reduction of 5 percentage points in the SBI rate (which the economic team did not implement). He also signaled that there should be no more bank closures. With conflicting demands on monetary policy coming from the IMF and the President, the economic team by this time had all but lost access to the President and could take no effective action.

Our evaluation suggests that the criticism that the high interest rate policy pushed by the IMF was responsible for the collapse in Indonesia is not well founded for the simple reason that the IMF's recommendations in this respect were never implemented. Interest rates were not raised despite repeated IMF urging. Instead, liquidity was expanded and resulted in a loss of monetary control (Box A.1). As a result, real interest rates were substantially negative (Figure A1.3). It was only after March 23, 1998 that the new economic team was able to raise nominal interest rates, pushing up the one-month SBI rate to 45 percent from 22 percent. The exchange rate steadily appreciated from Rp 9,750 per U.S. dollar the previous week to Rp 7,500 by mid-April and remained below

**Figure A1.2. Indonesia: Monthly Nominal Interest Rates**

(In percent a year, at the end of the month)



Sources: Bloomberg; and University of Indonesia, Institute for Economic and Social Research.

Rp 8,000 until the May troubles, which provoked a further depreciation (Figure A1.4).

### Monetary targets

Performance criteria for base money were set for end-December 1997 and end-March 1998, and indicative targets for end-June 1998 and end-September 1998. Base money was to grow by 4 percent in the last quarter of 1997 and to remain more or less flat in the first quarter of 1998. In the event, unlimited liquidity support from BI to the banking sector led to a virtual explosion in base money, which grew by 14 percent in the last quarter of 1997 and a further 32 percent in the first quarter of 1998, before its growth slowed down to 12 percent in the second quarter and finally to 2 percent in the third quarter (Figure A1.5).

While central bank liquidity support expanded sharply during the IMF-supported program, BI was already providing lender of last resort (LOLR) support to several banks experiencing shortages of liquidity well before the program. As the crisis developed, LOLR support was provided under a variety of schemes, which were later consolidated under the general title of Bank Liquidity from Bank Indonesia (BLBI) early in 1998. With the greater segmentation of the interbank market in the final quarter of 1997, the LOLR role of BI became all the more important. By the end of January 1998, total support under BLBI had reached 5 percent of GDP, or close to 100 percent of base money.

BI operated under severe constraints. When a bank had a shortfall at clearing, BI had to either supply the needed liquidity, or else close down or take over the bank immediately (Djiwandono, 2002). In November 1997, the Cabinet had decided, in accor-

<sup>13</sup>According to the BI Governor, liquidity problems in the banking sector developed as a result of monetary and fiscal tightening in August 1997. Weak banks began to experience distress and bank runs emerged in the second half of the month. Interbank rates increased from an average of 22 percent to more than 80 percent (see Figure A1.2). By the end of August, "more than 50 banks had failed to comply with the minimum reserve requirement of 5 percent" (Djiwandono, 2000). In the technical files of MAE, however, there is nothing to indicate a systemic liquidity problem and it is not clear if the whole system became illiquid or if the problem was limited to weak banks and those subject to runs. Market segmentation, however, does seem to indicate that at least the first-tier banks (e.g., the JIBOR banks) were not short of liquidity.



**Box A I. I. Indonesia: Was Monetary Policy Tight?**

IMF staff has argued that monetary policy was never tight in Indonesia, because most standard measures of real interest rates were negative from the inception of the program to early 1999 (Lane and others, 1999; Boorman and others, 2000; Ghosh and others, 2002). It is true that, for the first five months of the program, the Indonesian authorities hardly raised the policy interest rate despite urging from the IMF. It was only in March 1998 that, for the first time under the program, BI substantially increased the SBI rate. The one-month rate rose from 22 percent to 45 percent and reached, after several rounds of increases, 70 percent in August 1998.

The assessment of monetary policy under the IMF-supported program is made difficult by several factors:

- Before IMF assistance was requested, in August 1997, BI had already raised the one-month SBI rate from 10–12 percent to more than 30 percent. However, under pressure from the President, BI was forced to reduce the rate to around 20 percent in September 1997.
- With a sharp depreciation of the currency, relative prices in the economy were rapidly changing and the impact of interest rates was different in tradable and nontradable sectors. Real interest rates faced by the nontradable sector likely remained positive—and substantially so—during this period, while they were substantially negative for the tradable sector.
- The banking crisis led to a greater segmentation of the interbank market with a shift of deposits within the banking system. At least initially, 24 of the major institutions—the so-called JIBOR banks—had plentiful liquidity, while other banks found it difficult to raise funds at any interest rate. The high nominal interest rates faced by these banks reflected a large risk premium, not a particular stance of monetary policy.
- BI provided liberal liquidity support to all banks experiencing liquidity problems, so that high interbank interest rates did not present an issue for these banks.

- Continued pressure on the rupiah meant that Indonesian interest rates included a component reflecting the expected rate of depreciation.

It is fair to say that while high real interest rates were faced by some potential individual borrowers at different points in time, the stance of monetary policy as a tool of macroeconomic policy was never tight and, contrary to the wishes of the IMF, did not become any tighter as a result of the IMF-supported program. Moreover, market segmentation, always a feature of the Indonesian system, worsened markedly and intermediation spreads in the banking system became negative as banks attempted to keep payments current. There was, however, a period of tight monetary policy prior to the inception of the program which, according to the BI Governor and market observers, had adverse consequences for the corporate and banking sectors.

A related issue is whether or not high interest rate policy caused a credit crunch, a situation where existing demand for credit is not fully satisfied at a given interest rate. In the case of Indonesia, as banks experienced liquidity and then solvency problems, the supply of credit clearly fell. At the same time, as the balance sheets of many firms were adversely affected by the sharp depreciation of the rupiah, the number of credit-worthy borrowers also declined. To identify a credit crunch is inherently a difficult exercise, because it requires the identification of both demand and supply. A study by IMF staff argues that there was a credit crunch in Indonesia as the banking crisis deepened, but that the crunch disappeared when the demand for credit fell (Ghosh and Ghosh, 1999). The aggregate picture, however, may not tell the whole story about potential individual borrowers, particularly small and medium-sized enterprises (SMEs) with no recourse to nonbank financing (Yoshitomi and Ohno, 1999). There was evidence of some unsatisfied credit need, mainly reflecting supply factors (Bank Indonesia, 2001). Given the likely impact on the ability of banks to provide financial intermediation, a strategy to deal with the financing needs of viable SMEs would have been helpful, although it is inherently difficult to design such a strategy.

dance with commitments under the program, to provide LOLR only to solvent banks, but both the BI Governor and the Minister of Finance were certain that the President did not want any more banks to close. Without willingness on the part of BI to intervene in some other way, these two objectives were mutually incompatible.

In this climate, liquidity support served both legitimate LOLR and fraudulent purposes. Together with third-party depositors withdrawing funds in a “flight to safety,” some bank owners were stripping assets. In parallel, liquidity support also went to cover large

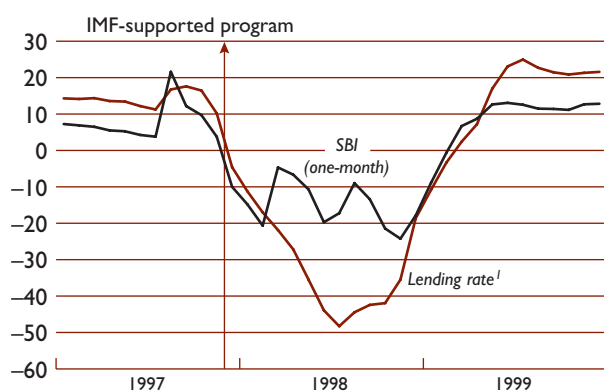
off-balance-sheet exposures in foreign exchange. This was particularly evident in early 1998, when the exchange rate plummeted and the banks could no longer borrow foreign exchange in the interbank market. This led to an explosion in liquidity support during that period. The increasingly negative intermediation spreads, as banks tried to keep payments current, added to insolvency and illiquidity that contributed to a buildup in liquidity support.

By the time the situation stabilized in mid-1998, the volume of liquidity injected through BLBI amounted to around Rp 144 trillion (or 14 percent



**Figure A1.3. Indonesia: Monthly Real Interest Rates**

(In percent a year)



Source: University of Indonesia, Institute for Economic and Social Research.

¹The lending rate is for working capital, deflated by actual two-month-ahead CPI inflation.

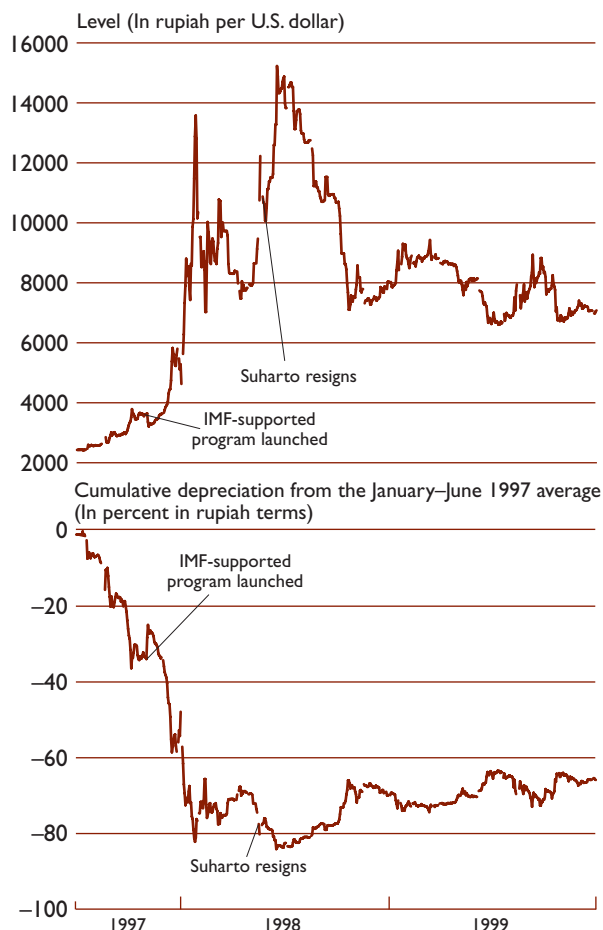
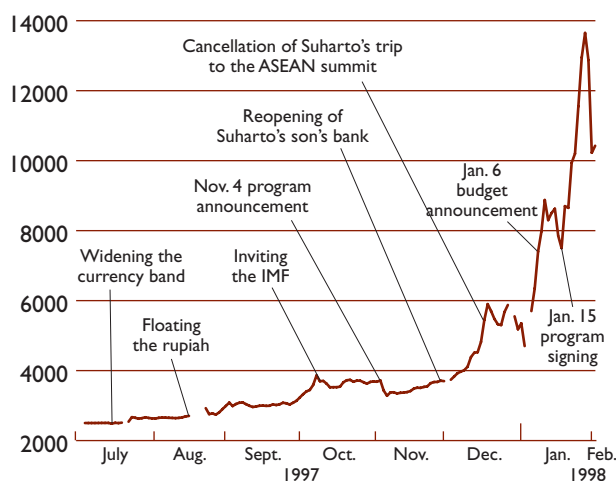
of GDP). In the initial phase, penalty rates were imposed on BLBI, which were then capitalized, leading to a steady rise in the outstanding volume of BLBI. When it was recognized that this was not serving any purpose, the rates were reduced. As BLBI was unsecured, the bank owners were required to provide personal guarantees, which later became the basis of the shareholder settlements administered by IBRA.<sup>14</sup>

Once BLBI support became routine, moral hazard became real. According to the official report of the Supreme Audit Agency (BPK), irregular practices dominated the administration of BLBI, with Rp 82 trillion out of total Rp 144 trillion judged to have been misused.<sup>15</sup> It should be noted that the report took a legalistic approach and thus characterized any violation of central bank rules as fraudulent, which

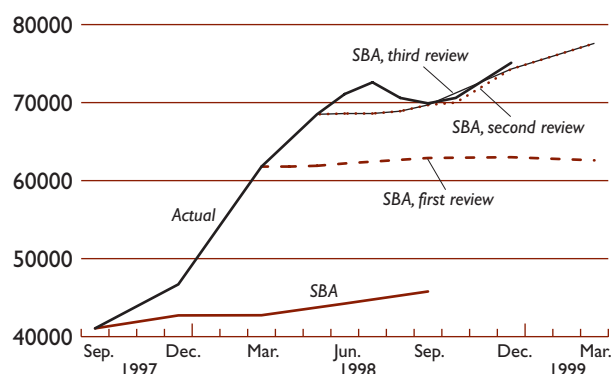
<sup>14</sup>While liquidity support in principle required collateral, for a variety of reasons, there was little collateral available in 1997–98, which necessitated the pledge of personal guarantees from the bank owners that their banks met the conditions for liquidity support. With the subsequent discovery that many of these pledges were in fact invalid, in most cases because the banks had breached the legal lending limits, the owners became liable for making the repayment. Under the so-called shareholder settlements, IBRA was to recover such funds from the respective owners, but the nonimplementation of commitments and manipulation of the process resulted in large LOLR losses.

<sup>15</sup>The report was prepared at the request of Parliament, in cooperation with the Finance and Development Supervisory Body (BPKP), with Price Waterhouse serving as a consultant. BPK audited all allocations of BLBI to 48 troubled institutions as well as the use of funds by 5 “Take Over Banks” (BTOs) and 15 liquidated banks (BDLs). BPKP audited the use of BLBI by 10 “Frozen Operation Banks” (BBOs) and 18 “Frozen Trading Activities Banks” (BBKU).

**Figure A1.4. Indonesia: Daily Movements of the Rupiah–U.S. Dollar Exchange Rate**



Source: University of Indonesia, Institute for Economic and Social Research.

**Figure AI.5. Indonesia: Base Money Outcomes and Targets Under IMF-Supported Programs**

Source: IMF documents.

likely overestimated the economic cost of corruption. However, it is certain that BLBI not only raised the cost of saving the banking system, but also contributed to greater exchange rate depreciation by effectively funding capital flight.

Almost all of the BLBI went to private banks, except for the special case of the state-owned Bank EXIM. The liquidity support to Bank EXIM was not in response to deposit withdrawals but rather to fraudulent losses in the bank's treasury operations. BLBI was concentrated in a handful of institutions, with EXIM and three private banks (BCA, Danamon, and BDNI) receiving 75 percent of the total. This concentration of BLBI implies that pressure was not necessarily on the overall financial system. The case of Bank EXIM is particularly noteworthy, as state banks benefited from the shift of deposits from the private banks (given the implicit deposit guarantee by the government).

Interviews with staff and a review of internal documents make clear that the staff was not fully aware of governance problems in the injection of liquidity until January or February of 1998. Thus, although the IMF staff was in daily contact with the authorities and monitored the amount of liquidity support, the IMF did not capture the extent of irregularities in the support operations during the crucial months of November and December, when monetary control was lost.

### Exchange rate policy and capital controls

The rupiah was floated in August 1997 at the outset of the crisis before the IMF program was negotiated, and this decision was welcomed by the IMF. Nevertheless, in view of sustained downward pressure on the rupiah, the IMF staff, during the review of

the brief for the October 1997 mission, discussed the idea of introducing capital controls. The idea was quickly dropped because of the likelihood that controls could not be administered effectively in a country with widespread corruption and weak administrative capacity. The Indonesian authorities told the evaluation team that they had never considered introducing capital controls, knowing that there was no infrastructure to administer such a system effectively. They also pointed out that one of the reasons for abolishing controls in the 1970s in the first place had been their ineffectiveness due to corruption.

By December 1997, the rupiah had depreciated substantially more than the currencies of the other crisis-hit economies of the region, and was continuing to depreciate, indicating that the Indonesian crisis was exceptional. In part, this reflected political developments. The illness of President Suharto in early December injected new sources of uncertainty as succession concerns surfaced prominently, and politically motivated attacks on the ethnic Chinese community also intensified.

With the currency in virtual free-fall from December through January, even after the signing of the revised LOI, both the IMF and President Suharto independently began to consider introducing a currency board arrangement (CBA). In Indonesia, business interests close to the President initiated the idea and invited an American academic expert to advise on the subject (Hanke, 1998b). The idea of formally introducing a CBA was declared by the President in February 1998. There was widespread though unsubstantiated concern, including within the IMF, that if the CBA were adopted, the rate would be Rp 5,000 per U.S. dollar, around half the going market rate, and that its supporters would use it to convert their rupiah holdings into U.S. dollars.

There were some advocates for the CBA within the IMF, but a consensus soon emerged that the existing conditions in Indonesia, including the weak banking system and the absence of respect for rule of law, were not appropriate for a CBA, at least over the short to medium term. On February 11, the IMF took a firm stance on the issue by sending a letter to the Indonesian authorities opposing the CBA and explaining why it was not appropriate for Indonesia at that time. A stalemate continued until the major IMF shareholder governments, including Germany, Japan, and the United States, stated their unequivocal opposition, through high-level contacts with President Suharto.

### Official financing

As noted in the main report, determining the size of access in a program designed to build confidence is an inherently difficult exercise, because the residual financing need is endogenous to the effectiveness

**Table A1.2. Indonesia: Balance of Payments Projections and Outcomes***(In billions of U.S. dollars)*

	1996/97	1997/98			1998/99		
		November program	April program	Actual	November program	April program	Actual
Current account	-7.7	-5.8	-2.3	-1.7	-4.9	4.3	4.3
Exports	52.1	55.6	56.3	56.2	60.8	58.8	48.3
Imports	-50.9	-50.4	-48.5	-47.4	-55.6	-42.3	-33.7
Goods and services	-8.9	-11.0	-10.1	-10.5	-10.1	-12.2	-10.3
Capital account	13.8	-0.5	-13.5	-11.7	0.9	-14.2	-1.8
Long term	4.5	3.1	2.3	3.2	2.1	5.0	6.7
Official	-2.0	-0.4	0.5	1.4	-1.0	4.5	6.6
Direct investment	6.5	3.5	1.8	1.8	3.1	0.5	0.1
Other	9.3	-3.6	-15.8	-14.9	-1.2	-19.2	-8.5
Errors and omissions	1.6	0.5	-0.1	...	0.0	0.0	...
Other	7.7	-4.1	-15.7	...	-1.2	-19.2	...
Oil/gas export credits	0.1	0.1	...	...	0.1	...	...
Portfolio investment	1.7	-1.7	...	...	-1.0	...	...
Other private capital	8.3	-1.6	...	...	-0.3	...	...
Monetary movements of commercial banks	-2.4	-0.9	...	...	0.0	...	...
Overall balance	6.1	-6.3	-15.8	-13.4	-4.0	-9.9	2.5
Change in gross foreign assets of Bank Indonesia	-6.1	0.2	10.2	10.2	0.5	-6.7	-9.4
Financing need	0.0	6.1	5.6	3.2	3.5	16.6	6.9
IMF	0.0	6.1	3.0	3.1	2.6	5.3	6.8
Asian Development Bank, World Bank and exceptional financing	0.0	0.0	2.6	0.1	0.9	11.3	0.1
Memorandum item:							
Gross foreign assets of Bank Indonesia (end of period)	26.6	26.4	16.4	16.4	25.9	23.1	25.8

Sources: IMF Staff Reports; and IEO staff estimates.

and speed with which confidence is restored. This also makes difficult our evaluation of the size of access in Indonesia, which was based on a projection of the likely balance of payments need under certain assumptions.

The IMF assumed that the current account deficit in 1997/98 would show a small improvement of about US\$2 billion compared to the previous year, but this would be accompanied by a large deterioration in the capital account of about US\$14 billion, reflecting failure to rollover short-term debt, withdrawal of portfolio investment, and lower net FDI flows (Table A1.2). The program also aimed to stabilize the level of gross foreign assets of BI at about US\$26 billion.

Given these assumptions, the IMF determined that an amount equal to one-third of the short-term debt of US\$33 billion (i.e., US\$11 billion) would need to be financed over the two years 1997/98 and 1998/99. In calculating access, however, it used the more conservative figure of US\$22 billion (or two-thirds of the total short-term debt) as the amount that was required to meet short-term obligations over the first year of the program. Access from the

IMF was thus set at US\$10 billion (490 percent of quota), after taking account of additional multilateral financing of about US\$8 billion from the World Bank (US\$4.5 billion) and the ADB (US\$3.5 billion), and the use of US\$5 billion of BI's own reserves if needed.<sup>16</sup> Of the US\$10 billion to be provided by the IMF, US\$8.7 billion was to be disbursed over the first two years, with US\$6.1 billion for 1997/98 and US\$2.6 billion for 1998/99.

The program also incorporated a substantial foreign exchange market intervention of up to US\$7.5 billion over the first three months of the program, with up to US\$5 billion during the month of November alone. In the event, the improvement in the current account was much larger, at US\$6 billion, and the reversal of capital flows was much worse than projected. Compared with the net inflow of some US\$14 billion in 1996/97, the November program had projected a net outflow of US\$0.5 billion for

<sup>16</sup>In view of the high level of reserves, it was assumed that BI could temporarily cover delays in the disbursement of multilateral resources from the other IFIs.

1997/98. The actual outcome was a net outflow of some US\$12 billion in 1997/98, including capital flight by domestic residents.

The working assumption that only one-third of the short-term debt would be rolled over was not unreasonable, as were the rest of the balance of payments assumptions. In retrospect, the projections were belied by large-scale capital flight by domestic residents, which became ever larger over time. As a result, what had seemed a reasonable package *ex ante* began to look inadequate as confidence collapsed.

In our view, the size of financing was not the cause of the failure of the November program. The origin of the failure was the inadequacy in program implementation and the associated rapid expansion of liquidity, and this technical failure was soon transformed into a political crisis, which undermined business confidence especially among the ethnic Chinese business community. At the technical level, the main oversight was the failure to take into account the unknown but large amount of short-term interbank lines of credit essential to finance imports. Trade credits were not rolled over and this exacerbated the crisis until the spring of 1998, when explicit efforts began to be made by the IMF and its major shareholder governments to encourage major commercial banks to do so.

### Bank closure and restructuring

The need to reform the banking system had been identified in surveillance and measures to this effect were rightly included in the program. As noted in the main report, in October 1997, the MAE team, collaborating with teams from the World Bank and the ADB, examined the supervisory data provided by BI and concluded that at that time intervention was needed for only a limited number of private banks. This assessment turned out to be a serious underestimation of the true state of the banking sector. The reality at the time was that, except for foreign banks, state banks, and a few large private banks, much of the rest of the banking system was illiquid and possibly on the verge of insolvency.<sup>17</sup>

The IMF reached its assessment in the following manner. Using the June 1997 data, the World Bank reviewed all 7 state banks (accounting for 40 percent of total banking sector assets); the ADB, 13 out of 27 regional development banks (2 percent of total banking sector assets); and MAE, 72 out of 160 private banks (43 percent of total banking sector assets and 87 percent of total private banking sector assets). Taken to-

gether, the combined IFI team investigated 92 out of 238 banks, accounting for 85 percent of market share.

Exclusive reliance on BI data proved to be a major problem for two reasons. First, the June 1997 data were not the right basis for making solvency assessments, given the exchange rate depreciation that had occurred since then. Second, supervisory information from BI was flawed by the low level of supervisory skills and, according to some observers, suspicions of corruption. This was clear from a widely known academic work (Cole and Slade, 1996) as well as from the findings of the World Bank's financial sector mission in 1996. The IMF staff did go beyond official data and asked the heads of large banks how the crisis had affected their balance sheets and also discussed the likely current balance sheets of banks with BI supervisors, bank by bank. However, these inquiries did not in most cases lead to a significantly more negative assessment.

The combined team identified 50 vulnerable banks, of which 34 banks were judged insolvent, including 26 private banks, 2 state banks, and 6 regional development banks. Another 3 private banks were on the borderline of solvency, requiring rehabilitation. The remaining 13 (out of the 50 vulnerable) banks were found to have diverse weaknesses, including capital adequacy ratios below the required minimum for some, and needed to be placed under intensified supervision. According to MAE, the 34 banks identified as insolvent accounted for about 15 percent of total banking sector assets, with the 26 private banks alone accounting for 5 percent.

The extent to which the IMF missed the scale of the problem is obviously crucial in making an *ex post* evaluation. Internal documents and interviews indicate that there was a considerable debate within the staff over the extent to which Indonesia faced a systemic banking problem. Some APD staff argued that the MAE analysis was too sanguine because it assumed that (1) there were a relatively few bad banks in an otherwise sound banking system, when the whole banking sector had become vulnerable as the exchange rate had depreciated and interest rates had risen; and (2) runs were caused by small and ignorant depositors, while it was in fact the high-wealth individuals with inside information who were withdrawing deposits.<sup>18</sup> However, these concerns were downplayed and therefore not reported in the staff report accompanying the November SBA request to the Executive Board. MAE insisted until January 1998 that the banking system was sound except for the 50 banks

<sup>17</sup>Some on the IMF staff hold the view that most banks would have remained solvent if the exchange rate had recovered to the programmed target range of Rp 3,000 to Rp 3,500.

<sup>18</sup>For example, Bank Danamon, a large retail bank, had experienced sporadic runs even before the IMF was called in and, by end-October 1997, had already received Rp 3.5 trillion of liquidity support.

identified, and that no data existed to support the contrary view. Even so, the MAE mission did note in its back-to-office report, dated November 11, 1997, that there might be other problem banks than the sample reviewed; NPLs might have been underestimated; and some banks not identified for action might have deteriorated since June 1997.

In any case, it is unlikely that identification of deeper sickness would have led to corrective action. BI argued that it could only close 16 of the 26 insolvent private banks (accounting for only 3 percent of total banking sector assets) because the other 10 had “nursing” agreements with BI, which legally prevented closure unless rehabilitation efforts failed.<sup>19</sup> Among the banks to be closed were three connected with the President’s family: Bank Andromeda, in which one of his sons had a minority ownership; Bank Industri, with partial ownership by a daughter; and Bank Jakarta, with some ownership by his half-brother.

A critical program design decision was the nature of a guarantee for depositors of closed banks. There was a consensus between the authorities and the IMF staff that a blanket guarantee would not be desirable on grounds of both fiscal cost (emphasized by the Indonesians) and moral hazard (emphasized by the IMF). It was agreed that depositors of the closed banks would receive up to Rp 20 million (about US\$6,000), covering 93 percent of the accounts and 20 percent of the deposits in the closed banks.

Initially, the closure of the 16 banks and the tough statement from the Minister of Finance that henceforth all banks allowed to become insolvent by their owners would be closed down was welcomed, as it seemed to imply a new way of doing business. However, several factors undermined the credibility of this policy. Most important, the President’s family challenged the closures. His son arranged for the business operations of Bank Andromeda to be shifted to another bank in which he had acquired an interest. The President’s half-brother initiated a legal challenge to the closure of his bank. The public also saw some inconsistency in the closure of 16 banks, when it was widely—and correctly—believed that many other banks were also in a similar condition. The authorities insisted on secrecy regarding the nursed banks and, as a result, the public had no idea of what was being done to address the wider problem.

BI also did not make an adequate effort to communicate its bank-closure policy to the public. There

were flip-flops in announced government policy. Under pressure from the President, the Minister of Finance soon reversed his previously announced tough position, saying that there would be no more bank closures. Some private individuals told the evaluation team that uncertainty had been compounded by lack of clear information on how and how quickly depositors would have access to their funds. In the event, by the end of November 1997, two-thirds of the 222 banks had experienced runs. Rp 12 trillion (or about US\$2.7 billion) of rupiah deposits shifted to large private banks, foreign banks, and state banks, and about US\$2 billion of U.S. dollar funds left the banking system entirely.

It was not until the end of January 1998, in the face of continuing banking sector problems, that the authorities accepted the banking strategy proposed by the IMF, involving a comprehensive bank restructuring plan, a general guarantee scheme, and the creation of the IBRA as a combined bank-restructuring and centralized-public-asset-management agency. The new strategy initially succeeded in stemming the exit of deposits from the banking system, and the appreciation that followed the announcement of the end-January banking and corporate debt measures was not fully reversed for almost four months, until the ethnic riots in May 1998.

The negative experience of November 1997 can be contrasted with what happened in early April 1998, when 7 banks representing 16 percent of banking sector assets were taken over by the IBRA and another 7 smaller banks were closed. The April 1998 operation differed from the November 1997 action in the following ways: (1) the existence of better arrangements for meeting depositors’ claims and a professionally managed public relations campaign designed to calm the public; (2) an assurance that the interventions were based on uniform and transparent criteria and that no banks failing these criteria were excluded; (3) a full guarantee that covered all deposits, as well as all liabilities in other banks; and (4) the existence of a comprehensive banking sector strategy within which the operations were carried out. The failure to have all these elements in place in November 1997 was a major factor contributing to the deepening of the crisis. While the IMF alone was not responsible for this failure—since the unwillingness of the government at the highest level to back key parts of the strategy was also critical—it does point to important lessons (see also the discussion in the main report).

Many, including IMF staff, have increasingly come to accept the view that the decision not to install a blanket guarantee was the critical mistake of the November 1997 bank closure (Lindgren and others, 1999). However, the question of a blanket guarantee, particularly in the context of Indonesia,

<sup>19</sup>BI had an understanding that the 10 banks being rehabilitated would be closed if they did not demonstrate the capacity to become viable within six months to a year.



requires careful consideration.<sup>20</sup> In November, bank runs were associated with a shift of rupiah deposits from weak private banks to foreign banks, state banks (with an implicit guarantee), and some large private banks, with no decline in the assets of the banking sector as a whole. Large withdrawals from the banking system from the start of the crisis reflected the running down of foreign currency deposits.<sup>21</sup> It is only with the presidential succession crisis in May 1998 that the real value of rupiah deposits began to decline, owing to a loss of confidence in the banking system as a whole. At that time, the blanket guarantee could do little about the crisis of confidence in the entire economic and political system (Booth, 2001), let alone the ability of the government to honor that guarantee.

### Deregulation

The need to reverse the creeping increase in rent-creating regulation over the past several years had been identified as a major issue by the World Bank and also in IMF surveillance. It was also on the agenda of the reformist economic team and had frequently been advocated by commentary in the local press. IMF management also viewed the program as an opportunity to assist the reformist team in pushing desirable reforms and the team viewed the program as providing leverage to do so.

Internal reports and interviews with staff indicate that, as the negotiations progressed in October 1997, the mission was under increasing pressure from Washington to include structural measures directed at dismantling the system that had given rise to extensive rent-seeking and cronyism in Indonesia. In part, this reflected the prevailing atmosphere of domestic politics in some of the major shareholder countries, where support was lacking for a large financing package without addressing the increasingly well-known governance issues in Indonesia.

Although several deregulation measures were included in the November program, a key feature of

structural conditionality at this stage was the absence of both specificity and a clear timetable. Almost all agreed measures were general in nature and were to be implemented over the program's three-year lifespan. This provided the reformists with the necessary leverage to pursue reform but gave them discretion to push when and where they felt they could achieve results. This feature of the November structural conditionality, however, was not well understood by the public because, as was customary at the time, the LOI was not published.<sup>22</sup> Without access to the LOI, the public began to speculate on the content of structural conditionality in the November program. Given the press references to certain deregulation measures, this led to an excessive focus on governance-related measures in public debate.

The failure of the initial program, combined with frustration over the lack of progress in structural reform, led to increased emphasis on the need for reforms as a key element of the strategy to restore confidence. Some of the IMF's major shareholders pressed for greater specificity in structural conditionality. At the time of the Executive Board meeting on November 5, 1997, several Executive Directors had expressed their unhappiness with what they regarded as the vague and general nature of the structural conditionality, arguing that no progress would be likely in needed reforms without specificity and a clear timetable. The lack of progress in structural reform under the initial program reinforced their sense of misgiving.

This led to a much more specific and time-bound approach to structural conditionality in the January 1998 program. The World Bank's Jakarta-based staff took the lead role in drafting the structural conditionality for the January LOI, and the IMF team went out of its way to ensure that all concerns of the Bank were fully met. By this time, the Indonesian economic team had all but lost direct access to the President (Boediono, 2001). Negotiations were carried out directly with the President, at his own request. On the IMF side, the First Deputy Managing Director was personally engaged in finalizing the understandings with the President.

Contrary to what the IMF had expected, President Suharto did not openly oppose the expansion of structural conditionality or the inclusion of specific measures, including the cancellation of the National Car Project in which his son was involved. Indeed, President Suharto publicly signed the revised LOI in an attempt to indicate his commitment publicly. However,

<sup>20</sup>Some representatives of the Indonesian authorities told the evaluation team that they had not been adequately informed on this issue by the staff, especially regarding the blanket guarantee that had been provided in Thailand. Within the Indonesian government, however, the Ministry of Finance was adamantly opposed to a blanket guarantee on grounds of both equity and cost. In Washington, following criticism of the blanket guarantee in Thailand, there was strong opposition to establishing a blanket guarantee in Indonesia. Some former Executive Directors and U.S. government officials interviewed told the evaluation team, as a matter of their personal opinion, that a program for Indonesia would not have been approved by the Executive Board if the program had included a blanket guarantee.

<sup>21</sup>The balance of foreign currency deposits is estimated to have declined from about US\$30 billion in August 1997 to about US\$15 billion in June 1998.

<sup>22</sup>PDR, however, explicitly recommended that the IMF should learn from the mistakes made in Thailand and publish the LOI. The IMF thus sent an annotated version of the LOI suitable for publication to the authorities, who in turn agreed to make it public. However, it was never published.

the President's opposition was expressed in other ways. The President is reported to have said in a high-level meeting of his advisers that not all agreed measures needed to be respected, and that he would "wage a guerrilla war against the IMF." Later, he expressed the view that some of the reforms violated the Constitution. In February 1998, the staff reported in a memo to management that "all of the deregulation and liberalization measures relating to wood, cloves, BULOG, palm oil, wholesale and retail trade, and interregional trade [were] being subverted by various groups close to the President."

The inclusion of extensive governance-related structural measures in the IMF-supported programs with Indonesia has been widely criticized as having been counterproductive in dealing with a financial crisis (Feldstein, 1998). A former U.S. Federal Reserve Chairman, during his visit with the President in early January 1998, is reported to have criticized the structural conditionality as irrelevant to financial stabilization by facetiously calling the conditions on marketing deregulations in cloves, oranges, and other foodstuffs a "recipe" (Kenward, 2000; Bluestein, 2001).<sup>23</sup> Likewise, a high-ranking Indonesian official remarked that "things might have turned out differently" if the conditionality had been confined to the macro-critical areas more relevant to dealing with the crisis, including comprehensive bank restructuring (Boediono, 2001).

In assessing these criticisms, it is important to recognize that structural conditionality became a seriously contentious issue only in January 1998. It was not the cause of the failure of the November program, which had more to do with the nonperformance of conditionality relating to bank restructuring and monetary control. In the wake of the collapse of the November 1997 program and the accelerated currency collapse in December, the IMF and officials of some key shareholder governments came to believe that more extensive structural conditionality was the only hope of restoring confidence by signaling a decisive break with the past, a view shared by some members of the academic community (Frankel, 2000; Goldstein, 2002) and the press (*Financial Times*, January 14, 1998).

The problems with the structural conditionality in the January 1998 LOI concern the lack of focus and ownership of the reform program, rather than its intrinsic usefulness to the Indonesian economy or the capacity to implement it. First, a number of the structural measures were popular with the public and

did have beneficial effects on the economy when they were implemented. According to recent academic research, for example, the dismantling of monopolies and monopsonies, implemented from late January, substantially raised the farm-gate prices of major agricultural crops, and, as the IMF had hoped, helped minimize the adverse impact of the crisis on poverty (Montgomery and others, 2002). However, the program clearly did not benefit from ownership at the time it was announced and the ready perception of this lacuna made it completely ineffective. Second, the government's capacity certainly was not a binding constraint in the implementation of structural conditionality (Boediono, 2001). This is borne out by the fact that once the new Cabinet installed in March 1998 had convinced the President that there was no alternative to the IMF-supported program, the "50-point" program announced in January began to be implemented more fully.

The January LOI also failed to impress the markets because it did not simultaneously address the key macro-critical issues of bank and corporate debt restructuring. In this respect, the focus on extensive structural conditionality in areas outside the concern of the IMF can be said to have distracted attention from some core reforms that were indeed macro-critical.

### Corporate debt restructuring

In early October 1997, before the negotiations began, PDR had expressed concern that uncertainty about the size of private sector short-term debt was not being addressed, and had suggested action on corporate debt, including the creation of a mechanism to identify firms needing assistance. However, because the IMF lacked expertise in this area, and given the optimism that the program would rapidly restore confidence, the IMF-supported program did not actively address the corporate debt issue until January 1998. The World Bank was also slow to get involved and it was only in the middle of 1998 that it began to assume a major role in supporting the dialogue between creditors and Indonesian conglomerates. The slow start on corporate debt restructuring partly stemmed from the authorities' view that the issue should be left largely to the private sector.

Starting in January 1998, the IMF provided technical assistance to a Private External Debt Team (PEDT). This had been set up in late 1997 as a voluntary initiative with the encouragement of the Indonesian authorities to provide a framework for the negotiations between creditors and corporations unable to service their debts. The role of the government was only indirect in this framework, and was limited to strengthening the legal and regulatory mechanism to enforce contracts. The debtors set up a

<sup>23</sup>At the suggestion of Singapore's Senior Minister, this former central banker was invited by President Suharto to provide an independent assessment of the IMF package. Kenward (2000) suspects that this negative assessment of the package may have influenced the President's subsequent actions.

committee to work with the PEDT but made it clear that little progress could be made without stronger government involvement, including financial support.

In the second half of March, a consensus emerged between creditors and the PEDT that some limited government involvement was necessary in the form of an exchange rate guarantee similar to that used in Mexico's so-called FICORCA scheme.<sup>24</sup> This position was endorsed by the IMF, with the caveat that there should be no subsidies to the corporate sector, a position shared by the authorities. The proposed voluntary approach aimed to protect debtors and creditors against exchange rate risk and to give assurance that foreign exchange would be available for debt-service payments in return for the restructuring of debt on specified minimum terms. Negotiations would seek to limit the exposure of the government to exchange rate risk.

In June 1998, adapting the FICORCA-type scheme to the conditions of Indonesia, a framework for the voluntary restructuring of debt was agreed in Frankfurt, and the Indonesia Debt Restructuring Agency (INDRA) was set up in August. Several problems remained, however. First, there was a need to reform the regulatory and legal framework, including removing restrictions on debt-to-equity conversions, eliminating tax disincentives for restructuring, streamlining approval procedures for FDI, a new arbitration law, and measures to provide for the registration of collateral. Second, the insurance provided by INDRA against further exchange rate depreciation was not attractive to many market participants, given the extent of exchange rate depreciation that had already occurred, for which market participants wanted some compensation. Third, as debt restructuring would take time, firms would remain short of working capital. Fourth, given the financial condition of many enterprises belonging to conglomerates, there were strong incentives for asset stripping by shifting assets to those entities better sheltered from the creditors.

On September 9, 1998, a "Jakarta Initiative" was finalized and became operational a month or two later. The initiative provided a framework to promote voluntary restructuring of debt through INDRA and to complement the amendments to the bankruptcy law aimed at providing incentives for debtors and creditors to negotiate. It included provisions for creditors to provide interim financing to distressed companies. Government involvement, however, was limited to the role of facilitator, including serving as a forum for the one-stop approval of regulatory fil-

ings. Despite all these initiatives, however, delays in implementing regulatory changes and difficulties in obtaining redress through the Indonesian legal system limited the progress of private sector debt restructuring. Well-placed interlocutors saw the failure to tackle the corporate debt issue as an important deficiency, as these debtors brought political pressure to bear on other issues. In this process, the IMF played a relatively limited role.

### Initial strategy and its adaptation

Because the Indonesian crisis went through several phases, it is necessary not only to assess its conventional program design issues, but also to evaluate how effectively the IMF responded to emerging signs of failure and revised the initial program accordingly.

The initial strategy reflected the assumption that the crisis was a moderate case of contagion in which the rupiah had overshot. This view, which appears overly sanguine in retrospect, was widely shared by major market players at that time.<sup>25</sup> Market insiders interviewed told the evaluation team that some important hedge funds had in fact been betting in favor of the rupiah at the time the program was being negotiated, indicating their expectations that the IMF-supported program could work. The strategy, however, was a risky one and the staff recognized that if the basic assumption that the rupiah had overshot and could be nudged back to a more reasonable level was questioned, an entirely different approach would be necessary. However, the staff never explored what this alternative might imply.

In this regard, in the light of the Mexican experience, one Executive Director representing a major shareholder government encouraged the staff to have a fallback plan. There is no evidence, however, to suggest that the staff either prepared or discussed a contingency plan with the authorities. While it is not realistic to expect the IMF and the authorities to negotiate a comprehensive alternative strategy when time is short and the ability to take key political decisions is limited, it should have been possible to identify at an earlier stage more comprehensive measures to deal with a bankrupt corporate sector and a systemic banking crisis, both of which were quite likely outcomes.<sup>26</sup> In responding to emerging signs of failure in mid-November, the IMF was handicapped by the absence of an agreed fallback plan.

When the original program failed to restore confidence, the underlying assumptions of the strategy

<sup>24</sup>In the FICORCA scheme, creditors and debtors were provided a guarantee against further depreciation of the exchange rate from its value at the time the debt was restructured.

<sup>25</sup>See, for example, Goldman Sachs, "Emerging Markets Currency Analysis," November 1997.

<sup>26</sup>Indeed, the quite prescient memorandum from PDR in October 1997, referred to earlier, did call for such action.

needed to be reassessed. In the latter part of November, a mission was dispatched to assess the situation and to consult with the authorities. However, the mission's brief was largely focused on implementation within the logic of the original program and blamed the failure on nonimplementation. While the lack of implementation was undoubtedly part of the story, the original premises of the strategy were rapidly overtaken by events and there was a need for a more fundamental shift of strategy. The IMF's continued attempts to push the unwilling Indonesian economic team to raise interest rates led to a public display of disagreement, which was not helpful to building market confidence.

A critical oversight was the failure to follow up on the close monitoring of BLBI undertaken by staff in the field. IMF staff was monitoring liquidity support bank by bank on a daily basis and keeping senior staff at headquarters informed. However, the IMF did not immediately take a firm position on the issue. For example, it did not press the authorities on the staff's suggestion that BI should take control of banks receiving excessive support so as to prevent asset stripping. Given the culture of forbearance at BI and the lack of political support, little was done to contain the explosion of liquidity support. The IMF staff was prevented from knowing what was taking place within the recipient banks, particularly when collusion of some BI staff with bank owners was involved. Remedial action likely would have included a comprehensive intervention mechanism to deal with insolvent or illiquid banks, relying on the existing regulatory framework. In the event, it took the IMF staff four or five months to find out that corrupt and abusive practices were involved in the allocation of BLBI.

At the root of these problems was the lack of a fallback strategy to be pursued if the original somewhat sanguine assumption about an easy recovery of the rupiah proved misplaced. The IMF did revise the fiscal policy aspects of the program, but there was no reassessment of the underlying strategy itself. In particular, there was no comprehensive strategy to deal with the fundamental issues driving the crisis, namely, the collapsing banking and corporate sectors. While the issues were under constant review and various "Plan B" options were considered internally, existing differences of view within the IMF were not resolved until late January 1998.

In part, this delay reflected the lack of internationally accepted best practice in bank restructuring and the onset of a major crisis in Korea in late 1997, which took part of the attention and resources away from Indonesia. As a result, the IMF made a premature announcement of a package in mid-January, which focused heavily on deregulation and nonfinancial structural reform, but without including a

comprehensive strategy to deal with banking system problem. With the benefit of hindsight, the signing of the second LOI should have been postponed for two weeks, to coincide with the announcement of comprehensive banking reform and corporate debt restructuring initiatives.

## The Mode of Operations

This section discusses issues related to the IMF's mode of operations, including country ownership, the decision-making process, human resource management, and the role of major shareholders and collaboration with the World Bank and the ADB.

### Country ownership

Indonesia poses a paradox regarding country ownership. Management took the view that the IMF should support the reformist economic team because they shared common views of economic policy. Moreover, most of the reform measures were almost universally applauded within Indonesia, except by a small number of powerful elites.<sup>27</sup> Nevertheless, the program failed because the key political authority, the President, did not buy into the reform process.

The IMF misjudged the commitment of the President and underestimated the pressures likely to come from his family and some of his influential associates. On several previous occasions, the economic team had received the full backing of the President to deal with economic crises and often successfully implemented the required reforms against opposition from powerful vested interests. With the increasing presence of the First Family and other competing stakeholders among the Indonesian elites, however, the economic team had lost much of that influence by the time of the crisis in 1997 (Booth, 2001). At the time of the crisis, this was well known to close observers of Indonesia.

The Indonesian economic team was very aware of its own limited influence in the country's decision-making process. In part, this was precisely the reason why the team needed the leverage of an IMF-supported program to implement the reforms. Knowing its limitations, the economic team also made sure to secure the personal commitment of the President to measures agreed in the IMF-supported program. One can only speculate what outcome would have resulted, had the President not received

<sup>27</sup>When the package of reforms was announced to the press in January 1998, Indonesian journalists spontaneously congratulated the IMF officials for their achievement.



the kind of opposition from his children and their close associates that he did in the last weeks of 1997, particularly following his illness in early December.

As it was, the program implied that firms and banks should be allowed to fail if they were insolvent. However, the President, under pressure from his children and close associates, was unwilling to let this happen. He also faced difficulty in allowing the structural reforms to go too far because they could undermine the very basis of his regime. According to some political observers interviewed by the evaluation team, the President wrongly came to view the IMF-supported program as an instrument of foreign powers seeking to undermine him.

How to secure ownership in such circumstances and what to do in its absence remains one of the unresolved issues arising from the Indonesian experience. To enhance ownership, the IMF did begin to recognize the need both to engage the President and to engage in a wider dialogue with various stakeholders. In January 1998, as noted, the First Deputy Managing Director visited Jakarta to negotiate directly with the President. Following the signing of the second LOI in mid-January, in which he himself participated, the Managing Director requested a retired member of management to serve as his personal representative to the President on an ongoing basis. The Indonesian team initiated conscientious efforts to talk to a wider group of people, both inside and outside the government. By then, however, the crisis had become largely political, overshadowing any consideration of ownership of economic policy.

Could a different approach have produced a better result? It is, of course, impossible to say. It could well be that no strategy would have been successful in separating the political and economic dimensions of the crisis. Nevertheless, a number of lessons on the ownership dimension do suggest themselves. First, an earlier assessment of the broader political economy issues underlying key elements of the program would have been useful. Second, a smaller set of structural measures that were fully owned could have reduced the scope for immediate implementation problems that damaged market confidence. Third, whatever the final judgments on ownership and the scope of the structural reform package, the January program should have included all of the measures judged macro-critical in order to be credible.

### Decision-making process

In retrospect, it was probably a mistake to ignore the advice of PDR and the Resident Representative, and to rush the negotiation process in October

1997.<sup>28</sup> The decision to rush was understandable, given the prevailing perception of a major regional crisis in Southeast Asia. However, Indonesia still had sufficient foreign exchange reserves to last for several months, as indicated by the fact that the program included use of Indonesia's own reserves. The rushed procedure compromised quality in program design, particularly relating to the formulation of a comprehensive banking strategy and even possibly the assessment of insolvent banks, and prevented the IMF from fully benefiting from the safeguards of the internal review process. It is not possible to say whether a materially different assessment would have emerged from the established procedures.<sup>29</sup> With less pressure, however, the IMF could have given greater time to examine the full implications of each policy option being considered, including a fallback option.

The rushed procedure had additional consequences. Management often worked directly with the mission in the field, bypassing the safety mechanism inherent in a bureaucratic organization. Some senior review department officers told the evaluation team that they had often felt sidelined and excluded in the decision-making process. Moreover, the Executive Board became involved in day-to-day and very detailed aspects of the program negotiations through informal sessions. Along with communications especially from major shareholders, this subjected the staff to considerable political pressure.

By the end of November 1997, the IMF had an urgent need to make a fundamental reassessment of its strategy. However, the IMF's *modus operandi*, namely, short and intense country interactions, often with a pre-set and tight agenda, made it difficult for the staff to undertake such reassessment. Under the conditions prevailing in Indonesia at that time, the more permanent presence of a high-level team on the ground may have been beneficial as a mechanism for closely monitoring developments, providing timely policy advice and, if required, rapidly and smoothly modifying the strategy.

### Human resource management

The Indonesian crisis, occurring as it did along with the other Asian crises, inevitably placed great strains on IMF resources and key decision makers

<sup>28</sup>PDR's comments on the brief included a proposal that a two-step approach of fact-finding followed by program design should be pursued. Likewise, the Resident Representative also advised strongly against rushing into a program, as it would unnecessarily panic the markets.

<sup>29</sup>For example, given the assumption that the exchange rate would quickly bounce back, use of BI's September data (available in early November) may not have given a substantially different diagnosis of the banking sector than did the June data, particularly because the staff was not allowed in any case to examine the loan files of individual banks.



within the institution. In many respects, the IMF responded very rapidly and with considerable flexibility. However, some aspects of the internal managerial approach, compounded by the IMF's modus operandi discussed above, did have an adverse impact on the effectiveness of the response. First, management took some time to reallocate human resources to APD, whose staff was overstretched by the simultaneous crises in Indonesia, Korea, and Thailand. When the Korean crisis erupted a few weeks after the Indonesian SBA was approved, more of management's attention and the institution's available human resources were shifted from Indonesia. Some senior staff members have indicated that the simultaneous pressures on resources probably contributed to the delay in the reformulation of the program from December 1997 to January 1998.

Second, APD took time to mobilize experts to the field. Even after a banking expert had been identified, it took months before he was formally assigned as a Resident Representative in Jakarta. This appointment was made in May 1998, over six months after the banking crisis had come into the open.

Third, available internal knowledge was not effectively used in formulating the program. Part of this was an unfortunate outcome of the reorganization of the Asia-Pacific operations of the IMF in early 1997.<sup>30</sup> The mission chief for the just-concluded 1997 Article IV consultation was not included in the mission that negotiated the program in October 1997 and had little input into the subsequent discussions on program formulation. Moreover, only a limited number of staff members of the first and subsequent APD missions had previous experience with Indonesia; the few with previous experience had not worked on the country for many years. This reflected a broader problem with excessive turnover of country teams within the IMF, as also noted in the IEO's evaluation of prolonged use of IMF resources (IEO, 2002).

Fourth, financial sector expertise was not fully shared within the missions. No one from MAE was a formal member of the negotiating mission, and the MAE technical assistance mission worked side-by-side with, but independently of, the APD mission. This arrangement was costly because the views of individual members of the MAE mission were not necessarily brought to the attention of the negotiating team.<sup>31</sup>

Fifth, there was little rationale for splitting responsibilities without defining clear lines of command in the staffing of the October 1997 mission, which was simultaneously headed by two mission chiefs. With a separate MAE mission, this meant the presence of three mission chiefs with different channels of communication with mission members and senior officers in Washington. Likewise, in February 1998, a decision was made to alternate two missions with two separate mission chiefs. This arrangement, which lasted only briefly from February to March 1998, was an understandable attempt to create a permanent high-level presence on the ground without creating the family and other personal pressure associated with permanent relocation at short notice. However, despite cooperation between the two teams, such an arrangement was not ideal in terms of maintaining continuity during a crisis. According to some of the mission members interviewed, the mission chiefs had slightly different points of emphasis, and the transfer of information from one team to the next was inevitably incomplete. Some Indonesian officials interviewed told the evaluation team that they had often needed to repeat the same information twice.

### **The role of major shareholders and collaboration with the World Bank and the ADB**

#### ***Major shareholders and the Executive Board***

Broad agreement existed on the strategy for Indonesia among most of the IMF's major shareholders who played an active role in the design of the program. Working through numerous informal sessions of the Executive Board, Executive Directors representing the major shareholders generally advocated tight fiscal and monetary policies and urged the adoption of structural reform measures aimed at improving governance. If there were dissenting views, they were not expressed at the formal Board meetings.<sup>32</sup> Once the depth of the recession became clear, however, the Board supported the loosening of fiscal policy.

Frequent informal sessions facilitated a flow of information between the staff and the Board. Execu-

<sup>30</sup>The Central Asia Department (CTA) and the South Asia and Pacific Department (SEA) were merged to form what is now APD, effective January 1, 1997. Staff coming from CTA, which previously had not covered the country, assumed the crisis management of Indonesia.

<sup>31</sup>The banking strategy announced in January 1998 was based on a January 13, 1998 memo prepared by a member of the MAE technical mission while the second LOI was being drafted. This

memo was circulated to the negotiating mission late in the process and almost by chance. Perhaps a broader dialogue on banking sector ideas in October could have provoked an earlier formulation of the key elements of that strategy.

<sup>32</sup>Since the minutes of informal Board meetings are not kept, the evaluation team could only rely upon interviews with those present to ascertain what was said. There were also meetings of the Executive Directors for the G-7 countries, for which no minutes were kept.

tive Directors could not only receive information on rapidly changing developments at these meetings but also express their views relatively freely. While the dissemination of information may not have been perfect, the informal sessions nonetheless provided the Executive Directors with opportunities to voice their inputs into the program at different stages. However, detailed involvement by the Board in specific elements of program design probably went too far. Although it was appropriate for the Board to define the policies and principles to be applied to the IMF-supported program, the staff and management should have been given greater freedom to pursue a strategy based on their judgment of country ownership, technical merits, and political feasibility. Detailed involvement by the Board or a subgroup of major shareholders appears to have added to the pressures for an extensive list of detailed structural reform and deregulation measures in the January and April 1998 programs.

### **The World Bank**

Management explicitly instructed staff to consult World Bank staff on program design, particularly regarding structural conditionality, and to cooperate closely in reviewing the financial condition of the banks. During the October 1997 mission, IMF staff was given a series of notes the Bank's Jakarta-based staff had prepared for the authorities during August and September 1997, advising them on how to deal with the crisis. The IMF staff also formally requested the World Bank for comments on the proposed content of conditionality but received no written response. However, some of the World Bank staff, including a senior official of its Jakarta office, felt that the IMF was not fully drawing on their resources and expertise.

Early difficulties between the IMF and World Bank teams in Jakarta in part resulted from the differences in the way the two institutions operate. IMF staff members involved in the negotiations said that they had initially found it difficult to work with Bank staff when tasks needed to be performed with tight deadlines since, in their view, the operational approach of the Bank often did not fit with such a timetable. Bank staff felt excluded because it was not informed of or invited to policy discussions. By January 1998, however, the working relationship had improved markedly, and the Bank's Jakarta team was fully involved in designing the structural conditionality of the revised program. Moreover, from late January 1998, the MAE team worked closely with its financial sector counterparts from the World Bank. World Bank staff participated fully, and was identified as co-authors in the series of reports prepared by the MAE staff during the crisis. As part of

this close collaboration, the World Bank took the lead in the financing of the mid-1998 audits of the "IBRA banks."

Despite the active involvement of World Bank staff in much of the program negotiations and design, dissenting voices were heard from the Bank's Washington headquarters, and the Bank's Chief Economist publicly criticized the IMF-supported program. To deal with precisely this type of situation, the IMF and the World Bank had earlier agreed, in the so-called Concordat on Fund-Bank Collaboration prepared in March 1989, on a general procedure to resolve differences of view on economic issues. The Concordat stipulates a five-tiered procedure, starting with working level staff and ending at the Executive Boards; each additional tier comes into play only after best efforts to resolve differences have failed at the previous level. On an ad hoc basis, moreover, it envisages the possibility of establishing a study group, under the direction of the IMF's Director of Research and the Bank's Vice President, Development Economics, to examine analytical issues that may arise in areas of shared interest.<sup>33</sup> However, this procedure was not utilized to resolve the differences of view, in part because the differences did not follow a simple IMF-World Bank divide.

### **The ADB**

The relationship with the ADB was also difficult. Its participation was initially conceived in the context of a technical assistance mission, given its earlier work on regional development banks. As a consequence, once a decision to negotiate a program was taken, the ADB's inputs, if any, were channeled through the MAE technical assistance mission. In addition to examining the balance sheets of regional development banks, the ADB was put in charge of looking at the nonbank financial institutions regulated by the Ministry of Finance, and not by BI.

Citing confidentiality, however, the IMF staff did not keep the ADB team fully informed of issues being discussed with the Indonesian authorities. The relationship was cool at best and continued to deteriorate until the end of January 1998, when the ADB temporarily pulled out of the collaborative relationship with the IMF over disagreement on the creation of the IBRA. The first ADB program loan, for US\$1.4 bil-

<sup>33</sup>When the Concordat was discussed in the Executive Boards in 1989, however, the Bank's Executive Directors expressed serious reservations, so that the Bank did not consider it to be institutionally binding. More recently, in September 1998, the Managing Director of the IMF and the President of the World Bank issued a joint statement, reaffirming the principles underlying Fund-Bank collaboration as set out in the 1989 Concordat. See Boughton (2001), pp. 1003–05, 1055–61.

lion, was not approved until June 1998. Subsequently, working relationships were established again. ADB staff was involved in financial sector work with MAE, and took the lead in the audits of the “non-IBRA banks.”

## Conclusions

This section provides a summary of major findings and our assessment of the role of the IMF in the Indonesian crisis, as reviewed in this annex.

### Precrisis surveillance

IMF surveillance of Indonesia in the precrisis period had limited effectiveness in terms of both diagnosis and impact. Although it identified the key issues, it did not emphasize the risks and assess comprehensively the impact if these risks were to materialize. The weaknesses of surveillance were particularly evident in the underestimation of governance problems in the banking sector, and the failure to analyze the implications of risks and corruption in an explicit and candid manner. Data weaknesses also hampered the effectiveness of surveillance, although a more systematic effort to analyze the potential vulnerabilities would have highlighted these weaknesses earlier.

Regarding the banking sector problems, the IMF identified the key issues but did not take a strong enough position, perhaps owing to the judgment that the weaknesses did not pose a systemic risk in an environment of strong macroeconomic growth. The IMF was not alone in this failure. In fact, even some of the closest observers had a generally positive assessment of the Indonesian banking system, while being well aware of pervasive corruption (Cole and Slade, 1996). The staff was handicapped by prevailing conventions that required it to approach governance issues with obliqueness. Moreover, banking sector issues were identified as part of technical assistance work, a voluntary process in which the IMF acts as the authorities’ confidential advisor for their exclusive benefit. There was thus tension over how much of what was uncovered could be used to raise difficult questions during surveillance. Nevertheless, a more candid discussion of these issues in the Executive Board would have been helpful in highlighting the dangers of poor supervision, the moral hazard inherent in Indonesia’s banking policy, and the urgency of dealing with insolvent banks while conditions remained favorable.

The lack of candor in discussing the implications of vulnerable balance sheets and pervasive corruption was another area of weakness in precrisis surveillance. As early as 1995, internal reviewers, espe-

cially those in RES, had pointed out that the adverse impact of a shift in market sentiment for the corporate sector and its macroeconomic consequences in an economy with a weak banking system, but these concerns were not pursued by exploring their implications.<sup>34</sup> As a result, the staff made only a limited attempt to collect data on corporate balance sheets.<sup>35</sup> While it is unlikely (and impossible to test) that greater candor would have led to a marked change in the authorities’ policies, such a candid discussion would have allowed the IMF and the authorities to consider worst case scenarios in an atmosphere free of crisis.

The failure to present a candid analysis of the extent and nature of corruption in Indonesia led to unrealistic expectations about the ease with which reforms could be implemented and misled the IMF on the potential adverse short-run impact of the drive to deregulate. Corruption had always existed in Indonesia, but it did not prevent the economy from growing at an impressive rate over many years. This may have caused the IMF to overlook the changing nature of corruption in the 1990s, when both foreign and domestic investors began to focus on links to the Palace, rather than on the intrinsic economic merits of projects, in their investment decisions. By not openly discussing this aspect of the buoyant capital inflows, the IMF failed to perceive that Indonesia was particularly vulnerable to a sudden shift in investor confidence that might result, for example, from presidential succession concerns.

These weaknesses in part reflected a failure to take account of the wide range of views that might affect policy options and to grasp the broader political economy context within which presidential decisions were made. The surveillance dialogue placed too much faith in the ability of reformists to deliver policies, and failed to explicitly consider the various political constraints on policymaking. A focus on the reformist economic team was understandable. They had, after all, delivered important

<sup>34</sup>There is a striking parallel to what happened at the World Bank. According to the Country Assistance Note on Indonesia prepared by the Operations Evaluation Department (World Bank, 1999), in February 1997, the office of the Chief Economist “stressed that risk factors had been underestimated, that the Bank’s strategy should not be limited to the optimistic base-case scenario, and that a ‘downside analysis’ was needed in view of the high country risks.” According to this note, as late as August 20, 1997, Bank country staff and management downplayed these risks and communicated to the Executive Board that there was no cause for concern.

<sup>35</sup>The staff was aware of the importance of corporate debt restructuring. However, the few attempts made at corporate data collection were not sustained because of the inherent difficulty of obtaining such data as well as the perception that the corporate sector was outside the IMF mandate and in the purview of the World Bank.

policy corrections during earlier crises and the IMF clearly has to interact primarily with its official counterparts. Nevertheless, staff could have sought informal inputs from a much wider set of people in order to obtain a broader sense of the political constraints for economic reform. The Resident Representative, who had significant local knowledge, could have been better integrated into the surveillance process. In practice, surveillance was largely conducted, with short country visits, by IMF staff in Washington.

### Program design and implementation

The November program was based on a critical assumption that the crisis was a moderate case of contagion and that a program of tight macroeconomic policies and banking reform, supported by foreign exchange market intervention, would succeed in restoring stability with only a temporary deceleration in growth. This proved grossly optimistic as the rupiah depreciated uncontrollably, owing initially to implementation failures and later to political developments. The initial assumption that the crisis would be easily controlled was at best fraught with risk, given the possibility of multiple equilibria. These risks were underestimated because the extent to which the crisis was a twin crisis, with severe weaknesses in the banking and corporate sectors, was not recognized early enough.

Given the initial highly optimistic assumptions on growth, *fiscal policy* was not inappropriate. One can argue in retrospect that, given the low initial level of public debt, it was misguided to include in the budget the carrying cost of bank restructuring, as the cost could have been financed by a slightly higher stock of debt over the medium term. However, the banking sector presented large contingent liabilities for the government, so that there was in fact less room than the formal public debt figures might have suggested for a massively countercyclical fiscal policy. Indonesia also faced the financing constraints resulting from the absence of a government bond market and the inherent difficulty of financing expenditures with issuance of debt during a crisis. In the case of Indonesia, the only recourse the government had to financing expenditure was drawing down its deposits at the central bank and foreign borrowing. Use of central bank deposits would have been counterproductive when base money was already exploding with liquidity support to the banking sector. Foreign borrowing was not an option when foreign lenders were fleeing from the country. Thus, while initial tightening was not necessary—and should not have been part of the program if a more realistic estimate of short-term growth prospects had been incorpo-

rated—there was little feasibility for a markedly expansionary fiscal policy.

As the crisis evolved, fiscal policy was continuously relaxed and the targets were never operationally binding. The fiscal program in 1998 also included adequate social considerations, as subsidies were increased on essential goods, while price increases were targeted toward goods and services consumed by higher income groups.

*Monetary policy* was never tightened during the early months of the program, despite the urgings of the IMF to the contrary. Most reasonable measures of real interest rates became increasingly negative, because the monetary base was expanding out of control with the provision of unlimited liquidity support to the collapsing banking system. As part of this support was used to fund capital flight, it placed downward pressure on the rupiah. Exchange rate and price stability only returned when monetary policy was tightened and nominal interest rates raised in the spring of 1998. In this respect, the adoption of base money targets, rather than conventional NDA targets, was not helpful as it allowed intervention and liquidity to get out of hand.

More generally, quarterly targets for any quantitative measure of base money (or its NDA component, for that matter) proved to be of little operational use in monitoring the conduct of monetary policy on a day-to-day basis during the crisis. Base money, consisting largely of the public's currency holdings, has a large endogenous component and is thus difficult to control in the short term, even under normal circumstances. During a banking crisis, base money is even more difficult to control, as there is a portfolio shift of unpredictable magnitude from deposits to currency. In the case of Indonesia, this difficulty was compounded by unlimited liquidity support, which caused base money to go out of control. A more direct discussion and explicit agreement on interest rate policy, as happened in the spring of 1998, along with a closer monitoring of the liquidity support operations, might have provided a better framework for monetary policy.

In this respect, a critical mistake in the initial strategy was to settle for an ill-defined “understanding” on interest rates without fully specifying what action would be required, given the unwillingness of the Indonesian economic team further to raise interest rates. This papering over of a fundamental disagreement about the appropriate approach subsequently led to a constant public display of disagreement between the IMF and the economic team, further damaging public confidence. The monetary policy the IMF advocated would have involved higher interest rates, and one can argue whether this would indeed have been appropriate, but the fact is that high interest rates were not applied.



The size of *financing* was based on conservative assumptions and may have appeared small in relation to the large capital outflows that took place. The IMF did not anticipate the magnitude of capital flight by local residents, but it is difficult to argue that the initial IMF-supported program should have been designed to take account of all such capital outflows. A number of staff members interviewed have argued that the relatively small amount of official financing available in the first few months of the program lowered the probability of success. However, in our view, shortage of financing was not the critical factor, especially since key aspects of the initial program were not implemented. Much of the capital flight that occurred can be attributed to political uncertainties, which were in turn exacerbated by the failure of the initial program. Additional official financing would not have helped to address any of the underlying issues and would have only allowed such flight to take place at a more appreciated exchange rate.

The initial design of *structural conditionality* in nonfinancial areas, mainly addressing governance issues, was reasonable, as almost all agreed measures were general in nature and were to be implemented over the three-year lifespan of the program. Structural reforms in nonfinancial areas became a contentious issue only in January 1998, when the initial program had failed and the crisis had turned political. By January 1998, key shareholders and the press no longer saw deregulation as just an issue of microeconomic inefficiency, but had begun to perceive the governance-related reforms as something necessary to restore confidence by signaling a clean break with the past. The extensive structural conditionality, a widely criticized feature of the IMF response, was not the cause of the failure of the initial program, but a response to it. While many of the measures were popular with the public and undoubtedly had beneficial effects on the economy, in retrospect, the extensive structural conditionality in the January 1998 program became a distraction from taking much needed action on bank and corporate debt restructuring, which was missing from the January program.

In *bank closure and restructuring*, there was no internationally accepted best practice at the onset of the Indonesian crisis. While the initial strategy of closing 16 banks was consistent with the program's logic (including the expectation of an exchange rate appreciation), it was based on a gross underestimation of the systemic nature of the banking sector problems. The IMF concluded that no other private banks needed to be intervened beyond the 10 under rehabilitation and the 16 being closed whose deposits represented only 3 percent of total banking sector assets, believing that the private banking system was sound beyond the

troubled banks in the initial sample.<sup>36</sup> In retrospect, the mistake was not the closure of the 16 banks which was initially well received, but the absence of a comprehensive strategy to deal with insolvent or illiquid banks. Such a strategy was only introduced at the end of January 1998.

The question of the partial deposit guarantee in the November program requires careful consideration. Arguably, the amount of Rp 20 million was too small and should have been expanded to cover some legitimate institutional deposits. However, the concept of a partial guarantee was entirely reasonable in a corrupt banking system, where the well-connected insiders had benefited both from high deposit rates and from questionable lending practices. In the early months of the program, moreover, confidence was maintained in the banking sector, where state banks with an implicit government guarantee accounted for a large share. What was happening in November was a shift of deposits from those private banks that were perceived to be weak to state, foreign and larger private banks, so that the banking crisis was not yet systemic (in the sense of affecting the whole banking system).

In the end, the blanket guarantee enormously raised the fiscal cost of banking sector restructuring, which is now estimated at over 50 percent of GDP, and allowed the same insiders who had benefited from the system an additional way to profit from abusive and corrupt practices. Would the introduction of a blanket guarantee in November have halted the banking crisis? It is impossible to test such a counterfactual. However, the evidence discussed here suggests that the most damaging aspect of the November crisis was not the nature of the guarantee itself, but the lack a well-communicated, comprehensive strategy to deal with problem banks.

Finally, *corporate debt restructuring* was a missing element of the IMF-supported program. It started late and did not progress very far. Restructuring of corporate debt was a difficult process, particularly in a corrupt system lacking an adequate legal infrastructure. Even so, something could have been done early in the program, when Indonesia's corporate debt compared favorably with that of Korea, Thailand, and Brazil (Ghosh and others, 2002). If debt restructuring had been enforced with strong support of the President—clearly, a very big “if”—it might have gone a long way toward an equitable sharing of losses among various stakeholders, including the well connected, their foreign financiers, and the tax-paying public. In the end, the burden was almost entirely passed on to future generations through an increased stock of public debt.

<sup>36</sup>The staff knew that the state banks were in serious difficulty, but determined that they could more appropriately be dealt with separately.



### **The mode of operations**

The failure of surveillance and weaknesses in program design and implementation in part reflected the IMF's mode of operations. The IMF overestimated the extent of country ownership, particularly in structural reforms. While most of the measures were endorsed by the economic team and popular with the general public, the program lacked the ownership of those who counted the most in the decision-making apparatus of Indonesia. Greater understanding of the political economy dynamics might have contributed to a different program design. Nevertheless, it must be recognized that separating the economic and political elements that made Indonesia's crisis so toxic would have been very difficult with any program.

The quality of program design was affected by the rushed procedure. While such a procedure may

be necessary in certain cases, and the decision to rush was understandable under the conditions of great concern about a regional meltdown, the case of Indonesia—which initially had substantial reserves—does not seem to fall in that category. The rushed procedure led to detailed involvement by the Executive Board, subjecting the staff to greater political pressure. Management often worked directly with the missions in the field, bypassing the normal review mechanisms inherent in a bureaucratic organization. These problems were compounded by some weaknesses in human-resource management practices, which resulted in the failure to utilize available skills and resources in an efficient manner. The IMF showed flexibility in responding with speed, but there was a significant cost in terms of quality, especially in terms of understanding the nature of the crisis and the degree to which the program was owned and hence would be implemented.

## Appendix A.I.1

### Indonesia: Selected Conditionality Under IMF-Supported Programs: Evolution and Implementation, 1997–98<sup>1</sup>

#### A. November 1997 Letter of Intent

Performance criteria	Benchmarks	Targets	Other conditions for completing the next review
End-December 1997 and end-March 1998 base money target.*	By end-March 1998, introduce full tax deductibility of loan loss provisions.**	Commit to liberalize foreign trade and investment, including gradual phase out of export taxes and restrictions; dismantle monopolies and price controls; allow greater private sector participation in provision of infrastructure and privatization.	Finalize understandings for FY 1998/99 and establish performance criteria (PC) for June and September 1998. <sup>2</sup> **
End-December 1997 and end-March 1998 overall central government balance to achieve surplus of ¼ percent of GDP for 1997/98 compared with 1.2 percent in 1996/97.*	By end-March 1998, complete public expenditure review.  By end-March 1998, complete audits of state-owned banks by internationally recognized accounting firms.*	Overall fiscal surplus of 1 percent of GDP for 1998/99 to be updated at time of first review.**	Update indicative targets to PC for 1998/99 budget and for end-June and end-September base money, net international reserves, and external debt. <sup>2</sup> **
End-December 1997 and end-March 1998 floor on net international reserves.**	By end-April 1998, reduce tariffs in line with ongoing 1995–2003 tariff reduction program.	Reduce VAT exemptions from April 1998 and consolidate off-budget funds into budget within three years.**	Limit use of Reforestation Fund to intended uses.
End-December 1997 and end-March 1998 limit on short-term debt outstanding.*	By end of program (in 2000) eliminate quantitative restrictions on trade.		Protect social spending and increase targeted aid to poor villages.
By end-December 1997, closure of “nursed” banks or those under conservatorship that do not submit rehabilitation plans or whose plans are not approved by BI.			
By end-December 1997, establishment of quantitative performance targets for state-owned banks together with monitoring mechanisms.			
By end-December 1997, issuance of implementation regulations on procurement and contracting procedures.			
By end-March 1998, 30 percent increase in electricity prices** and petroleum prices raised to eliminate subsidies. **d			

**B. January 1998 MEFP and Letter of Intent**

Prior actions	Performance criteria	Benchmarks	Targets	Other conditions for completing the next review
	By April 1998, begin to increase petroleum prices to eliminate subsidies with large initial rise (except for kerosene and diesel to protect the poor). <sup>**</sup>	By end-April 1998, reduce tariffs in line with commitments in October 1997 MEFP.	Avoid a decline in output, while containing inflation to 20 percent in 1998/99 <sup>*</sup> and single digits in 1999/2000.	
	By end-March 1998, increase electricity prices by 30 percent. <sup>**</sup>		Overall fiscal deficit of about 1 percent of GDP for 1998/99. <sup>*</sup>	
	End-March 1998 base money target.		Accounts of Restoration and Investment Funds to be brought into budget in 1998/99. <sup>**</sup>	
	End-March 1998 overall central government balance to achieve deficit of 1 percent to 2 percent of GDP for 1997/98.		Twelve infrastructure projects to be canceled. <sup>**</sup>	
	End-March 1998 floor on net international reserves.		Budgetary and extrabudgetary support and credit privileges granted to IPTN's airplane projects to be discontinued, effective immediately. <sup>**d</sup>	
	End-March 1998 floor on new external debt.		All special tax, customs, and credit privileges for the National Car Project to be revoked, effective immediately. <sup>**d</sup>	
			Bank Indonesia to be given full autonomy to conduct monetary policy and to begin immediately to unilaterally decide interest rates on its SBI certificates. <sup>*</sup>	
			Virtually all of the restrictions that had been put in place over time to be eliminated.	
			<ul style="list-style-type: none"> <li>• From February 1, BULOG's monopoly over the import and distribution of sugar, as well as over the distribution of wheat flour, to be eliminated.<sup>**</sup></li> <li>• Domestic trade in all agricultural products to be fully deregulated.</li> <li>• The Clove Marketing Board to be eliminated by June 1998.<sup>**</sup></li> <li>• All restrictive marketing arrangements to be abolished. Specifically, the cement, paper, and plywood cartels are to be dissolved.<sup>**</sup></li> <li>• All formal and informal barriers to foreign investment in palm oil plantation and wholesale and retail trade to be lifted.<sup>**</sup></li> </ul>	

## C. April 1998 Supplementary MEFP

Prior actions	Performance criteria	Benchmarks	Targets	Other conditions for completing the next review
Introduction of full tax deductibility of loan loss provisions (by end-March 1998).	By end-June 1998, increase in prices of petroleum products to eliminate subsidies.**	By end-June 1998, audit state-owned banks by internationally recognized accounting firms (*).	Monthly targets for end-May through June and quarterly targets through end-March 1999 for NDA,** base money,** liquidity support,** short-term external debt,* and NIR floor:**	By the end of September 1998: <ul style="list-style-type: none"> <li>• Complete action plans for all 164 state enterprises,**</li> <li>• Initiate sales of additional shares in listed state enterprises including, at a minimum, the domestic and international telecommunications corporations. **§§</li> <li>• Eliminate subsidies on sugar, wheat flour, corn, soybean meal, and fishmeal. §§§d</li> <li>• Complete divestiture of two state enterprises that are presently unlisted.*</li> <li>• Complete action plans for restructuring banks under auspices of IBRA.*</li> </ul>
Transfer to IBRA control seven banks accounting for over 75 percent of BI liquidity support, and freeze licenses of seven other banks.	By end-June 1998, increase in electricity prices by 30 percent.**	By end-June 1998, complete public expenditure review.		
Implement first stage increase in SBI interest rates (from 22 percent to 45 percent on March 23).	May 15, 1998 NDA,** base money,* and liquidity support.**			
Implement further increases in interest rates as necessary to strengthen the rupiah and to keep NDA in line with the program target. Keep NDA and base money in line with their program paths during the period before the Board meeting.	End-April 1998 overall central government balance to achieve deficit of 3.8 percent of GDP for 1997/98.**			
Lift restrictions on foreign investment in wholesale trade.	May 15, 1998 floor on net international reserves. **			
Raise prices of sugar, wheat flour, corn, soybean meal, and fishmeal.	End-June ceiling 1998 on short-term external debt.**			
Identify seven new state enterprises to be privatized in 1998/99 (including steel, toll road, and coal mining companies; port and airport management companies; and a palm oil plantation).	End-June ceiling 1998 on net external debt.**			
Extend to private sector subsidies on food items previously given only to BULOG (incomplete).	Merging Bank Bumi Daya and BAPINDO and transferring problem loans to the asset management unit of IBRA, by June 30, 1998.			
Introduce resource rent tax on forestry products and reduce export tax on logs and sawn timber to 30 percent.				
				By the end of March 1999: <ul style="list-style-type: none"> <li>• Complete sales of additional shares in listed state enterprises.</li> <li>• Complete divestiture of three additional state enterprises that are presently unlisted.</li> </ul>

## C. April 1998 Supplementary MEFP (concluded)

Prior actions	Performance criteria	Benchmarks	Targets	Other conditions for completing the next review
Issue criteria for determining remaining locational restrictions on investment in palm oil plantations for environmental reasons.				• Restore IBRA banks to 8 percent capital adequacy ratio.
Make loan loss provisions fully tax deductible, after tax verification.				• Prepare plans for privatization of at least one quarter of IBRA banks in 1999.
Replace quantitative restrictions on palm oil, olein, and stearin with an export tax of no more than 40 percent.				
Announce dismantling of joint marketing body for plywood.				
Issue instructions to provincial governors to eliminate all local export taxes.				
Announce minimum capital requirements.				
Issue to IBRA an initial tranche of Rp 80 trillion in indexed government bonds.				
Enact government regulation in lieu of law to amend the Bankruptcy Law and establish a Special Commercial Court.				
Publish weekly key monetary data, including base money, NDA, and NIR.				
Provide historical data on the accounts of the Reforestation Fund.				

Note: Unless italicized, all the structural measures were included in the 1997 Article IV consultation report.

1\*\*\* = subject to revision during subsequent reviews; \*\* = fully satisfied conditionality without delay; \* = partially satisfied conditionality with delay; % = fully satisfied conditionality without delay; %d = fully satisfied conditionality without delay; %d = fully satisfied conditionality without delay; %d = fully satisfied conditionality without delay; %d = fully satisfied conditionality without delay.

When no mark is attached information was considered insufficient to judge.

2PC for April and June 1998 were established.



## Appendix A I.2

### Indonesia: Timeline of Major Events<sup>1</sup>

Date	
7/9/97	IMF Executive Board meets for the 1997 Article IV consultation. <sup>2</sup>
7/11/97	The authorities widen rupiah trading band to 12 percent from 8 percent.
8/14/97	Indonesia abolishes its currency band and allows the currency to float. The rupiah falls to Rp 2,755 per U.S. dollar.
8/19/97	Central bank raises the one-month SBI rate to 30 percent from 11.625 percent.
8/29/97	BI governor announces limits on forward foreign currency trading by domestic banks to nonresident customers at US\$5 million.
9/3/97	Reform measures introduced, including removing 49 percent limit on foreign investors' equity purchase for IPOs and raising luxury goods tax rate.
	Government announces delays for infrastructure projects of US\$13 billion to curb widening current account deficit.
9/4/97	Central bank lowers the one-month SBI rate to 27 percent from 30 percent.
9/9/97	Central bank lowers the one-month SBI rate to 25 percent from 27 percent.
9/15/97	Central bank lowers the one-month SBI rate to 23 percent from 25 percent.
9/22/97	Central bank lowers the one-month SBI rate to 21 percent from 23 percent.
10/8/97	IMF sends a technical assistance mission on the financial sector and mission to discuss a three-year IMF-supported program.
10/20/97	Central bank lowers the one-month SBI interest rate to 20 percent from 21 percent.
10/31/97	IMF announces a US\$23 billion financial package to help Indonesia stabilize its financial system. <sup>2</sup>
11/1/97	The government closes 16 banks. Guarantees payment of up to Rp 20 million per deposit starting November 13.
11/3/97	The rupiah strengthens by 7 percent following intervention by monetary authorities of Indonesia, Singapore, and Japan.
11/5/97	PT Bank Andromeda, part-owned by President Suharto's son, files lawsuit against Finance Minister and BI Governor challenging bank closure.
	IMF Executive Board approves 36-month Stand-By Arrangement for SDR 7.34 billion. <sup>2</sup>
11/7/97	Fifteen mega-projects quietly reinstated.
11/11/97	IMF Managing Director visits Jakarta.
11/23/97	The President's son buys a small bank and starts its banking business on the old premises of Bank Andromeda.
11/25/97	IMF mission arrives in Jakarta.
12/5/97	President Suharto begins an unprecedented 10-day rest at home.
12/12/97	President Suharto cancels a plan to attend the ASEAN summit in Kuala Lumpur.
12/23/97	President Suharto calls on a retired technocrat to help private companies deal with their debt crises.
12/30/97	The Jakarta court decides to delay the liquidation of PT Bank Jakarta owned by Suharto's half-brother Probosutedjo.
1/6/98	Rupiah falls 11 percent ahead of the budget announcement. President Suharto announces 32 percent increase in government spending for 1998/99, perceived as violating IMF targets.
1/8/98	Rupiah falls after comments by U.S. Deputy Treasury Secretary that Indonesia needs to show commitment to reform.
1/9/98	U.S. President Bill Clinton calls President Suharto to insist that IMF program must be followed.
1/13/98	The government is reported in local press to be considering introducing a currency board.
1/14/98	The rupiah rises 9 percent in expectation of an agreement on the IMF-supported package.
1/15/98	Rupiah loses 6 percent as President Suharto signs agreement to dismantle monopolies and family-owned businesses.
1/19/98	President Suharto emphasizes that National Car Project and plan to develop Indonesian jet plane will continue without state funding or assistance.
1/27/98	Government announces (i) full guarantee of commercial bank deposits and credits and new agency to restructure the banking sector, and (ii) "steering committee" to handle negotiations between foreign lenders and Indonesian debtors and freeze on debt payments pending new framework. There will be no debt moratorium since corporations must service debt if able to do so. Rupiah gains 18 percent.
	Central bank raises the one-month SBI rate to 22 percent from 20 percent.
2/11/98	Finance Minister says that Indonesia will soon establish a currency board and is finalizing the legal and institutional framework.
2/14/98	Fifty-four banks are brought under the auspices of IBRA and restrictions placed on their operations.
2/20/98	Government guarantees all deposits—Rp 3.1 trillion—in 16 liquidated banks. Previously covered up to Rp 20 million per account, totaling Rp 1.7 trillion.
2/22/98	Finance ministers from G-7 countries reportedly urge Indonesia to reconsider its plan for a currency board.

**Indonesia: Timeline of Major Events (concluded)**

Date	
3/2/98	President Suharto reports implementation of structural reforms under IMF program is incompatible with Indonesia's constitution.
3/3/98	Senior U.S. officials say the United States will not support the IMF's next loan disbursement without "adequate" progress in reforms. <sup>3</sup>
3/5/98	The European Union reportedly urges President Suharto to follow through the crisis with commitment to reforms under the IMF-led package.
3/10/98	President Suharto is reelected.
3/16/98	President Suharto's new cabinet sworn into office.
3/23/98	Central bank raises the one-month SBI rate to 45 percent from 22 percent.
4/4/98	IBRA takes over seven large banks with liquidity support exceeding Rp 2 trillion each and freezes licenses of seven small unsound banks.
4/8/98	IMF and Indonesia agree on new IMF-supported financial package that allows the government to maintain costly budget subsidies. <sup>2</sup>
4/21/98	Central bank raises the one-month SBI rate to 50 percent from 45 percent.
4/22/98	Economic Coordinating Minister says Indonesia implemented all the reforms due under deadline agreed with the IMF.
5/5/98	IMF Executive Board meeting approves US\$1 billion loan disbursement to Indonesia. Board recommends tight monetary policy, strengthening banking restructuring, and providing a framework for addressing debt problems of private corporations. <sup>2</sup>
5/7/98	Central bank raises the one-month SBI rate to 58 percent from 50 percent.
5/21/98	President Suharto announces his resignation and immediately hands power over to Vice President B.J. Habibie.
5/22/98	President B.J. Habibie announces his cabinet, consisting of 23 ministers from the previous cabinet and 16 new appointees.
5/28/98	Bank of Central Asia put under IBRA control after massive run. IMF reportedly arranges meetings with Indonesian opposition leaders and activists in an effort to make ties across a broad spectrum. <sup>3</sup>
6/4/98	Indonesian debt negotiation team and creditor banks in Frankfurt agree on a comprehensive program to address Indonesia's external debt problem, including creation of an Indonesia Debt Restructuring Agency (INDRA). <sup>3</sup>
6/18/98	The Export-Import Bank of Japan announces that Japan signed US\$1 billion trade credit facility for Indonesia.
6/24/98	Government signs another agreement with IMF, the fourth in nine months, promising further reforms. <sup>2</sup>
7/2/98	INDRA is established to tackle private debt problems.
7/15/98	IMF Executive Board meeting approves a US\$1 billion loan disbursement. <sup>2</sup>
8/19/98	The one-month SBI rate reaches 70 percent after several rounds of increases over three months.
8/25/98	IMF Executive Board approves next credit tranche of US\$1 billion and an Extended Fund Facility (EFF) arrangement for US\$6.2 billion. <sup>2</sup>
9/23/98	Paris Club reschedules US\$4.2 billion of sovereign debt. <sup>3</sup>

Sources: Bloomberg, Reuters, IMF, and local newspapers.

<sup>1</sup>Local time, unless noted otherwise.

<sup>2</sup>U.S. eastern standard time.

<sup>3</sup>Western European time.

## Introduction

This annex provides a detailed assessment of the role of the IMF in Korea's capital account crisis of 1997–98, focusing on the role of the IMF in precrisis surveillance and in the process of crisis management.

The annex is organized as follows. First, it evaluates the effectiveness of IMF surveillance in identifying underlying vulnerabilities and the potential risk of crisis. It then discusses issues of program design, including monetary and exchange rate policy, fiscal policy, financial sector reform, and nonfinancial structural reforms. Next, it examines the appropriateness of program financing and the role of the IMF in the debt rollover agreement of late December 1997. The final section presents conclusions.

## Precrisis Surveillance

With the benefit of hindsight, one can identify several weaknesses in the IMF's surveillance of Korea during the period leading up to the crisis. This section discusses two areas in which these shortcomings proved to be most damaging: the analysis of the vulnerabilities introduced by the uneven process of capital account liberalization; and the initial assessment of the risk that the crisis spreading through Asia in the fall of 1997 would soon hit Korea.

## Underlying vulnerabilities

Throughout the 1980s and the first half of the 1990s, the Korean authorities alternately liberalized and restricted both inward and outward capital account transactions in pursuit of their policy goals for the external sector.<sup>1</sup> Thus, in the early 1980s, capital inflows were liberalized and capital outflows restricted to assist the financing of current account deficits. Later in the decade, when Korea began to run substantial current account surpluses, controls

were reimposed on inflows and controls on outflows were eased. The environment of current account surpluses also contributed to the authorities' decision, in 1988, to fully liberalize current account transactions and thereby accept the obligations of Article VIII of the IMF's Articles of Agreement.

When current account deficits reappeared in the early 1990s as a consequence of the strong won and the global recession, the Korean government again imposed controls on purchases of foreign exchange by residents and removed controls on certain categories of capital inflows. The stock market was opened to foreign investors in 1992, though with ceilings on the fraction of a given company's shares that could be held by any foreigner individually and by foreigners in aggregate. FDI was partially liberalized. Short-term borrowing by banks and certain nonbank financial institutions was liberalized in the mid-1990s. Merchant banks, which would later play a central role in the 1997 crisis, were at the forefront of institutions taking advantage of the easier rules on overseas borrowing (Box A2.1).

As a result, capital inflows surged, which led to upward pressure on the currency. Significantly, rather than attempting to restore balance by reimposing controls on inflows, as might have been done in the past, the authorities instead chose to liberalize outward portfolio investments by Korean residents. A Foreign Exchange System Reform Plan was issued in December 1994, which outlined a gradual, staged liberalization process for the capital account and the foreign exchange market.

In spite of the overall commitment to freeing capital flows, this process had not moved very far by 1997. Korea still maintained substantial controls on many capital account transactions, particularly on the external issuance of long-term bonds and long-term commercial loans by financial and nonfinancial entities. Limits also remained on foreign participation in domestic equity and bond markets. The decision to pursue liberalization of capital inflows had in part resulted from lobbying by the business community, which wanted to take advantage of relatively low short-term interest rates in global markets. Yet many reform-minded officials, while favoring the liberaliza-

<sup>1</sup>Much of the background material in this section is drawn from Kim and others (2001) and Johnston and others (1997).

### Box A2.1. Merchant Banks in Korea

The merchant banks, most of them owned by *chaebol*, had been created from short-term finance companies, which in turn had been established in 1972 to facilitate “curb market” transactions, that is, those not permitted to the established commercial banks. The policy of liberalizing short-term flows before long-term flows and restricting direct capital-raising by nonfinancial firms gave the merchant banks a profitable market niche. They acted as intermediaries for *chaebol*-affiliated firms, discounting commercial paper and reselling it to commercial banks. They also offered cash-management accounts and other instruments to investors, and dealt in corporate promissory notes. These opportunities proved to be so lucrative that 24 new merchant banks were established between 1994 and 1996. The merchant banks were required to keep their currency exposures in balance, but there were many loopholes in these rules and supervision was poor. For their part, commercial banks felt pressure to compete with the merchant banks, and began to borrow abroad at short maturities as well.

tion of financial markets as a general principle, resisted measures to allow firms to raise funds directly from foreign bond investors. It was feared that this would enhance the power of the large conglomerates (the *chaebol*) at the expense of small and medium-sized enterprises. As a result, in the mid-1990s, a new policy was initiated that deliberately steered capital inflows through domestic financial institutions.

Even Korea’s accession to the Organization for Economic Cooperation and Development (OECD) in December 1996 did not lead to a substantial additional opening of capital markets. Joining the OECD was seen as an important political goal and as a way to reduce borrowing costs,<sup>2</sup> but in the accession talks the authorities resisted efforts to bring Korea’s capital account regulations in line with those of other OECD members.<sup>3</sup> In taking this stance, the authorities cited their concern about the consequences of a sharp in-

crease in capital inflows, given prevailing interest rate differentials. The policy of permitting short-term borrowing and restricting long-term flows allowed the authorities additional flexibility vis-à-vis the OECD’s rules, which grant members the right to “roll back” previously adopted liberalization measures with respect to most short-term capital movements but not those regarding long-term movements.

The decision to liberalize short-term transactions before long-term ones had unintended consequences. Given the opportunity, the *chaebol* and the banks would probably have strived to secure long-term financing even at the expense of a small term premium. If a greater share of Korea’s external debt in 1997 had been in the form of long-term instruments, issued by a mix of financial and nonfinancial institutions, rather than in the form of short-term bank debt, the character of the December crisis would have been different and probably less damaging. For one thing, a diversity of financing channels might have made the system more resilient to a breakdown in one channel, in this case interbank loans to overseas branches and subsidiaries. If the international market for the long-term debt of Korean nonfinancial corporations had been deeper and possessed a lengthy, successful track record, then foreign investors might have been willing to continue financing investment by healthy borrowers, while avoiding troubled corporations and banks.<sup>4</sup>

Moreover, if more of Korea’s external debt had been at longer maturities, the sudden drop in the market’s confidence in the Korean financial system might have led to an explosion of spreads and a severe credit crunch, but not a liquidity crisis. This is because holders of maturing short-term debt can demand payment from the original issuers, forcing the latter to rush to obtain cash or liquid assets, while holders of long-term debt that has been downgraded but has not yet matured can only sell the obligations to other investors (or simply write down the loss).

The distinction is important because liquidity crises tend to spread more rapidly and have a broader impact than do incidents where perceived levels of credit risk merely rise sharply. In a foreign exchange liquidity crisis, there is the further risk that the authorities will impose a standstill on payments. As a result, the risk premium imposed by foreign investors on *all* borrowers increases, regardless of their creditworthiness. Creditors, concerned over whether any borrower will be able to honor their foreign exchange-denominated obligations, may demand repayment as soon as these obligations mature. Once some creditors start to take this approach, all creditors find themselves forced

<sup>2</sup>The capital accords agreed by the Basel Committee on Banking Supervision in 1988 allowed a lower capital charge for obligations of (or guaranteed by) OECD member governments and for short-term loans to banks based in OECD member countries. However, the accords only prescribed a minimum charge. Regulators were free to set a higher charge for specific borrowing countries.

<sup>3</sup>Members of the OECD agree to adopt the organization’s legal instruments, including the *Code of Liberalization of Capital Movements* and the *Code of Liberalization of Current Invisible Operations* (covering cross-border financial services). These codes incorporate a commitment to move toward full liberalization and not to introduce new restrictions. The existing members of the organization make the final decision on accepting new members, based on the recommendation of the OECD secretariat and committees.

<sup>4</sup>This indeed occurred to some extent at the domestic level in the first half of 1998, but could not happen at the international level because Korean borrowers were not well enough established on international capital markets.

to do so, introducing dynamics that are strongly reminiscent of a bank run (Radelet and Sachs, 1998a). By contrast, in a credit crunch that is not a liquidity crisis, the market's ability to distinguish between good and bad borrowers eventually returns, even if risk premiums may increase for a time on all borrowers. Creditors do not demand repayment from creditworthy borrowers simply because they fear that liquidity will run out. The extent of damage to the real economy is therefore likely to be less.

The IMF followed Korea's capital account liberalization process closely and, through Article IV consultations, regularly urged the authorities to establish and follow a steady timetable for liberalization. However, staff papers and Board discussions were concerned primarily with the speed of liberalization (typically recommending a faster process) and with whether it should be contingent on the convergence of Korean interest rates to international levels (typically concluding that it should not). Issues of sequencing and supervision were inadequately addressed in the surveillance process, though these topics were attracting increasing attention elsewhere in the IMF.<sup>5</sup> According to staff members interviewed by the evaluation team, the focus on capital account liberalization in Korea reflected the IMF's belief that liberalization of its external accounts would encourage the authorities to pursue genuine reforms of the domestic financial sector, including improvements in supervision.

One reason why surveillance failed to highlight the potential vulnerabilities in Korea's external accounts was that the IMF—along with many others at the time—thought of the capital account solely in terms of transactions between residents and nonresidents. For this reason, short-term borrowing by overseas bank branches and subsidiaries was not recognized as an important issue. For example, a study of capital account liberalization in Korea and three other countries conducted by MAE and published in November 1997 exhaustively catalogued the liberalization measures undertaken by each country and the associated developments in transaction volumes (Johnston and others, 1997). Yet this paper did not draw attention to the growth in borrowing by Korean overseas bank affiliates, except to mention that the establishment of overseas branches and subsidiaries had been permitted as part of the liberalization of *outflows* of direct investment. The authors did not treat borrowing by the affiliates as potentially equivalent to borrowing by their parent institutions.<sup>6</sup>

<sup>5</sup>See for example Folkerts-Landau and Lindgren (1998), a draft of which had begun circulating internally in late 1997.

<sup>6</sup>The same report noted that increased net private inflows had been associated with increased domestic credit growth, inflation, and current account deficits in Korea, Thailand, and Indonesia, but not in Chile, where capital inflows seemed to *substitute* for

## Assessment of the risk of crisis

The prevailing IMF view in the early months of 1997 was that, while Korea faced problems in its financial sector that were potentially very serious and that needed to be addressed promptly, there was no risk that this would lead to a loss of confidence and crisis-inducing capital account outflows. There was some concern at the widening current account deficit, but these concerns dissipated as the deficit narrowed in the first half of 1997. The failure of Hanbo Steel was treated as a political matter, because of its impact on the standing of the ruling party, rather than in terms of the impact of further failures of *chaebol* on the health of the banking sector. The IMF's view, which was shared by many (though not all) other public and private sector observers at the time, was influenced by Korea's strong macroeconomic record and its proven ability to raise foreign funds with little difficulty.

As the East Asian crisis spread in the summer and fall of 1997, there were grounds to reassess this view. Because of the activity of their overseas branches, Korean banks faced a maturity mismatch between their foreign currency assets and liabilities, while the *chaebol* to which the banks had lent in dollars faced a currency mismatch. Much of the Korean banks' debt was at short maturities and was vulnerable to a decision by foreign lenders not to roll it over. Their situation was reminiscent of those of the financial sector in Thailand and the corporate sector in Indonesia. Market commentary and credit spreads indicated that international investors and bank lenders were reappraising the riskiness of their exposure to the East Asian region as a whole.

The IMF was aware of these issues. In internal memos circulated in August and September 1997, the staff criticized the support package put together by the authorities in response to growing financial sector problems, on the grounds that the package fell far short of what needed to be done to restructure the financial sector. The guarantee extended to the external liabilities of Korean banks in late August was especially troubling. In the staff's view, the guarantee raised the risk of a spillover of domestic financial difficulties into the external sector, because to honor the guarantee the authorities would either have to borrow on international capital markets or dip into foreign exchange reserves.

The Article IV consultation mission that visited Korea in October 1997 included a staff member from MAE, who produced a detailed analysis of financial

domestic credit growth. One reason for this, the authors suggested, was that Chile had done more to improve prudential standards before starting to liberalize its capital account. At the time the paper was written, Thailand had already been hit by a crisis, and Indonesia had started to experience its own difficulties. But the appropriate parallel to Korea's vulnerability was not drawn.



**Figure A2.1. Won–U.S. Dollar Exchange Rate and Korean Equity Prices**



Source: IMF database.

stability issues. Yet, while acknowledging the possibility of a spillover from the financial sector to the capital account, the mission concluded, in its back-to-office report, that Korea was “relatively well equipped” to handle further external pressures.<sup>7</sup> Because of this assessment, which was heavily influenced by incomplete reporting on the part of the authorities about their reserve position (see below), there was no attempt to analyze rigorously Korea’s vulnerability to a cutoff of external short-term financing until after the country’s usable foreign exchange reserves were all but depleted. Had such an analysis been attempted earlier in 1997, important data gaps might have been recognized sooner, particularly in such areas as the nature of the BOK’s advances to commercial banks, the ability of the authorities to access these funds in a crisis, and the multiple strains on Korea’s dwindling stock of foreign exchange reserves.

The failure of IMF bilateral surveillance to identify Korea’s vulnerability to a crisis was not unique. Other observers in the private sector were also caught off guard. In retrospect, one can attribute the failure on the part of the IMF to five misconceptions, which were compounded by critical information gaps.

First was the *misestimation of the degree of flexibility in the country’s exchange rate policy*. The briefing paper for the October Article IV consultation mission lists, as one of the reasons for the staff’s view that Korea faced only a “moderate” risk of a foreign ex-

change crisis, “the relatively flexible exchange rate policy and absence of indications of exchange rate overvaluation.” It noted that the Korean won had depreciated almost 17 percent against the dollar since the beginning of 1996, reversing an earlier period of appreciation. Yet, depreciation up to that point *in response to the Asian crisis* had been very limited (Figure A2.1). At the time the paper was written, the won had depreciated barely 2 percent since July 1, 1997, after having weakened 8 percent from October 1996 to July 1997. The behavior of other Asian currencies at that time could have offered evidence that the won was being artificially supported. Singapore, which pursued a more flexible managed float from the beginning of the crisis, allowed its currency to depreciate 7 percent from the beginning of July 1997 to the end of September. Malaysia’s currency fell 29 percent over the same period.

With regard to exchange rate policy, the mission team misconstrued the authorities’ willingness to let the currency weaken further if foreign demand for Korean assets fell significantly. Internal documents suggest concern at the degree of foreign exchange market intervention, and particularly at the possibility that Korea might have adopted a large forward exposure, as had been the case for Thailand. At the end of the Article IV consultation mission, the staff advised the authorities to scale back such intervention. Yet, perhaps because of their judgment that the won was not overvalued, the staff did not put much emphasis on this issue. Instead, the IMF’s policy advice to the Korean authorities focused more on the need to accelerate structural reforms than on macroeconomic policy. The staff at that point did not view an excessive commitment to support the won as a factor hindering Korea’s ability to respond effectively to the crisis. The authorities’ failure to share critical information with the staff about the extent and nature of their intervention, and about the actual status of their reserves, was central to the staff’s misdiagnosis of the situation. In the event, the authorities’ attempts to support the won during November through intervention would prove to be a critical drain on Korea’s foreign exchange reserves.<sup>8</sup>

There was also excessive optimism regarding Korea’s ability to prevent speculative pressure on the won. In September, the staff found reassurance in the fact that “the remaining capital controls [limited] the ability of international investors to take short positions in won.” Yet the Thai experience should have shown that capital controls of this type cannot pro-

<sup>7</sup>The staff report for the 1997 Article IV consultation was never presented to the Executive Board because its relevance was overtaken by subsequent events.

<sup>8</sup>As an example of an alternative response to the regional crisis, Taiwan Province of China successfully fended off a potential crisis by moving to a more flexible exchange rate policy in mid-October. The New Taiwan dollar weakened roughly 8 percent in the three days following this policy shift.

protect a currency when domestic and foreign investors move decisively out of domestic assets through whatever channels are available. For example, as RES pointed out at the time, foreign investors could take short won positions in offshore derivatives markets. Downward pressure on the won would then be transmitted to the domestic market through hedging by the domestic Korean institutions that acted as market-makers in these instruments. In other words, pressure on the won, if it developed, would take whatever form it could.

Second, the staff *underestimated the risk of a breakdown in funding the capital account*. The staff recognized that such a risk was present, particularly in the crisis conditions then prevailing in East Asia, but concluded that the authorities could handle any pressures by making renewed efforts in the area of financial reform, by addressing financial sector weaknesses, and by loosening controls on long-term external borrowing. In part, this risk was underestimated because there was insufficient data on Korea's short-term external obligations (though some relevant data sources were overlooked). While the staff was concerned at the level of short-term external debt and pressed the authorities to lengthen the maturity structure of this debt, efforts to clarify these concerns, for example by requesting the appropriate data more forcefully, do not seem to have been pursued until the crisis had already broken out.

More fundamentally, the staff (and most other observers at the time) did not foresee the degree to which market sentiment would swing against Korea, and the consequences this would have for the provision of credit of all kinds. This shift in sentiment rendered the recommendation for looser controls on long-term borrowing moot; surely, if Korea had difficulty rolling over its short-term external debt, it would have even more difficulty refinancing its short-term debt at longer maturities.

Third, the potential *short-term impact on growth of problems in the financial sector was underestimated*. The September 1997 briefing paper contained three scenarios for macroeconomic developments in Korea: a "baseline" scenario positing growth of about 6 percent in both 1997 and 1998; a scenario assuming the adoption of the IMF's "preferred policies," under which growth would fall to 5.3 percent in 1997, then rise to 6.7 percent in 1998 (after which the outlook would remain higher than in the "baseline"); and "disorderly adjustment," a scenario supposedly incorporating a possible spillover of the domestic financial problems to external financing, resulting in growth of 4.0 percent in 1997 and 4.5 percent in 1998.<sup>9</sup> Slower

growth in this last scenario resulted, not from a breakdown in financial intermediation or a fall in investment reflecting a drop in confidence, but from tighter macroeconomic policies in response to downward pressure on the won. Yet the experiences of other economies in the 1990s, such as Japan, Sweden, and Finland, showed that broad-based financial sector restructuring can have a serious impact on growth rates over a period of several years. The narrow range of growth estimates across the three scenarios, a reflection of the remarkable stability of Korea's growth rates over the previous decades, prevented the staff from exploring the possibility or, more importantly, the consequences of a more serious slowdown.

Fourth, *not enough attention was paid to relevant market indicators*, for example, the yield spread of Korean Development Bank (KDB) bonds (state-guaranteed obligations denominated in dollars) over U.S. treasuries, and the expected won depreciation implied by prices in the offshore nondeliverable forward market. As noted in Park and Rhee (1998), both of these began signaling profound market unease over events in Korea as early as August 1997 (Figure A2.2, top panel; and Figure A2.3, top panel). From August to October 1997, the bond spread widened and the nondeliverable forward rate indicated increased expectations of depreciation (though these movements would be dwarfed by developments during the crisis period).<sup>10</sup> Nowhere in the briefs leading up to the November program-negotiation mission can one find a reference to the negative signals emanating from these sources.

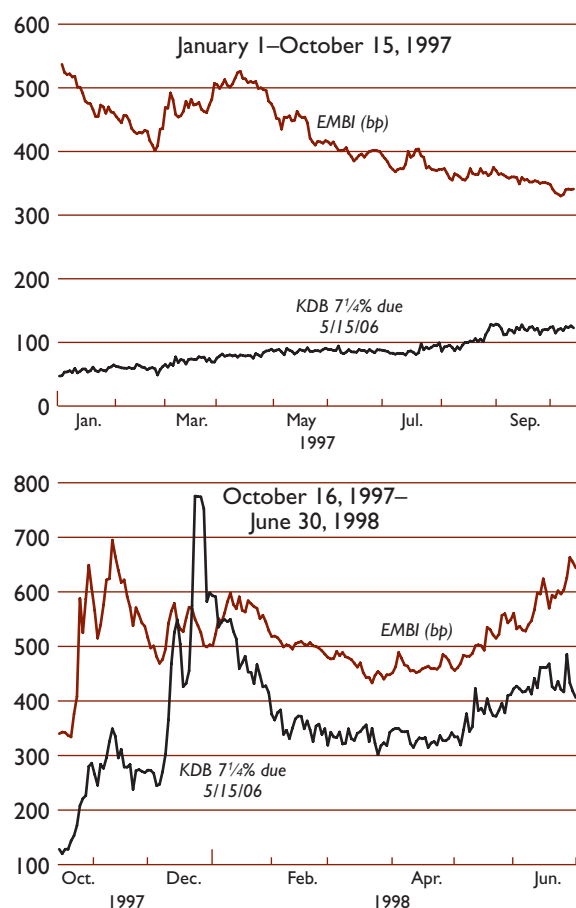
Finally, and more generally, bilateral surveillance in the years preceding the crisis was *not sufficiently sensitive to the short-term stability implications of financial sector liberalization*.<sup>11</sup> The prior experience of liberalization in other countries, such as the Nordic countries or the savings and loan crisis in the United States, was that liberalization tended to be followed by excessive lending and radical restructuring of the financial industry, with firms, consumers, and regulators learning the ins and outs of the new system through trial and error. The long-term benefits of such

would be little or no growth in the fourth quarter, and growth below potential in 1998.

<sup>10</sup>Under conditions of full capital mobility and liquid money and bond markets, the forward won-dollar exchange rate would simply correspond to interest rate differentials between Korea and the United States, but these conditions were not present for Korea at that time. The forward rates in the nondeliverable forward market were more depreciated than those in the relatively thin onshore won-dollar forward market during this time, implying that the onshore rates were being artificially supported by official intervention (Park and Rhee, 1998).

<sup>11</sup>However, many of the relevant issues were well known to the IMF staff, having been addressed in studies such as Lindgren and others (1996) and Alexander and others (1997).

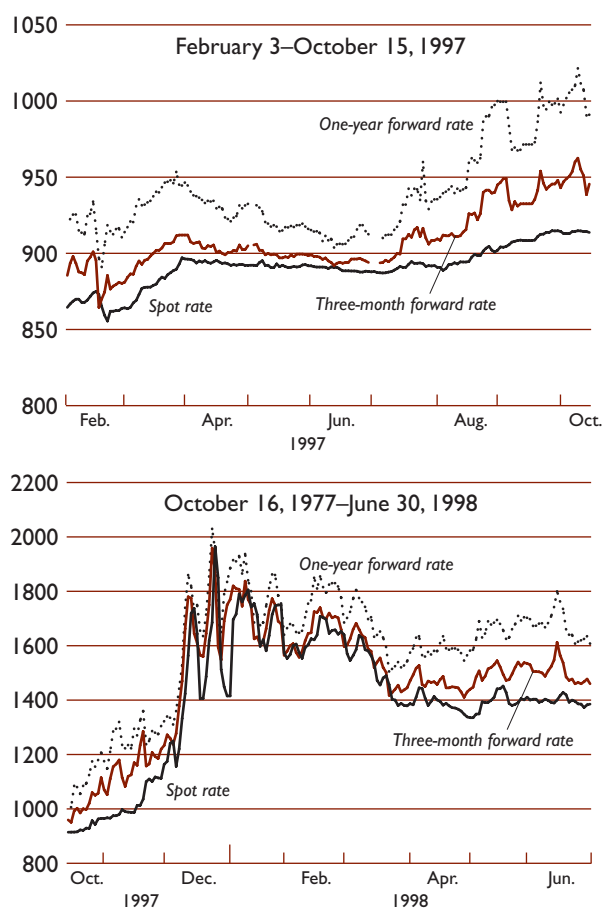
<sup>9</sup>Given the strong growth that had already occurred in the first three quarters of 1997, this represented a prediction that there

**Figure A2.2. Korean and Emerging Market Borrowing Spreads***(In basis points over comparable U.S. treasury rates)*

Source: Datastream.

liberalization came only after a period of experimentation and instability. The advice offered to Korea in the late summer and early fall of 1997, to the effect that the solution to the immediate problems of the financial sector lay primarily in strengthening and accelerating the reform agenda, may have been valid from the perspective of the long-term health and efficiency of the system, but did not offer much guidance as to how the Korean authorities should secure the system against the external shocks that had already started to hit nearby countries.<sup>12</sup> The Article IV con-

<sup>12</sup>The briefing paper prepared for the 1997 Article IV consultation identified four priorities for reform of the Korean financial sector: removing nonprudential controls on balance sheets, which had served as vehicles for political involvement; removing the implicit and explicit guarantees against bank failures; ensuring “a well-targeted safety net,” an apparent reference to deposit

**Figure A2.3. Won–U.S. Dollar Spot and Forward Rates<sup>1</sup>**

Source: Reuters.

<sup>1</sup>The forward rates are implicitly derived from offshore nondeliverable forward prices.

sultation mission did urge the authorities to assess the extent of the banks' NPLs and the scope for provisioning. Relatively little advice was offered, however, toward the formulation of a strategy for restructuring and recapitalizing the banking sector in the face of a possible crisis, beyond general principles such as avoiding regulatory forbearance, limiting public support to the minimum necessary, and broadening the role of the KAMCO. This reflected the IMF's lack of experience at that time in the resolution of domestic financial sector crises.

While these factors were not adequately assessed in the IMF surveillance reports, there was recogni-

insurance; and facilitating merger and acquisition activity in the financial sector.

tion internally that they may pose serious problems. A team from the RES Capital Markets Division had visited Korea earlier in the year, as part of their preparation for the annual *International Capital Markets* report, and had identified several weaknesses in the Korean financial system. Expanding on these findings, a member of the team later prepared an internal note detailing some of the vulnerabilities, including the NPL problems. Commenting on the Article IV pre-mission brief, RES cited the authorities' "widespread and unconditional" support for troubled financial institutions, the poor state of supervision and regulation, and the rapid rise in short-term debt as potential sources of risk. RES also expressed skepticism over the willingness of the authorities to allow the exchange rate to adjust in the way envisaged in the briefing paper, given their history of intervention.

In part, the shortcomings of surveillance in the pre-crisis period reflected a shortage of analytical resources. Because of Korea's record of stability, relatively few staff members were following the country regularly during the time preceding the crisis.<sup>13</sup> Korea was usually covered either by the division that also was responsible for following Japan, or by the one that covered China; in both cases, the bulk of analytical resources was devoted to the larger country. There was little in the way of structural analysis of Korea's financial and corporate sectors available from the World Bank, because Korea had "graduated" from Bank lending programs in the early 1990s.<sup>14</sup> Moreover, by the fall of 1997, APD was stretched thin by the crisis spreading throughout the region, so senior staff had to be transferred from other country assignments to lead the Article IV consultation mission.

However, several of the lapses identified above represented not so much a lack of familiarity with or knowledge of Korea, as a failure to draw the appropriate parallels with experiences in other economies. This was the case both for contemporaneous developments—contrasts with Taiwan Province of China, Singapore, Malaysia, and Thailand have already been noted—and for prior experience, as with bank reform and restructuring in the Nordic countries.

Surveillance also suffered from the poor quality of the available data, particularly on the vital topics of NPLs, external debt, and usable reserves. The lack of

good data appears in part to have reflected the data provision policies chosen by the authorities. Until November 1997, there was little internal discussion of the need to press the authorities to improve the quality of statistics on their debt and reserves.<sup>15</sup> At the same time, certain data sources appear to have been overlooked. For example, the consolidated and locational statistics compiled by BIS pointed to sharp increases in interbank debt, and particularly short-term debt, in the years immediately preceding the crisis.<sup>16</sup> As noted above, another key reason for the poor quality of the data was the tendency for both the staff and the authorities to think about capital flows only in terms of a "residence" concept rather than "nationality." As a result, they relied on prevailing statistical definitions that did not include the obligations of Korean banks' overseas branches among the liabilities of the Korean financial sector, although nationality-based data were available, albeit in limited form, from BIS and national sources.<sup>17</sup>

## Program Design

This section reviews the major elements of program design in the IMF-supported program for Korea, as agreed at the beginning of December 1997 and modified over the subsequent months (Box A2.2), including monetary and exchange rate policy, fiscal policy, financial restructuring, and nonfinancial structural reforms.

## Monetary and Exchange Rate Policy

### Evolution of the IMF's policy advice

The monetary policy section of the briefing paper prepared for the November 1997 negotiating mission was the outcome of considerable internal debate. In commenting on an earlier draft of this brief, RES suggested that monetary policy should guide the exchange rate to a range close to its then prevailing level, while MAE suggested that it would not be possible to determine an appropriate exchange rate

<sup>13</sup>The 10 Article IV consultation missions from 1988 to 1997 were headed by six different individuals, though the same person headed the consultation missions in 1995, 1996, and 1997. Only one other staff member participated in more than 2 of the 10 consultation missions.

<sup>14</sup>On the other hand, with Korea's accession in December 1996, the OECD was developing considerable expertise on Korea. In view of this, the IMF later invited the OECD to provide inputs into the structural conditionality of the December 1997 program in the area of corporate governance.

<sup>15</sup>The staff report for the 1995 Article IV consultation remarked that "Korea's economic statistics [were] of high quality and [were] reported to the IMF on a timely basis."

<sup>16</sup>In December 1997, data were available from the BIS consolidated banking statistics through the end of 1996. This put Korea's liabilities to reporting banks at US\$100 billion, of which US\$67.5 billion was short-term (by resident maturity). This represented an increase in bank debt of US\$22.5 billion over the previous year, including an increase of about US\$13 billion in short-term debt. More up-to-date data were available from the "locational" series, published in November 1997, with data covering up to end-June 1997. This suggested that borrowing from international banks had continued to grow in the first half of 1997.

<sup>17</sup>For example, some of this information was available from the U.K. and U.S. national supervisory data.



### Box A2.2. The IMF-Supported Program in Korea

The policy actions undertaken by Korea in connection with the SBA were detailed in a “Memorandum on the Economic Program” attached to the “Letter of Intent,” which was signed by the Minister of Finance and Economy and the BOK Governor, and in a letter on “Prior Actions,” signed by the Minister of Finance and Economy alone. The Memorandum detailed the actions that the authorities intended to undertake and identified performance criteria and structural benchmarks that they were committed to achieve. In fact, there were only two explicit performance criteria in the initial program, namely, targets for NIR and for NDA, though there was extensive discussion of policies that would be pursued in other areas. The prior actions letter detailed measures that had been taken or would be taken in short order upon approval of the program by the Executive Board. These two documents specified actions that had been or would soon be taken in the following areas:

#### **Monetary and exchange rate policy**

##### **1. Prior action**

The overnight call rate, then roughly 12.7 percent, would be raised to 25 percent by December 5, 1997, and maintained there until the program’s inflation objective had been achieved and the exchange market had stabilized.

##### **2. Performance criteria**

- a. A floor was specified for NIR and a ceiling for NDA.
- b. New foreign exchange advances from the BOK to banks were to carry a penalty rate of 400 basis points over LIBOR, for at least the next four weeks.

##### **3. Other measures**

- a. The growth rate of M3 would be reduced, then kept in line with an inflation objective in 1998.

- b. The liquidity injection that had taken place in recent weeks in support of the banks would be reversed.
- c. Exchange rate intervention would be limited to smoothing operations.

#### **Fiscal policy**

##### **1. Prior actions**

Transportation and excise taxes were to be increased immediately.

##### **2. Other measures**

- a. The public sector budget in 1998 would be close to balance. To counteract the carrying costs of the financial sector cleanup and the impact of slower growth, this required contractionary measures of 1.5 percent of GDP.
- b. In addition to the tax increases already mentioned, measures would be formulated on both the revenue and the expenditure sides.

#### **Financial sector restructuring**

##### **1. Prior actions**

- a. Nine troubled merchant banks were closed on December 2, 1997, with depositors fully protected.
- b. The remaining merchant banks would be required to develop plans to meet the capital adequacy standards that had been established by the Basel Committee on Banking Supervision (BCBS) by June 1999, subject to the approval of the MOFE.
- c. Two troubled commercial banks (widely understood, and later revealed, to be Korea First Bank and Seoul Bank) would be required to develop plans to achieve the BCBS capital adequacy standards by mid-1998, subject to the approval of the BOK. Until then, they would be “subject to inten-

target at that time. MAE argued that there was a risk that targeting the exchange rate would prove unsustainable, because the high domestic interest rates needed to defend it would exacerbate the bad loan problem over time.

The brief that emerged represented a compromise. It envisaged “a tightening of monetary policy directed at containing the impact of recent won weakness on inflation and preventing a significant further weakening of the currency.” A target of 8.5 percent growth in M3 was set for 1998, significantly lower than the 15.8 percent M3 growth projected for

1997. The proposed program also involved “an (implicit) [parentheses in original] target range for the won’s nominal effective exchange rate with the understanding that monetary policy [would] be tightened if the rate [fell] to the bottom of this range,” though the exact range was not specified.

By the time the program was finalized in early December 1997, the role envisaged for monetary policy had shifted. A nominal effective exchange rate target was no longer contemplated. Instead, the objectives of monetary policy were defined to be to contain inflation to 5 percent and to limit down-



sive supervision,” which might include mergers or asset sales.

- d. Other commercial banks would be required to make provision for loan losses by March 1998, and to develop plans by mid-1998 to achieve the BCBS capital adequacy standards by end-1999, subject to the approval of the BOK.
- e. Losses were to be taken first by shareholders, then by nonguaranteed creditors.
- f. The ceilings on share ownership by foreigners were to be increased.
- g. Restrictions on hostile takeovers, friendly takeovers of financial institutions by foreign institutions, foreign ownership of merchant banks, and the ability of foreign institutions to set up Korean branches and subsidiaries were to be removed.
- h. The government would develop an action plan for bringing supervision and regulation up to international standards.

## 2. Other measures

- a. The Bank of Korea was to be made independent, with a mandate for price stability.
- b. Supervision of commercial banks, merchant banks, securities firms, and insurance firms would be consolidated in an autonomous agency.
- c. A consolidated deposit insurance corporation, financed by the issuance of government-guaranteed bonds, would be set up.
- d. Foreign access to the Korean money and bond markets would be liberalized.
- e. A timetable would be established by end-February 1998 to allow overseas borrowing by corporations.
- f. There would be no government intervention in banks’ management and lending decisions, except as required by prudential regulations. Where there was policy-oriented lending, the interest subsidy would be included in the public sector budget.

ward pressure on the won. There would be an immediate increase in interest rates to demonstrate the government’s resolve in the face of the crisis and to calm the markets. Interest rates would later be brought down somewhat, but would remain high enough to limit downward pressure on the won and to ensure that inflation would be no higher than 5 percent in 1998. A target for broad money growth was set for the fourth quarter of 1997 but, unusually for IMF-supported programs at that time, monetary policy for the following year was to be guided by an inflation target. An inflation target,

## **Corporate sector, trade, labor market, and information provision**

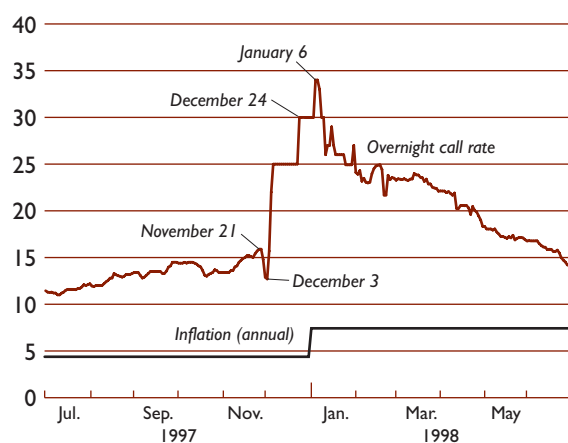
### 1. Other measures

- a. Corporations would regularly prepare consolidated, audited financial statements. Accounting and disclosure standards were to be brought up to internationally accepted levels, including independent external audits.
- b. The authorities would set up a timetable for eliminating trade-related subsidies, restrictive import licensing practices, and the import diversification program.
- c. Korean legislation on takeovers would be harmonized with that of other countries.
- d. The existing bankruptcy code would be allowed to operate without official interference, with no bailouts of individual companies.
- e. With the assistance of multilateral lending organizations, a plan would be formulated to reduce corporate leverage, develop traded capital markets, and change the system of cross-guarantees within conglomerates.
- f. Labor-market flexibility would be improved, including strengthening of the employment insurance system.
- g. Provision of data, on such matters as foreign exchange reserves, nonperforming loans, capital adequacy, ownership of financial institutions, external debt, and local government finances, would be improved.

The above list formed the basis for the policies that Korea would undertake over the next two years. A modified program was agreed on December 24, 1997, along with a faster disbursement of IMF resources. The revised program specified additional measures that would be undertaken (in most cases, this amounted to an accelerated timetable of agreed measures). Subsequent program reviews would convert some of the items listed into explicit structural conditions, and add new reform measures in the same spirit as those listed.

however, was not made part of formal conditionality in the program.

Two principal developments appear to have contributed to this change in focus. One was the sharp depreciation in the won, from W 987 per U.S. dollar on November 17 to W 1,249 on December 4. This made it virtually impossible to determine an exchange rate range that could be relied on as an anchor for policy. A second factor was that the BOK continued to provide won liquidity to troubled banks at favorable interest rates, even while the program negotiations were under way. As a result, the call

**Figure A2.4. Korea: Overnight Call Money Rate and Inflation***(In percent)*

Source: Datastream.

money rate declined to 12.7 percent on December 2 from 15.0 percent on November 17 (Figure A2.4). The staff felt that strong action would now be necessary, in part to stem the drop in the exchange rate, but primarily to reestablish monetary control and to demonstrate the authorities' resolve to regain exchange rate stability. Once the foreign exchange market had been stabilized, policy would be loosened, but would remain geared toward containing any inflationary effects of the weaker won and counteracting further depreciation.

Monetary policy, along with the closure of the merchant banks (discussed below), was one of the principal issues on which the authorities and the IMF disagreed most strongly during the first phase of the negotiations. The authorities feared that excessively high interest rates would cause an increase in bankruptcies in the highly leveraged corporate sector. Only with the intervention of the Managing Director in the final stages of the negotiations did the Korean authorities agree to raise interest rates to the levels thought necessary by the IMF.

The temporary nature of the rate increase was underscored in the letter on prior actions, signed by the Minister of Finance and Economy, that accompanied the request for an SBA. This letter specified that the call rate would be raised to 25 percent, and "maintained at that level until the time it [would] be judged—in consultation with the IMF staff—that it [could] be progressively brought down to a range of 18–20 percent."

The call rate was duly raised to 25 percent in early December 1997, but confidence was not re-

stored. Instead, the won remained extremely volatile and fell to record lows (Figure A2.1). The IMF urged a still tighter policy, but this could not be implemented immediately because of a 35-year-old usury law that set a ceiling of 25 percent on the call money rate. A law increasing the usury ceiling was passed on December 14, after which this rate was promptly raised to 30 percent. Further increases followed and the call rate peaked at 34 percent in early January 1998. However, by mid-December, it was clear to the authorities and the IMF (particularly the mission team in Korea) that this situation was not sustainable, given the impact it had begun to have on corporate balance sheets and given continued capital outflows. This spurred the search for another solution, namely the strengthened program and coordinated debt rollover announced on December 24.

The staff continued to endorse the maintenance of relatively high real interest rates in the early months of 1998, believing that the exchange rate had not yet fully stabilized and that there was still a risk of accelerating inflation. The call rate was maintained in the 20–25 percent range for the first three months of the year, and then was lowered gradually in the spring and summer. There was a strong concern that premature loosening of monetary policy would lead to a loss of monetary control and renewed depreciation of the exchange rate, as had happened in Indonesia.<sup>18</sup> The staff acknowledged that the tight monetary policy (along with higher capital adequacy requirements) contributed to a credit squeeze, but contended that the best way to ameliorate the squeeze would be to implement the accelerated timetable for financial sector restructuring and to provide official liquidity to sound institutions against appropriate collateral. In the Executive Board reviews of the Korean program, comments tended to favor maintaining a tight monetary policy in support of the exchange rate. However, in the February discussion, one chair warned about "overkill" and suggested a more active willingness to ease policy once the exchange rate had stabilized.

Real interest rates during the first half of 1998 were very high by the standards of most industrial countries facing a recession, though not unusually high for emerging economies in crisis (see Table 4.2 in the main report). Using the actual 1998 CPI inflation rate of 7.5 percent, the overnight call money rate reached a high of 26.5 percent in real terms in early January, before falling to around 15 percent in February, 10 percent in early May, and single digits for the

<sup>18</sup>RES was opposed even to the gradual lowering of rates that occurred in early 1998, and continued to urge that policy be oriented toward a target range for the exchange rate.

### Box A2.3. Recent Studies on the Impact of High Interest Rate Policy in Korea

In the case of Korea, two recent empirical papers have yielded the result that higher interest rates (relative to their U.S. equivalents) had an appreciating effect on the won–U.S. dollar exchange rate during the 1997–98 crisis. Cho and West (2000) used daily data for the period December 17, 1997–June 30, 1999 to estimate regression and vector-autoregression (VAR) models and found that, with appropriate control for risk, liquidity, and some external factors, a higher call rate was associated with exchange rate appreciation. Likewise, Chung and Kim (2002) applied a nonlinear econometric methodology (in order to take account of both levels and changes in interest rates) to daily data for the period January 4, 1995–September 30, 1998 and found that, in a bivariate VAR framework, a higher certificate of deposit (CD) rate led to an initial depreciation of the exchange rate for a few days, followed by an appreciation sustained over a few months, even during the crisis period (December 1, 1997–March 31, 1998) when the level of interest rates was high. It should be noted, however, that (1) a substantial portion of the sharp currency depreciation of the crisis period had already occurred by the beginning of the sample period in the Cho-West (2000) study, with a trough on December 24, and (2) the parameter estimates of the Chung-Kim (2002) study come from a sample that include a relatively long noncrisis period. Given these qualifications, the studies do not seem to present a strong case against the undeniable fact that the Korean won depreciated from W 1,163 to W 1,964 per U.S. dollar in December 1997 while the call rate was raised from 13 percent to 30 percent. More likely, these studies provide a confirmation of the conjecture that tight monetary policy maintained in the aftermath of the sharp depreciation helped to ensure that the subsequent real appreciation took the form of nominal appreciation rather than higher inflation.

rest of the year.<sup>19</sup> This represented a return to precrisis levels, which averaged about 8 percent in 1996–97.

The three-year corporate bond yield was 200–500 basis points less than the call rate from January through May, after which the call money rate fell substantially below the corporate bond yield. This implies, after appropriate allowance is made for the corporate credit risk premium, that the latent domestic currency term structure moved from being inverted to being upward-sloping either in May or soon afterward, offering another indicator that the monetary stance loosened around this time.

#### Assessment

As in other crisis countries, monetary policy in Korea reflected a trade-off between, on the one hand, the need to reestablish external credibility, control inflation, and stabilize the exchange rate, and, on the other, the need to support domestic demand at a time of financial sector restructuring. As discussed in the

main report, most economic policymakers at the time accepted the existence of a link between higher interest rates and a stronger exchange rate. While this view has been challenged since the Asian crisis, the large theoretical and empirical literature that has emerged has yet to settle the matter (Box A2.3). The literature, however, does suggest that the relevant issues and relationships differ, depending on whether one is defending an exchange rate in the midst of a crisis, or attempting to manage the situation in the aftermath of an episode where the exchange rate has overshot its equilibrium level. In the latter case, the objective is to ensure that the required real appreciation occurs not through domestic price increases but through nominal appreciation (Goldfajn and Gupta, 1999).

For Korea, this suggests that there are in fact two distinct issues to consider:

- Were high interest rates justified as a means to stabilize the won at the outset of the crisis in December 1997?
- Were high interest rates justified in the early months of 1998, after the most critical stage of the crisis had passed but the exchange rate remained substantially weaker than its earlier levels?

It is difficult to answer these questions conclusively, given the lack of consensus in the academic and policy communities. However, we can look at which of

<sup>19</sup>Independent inflation forecasts for 1998 were around 11 percent in the early months of that year, suggesting that real interest rates measured using expected inflation were only a few percentage points below the levels cited here. See Bloomberg News, “Korea’s Consumer Prices Fall 0.2 percent in March,” March 31, 1998. In terms of realized *monthly* inflation rates, the real call rate was briefly negative in December because of the one-time jump in prices resulting from the depreciation.

the identified effects were operating in Korea at the time, and at whether the IMF took sufficient account of the relevant issues in formulating its policy advice to the Korean authorities.

### **Stabilizing the exchange rate**

After the Korean authorities floated the currency, the immediate objectives of monetary policy were to arrest the sharp decline of the exchange rate and stabilize the foreign exchange market. However, the closed nature of Korean capital markets limited the channels through which monetary policy could achieve those goals. Higher interest rates could not have stabilized the won by increasing the cost of speculation against the currency. While the offshore market, mentioned earlier, was a potential source of speculative pressure, it was by no means the primary reason for the won's weakness. Korea faced increased demand for liquidation of foreign currency claims rather than a conventional speculative currency attack. There was little risk of domestic capital flight, because of limits on the ability of residents to take funds out of the country.<sup>20</sup> Though foreign currency deposits held by residents rose 267 percent in U.S. dollar terms from end-June to end-November 1997, even at the end of November they totaled only US\$5.3 billion, so this trend had little impact.<sup>21</sup> Conversely, foreign entities did not have many vehicles through which to invest in won-denominated assets. In practical terms, neither the long-term bond market nor the short-term money market was open to foreigners. It was possible to lend to Korean entities—but these were precisely the loans that foreign financial institutions were rushing to liquidate. Foreigners could also invest in the stock market, but higher interest rates would be likely to discourage foreign share purchases in conditions of panic, by lowering realized returns and thus depressing market sentiment.

In the view of IMF staff at the time, the main channel through which the interest rate defense would operate was that higher interest rates would raise the opportunity cost for Korean banks of not having their foreign currency loans rolled over. A Korean bank with an outstanding short-term dollar-denominated loan about to come due could either promise to pay its foreign lender a higher dollar interest rate, inducing

the latter to roll over the loan, or it could borrow won on the domestic market—in effect, a loan from the central bank, given the guarantee mechanisms in place—and use the won to buy dollars in order to pay off the loan. The second of these two options, if pursued by enough institutions, would cause downward pressure on the won. A higher won interest rate might induce more Korean banks, at the margin, to choose the former course rather than the latter. In this sense, the high won interest rates were a complement to the policy of having the central bank charge a penalty rate for foreign exchange advances; both policies were intended to induce Korean banks to seek rollovers rather than drawing on central bank liquidity.

Given the nature of the Korean crisis, however, very high interest rates were necessary for this channel to operate effectively. For many creditor banks, the rollover decision depended more on their assessment of credit risk—including the suddenly heightened risk, not merely of their Korean positions, but of East Asian exposure in general—than on the interest rate their Korean counterparties offered them. It is not clear if *any* level of interest rates offered by Korean borrowers would have been high enough to induce such banks to roll over their loans. This was borne out by events, since capital outflows only stopped when the high interest rates were complemented by the coordinated rollover agreement.

Thus, a tighter monetary policy may have been necessary to slow the leakage of foreign exchange and to prevent a full-scale collapse of the exchange rate, but it was not sufficient as a means to reverse capital outflows and resolve the crisis. If the staff had come into the crisis with a better understanding of the nature of Korean capital markets, then it is possible that less emphasis would have been placed on monetary policy in the initial formulation of the program, and more on finding an alternative solution to the worsening liquidity crisis.

### **The recovery and the transition to lower rates**

According to the objectives set out in the IMF-supported program, monetary policy during the first half of 1998 had two goals: to stabilize the foreign exchange market and to counteract the inflationary effects of the depreciation. As regards the first objective, one can argue, with the benefit of hindsight, that monetary policy was guided by an excess of caution rather than deliberate overkill. The won strengthened from W 1,964 to the U.S. dollar on December 24, 1997 to around W 1,400 at the end of March 1998, and remained at or near that level for the next three months (see Figure A2.1). The volatility of the exchange rate declined steadily in the first half of 1998 (Figure A2.5). The volatility of the won–U.S. dollar rate (measured as the standard devi-

<sup>20</sup>However, residents could still circumvent these restrictions by accelerating or postponing cross-border payments.

<sup>21</sup>Residents' foreign currency deposits fell 31 percent in U.S. dollar terms in December 1997. This suggests that local residents did not try to flee the currency, but instead participated in the global run on the dollar holdings of the Korean banking system. Foreign currency deposits were stable as a fraction of total deposits during December, as these withdrawals were balanced by the won's depreciation (which increased the value of dollar deposits relative to won deposits).



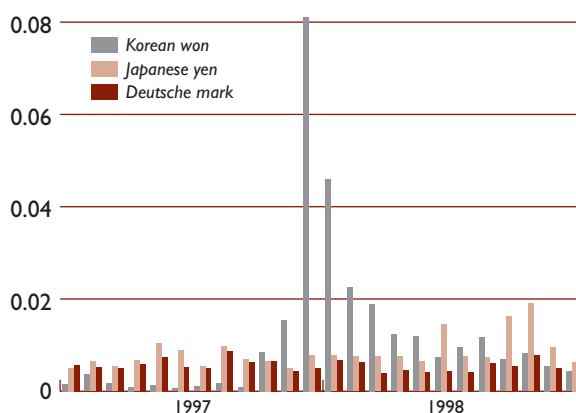
ation of daily logarithmic changes) fell to 0.7 percent in June 1998 from 8.1 percent in December 1997. For comparison, the monthly volatility levels of the Japanese yen–U.S. dollar and deutsche mark–U.S. dollar exchange rates during this time ranged between 0.4 percent and 0.8 percent.

Did high real interest rates contribute to this stabilization? It is difficult to answer this question without being able to test the alternative hypothesis. Certainly it was important to maintain high real interest rates in order to prevent a flight from won-denominated assets by Korean institutions and individuals, though, as noted above, there were few channels through which this could occur. But the government's prompt actions in starting to address the problems in the corporate and financial sectors are likely to have done more to rebuild the market's confidence in the Korean economy.

The second principal motivation for the level of interest rates, namely the need for a tight monetary policy to contain inflation, was open to question. With unemployment at 7 percent, the gap between actual and potential GDP was probably quite large. The experience of such countries as the Philippines and Thailand in the late 1990s and Finland and Sweden in the early 1990s shows that there is no reason to assume a large sudden depreciation will necessarily lead to a correspondingly large acceleration of inflation. Academic work produced after the crisis has investigated the reasons why “pass-through” tends to be weaker than expected in such situations. Burstein and others (2001) cite two countervailing effects: first, consumers tend to substitute domestic for foreign goods; and second, the component of the final price of a “tradable” good that is sensitive to the exchange rate is often quite small relative to domestic cost components such as transportation and distribution. Of course, these experiences, and the lessons that have been drawn from them, were not fully available or understood at the time of the Korean crisis.

High interest rates undoubtedly imposed costs on the domestic economy, but these are difficult to quantify. Given the short-term structure of corporate finance, the transmission of high interest rates to the real economy was rapid. At the time of the crisis, some 35 percent of domestic corporate debt had an average maturity of less than three months, and about 70 percent had a maturity less than one year. One reason for this was the extensive use of three-month promissory notes as a means of payment among enterprises, especially among small and medium-sized ones (Baliño and Ubide, 1999). In the case of Korea, given the high leverage and export orientation of the corporate sector, the adverse balance sheet consequences of a lower exchange rate may well have been much smaller than the cost of higher interest rates (Krueger and Yoo, 2002).

**Figure A2.5. Daily Volatility of U.S. Dollar Exchange Rates Against Korean Won, Japanese Yen, and Deutsche Mark<sup>1</sup>**



Source: Datastream.

<sup>1</sup>Measured as standard deviations of daily logarithmic changes.

As the crisis developed, the IMF staff became more aware of these vulnerabilities and often mentioned the impact of high interest rates on the corporate sector in program reviews and communications with management. However, the collapse in business and consumer confidence and the sudden, sharp contraction in financial intermediation, which was due to the need to clean up balance sheets and rebuild capital levels, probably played a more important role in creating the recession than did the level of interest rates per se. As the experience of Japan has shown, banks that are burdened with weak balance sheets are usually reluctant to finance business investment, even when their cost of funds is very low. An alternative financing channel, the corporate bond market, began to grow rapidly during this period, but it took time for the necessary market infrastructure to be developed (Oh and Rhee, 2002).<sup>22</sup>

While the move toward a gradual reduction in policy rates in the aftermath of the crisis was justified, the rates themselves remained above levels that would have been more appropriate to helping the country get out of recession. In this context, the lack of a clearly defined and well-announced framework to guide monetary policy was not helpful.<sup>23</sup> The IMF was aware that there was scope for further eas-

<sup>22</sup>Later events would show that the growth of domestic corporate bond issuance had been partially supported by lax supervision of the investment trust companies that were a primary vehicle for retail investors (see section on “Financial sector reform,” below).

<sup>23</sup>The program contained a broad inflation target, but no mechanism was specified to achieve that objective.



ing and understood the effect the high rates were having on the corporate sector but, for fear of the crisis returning, was reluctant to allow rates to fall more quickly. In retrospect, an earlier easing of rates would have been justified. However, it must be recognized that the IMF was faced with making a very difficult judgment, based on incomplete information, as to whether an earlier easing of rates would have triggered renewed exchange rate pressures, particularly given the unsettled currency markets in the East Asian region. Moreover, the period of unusually high real rates was only a few months. Given other weaknesses of the economy, particularly the breakdown in financial intermediation, it is doubtful that an earlier loosening of monetary policy would, by itself, have prevented the recession, although hindsight now suggests that some earlier loosening would have been warranted.

## Fiscal policy

### Background

Korea's public sector budget was essentially in balance at the onset of the crisis. The authorities projected a deficit of 0.2 percent of GDP in 1997 and a surplus of 0.25 percent in 1998, after surpluses of 0.3 percent in the two previous years. Public debt was only 6 percent of GDP.

Despite the very healthy position of public finances at the start of the crisis, the staff's initial approach was to favor a tight fiscal policy. In a draft briefing paper prepared before the program mission in late November 1997, APD proposed fiscal measures that would not only pay for the carrying cost of debt issued for financial sector restructuring, but also result in a surplus of 1.5 percent of GDP in 1998. The tighter fiscal policy was meant to secure the needed current account adjustment without increasing the burden on monetary policy and the exchange rate. Some review department comments urged a still greater fiscal adjustment, in order to signal the government's resolve and to be prepared if restructuring costs were larger than expected. It was pointed out that, given the experience of Thailand and Indonesia, the authorities could not always be trusted to maintain tight monetary policies under conditions of severe financial sector weakness, so that a greater burden of adjustment should be placed on fiscal policy.<sup>24</sup> However, this latter approach was rejected by IMF management in recognition of the fact that the precrisis fiscal situation was largely in balance and the need to

avoid fiscal "overkill." As a result of management's intervention, the proposed surplus for 1998 in the pre-mission brief was reduced to 1 percent from 1.5 percent of GDP.

Fiscal policy was not a major area of disagreement between the IMF and the authorities in negotiating the IMF-supported program. The eventual program envisaged a surplus of about 0.15 percent of GDP in 1998, which was still smaller than in the premission briefing paper. This figure incorporated the surplus of 0.25 percent of GDP projected before the crisis; a 0.8 percent shortfall because of slower growth; 0.8 percent in carrying costs for the financial sector cleanup, based on the assumption that the cleanup would eventually cost a total of 5.5 percent of GDP;<sup>25</sup> and offsetting measures of 1.5 percent. As a demonstration of the authorities' resolve to undertake these offsetting measures, an increase in the transportation tax and an excise tax were among the "prior actions." This fiscal stance was broadly supported by the Executive Board when the program was discussed, with only one Executive Director expressing concerns and suggesting a more expansionary fiscal stance.

Even the 0.15 percent projected surplus could be said to incorporate an implicit assumption that Korea would run a deficit under the policies stated in the program document. This is because the staff believed that the program's growth assumption of 2.5 percent for 1998, as agreed with the authorities, was overstated. According to staff members interviewed by the evaluation team, the staff expected growth in 1998 to be zero or even negative. It nevertheless agreed to include a positive growth forecast at the urging of the Korean authorities, who wanted this for political reasons.<sup>26</sup>

In the early months of 1998, as growth projections worsened, the program assumed an ever greater deficit. The staff recommended that the authorities "let automatic stabilizers work," in other words, that they take no action to offset the projected deficits. Internal documents show that IMF management was apparently more keen than the staff to allow for flexibility in fiscal policy. An early draft of the staff report accompanying Korea's late-December request for accelerated disbursements stated that fiscal policy would "need to remain tight." This conformed to

<sup>24</sup>While there was no explicit discussion of fiscal sustainability, it was implicitly recognized that, given Korea's low precrisis level of sovereign debt, sustainability was not an issue, provided that the crisis was resolved quickly.

<sup>25</sup>The net fiscal costs of bank restructuring, now estimated at 23 percent of GDP, have turned out to be still greater than had been feared in 1997.

<sup>26</sup>However, if there was staff pessimism about near-term growth prospects, there was no evidence of this even in internal program documents before the late spring of 1998. The confidential premission brief prepared on November 21, 1997, also projected 2.5 percent growth for 1998. The staff report accompanying the second bi-weekly program review, prepared on January 8, 1998, stated that, "[the] downturn in growth [was] likely to be sharper than previously expected, particularly during the first quarter." Yet, that review included a positive growth forecast for 1998, as did every subsequent program review until that of May 19, 1998.

the authorities' commitment, in the December 24 LOI, that "the initial fiscal adjustment of the program [would] be maintained despite higher costs to the government associated with the larger depreciation of the won and with financial sector restructuring." However, at the urging of management, the language in the staff report (but not in the LOI) was replaced by a statement that "the staff's preliminary assessment [was] that . . . automatic stabilizers should be allowed to operate."

The Korean authorities were reluctant to do so, in accordance with their traditional inclination toward fiscal conservatism. Government consumption expenditures fell by 0.4 percent in real terms in 1998. Nevertheless, because tax revenues fell even further than did government spending, Korea ended up running a budget deficit of 4.3 percent of GDP in 1998, or 1.5 percent in cyclically adjusted terms. The public sector deficit was further augmented by the activities of off-balance-sheet quasi-public entities such as the KDB (Cho and Rhee, 1999).

### Assessment

In terms of the role of fiscal policy, the Korean situation in November 1997 differed from the typical situation in which IMF assistance is sought. The level of outstanding public debt was very low. The government faced potentially very large contingent liabilities through its de facto guarantee of foreign currency bank debt.<sup>27</sup> The bailout of Kia raised suspicions that the government's de facto domestic-currency contingent liabilities were also large. However, domestic and foreign investors did not doubt either the capacity of the public sector to maintain control of its fiscal processes, or the political commitment of the authorities to maintain a sustainable level of sovereign debt. When international credit-rating agencies lowered Korea's debt ratings sharply at the end of 1997, they were careful to assert that this reflected the country's dire liquidity situation, rather than the underlying strength of its economy or its overall debt position.

Under these conditions, there was scope for a "debt for debt" swap, in which the government would draw on its extensive spare domestic and international borrowing capacity to offer its obligations in exchange for those of the country's troubled financial sector. Indeed, this is what eventually happened. Leaving aside

the admittedly important moral-hazard and burden-sharing issues of such an approach, the question for fiscal policy then comes down to whether the carrying cost of the government debt issued in this process should have been paid for through current receipts, as the IMF initially proposed, or through issuing additional debt. A good argument could be made that there was scope for the carrying costs, too, to be financed temporarily by public borrowing, since Korea's past record was sound enough to convince the market that such borrowing was unlikely to spiral out of control.

Another possible role for fiscal policy would have been to counteract the contractionary effects of the restructuring of the financial sector. In this sense, the emphasis on "reducing the burden on monetary policy" was misplaced. The drive for the banks to write off bad loans and to rebuild their capital adequacy as quickly as possible was exerting a deflationary pull far stronger than monetary policy could have provided.

The initial recommendation for a relatively tight fiscal policy was, in part, the result of an excessively optimistic growth projection and in part a reflection of the IMF's traditional preference for fiscal tightening in crisis situations. However, within a month or two from the outbreak of the crisis, once it became clear that output would be well below program targets, the IMF showed flexibility in recognizing the need for a looser fiscal policy and transmitting this advice to the Korean authorities. The latter, however, were reluctant to act upon it.

The idea that a country engaged in financial sector reform should pursue a loose fiscal policy in order to support aggregate demand was not unknown at the IMF; the 1998 Article IV consultation report for Japan, produced a few months after the Korean crisis, urged just such a policy. Of course, Korea's ability to borrow during the crisis was limited by the need to rebuild the confidence of foreign investors, while Japan could finance its deficits at home, and the role of fiscal policy in Japan was itself a subject of considerable debate. There was also a limit to how aggressively the IMF could have pushed for a looser fiscal policy, given the authorities' preference for fiscal conservatism and the damage to credibility that might have come from any public criticism. Nevertheless, it is striking that such an approach was not considered more seriously at an earlier stage in the crisis.

### Financial sector reform

#### Background

In the years preceding the crisis, Korean policymakers pursued a slow but deliberate policy of financial sector reform. The authorities announced a blueprint for financial liberalization in 1993. This led to

<sup>27</sup> Ambiguity about the amount of liabilities covered by this guarantee was a further source of difficulty. At end-September 1997, short-term external debt of domestic commercial banks resident in Korea was roughly US\$24 billion, but a broader definition that included medium- and long-term debt, borrowing by foreign branches of Korean banks, and borrowing by nonbank financial institutions would raise this figure to roughly US\$106 billion.

deregulating interest rates, liberalizing the issuance of corporate bonds and commercial paper, and sharply reducing subsidized “policy lending” through state-owned institutions.

However, progress on many issues in 1997 remained incomplete, partly because of conflicts between different interest groups in the public and private sectors, and partly because of a reluctance to take bold policy measures in the lead-up to the presidential elections in December. Many observers viewed apparent reform initiatives, such as the establishment of a Presidential Commission on Financial Reform, as attempts to deflect criticism by postponing concrete action until after the elections. IMF staff members involved in surveillance before the crisis told the evaluation team that, despite the many reform initiatives, they were never sure how much genuine reform had actually taken place in Korea. Announced reforms often did not seem to have much practical effect on the behavior of financial institutions. Formal controls on transactions or activities were sometimes replaced by less transparent controls, or by informal channels of influence.

After the crisis hit, the Presidential Commission’s recommendations suddenly assumed much greater relevance. The Commission had recognized that reform was needed, not just in the content of financial sector regulation, but also in the organizational structure of the bureaucracy responsible for regulation. For example, while commercial banks were supervised by the Office of Bank Supervision at the BOK, responsibility for supervising the merchant banks lay with the MOFE. This contributed to the uneven quality of financial sector supervision across different types of institutions.

There were three important differences between the Commission’s recommendations and the restructuring program that was ultimately followed. First, the Commission did not specify the sequencing of the reforms that it recommended. Second, the Commission did not offer recommendations on the resolution of the NPL problem, partly because it was charged with offering a “big picture” vision of reform, but also because its members, like most outside observers, were not aware of the depth of the problem. Third, while it recommended the establishment of a consolidated supervisor, the Commission did not fully address issues relating to the bureaucratic structure of supervision, with the result that political infighting stalled the reform process at a crucial time.

The structural program for the financial sector had two distinct goals: to restore the health of the financial sector through the disposal of bad loans and closing or rehabilitating insolvent institutions; and to institute reforms that would improve the sector’s efficiency and stability and enable it to contribute to Korea’s growth in the longer term. Each of these as-

pects of the program are considered separately below, although the measures taken in each area were closely related.

### **Rehabilitating the financial system**

With regard to cleaning up bank balance sheets, the strategy followed was similar (though not in all respects identical) to that pursued by other countries facing banking crises in the middle and late 1990s. The key elements were the prompt closure of the most troubled institutions; the extension of the deposit insurance system, funded by government-guaranteed bonds, to protect depositors and prevent bank runs; the utilization of an asset management company, also funded by government-guaranteed bonds, to buy and dispose of bad loans; and the requirement that weak but solvent institutions submit a restructuring and recapitalization plan for approval by supervisors or face closure.<sup>28</sup> A bridge bank was set up to buy and dispose of nonperforming assets held by the merchant banks. The asset-management and deposit insurance agencies had been set up prior to the crisis but were given expanded responsibilities.

During the negotiations, the authorities initially resisted some aspects of the IMF’s strategy for cleaning up the financial sector, particularly the proposed closure of insolvent commercial and merchant banks. Such action was unprecedented in recent Korean history and the authorities were worried about the consequences for systemic stability. IMF staff members had the impression that this official reluctance to confront Korea’s financial sector problems influenced other aspects of their interactions with the Korean authorities, for example, the provision of data on NPLs. After the intervention of the Managing Director in the final stage of the negotiations, the authorities agreed as part of the first program to close nine merchant banks and to restructure two large commercial banks. Subsequently, and particularly after the election, the authorities demonstrated a greater commitment to reform, closing additional banks and accepting a more rapid pace of liberalization. What emerged was a politically realistic, yet bold program of financial sector restructuring under a team of competent administrators.

Some of the authorities’ actions did not meet the ambitious timetable set by the two December programs. Rather than being closed or sold off, Seoul Bank and Korea First Bank were nationalized. The government also became a major shareholder in several other commercial banks. Five years later, the

<sup>28</sup>Dookyung Kim (1999) and Baliño and Ubide (1999) review the early stages of this process.

privatization of these banks was still not complete.<sup>29</sup> Five smaller banks were closed in June 1998, the first such closures in Korea's recent history, but the rehabilitation plans for other undercapitalized banks were not finalized until September 1998. Legislation allowing supervisory authorities to write down the equity of failed banks without restriction was not passed until August 1998.

Despite these delays, the IMF and international investors remained confident about the Korean authorities' commitment to reform. This was because, even if measures were delayed or revised, the authorities were careful neither to backtrack from earlier pledges nor to take actions that ran counter to the spirit of reform. Between December 1997 and March 1998, 6 of the 26 commercial banks and 16 of the 30 merchant banks were closed or merged (Baliño and Ubide, 1999). As already mentioned, public funds totaling over 20 percent of GDP would eventually be committed to cleaning up the banking sector. This included equity injections, purchases of subordinated debt, purchases of NPLs, restitution to insured depositors, and funds for recapitalization.

### **Reforming the financial system**

Many of the financial sector conditions in the IMF-supported program called for carrying out recommendations that had been made by the Presidential Commission during 1997. These included creating an independent, consolidated financial regulator; liberalizing the market for ownership rights in financial institutions; removing restrictions on the activities of financial institutions; modernizing monetary policy operations; and completing the deregulation of interest rates. According to interviews with Korean officials, the fact that the financial sector elements of the program were based upon a homegrown policy meant that the authorities were generally more willing to implement these measures than they would have been if they had been entirely imposed from outside. Essentially, what the IMF did in terms of financial sector restructuring was to tip the balance of power in Korea in favor of advancing the homegrown agenda. Starting in early 1998, the World Bank played an important role in advising the Korean authorities on reform policies and in outlining operational measures.

<sup>29</sup>Average government ownership stakes in commercial banks, weighted by bank assets, rose from 17 percent at the end of 1996 to 58 percent at the end of 1998, then fell to 34 percent at the end of 2001. In January 2002, the authorities announced a plan to complete the privatization process over the next three to four years. A majority stake in Seoul Bank was sold to another Korean bank in September 2002, with the government planning to sell the remaining 31 percent by March 2004.

Following the first IMF agreement in December, the previously failed legislation passed the National Assembly, establishing the independence of the BOK and consolidating financial sector supervision in a single agency. However, the institutional arrangement of financial supervision continued to be a major area of dispute among the Korean authorities. The IMF-supported program, like the Presidential Commission, envisaged an independent regulator, but did not resolve the question of its relationship with the BOK and the MOFE. When the authorities began to draw up plans to implement this provision, the IMF at first took a neutral stance over the disposition of the new regulator, while insisting that it should remain independent of the MOFE. Ultimately, though, the IMF felt compelled to take a position in order to speed up the restructuring program. With the IMF's backing, the program ended up adopting the MOFE's vision of subordinating the Financial Supervisory Service (FSS) to a government agency, the FSC. This setup had some virtues. The new supervisory system was not formally part of the MOFE or the BOK, and the bureaucracy charged with managing and resolving the crisis was separate from the ongoing supervision function. However, the new framework had the disadvantage of allowing the MOFE to exercise influence over supervision through the participation of its officials in the FSC, a situation that was not entirely in keeping with the preferences of the IMF and World Bank.

As with the cleanup, the actual implementation of the promised reform measures was somewhat slower than had been specified in the IMF-supported program. New loan-classification standards and provisioning rules were put in place in June 1998, but the FSS, charged with carrying out the supervisory function, did not formally begin operations until January 1999. Rules imposing stronger risk management for banks' foreign exchange operations also did not become effective until 1999. Limits on large credit exposures, intended to insulate the banking system from the failure of a small number of large companies, as happened in 1997, have been phased in only gradually, in order not to disrupt credit flows to the companies concerned. At the same time, the cumulative progress of reform over the past five years has been impressive, and there have been no attempts to roll back previously implemented reforms.

### **Assessment**

Over time, the financial sector restructuring program achieved its goals of facilitating the relatively prompt removal of bad loans from bank balance sheets and reducing the system's vulnerability to external shocks. The rapid restructuring of the banks and the short timetable for attaining high capital adequacy levels contributed to the severity of the eco-



conomic slowdown in 1998.<sup>30</sup> Yet, a less rapid cleanup would not necessarily have resulted in a better outcome. Other liberalization measures, such as those that made it easier for corporations to issue bonds directly to investors, fostered the development of alternative financing channels. This strengthened the Korean economy by reducing the dependence of investment on the health of the banking sector.

There were, however, gaps in the new supervisory framework. A prominent example was the investment trust company (ITC) sector. The pressure on the banks to recapitalize and restructure led them to reduce their corporate lending and the returns they could offer to savers. This provided a window of opportunity to the ITCs, which channeled funds from small investors into the rapidly growing corporate bond market (Oh and Rhee, 2002). ITC accounts were intended to behave like mutual fund holdings, but in practice many ITCs offered guaranteed yields to investors. In 1999, when corporate bond prices fell following a large corporate bankruptcy, the ITCs could not meet the guarantees and the result was widespread panic selling. This episode, while causing losses to many investors and disruption to Korean capital markets, did not have a substantial impact on the country's overall investment and growth trends—a sign that the system had become more resilient, even though clearly more effort was needed in the area of improved supervision.

## Nonfinancial structural reforms

### Background

As was the case with the financial sector, there had been an ongoing debate within Korean society before the crisis on the optimum design of the corporate sector. Some reformers opposed the concentration of economic power in *chaebol*. Influenced by these ideas, the authorities, in a dramatic reversal of policy, had begun to allow large corporate bankruptcies (such as that of Hanbo) to take place even before the onset of the crisis. But others in Korea advocated the preservation of the *chaebol* system in light of its track record in facilitating rapid economic growth.

Comprehensive reforms in the nonfinancial corporate sector envisaged in the December 4, 1997 program included provisions on accounting standards, bankruptcy procedures, and governance mechanisms.

In the late December program and subsequent reviews, provisions were added mandating the appointment of outside directors, liberalizing the market for corporate control, and enhancing labor market flexibility. In the World Bank's structural adjustment loans, more specific measures were identified, such as curtailing emergency loans, facilitating use of debt-equity conversions to address excessive leverage among *chaebol* affiliates, reducing cross-guarantees, providing additional encouragement for corporate mergers and acquisitions, debt restructuring and asset dispositions, and improving procedures and coordination for court-supervised insolvency (Mako, 2002; Joh, 2002). Thanks in part to these efforts, the debt-equity ratio of the manufacturing sector was gradually reduced from nearly 400 percent in 1997 to 211 percent in 2000 (Im, 2002).

A common criticism of the Korean program, echoed at the time in the Korean press, was that certain measures were included in the program at the insistence of major shareholder governments to serve their particular national interests. For example, the requirement that Korea eliminate its "import diversification" program was said to be a response to Japanese pressure,<sup>31</sup> while the measures to allow increased participation of foreign institutions in the Korean financial system were alleged to reflect pressure by the U.S. authorities on behalf of U.S.-based institutions.

The IMF's largest shareholder governments made no secret of their view that IMF assistance should be accompanied by strong reforms. The U.S. authorities, in particular, insisted that strong reform measures should be a condition for IMF support. However, internal IMF documents do not support the allegation that the specific policy measures mentioned were included solely because large IMF shareholder governments demanded them.<sup>32</sup> These governments may indeed have had an interest in these measures, but they were also on the agenda of policy reforms which had surfaced in the course of IMF surveillance and had been discussed by the staff with the authorities. For example, increased participation by foreign financial institutions in the Korean financial system had long been on the list of IMF recommendations made in the surveillance process and was among the measures recommended by the Article IV consultation mission two months earlier. It was in the briefing paper prepared by the staff on the eve of the negotiations, and is a policy recommended by the IMF for virtually all

<sup>30</sup>Domaç and Ferri (1998) find evidence that the contraction of bank credit and increase in bank lending spreads in Korea contributed to the fall in activity after the crisis. Hyun Kim (1999) finds that the decline in bank loans resulted from a contraction in supply (the willingness of banks to lend) rather than demand (that is, a fall in investment), though Ghosh and Ghosh (1999) find the opposite result. Borensztein and Lee (2000) find that there was a reallocation of credit from less efficient (including *chaebol*-connected) borrowers to more efficient ones.

<sup>31</sup>This program, which restricted imports from countries with which Korea had a large bilateral trade deficit, was designed to reduce certain categories of imports from Japan.

<sup>32</sup>According to former senior U.S. officials interviewed by the evaluation team, their only direct input was to introduce a penalty rate for the BOK's foreign exchange advances to Korean financial institutions.



emerging market economies. After the crisis started, takeovers and other asset purchases by foreign institutions were seen as a way to improve bank governance and to reduce the amount of public money needed to recapitalize the banking system. Similarly, the elimination of the import diversification program had been included in the recommendations of the earlier Article IV consultation mission and was incorporated in the prenegotiation brief. The staff saw this as a vital trade liberalization measure that would demonstrate the authorities' commitment to reform.

As with the financial reforms, the Korean authorities initially were eager to demonstrate their commitment to the program by moving forward rapidly on implementation. However, after the economy survived the initial phase of the crisis and began a quick recovery, the government reduced its efforts to pursue painful and costly restructuring. At the end of 2000, more than a quarter of manufacturing firms still had earnings that were below their interest costs. There were also signs of persistent official favoritism toward *chaebol*. For example, when a large conglomerate experienced financial difficulties in 2000, at a time when illiquidity in the corporate bond market made it difficult for companies to raise new capital, the Korean government mobilized such means as "fast-track underwriting" (in which the KDB refinanced maturing corporate bonds at a penalty interest rate) to prevent the company from going bankrupt.

### Assessment

Some observers have argued that nonfinancial structural reform measures were not crucial to the resolution of the crisis, and have cited the fact that output recovery began well before many of the key reforms were implemented (Feldstein, 1998; Park, 2001). In particular, they argue that labor market and trade measures were a distraction from the core program requirements, although they may well have proven helpful to the long-term efficiency of the Korean economy.<sup>33</sup>

The effectiveness of some of the structural measures in the IMF-supported program can also be questioned. Some of them appear to have been rushed into implementation because of the short time horizon.

<sup>33</sup>There were 21 "structural performance criteria" specified in the course of the three-year IMF-supported program in Korea, that is, an average of seven a year (Chopra and others, 2002). The LOI attached to the December 4, 1997 program identified five "prior actions" to be taken by the authorities before the Executive Board approved the SBA. The total number of structural conditions was close to the median for SBAs during this time period, and somewhat less than that for longer-term IMF arrangements such as the Enhanced Structural Adjustment Facility and the Poverty Reduction and Growth Facility. See "Structural Conditionality in Fund-Supported Programs," SM/01/60, Supplement 2, February 2001.

Some staff members told the evaluation team that they had been under pressure to show quick results and had known that they would need to reduce intensive monitoring once the crisis had passed. This led to a focus on measurable benchmarks that could be achieved in the first six months or so of the program, at the expense of more lasting but less visible actions. For example, companies listed on the Korea Stock Exchange were required to appoint at least one outsider to their boards of directors. Some have questioned whether the newly appointed outside directors were truly independent of management or able to exert influence on corporate decisions (Joh, 2002).

Defenders of the IMF-supported program respond that, aside from the intrinsic merits of the policies followed, a demonstration of the authorities' commitment to reforms in both the financial and nonfinancial fields was needed to restore international confidence and promote rapid recovery. There were also some cases where nonfinancial structural measures were intended to facilitate a rapid recovery from the crisis, and thus formed a vital element of the IMF-supported response. In particular, smoother bankruptcy procedures and labor market reforms were designed to promote the reallocation of industrial assets and reduce the consequences of the reforms for employment.

It is difficult to evaluate these arguments because the objectives for many of these reforms were never fully spelled out. While the weak governance and high leverage of the Korean industrial sector certainly contributed to the crisis, the immediate need for action in these areas was not as clear as the need to address solvency issues in the financial sector.

To the extent that the reforms in the nonfinancial area were intended to facilitate other policies more directly linked to resolving the crisis, the argument for them would be much stronger. Even in this case, however, the IMF might have been better advised to confine its advice and conditionality to a narrower range of issues, and then to let the Korean authorities define their own agenda for implementing this more focused set of policy measures. This is particularly true of many of the trade and other external liberalization measures that were already mandated by agreements with the OECD and the World Trade Organization (WTO). The role of formulating and facilitating the needed reforms would then fall to institutions that are better placed to do so.

### Program Financing and the Debt Rollover

This section reviews the process by which the financing package associated with the December 4, 1997 program was determined and whether the final

**Table A2.1. Korea: Balance of Payments and Financing Requirements***(In billions of U.S. dollars)*

	Premission Brief		December 4 Stand-By Request		Actual	
	1997	1998	1997	1998	1997	1998
Current account (a) (– = outflow)	–13	–2	–14	–2	–8	40
Capital account (b) (– = outflow)	1	–5	–14	3	–28	–15
Of which:						
Portfolio investment	–2	–3	8	1	14	–1
Banks <sup>1</sup>	4	0	–16	3	–27	9
Change in reserves (c) <sup>2</sup> (– = increase)	12	–13	17	–23	21	–40
Financing gap (a + b + c)	0	–20 <sup>3</sup>	–11	–22	–16	–14
Provided by official financing	0	20	11	22	16	10
Of which:						
Net IMF purchases	0	4	9	10	11	5
Market borrowing by government	0	0	0	0	0	4

Source: IMF database and documents.

<sup>1</sup>Adjusted to include the impact of foreign currency liquidity support by the BOK to overseas branches of Korean banks.<sup>2</sup>Adjusted to exclude the impact of foreign currency liquidity support by the BOK to overseas branches of Korean banks.<sup>3</sup>An additional financing gap of US\$5 billion was projected for 1999.

size of the package was appropriate for the circumstances. Our overall assessment is that there was considerable ambiguity surrounding the publicly announced bilateral “second line of defense” and this damaged the program’s credibility. It forced the staff to adopt unrealistic assumptions in formulating the December 4 program, which led to underfinancing. Korea’s underlying liquidity shortfall was not resolved until the coordinated rollover agreement at the end of December.

### The December 4 package

At the start of the negotiations with Korea in late November 1997, the staff estimated the country’s financing gap during the years 1998 and 1999 at US\$25 billion, of which US\$20 billion was for the first year (Table A2.1, columns 1 and 2). Funds were needed, it was thought, to finance the current account deficit (estimated to be US\$2 billion for 1998), portfolio outflows (another US\$3 billion), and a US\$13 billion increase in reserves. These figures were based on two crucial assumptions. First, Korea’s short-term external debt, then estimated to total US\$66 billion, was projected to be fully refinanced, though it was assumed that there would be little or no new short-term borrowing. Second, Korea’s reserves of US\$30 billion were thought to be enough to cover the country’s obligations until the program funding was disbursed. No financing need was envisioned for 1997.

These assumptions had to be revised radically almost as soon as the IMF team arrived in Korea, because of a combination of new information and re-

vised assumptions about the behavior of external creditors. It was discovered that Korea’s usable reserves—that is, official reserves, minus the amount that had been deposited at overseas bank branches to cover short-term debt repayments—were around US\$11 billion, and falling very fast. This pointed to the fact that the major drain on the capital account was likely to arise, not from a reversal of portfolio investment, but from bank debt repayments.

The debt, in turn, was far larger than initially thought, because it comprised obligations of overseas borrowing by Korean institutions, which were not included in residence-based debt data used by the IMF. The most important component of this additional debt was some US\$22 billion in offshore borrowing by overseas branches of domestic banks. After correcting for double-counting and including offshore borrowing and the debt of Korean banks’ foreign branches and subsidiaries, short-term external debt (bank and nonbank) was estimated at around US\$86 billion at end-September 1997, of which banks owed US\$62 billion. It was this component of the debt that triggered the crisis. By the end of November, short-term external bank debt had fallen from US\$62 billion at end-September to US\$49 billion, and further to US\$33 billion at the end of December, representing an outflow of US\$16 billion in a month.

Estimating the amount of financing needed in the fast deteriorating situation that prevailed in November 1997 was no easy task. In the event the staff report supporting the SBA request contained two different estimates of the financing needed for the rest of 1997 and 1998. In the text of the report, the total financing

needed was indicated as US\$55 billion but the detailed estimates in Table 6 of the same report (reproduced in columns 3 and 4 of Table A2.1) showed a smaller figure of US\$33 billion. The difference between the two estimates was not reconciled in the staff report but interviews with the staff indicate that the larger estimate resulted from the initial expectation that the rollover rate on short-term bank credit would be only 20 percent. It was recognized that providing large volumes of financing from the IMF to Korea would be difficult because of the IMF's resource constraints and also because Korea's quota was unusually small relative to the size of the economy.<sup>34</sup> However, the staff worked on the assumption that IMF financing could be supplemented by additional amounts from other IFIs (the World Bank and the ADB) and bilateral sources (i.e., the second line of defense).

### The second line of defense

The incorporation of bilateral financing to supplement IMF and other IFI resources was in line with the principles of the so-called Manila Framework, endorsed by the APEC summit meeting only a few days earlier on November 24, 1997, which envisaged the provision of bilateral financing to support IMF-supported programs when necessary. However, the availability of these resources turned out to be uncertain. There also appear to have been miscommunications on the second line's conditions and timing (in relation to the disbursement of the IMF's own resources) that compounded the problem.

The staff had initially incorporated a specific level of bilateral financing in the proposed IMF-supported program. At virtually the last minute, headquarters informed the mission that it could no longer count on the second line of defense being available as part of the financing for the "baseline" program. Additional decisions would be needed before any part of the financing could be released, and the financing could in any case not be made available for several weeks.

IMF management and staff recognized that, without the assured availability of official bilateral financing, the program would be underfinanced. They accordingly approached the major shareholder governments to explore the possibility of concerted action to involve the private sector in some form of rollover. The major shareholders, however, were reluctant to use nonmarket instruments to influence the behavior of private sector institutions, given the

lack of clearly defined regulatory authority and the fear that such action might precipitate an exodus of capital from emerging markets.

Faced with these circumstances, the staff presented a financing scenario in which the availability of bilateral financing was not essential. This was achieved by modifying one of the key assumptions which determined financing need. Specifically, the fraction of short-term interbank loans from external creditors that was assumed to be rolled over was raised from the 20 percent assumed initially to 80 percent.<sup>35</sup> This arbitrary adjustment ensured that the amount of financing provided in the December 4 package would meet Korea's ex ante needs as projected in the program documents.

Although the program financing requirement was reduced in this way, the package publicly announced was US\$55 billion, including a second line of defense in excess of \$20 billion. The press notice released on December 4 announcing the Executive Board's approval of the program specifically stated:

[A] number of countries (Australia, Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Sweden, Switzerland, the United Kingdom, and the United States) have informed the IMF that they are prepared, in the event that unanticipated adverse external circumstances create the need for additional resources to supplement Korea's reserves and resources made available by the IMF and other international institutions, to consider—while Korea remains in compliance with the IMF credit arrangement—making available supplemental financing in support of Korea's program with the IMF. This second line of defense is expected to be in excess of US\$20 billion.

Market participants were highly skeptical as to whether the second line of defense would truly be available. Political opposition to "bailouts" of crisis countries was running high in several of these contributing countries and, since there was no clarity on the circumstances under which the amounts would be released, their availability was widely discounted.

The unrealistic rollover assumption implicitly contained in the December 4 program lowered the package's probability of success. It meant that, without a radical turnaround in confidence, the program was likely to be underfinanced. When this turnaround did not materialize, the credibility of the program (and of the IMF more generally) was damaged,

<sup>34</sup>The commitments made in Thailand, Indonesia, and elsewhere had already stretched resources thin. As of May 31, 1997, the IMF had approved financing arrangements totaling slightly less than SDR 18 billion (or US\$25 billion); six months later, before the Korea package, this figure had risen to almost SDR 28 billion (or US\$38 billion).

<sup>35</sup>These percentages were provided to the evaluation team by staff members and do not appear in the program documents. It is thus difficult to cross-check them and to determine which of the various possible aggregates the numbers refer to. Nevertheless, it is undoubtedly the case that a substantial change in the assumed rollover path took place at the last moment.

making the task of formulating a revised response to the crisis more difficult.

Negotiations on a second line of defense between the Korean authorities and those of the contributing countries eventually took place in the early months of 1998. These negotiations did not lead anywhere, however. Those close to the talks have advanced differing reasons as to why this was the case. There were differences of view regarding the appropriate pricing and technical conditions for the facility. However, the most likely explanation for the absence of agreement is that private sector financing conditions by that time had improved substantially, so that setting up another official financing facility did not seem necessary.

### **The coordinated rollover**

With the failure of the December 4 program, usable foreign exchange reserves dwindled rapidly and the won fell sharply in the first weeks of December. The staff projected that usable reserves, which had been temporarily boosted by the IMF disbursement in early December, would fall from US\$8.5 billion on December 14 to US\$4.5 billion at year-end.<sup>36</sup> Further official financing was neither politically nor practically feasible. An attempted international bond offering by the state-owned KDB failed and was hastily withdrawn. A more vigorous and sustained increase in interest rates might have attracted some capital back into the country, but it could also have caused so much damage to Korea's highly leveraged corporate sector that its impact on market confidence could very well have been negative. The IMF mission in the field advised management that a restructuring of Korea's short-term debt would be necessary for resolving the liquidity problem.

It was in this context that the idea of pressing Korea's creditors to agree to a coordinated rollover and a maturity extension of their short-term claims gained renewed prominence.<sup>37</sup> The idea had been circulating among IMF officials and the large shareholder governments, as well as in the private sector, virtually from the start of the crisis and, as noted, had been raised by IMF management in its consultation with the major shareholder governments. It was also raised by foreign bankers in Korea with the authorities and IMF staff in early December, but did not receive support at that time from the banks' head offices.

The decision to urge the rollover on creditor banks appears to have arisen from discussions among Korean, U.S., and IMF officials immediately after the Korean presidential election on December 18. The President-elect's statements in support of the IMF-supported program had boosted its credibility in the markets. The incoming administration began to cooperate with the outgoing administration in vigorously implementing the program. Officials from large shareholder governments put aside their earlier concerns about excessive intervention, because of the gravity of the situation and the evident failure of the approach that had formed the December 4 program. Once the decision to pursue the rollover was made, it was arranged relatively quickly and announced on December 24, 1997. Central banks and finance ministries in the industrial countries contacted large banks based in their jurisdictions, which in turn contacted other lenders. The banks agreed to maintain their existing credit lines while they negotiated to extend the maturities of their claims on Korean banks. A system of daily monitoring of rollovers by individual banks, established with substantial IMF inputs, proved crucial in ensuring compliance.

Negotiations between the Korean government and the banks over the maturity extension began in early January 1998.<sup>38</sup> A tentative maturity-extension agreement was concluded on January 28, and the final terms were settled in February. While these negotiations were under way, a second rollover announcement was made on January 16, which committed the banks to maintain existing credit lines through the end of March 1998.

The pricing on the extended bonds shows that the market's confidence in the Korean economy had already started to revive. In April 1998, some US\$22 billion of eligible bank debt maturing during 1998 was exchanged for government-guaranteed loans with from one to three years' maturity and interest rates between 225 and 275 basis points over LIBOR. In early April, the Korean government issued US\$4 billion in 5- and 10-year global bonds, respectively at 345 and 355 basis points over U.S. treasuries. The spreads on both transactions were well below that on the JP Morgan EMBI+ index, which was never lower than 464 basis points in April 1998. Even after

<sup>36</sup>For comparison, Korea's average monthly imports in 1997 were US\$12 billion.

<sup>37</sup>The written record on the evolution of this idea is thin. Most of the information in this and the following paragraphs is from interviews with IMF staff and former U.S. and Korean officials, as well as Kim and Byeon (2002). See also Blustein (2001).

<sup>38</sup>Two approaches were on the table. One involved a new bond issue that would simultaneously finance the maturity extension and raise new money. The second proposal, which would ultimately be adopted, called for a sequential approach, with the extension of the maturity of existing bank debts under a government guarantee to be followed by a new sovereign bond issue when market conditions were more favorable. When asked by the Korean authorities for their opinion, IMF management declined to favor one approach or the other, and urged the authorities not to reject any reasonable proposal for the time being. Kim and Byeon (2002) recount the negotiating process.



differences in maturity are taken into account, the more favorable borrowing terms offered to Korea suggest that by that point the market already assigned Korea a lower credit risk than most other emerging market borrowers.

Subsequent events would justify the confidence that international creditors showed in the Korean financial system in early 1998. All of the extended loans would be repaid by the original borrowers; the government guarantee was never exercised. As Korea's external financing conditions improved, most of the borrowers took advantage of prepayment options to refinance the debt at lower interest rates. Although only 63 percent of the debt was scheduled to mature by April 2000, 90 percent of it would end up being repaid by that date.<sup>39</sup>

### Assessment

It is of course easier to draw lessons on matters of program financing after the fact than at the time, when information was incomplete, market reactions could not be anticipated, and decisions needed to be taken rapidly. Nevertheless, three aspects of the approach to financing and the role of the private sector in the Korean case are worthy of note.

First, to the extent that the Korean economy in late 1997 faced a shortage of liquidity rather than a long-term debt-sustainability problem, the successful resolution of the crisis depended as much on *how* and *how fast* new financing was to be provided as on whether it would be provided. A delayed or highly conditional commitment of funds would do nothing to reverse the drive by creditors to liquidate their investments while they still could. An immediate commitment of liquid funds, from whatever source, would convince lenders that their chances of repayment were reasonably high and that it would be worthwhile rolling over existing credit lines, though perhaps at a higher risk premium than before the crisis.

In this respect, the ambiguity over the second line of defense was clearly counterproductive. The IMF and the national authorities of the contributing countries may have hoped that the mere announcement of broad international support, in conjunction with strong IMF endorsement of the Korean authorities' policies, would be enough to restore market confidence and make any actual payout unnecessary. Given the absence of deeper solvency concerns, the announcement of official financing could have had the intended catalytic effect, and one can argue that

this approach *ex ante* was worth the gamble. However, staff calculations suggest that the assumed increase in the rollover rate was unrealistic, especially in a very short time. Had the second line of defense been firmly committed, with clear indications to the markets that the funds would be automatically released if needed, the large "headline" figure might have produced a catalytic effect. In the event, there was too much uncertainty about their availability and the effort to influence the subtle dynamics of market confidence backfired. By including some US\$20 billion that was not backed by actual commitments, the December 4 package only emphasized the extent of Korea's cash shortfall. The market became skeptical, and the announcement of the IMF package failed to provide the boost to confidence that had been hoped for.

The second lesson to be drawn is that, in the end, the coordinating role of the IMF in the context of the rollover agreement proved to be at least as useful in resolving the crisis as its ability to provide or mobilize financial resources. The success of the coordinated rollover and private sector debt restructuring would ultimately render the second line of defense irrelevant. While the authorities of the IMF's large shareholder governments made the key decision to pursue the rollover plan and to exert the necessary moral suasion on banks, the IMF played a useful role in facilitating communication among the different actors, in providing information, and in certifying that the policies to be pursued by the Korean authorities were appropriate. No single national government, nor any private sector institution, could have played this role as effectively.

A third lesson is that, for the success of a large financing package, the IMF's coordinating role must be complemented by strong engagement on the part of its large shareholders. The role of the United States in pressing for vigorous reforms has already been noted. As part of this process, officials of the U.S. and other large shareholders were in regular communication with IMF staff and management during and after the program negotiations. However, the public face of this involvement must be managed carefully. The presence of a U.S. Treasury official in close proximity of the negotiations caused some in the public to have a wrong perception of the IMF involvement in Korea.

### Conclusions

A definitive statement on the "success" or "failure" of the IMF-supported program in Korea would depend on one's criteria for success. In terms of stabilizing markets and reversing capital inflows, the program announced in early December was clearly a

<sup>39</sup>The BOK's facility providing advances of foreign exchange at a penalty rate, the other vehicle by which the banks' huge overseas obligations were refinanced, was also repaid in full, and in fact made a profit of some W 6 trillion over the period from December 1997 to June 1998 (Baliño and Ubide, 1999, p. 42n).



failure, while the late December package can be called a success. However, one should also acknowledge that the key features of the second program became acceptable to the international community only after the strategy of the first was tried and proven to have failed. The depth of the 1998 recession may, in part, be attributed to the stringency of the financial sector restructuring measures required in the program—but significant restructuring would have been necessary whether or not a crisis occurred, and in any case the economy's subsequent strong recovery suggests that these effects were temporary. The program induced the Korean authorities to take the necessary decisive steps toward reforming the economy and, in this sense, made a contribution to building the foundation for Korea's impressive recovery. However, some needed reforms were later delayed or scaled back.

This annex has identified specific missteps in surveillance before the crisis, in the formulation of the adjustment program, and in the provision of financing that suggest lessons for the future. These are summarized below. More specific recommendations, including a discussion of the extent to which these lessons have already been identified and acted upon within the IMF, are discussed in the main report.

### Surveillance

Partly because of Korea's consistently strong economic performance, IMF surveillance did not fully anticipate many of the elements that would contribute to the Korean crisis. With hindsight, shortcomings can be detected at two levels: the analysis of the implications of Korea's capital account liberalization policies in the 1990s, and the analysis of the vulnerabilities facing Korea in the months immediately preceding the crisis in 1997. Specifically, the IMF focused too much on the degree of capital market liberalization, and not enough on sequencing, thereby underestimating the systemic vulnerabilities introduced by a policy that combined liberalization of short-term flows, controls limiting long-term flows, and poor supervision of some of the institutions that borrowed externally. This was in keeping with the IMF's standard approach at the time, which viewed financial sector issues in terms of their impact on microeconomic efficiency rather than in terms of whether they might increase the risk of an external crisis.

IMF surveillance in the months preceding the crisis did identify many of the relevant vulnerabilities. However, it paid insufficient attention to issues that would prove central to the onset and evolution of the crisis, and the overall assessment proved to be excessively optimistic. In retrospect, five misconceptions hindered the ability of the staff to offer a more accurate assessment:

- An overestimation of the flexibility in Korea's exchange rate policies.
- An underestimation of the risk of a breakdown in funding the capital account. While recognizing that such a risk was present, particularly in the crisis conditions then prevailing in East Asia, the staff concluded that the authorities could handle any pressures by making renewed efforts in the area of financial reform, by addressing financial sector weaknesses, and by loosening controls on long-term external borrowing.
- Excessive optimism about the short-term impact on growth of rehabilitating and reforming the financial sector. The narrow range of growth estimates considered, based on the remarkable stability of Korea's growth rates over the previous decades, prevented the staff from exploring the consequences of a more serious slowdown.
- Insufficient attention to relevant market indicators, some of which (such as spreads on KDB issues) showed mounting wariness among investors well before the crisis began in earnest.
- Advice in the area of financial sector reform that was primarily oriented toward improving the long-term health and efficiency of the system. While this advice was generally well thought out, in the conditions of the summer and fall of 1997 when investors had become significantly more risk-averse, advice on securing the system against a possible crisis and preparing for the consequences of such a crisis might have been more helpful.

Several of these misconceptions had their origin in, or were exacerbated by, incomplete information and poor data availability. As discussed in the main report, this is an area in which substantial progress has been made since the Asian crisis, through the various initiatives on standards and codes.

### Program design

#### Monetary policy

Some increase in interest rates was justified at the time of the crisis, given the need to prevent a collapse of the exchange rate and to maintain positive real rates in the face of high inflation expected to result from the depreciation of the won. The authorities also needed to demonstrate their determination to respond forcefully to the crisis. But, given the nature of the crisis, too much reliance was placed on high interest rates to stabilize the won. The key immediate issue in resolving the crisis was Korea's lack of liquidity, and there were too few channels through which high interest rates could remedy this shortfall. The lack of owner-

ship of monetary policy on the part of the authorities no doubt further weakened its credibility and hence its signaling effect. Hindsight suggests that rates were maintained at a high level in early 1998 somewhat longer than necessary, although an excess of caution was understandable under the circumstances. However, the stance of monetary policy was not the major cause of the steep output decline.

### **Fiscal policy**

Given the low stock of public debt, the IMF could have urged Korea to use fiscal policy to counteract the likely contractionary effects of financial sector restructuring from the beginning of the crisis, rather than waiting until the early months of 1998 to start giving this advice. In any event, the Korean authorities, reflecting their tradition of fiscal conservatism, were not very receptive to this advice and cut government expenditures. Fiscal policy nevertheless ended up being countercyclical because tax receipts fell even further and because of off-budget activities.

### **Structural reforms**

The financial and nonfinancial structural reforms were extensive, and had a positive effect in improving the efficiency and stability of the Korean economy. In retrospect, however, while the IMF was justified in using its leverage to insist on such change as a condition for financial support, too much attention was paid to producing visible results quickly. More emphasis should have been placed on the overall strategy, not on specific short-term measures, with the authorities being given greater freedom in setting their own agenda. In the case of the financial sector, a home-grown agenda was already available in the form of the reports of the Presidential Commission, and efforts in this area benefited from the sense of country ownership. In the case of nonfinancial reforms, the extent of ownership was less clear. The immediate need for action in areas such as corporate governance, while potentially important in the long term, was not as apparent as the need to reform bankruptcy laws or address solvency issues in the financial sector.

As confidence rapidly returned to Korea, some aspects of financial sector reform were delayed, while many nonfinancial structural measures were in the end never fully implemented. Particularly given the negative backlash some of these measures created on the public perception of their origin, the IMF might have been better advised to confine its advice and conditionality to a narrower range of issues, and then let the Korean authorities define their own agenda to implement this more focused set of policy

measures. This is particularly true of trade and other external liberalization measures, which were already mandated by Korea's agreements with the OECD and the WTO.

### **Financing and the debt rollover**

The strategy adopted in the first program was predicated on the hope that tough monetary and financial sector policy measures would be sufficient to bring about a spontaneous rebound in confidence. In support of this strategy, the announced package kept a large "headline figure" that included a component whose availability was uncertain and was discounted by the markets. The attempt to present the financing package in as favorable light as possible proved damaging on two levels: in the short term, to the market's confidence in Korea's ability to overcome the crisis and, in the longer term, to the credibility of IMF-led financing arrangements generally. If the IMF and the authorities of the major shareholder governments had acknowledged the limited availability of these funds from the beginning, there might have been an earlier effort to seek alternative solutions, including a coordinated rollover of short-term debt.

Admittedly, it is difficult to be certain whether the private sector rollover and maturity extension of short-term bank debt could have been arranged earlier than they were. Some creditors wanted to eliminate their exposure to Korea under any circumstances. Others might have been more receptive to a coordinated rollover, but would not have wanted to make any further commitments in advance of the elections on December 18, 1997. Yet, according to individuals in the private sector interviewed by the evaluation team, from the very beginning of the crisis, some—if not many—creditors expressed an interest in finding a collective solution of some kind.

If the interest of some private creditors in concerted action had been recognized from the start of the IMF's involvement, there might have been a greater effort to establish contacts, think through the broad outline of such an agreement, and follow up on private sector initiatives, such as those of the Seoul Foreign Bankers' Association. IMF management appears to have understood that some concerted action might be necessary from the outset and communicated this message to the major shareholders, but the authorities of the IMF's large shareholder governments were initially reluctant, fearing that such action might set undesirable precedents and adversely affect the flows to other emerging economies. Given the domestic political uncertainties prevailing before the elections, and the constraints faced by the major shareholders, it may well be that the first strategy needed to be proven to have failed before concerted action could be attempted.

## Appendix 2.1

### Korea: Timeline of Major Events<sup>1</sup>

Date	
1/23/97	Hanbo Steel goes bankrupt with US\$6 billion of debt.
6/3/97	The Presidential Commission on Financial Reform submits its second report to the President, recommending liberalization of the financial markets, independence of the central bank, strengthening of the supervisory system, and improvement of information efficiency.
6/24/97	Moody's states that the outlook for Korea's credit rating has deteriorated, reflecting the country's weakening financial health. <sup>2</sup>
	The Korea Development Bank provides additional loans to prevent bankruptcy of the Kia group.
7/24/97	Seoul Bank applies for special loans from the Bank of Korea, saying that it can no longer borrow funds abroad.
8/13/97	Korea First Bank is reported to be facing a liquidity crisis as a result of the reduction of its credit rating to junk status.
8/24/97	The Korean government decides to provide special loans of W 1 trillion to Korea First Bank.
8/29/97	The government issues a public statement that it will ensure the payment of foreign debt liabilities by Korean financial institutions.
10/6/97	Start of an IMF mission (lasting until October 15) for the 1997 Article IV consultations with Korea.
10/8/97	The Bank of Korea decides to provide special loans to merchant banks in order to secure credibility and liquidity in the financial market.
10/24/97	Standard & Poor's downgrades Korea's foreign currency long-term sovereign rating to A+ from AA-. <sup>2</sup>
10/29/97	The monetary authorities decide to accelerate capital account liberalization measures, including bringing forward the opening of the domestic bond market to foreign investors and easing restrictions on firms' raising capital abroad.
11/1/97	Moody's downgrades the credit ratings of four major Korean banks. <sup>2</sup>
11/2/97	The MOFE announces that it will supply up to US\$2 billion in foreign exchange every day from the next day (November 3) for a week in order to stabilize the exchange rate.
11/7/97	A Korean newspaper reports that government financial experts are cautiously discussing the need for IMF-led rescue loans, because of a shortage of foreign exchange reserves. The Bank of Korea and the MOFE deny this.
	The IMF Managing Director says that the IMF is ready to help Korea, if Korea requests support. <sup>2</sup>
11/13/97	The Director of the Institute for International Economics tells the U.S. House Banking Committee that Korea would need at least US\$50 billion to cope with the current financial crisis. <sup>2</sup>
11/18/97	A financial reform bill, setting up an independent, consolidated supervisory agency, fails to pass the National Assembly.
	The MOFE denies requesting rescue loans from the IMF.
11/19/97	The Finance Minister resigns and a new minister takes office.
	The new Minister of Finance and Economy announces measures to stabilize the financial market, including: (1) cleaning up nonperforming loans of the financial institutions by injection of public funds; (2) promoting restructuring of the financial sector through mergers and acquisitions; (3) authorizing the Bank of Korea to buy foreign exchange from branches of foreign banks; (4) expanding the daily exchange rate band from +/- 2.25 percent to +/- 10 percent; and (5) liberalizing the long-term bond market.
	The new Minister of Finance and Economy says the government will seek financial support from the U.S. and Japanese governments.
11/21/97	The Minister of Finance and Economy announces that the Korean government will ask the IMF for financial assistance. He suggests that the total amount of support could range from US\$50 billion to US\$60 billion, including loans from G-7 countries.
11/22/97	Standard & Poor's downgrades Korea's foreign currency long-term sovereign rating to A- from A+. <sup>2</sup>
11/26/97	A staff team from the IMF arrives in Seoul to negotiate a program to be supported by a Stand-By Arrangement.
12/2/97	The penalty rate for new injections of foreign exchange by the Bank of Korea to Korean commercial banks is raised to 400 basis points above LIBOR.
	Nine technically insolvent merchant banks are suspended.
12/3/97	Negotiations on the IMF-supported program conclude. The authorities formally request a three-year Stand-By Arrangement from the IMF in an amount equivalent to SDR 15.5 billion (US\$21 billion), as part of a multilateral and bilateral financing package totaling US\$55 billion.
12/4/97	The IMF Executive Board approves the Stand-By Arrangement. <sup>2</sup>
12/5/97	The government announces W 4 trillion expenditure cuts in a revised 1998 budget.
12/8/97	Korean press reports state that, according to a leaked IMF report, Korea's foreign reserves declined to only US\$5 billion in the previous week.

### Korea: Timeline of Major Events (concluded)

Date	
12/9/97	<p>The Korean government offers to make special loans of ₩ 1.18 trillion to Korea First Bank and Seoul Bank in exchange for layoffs of at least 1,500 personnel and a 10–30 percent expenditure reduction, and announces plans to nationalize the two banks.</p> <p>The government suspends the operation of 5 additional insolvent merchant banks, bringing the total suspended to 14.</p> <p>The Korea Development Bank postpones bond issues intended to raise US\$2 billion. Foreign financial institutions are reportedly refusing to renew credit lines to the country.</p>
12/11/97	A leading presidential candidate says he might renegotiate a deal with the IMF, reversing an earlier pledge to honor it.
12/15/97	The government announces that it will seek a foreign buyer for either Korea First Bank or Seoul Bank.
12/16/97	<p>The government removes a 10 percent daily limit on the currency's daily movements, allowing the won to float freely against the dollar.</p> <p>An increase in the interest rate ceiling from 25 percent to 40 percent is approved by the cabinet.</p>
12/18/97	<p>Kim Dae-jung wins the presidential election.</p> <p>The IMF Executive Board completes the first review of the Korean program and activates financing of US\$3.5 billion (SDR 2.6 billion) through the newly created Supplemental Reserve Facility.<sup>2</sup></p> <p>The government hires two U.S. investment banks as advisers in the restructuring of government-guaranteed overseas borrowing by domestic banks.</p>
12/19/97	President-elect Kim Dae-jung pledges support for the IMF-supported program, and says that he wants to minimize conditions that could lead to greater unemployment.
12/23/97	A high-level team led by the MOFE is established to enter into negotiations with foreign commercial bank creditors to facilitate extensions of short-term debt.
12/24/97	<p>The Korean government and the IMF agree to a revision of the Stand-By Arrangement, under which Korea will undertake additional or accelerated market-opening measures in exchange for faster disbursement of IMF resources. Roughly US\$10 billion in funding from the IMF, the World Bank, and the Asian Development bank is to be made available by early January.</p> <p>Several major U.S. banks are reported to be willing to roll over their loans to Korean banks.</p>
12/26/97	Korea First Bank and Seoul Bank are reportedly placed under intensive supervision by the Bank Supervision Office.
12/29/97	<p>Banks from the United States, the United Kingdom, Japan, Germany, and the Netherlands pledge to roll over short-term loans to Korean banks.<sup>2</sup></p> <p>The National Assembly approves a package of important financial reform bills demanded by the IMF. As a result (1) the central bank will gain independence from the Ministry of Finance and Economy and (2) a new unified financial supervisory agency to oversee the bank, securities, and insurance sectors will be placed under the Prime Minister.</p>
12/30/97	<p>Banks in France, Switzerland, Italy, and Canada agree to roll over short-term loans to Korean banks.<sup>2</sup></p> <p>The bond markets are fully opened to foreign investors. Investors will be allowed to take majority stakes in listed Korean companies and conduct "friendly mergers and acquisitions."</p> <p>The IMF Executive Board formally approves Korea's request for modification of the schedule of purchases under the Stand-By Arrangement.<sup>2</sup></p>
1/8/98	International banks tentatively agree to extend payment on as much as US\$25 billion in short-term loans until March 31. <sup>2</sup>
1/15/98	A tripartite committee consisting of labor unions, business leaders, and the government is established to deal with labor reform and social safety net issues.
1/20/98	Labor leaders reportedly agree that some layoffs will be needed to rescue the economy.
1/28/98	International banks and the government reach an agreement on the rescheduling of Korea's short-term debt. Under the plan, Korean banks will offer to exchange their short-term debt for new loans with maturities of one, two, or three years. <sup>2</sup>
1/31/98	The government recapitalizes Korea First Bank and Seoul Bank, taking effective control of them.
2/17/98	The IMF Executive Board approves a review under the Stand-By Arrangement. <sup>2</sup>
2/18/98	Standard & Poor's upgrades Korea's foreign currency long-term sovereign rating to BB+ from B+. <sup>2</sup>
3/16/98	The plan to roll over financial institutions' external debt into new loans with one–three year maturities is concluded successfully. <sup>2</sup>
4/8/98	The government successfully launches its first international bond issue since the financial crisis, consisting of US\$1 billion of 5-year notes and US\$3 billion of 10-year bonds. <sup>2</sup>

Sources: Bloomberg, Korean government official homepage, Moody's, Standard & Poor's, IMF, and local Korean newspapers.

<sup>1</sup>Local time unless noted.

<sup>2</sup>Eastern standard time in the United States.

# ANNEX 3

## Brazil

### Introduction

This annex provides detailed background for assessing the role of the IMF in anticipating and resolving Brazil's capital account crisis of 1998–99. It first investigates the effectiveness of IMF surveillance in the precrisis period. The following section discusses program design issues, including (1) support for the crawling peg, (2) fiscal policy and debt sustainability, (3) monetary policy, (4) structural measures, (5) official financing and private sector involvement, and (6) program projections. It examines both the initial IMF-supported program that was agreed in the fall of 1998, and the program as revised in March 1999. It also touches upon the successor program agreed in August 2001, which was canceled in September 2002. The current program, beginning in September 2002, is outside the scope of our enquiry. The final section presents conclusions.

### Precrisis Surveillance

This section assesses the role of the IMF in major areas of precrisis surveillance, including fiscal policy, exchange rate policy, banking sector issues, capital account developments and vulnerability indicators, and the impact of surveillance.

### Background

Many of the central issues of the precrisis period had their origins in the policies adopted in the aftermath of the Real Plan, the stabilization program launched in 1994 (Box A3.1). The IMF chose not to support the Real Plan with a program because, in its view, the proposed fiscal adjustment was insufficient to secure disinflation in a durable way.<sup>1</sup> Instead, a monitoring arrangement, involving twice-yearly

<sup>1</sup>A program was being sought not for balance of payments reasons but in the context of a debt restructuring deal with international banks. See IEO (2002) for a discussion of the broadening rationale for IMF-supported programs, the shifting of the boundary between programs and surveillance, and its possible consequences.

staff visits, was established, in part as a face-saving measure.<sup>2</sup> Not agreeing on a program adversely affected the relationship between the IMF and the Brazilian authorities, and weakened the impact of IMF advice on Brazil's policy formulation during the precrisis period.

The IMF's skepticism about the ability of the Real Plan to reduce inflation appears ill founded in retrospect. The anti-inflationary gains were achieved and sustained over an extended period, albeit with a much greater fiscal deterioration than the IMF had feared. However, the IMF was correct in recognizing that weaknesses in the plan would pose challenges in consolidating these gains. As early as the first half of 1995, concerns emerged over the widening current account deficit, which prompted the authorities to tighten monetary policy in an attempt to contain the surge in consumption. Over a longer time horizon, there were questions about the eventual exit strategy from an appreciated real exchange rate, and the risk that the exit would reignite inflation.

Unlike East Asia, where the crisis took the IMF by surprise, the vulnerabilities of Brazil were well identified by surveillance, perhaps because they were mainly macroeconomic in nature. As early as September 1995, a briefing paper expressed concern that the external current account deficit did not seem sustainable and that its financing was highly vulnerable to shifts in market confidence. A prescient management comment on a briefing paper in October 1997 noted that "the current strategy [was] a risky one, and one thing far worse than a fiscal contraction a year before an election [was] a foreign exchange crisis a week before an election." Staff reports for Article IV consultations were typically less frank, but carried a reminder that a relatively large current account deficit and heavy amortization commitments left Brazil vulnerable to shifts in investor sentiment. Even so, the IMF was generally more optimistic than the private sector. For example, in mid-1997, management instructed the

<sup>2</sup>Originally, a formal staff-monitored program appears to have been envisaged, but ultimately the closer monitoring relationship established was informal. Staff reports to the Executive Board were only prepared after the annual Article IV consultation missions.



### Box A3.1. Brazil: The Real Plan

The Real Plan was a two-stage procedure of substituting the old currency, first by a unit of real value (URV) and second by a means of payment, the real, which was initially set equal to one U.S. dollar. The URV was a device designed to eliminate the backward-looking indexation by virtue of the fact that the URV itself was a price index. It was only after all contracts had been converted into multiples of the URV that the new unit of account was issued. All the steps were announced to the public, with no surprises or shocks (Franco, 2000; Bacha, 2001). Unlike some of the previous stabilization plans, no price or wage freeze was attempted; thus the Real Plan generated wide popular support. On March 1, 1994, the URV was introduced and, after four months of contract conversion, the real was issued by the Central Bank of Brazil (BCB) on July 1, 1994, with 30-days advance notice.

The IMF, however, was reluctant to support the Real Plan (and the 1994 Brady debt restructuring program) with a financing arrangement. According to internal documents, there was skepticism in the IMF that the Real Plan would succeed in reducing inflation in a durable way. The IMF did not believe that the proposed fiscal stance was sufficient to produce the envisaged reduction in inflation in 1994, and doubted its sustainability after 1994. The response of government revenues to lower inflation was highly uncertain, and there were doubts over planned structural fiscal reforms, which depended in part on approval by Congress in a constitutional review.

Following its introduction in July 1994, the real was allowed to appreciate by about 15 percent in nominal terms. Inflation fell from a monthly rate of over 40 percent in the first half of 1994 to between 1 percent and 3 percent a month by the end of the year, but was still greater than in Brazil's major trading partners. According to contemporary IMF staff estimates, the real effective exchange rate appreciated 33 percent in terms of the general price index between June 1994 and February 1995.

imminent mission “to consider why some in the markets appear[ed] more skeptical about the Brazilian economy” than the IMF’s own analysis.”<sup>3</sup>

Public warnings of these vulnerabilities were rare, although the 1997 *World Economic Outlook* noted, in a likely veiled reference to Brazil, that countries with insufficient fiscal consolidation, and therefore with “excessive reliance on short-term interest rates to restrain domestic demand,” might be “more vulnerable to changes in market sentiment.” In June 1998, the *International Capital Markets* report noted a risk that “the re-evaluation of emerging market vulnerabilities [had] not run its course” and that the terms and conditions of external financing could worsen further, leading to a broadening of the crisis to emerging markets outside Asia. Nevertheless, the staff appraisal in the capital markets report implicitly downplayed the risks to Brazil, noting that “many Latin American economies” had strengthened their financial systems, permitting the use of aggressive and credible interest rate defenses against contagion from Asia.

<sup>3</sup>Market views were by no means monolithic but, given the appreciated real exchange rate, some private sector observers foresaw increasing strains on the exchange rate regime over the medium term, particularly if international capital market conditions became less buoyant. There was also growing market concern about fiscal sustainability and the prospects for fiscal consolidation and structural reforms. See, for example, IIF (1997a).

### Fiscal policy

Brazil’s fiscal position weakened substantially in 1995, owing in part to large increases in public sector wages, public sector price freezes, and the loss of control mechanisms that had previously relied on high inflation to erode the real value of budgeted expenditures (Table A3.1). The staff consistently called for efforts to strengthen the fiscal stance, primarily in order to reduce the burden on monetary policy and permit a decline in interest rates and, as a consequence, some real depreciation of the currency. Given the high overall tax burden, staff consistently took the position that fiscal adjustment should be carried out mainly through expenditure restraint.

From 1996, concerns about public debt sustainability were also cited as reasons for a tighter fiscal stance. Staff projections in successive reports nevertheless consistently showed public debt on a downward path from progressively higher bases, implying that the debt at each stage was “sustainable,” if an adequate primary surplus could be achieved in the future. For example, projections in the staff report for the 1995 Article IV consultation showed net debt declining to 15 percent of GDP by 2000. For 1996, these projections assumed a primary surplus amounting to 3.3 percent of GDP and a reduction in real interest payments equivalent to 2 percent of GDP, whereas the actual outcome was a primary deficit of

**Table A3.1. Brazil: Fiscal Developments***(In percent of GDP)*

	1994	1995	1996	1997	1998	1999	2000	2001	2002
Public sector borrowing requirement <sup>1</sup>	44.3 <sup>2</sup>	7.1	5.9	6.1	7.9	10.0	4.6	5.2	4.4
Operational balance <sup>3</sup>	0.5	-4.8	-3.9	-4.3	-7.4	-3.4	...	...	...
Federal government + Central Bank <sup>4</sup>	1.6	-1.6	-1.6	-1.8	-5.1	-3.2	...	...	...
States + municipalities	-1.0	-2.3	-1.8	-2.3	-1.8	-0.5	...	...	...
Public enterprises	-0.1	-0.8	-0.3	-0.3	-0.5	0.3	...	...	...
Primary balance	4.3	0.3	-0.1	-1.0	0.0	3.2	3.5	3.7	3.9
Federal government + Central Bank <sup>4</sup>	3.0	0.6	0.4	-0.3	0.6	2.4	1.9	1.9	2.4
States + municipalities	0.4	-0.2	-0.6	-0.7	-0.2	0.2	0.6	0.9	0.8
Public enterprises	0.9	-0.1	0.1	0.1	-0.4	0.7	1.1	1.0	0.4
Net public debt to GDP ratio	30.0	30.6	33.3	34.4	41.7	48.7	48.9	52.6	56.5

Source: Data provided by the Central Bank of Brazil.

<sup>1</sup>The coverage of the consolidated public sector in Brazil is very comprehensive.<sup>2</sup>The 1994 PSBR is high because of the very high nominal interest payments in the first half of the year, reflecting an inflation rate of over 40 percent a month.<sup>3</sup>The operational fiscal balance is defined as the primary balance less the "real" component of interest payments.<sup>4</sup>Comprises central administration, the Central Bank, and the social security system.

0.1 percent of GDP, and real interest payments lower by just 1 percent of GDP.

The persistently weak fiscal position and high real interest rates led instead to a rapid expansion in the ratio of public debt to GDP, despite the start of a far-reaching program of privatizations and sales of other assets. The stock of net public debt rose to 33 percent of GDP at the end of 1996, from 30 percent in 1995, as neither of the assumptions (on the primary surplus and real interest payments) was fulfilled. The projections in the staff report for the 1996 Article IV consultation were not so optimistic, but they still showed the ratio declining to 28.3 percent of GDP by 2001, on the assumption of a medium-term primary surplus of 2 percent of GDP and substantially lower real interest rates.<sup>4</sup> The report did not directly analyze why earlier projections had not been realized.

The authorities typically accepted in principle the IMF's advice that fiscal adjustment was necessary but they were generally less ambitious in their efforts than the IMF recommended. Even the modest fiscal adjustment targeted by the authorities was rarely achieved and little progress was made in practice on fiscal consolidation between 1995 and 1998, with the fiscal accounts at best in primary balance. The authorities faced strong constitutional and institutional constraints in implementing such a consolidation, in part because of heavy earmarking of tax revenues and political pressures, including competing priorities for the congressional agenda.<sup>5</sup>

<sup>4</sup>The real interest rate was assumed to fall from 17.3 percent in 1996 to 6 percent in 2000.

<sup>5</sup>For example, the Constitution stipulated that income tax changes could take effect only in the year after their approval.

From time to time, the IMF identified specific policy measures to achieve adjustment, or to bring the fiscal balance back on track.<sup>6</sup> However, instead of addressing immediate fiscal adjustment, the authorities accorded a higher priority to overcoming fiscal constraints in the medium term by establishing mechanisms to increase the flexibility of public expenditure, exercise control over state and local finances, and reform the pension and social security systems. The authorities were reluctant to seek congressional approval of revenue measures when constitutional reforms were under consideration by Congress. This does not mean that the Brazilian authorities never took tough fiscal measures. For example, faced with a major international turbulence in November 1997, they announced a package of fiscal measures ("the Package of 51"), estimated to yield over 2.5 percentage points of GDP.<sup>7</sup> Its implementation, however, faltered in the face of electoral pressures in 1998.

The IMF was generally realistic about the political constraints, including risks to implementing agreed measures. In internal papers, for example, staff judged

<sup>6</sup>For example, in mid-1997, the staff suggested the elimination of tax exemptions that were determined administratively, increases in wholesale tax rates by decree, stronger efforts to collect tax arrears and cuts in budgeted appropriations, as well as efforts to reduce payroll spending within existing constitutional constraints.

<sup>7</sup>The package included a surcharge on upper-bracket personal income tax, increases in taxes on fixed income investments, and increases in public sector tariffs. Regional tax incentives were reduced. Discretionary federal government spending was fixed in real terms, and the planned increase in the wage bill was substantially reduced. Limits on bank financing for state and municipal governments were tightened. Public enterprise spending, particularly on investment, was curtailed. Social security benefits were restricted.

that the November 1997 package would deliver the projected savings if implemented in full, but correctly pointed out the risk that spending pressures would build during the election year 1998 “particularly if external constraints ease”; the limitations faced by the federal government in controlling the states; and possible slippage in securing congressional approval for fiscal measures. The Article IV consultation report in January 1998 presented the implementation risks less starkly than did internal documents, although it did note that steady implementation of the fiscal package would be essential to reduce Brazil’s vulnerability.

While progress was slow, enough groundwork on fiscal reform appears to have been done by the Brazilian authorities to facilitate fiscal adjustment under the 1999 program. Importantly, this included measures to control fiscal relations between the federal government and states and municipalities, which were linked to debt restructuring agreements. In this context, several Brazilian officials interviewed noted the useful contribution of IMF technical assistance in this area, including public debt policy and management. The experience of 1999 shows that it was indeed possible to tighten fiscal policy, given sufficient political will.

### Exchange rate policy

The case of Brazil posed a number of challenges to the IMF’s approach to exchange rate policy. The Articles of Agreement have been interpreted as mandating that the IMF should take the exchange rate regime preferred by the authorities as given and try to ensure that other macroeconomic policies are consistent with it. Surveillance guidelines, however, state that Article IV consultation discussions and reports should include an accurate description of a country’s exchange rate regime, a candid appraisal of its appropriateness and consistency with underlying policies, as well as a forthright assessment of the exchange rate level.

Throughout the precrisis period, the IMF remained concerned about substantial real exchange rate appreciation and its adverse impact on Brazil’s external competitiveness, especially given the country’s poor export performance. However, implicit in its policy advice was the judgment that a gradual real depreciation could resolve the overvaluations, as long as this was supported by fiscal adjustment. Earlier in 1995, particularly in the aftermath of the Mexican crisis, there was greater skepticism—and much internal debate—as to whether the exchange rate system could be sustained (Box A3.2). Even then, internal papers reveal that the IMF favored a gradual exchange rate adjustment, combined with a major tightening of both fiscal and credit policy, rather than a step devaluation to counter current account problems.

Typically, the IMF’s policy advice was to accelerate the rate of depreciation within the de facto crawling peg system. Staff feared that floating the currency carried a substantial risk of overshooting. As time went on, concerns about overvaluation were downplayed, and the staff increasingly accepted the authorities’ arguments minimizing the size of any overvaluation, particularly in view of buoyant capital inflows that more than financed the current account deficit. Although at times the authorities indicated that they were open to accelerating the rate of crawl, they generally took the position that this would not noticeably benefit the current account and risked destabilizing market expectations and confidence.

The IMF was prepared to advise more drastic action *in extremis*, including a step devaluation or floating the currency. For example, at the time of the Asian crisis in mid-November 1997, IMF staff proposed that if there was a strong attack on the real, the exchange rate regime should not be defended. Management, however, advised against recommending a free float unless the band became totally untenable. The authorities reiterated their opposition to a discrete devaluation or a float, because of likely overshooting. In the event, Brazil weathered strong market pressure by raising interest rates sharply, announcing fiscal measures, and intervening heavily in the foreign exchange market.

Executive Directors generally supported the staff’s advice for a gradual acceleration of the crawl, though some believed even such an acceleration would be unnecessary or inadvisable. But there were exceptions. For example, in the discussion of the Article IV consultation in March 1997, one Executive Director argued that consideration should be given to allowing the exchange rate to float, so as to avoid an exchange rate crisis if investor confidence were to weaken. Most Directors, however, were of the view that, in the prevailing unsettled market conditions, any significant change in policy could lead to a loss of confidence. Some Directors encouraged the authorities to introduce greater flexibility into exchange rate policy, once market conditions had stabilized. At a meeting of the Executive Board on the Article IV consultation report in February 1998, staff orally disclosed that they had discussed a number of options with the authorities, including a discrete currency devaluation, more flexible exchange rate management, an acceleration of the rate of crawl, and the possibility of using a currency basket as a reference currency. One Executive Director, however, expressed displeasure over the absence of a clear discussion of exchange rate options in the papers prepared for the Board by staff.

While it was generally agreed that the currency was overvalued, there was considerable disagreement about the extent of the overvaluation (Figure A3.1).

### Box A3.2. Brazil: The Evolution of Exchange Rate Policy

In the period immediately preceding the introduction of the real, the exchange rate was allowed to depreciate in line with contemporaneous inflation.

The real was introduced on *July 1, 1994*, with the unit of real value (URV) converted into the real at parity with the U.S. dollar. An exchange rate band of R\$0.93 to R\$1 = US\$1 was initially established, but the exchange rate was ultimately allowed to appreciate in nominal terms to R\$0.83 to US\$1 in late 1994, with the floor of parity with the U.S. dollar maintained. The exchange rate was maintained at about R\$0.84 per U.S. dollar until March 1995.

Exchange rate policy was altered on *March 6, 1995* to a system of more depreciated adjustable bands, with a preannounced substantial further widening of the band from May 1995. This followed a rapid loss of reserves, reflecting a sharply widening current account deficit and weaker capital inflows following the Mexican crisis. However, in part owing to a lack of clarity about how the arrangement would operate and renewed pressures on the exchange rate, the policy was altered again on *March 8, 1995*, only two days later, with the adoption of a band of R\$0.88 to R\$0.93 per U.S. dollar. An inner band was established within this framework, which began to be operated as a de facto crawling peg, depreciating at an (unannounced) rate of about 0.6 percent a month. The outer band was periodically adjusted (approximately annually) to accommodate this rate of crawl, but had little operational significance.

In *April 1998*, the authorities introduced a marginal change in exchange rate policy by announcing a progressive widening of the inner band, initially just 0.4 percent wide, by 0.1 percent a month for the following three years.

On *January 13, 1999*, the inner band was abolished and the outer band became the operational band. It was initially established at R\$1.20 to R\$1.32 per U.S. dollar. It was announced that the band would evolve under a complex “endogenous diagonal band system” under which the rate of depreciation of the upper limit of the band would be faster when the actual rate was close to the lower limit of the band and vice versa. As the exchange rate fell immediately to the more depreciated boundary of the band, this involved a depreciation of about 9 percent.

On *January 15, 1999*, the exchange rate was allowed to float freely. This decision was confirmed on January 18, 1999, after consultations in Washington with IMF management. The program left some scope for Central Bank intervention in foreign exchange markets, although it was understood that this would not involve defending any specific exchange rate.

The IMF staff initially noted a strong real appreciation when the Real Plan was launched. In February 1995, the staff put the real appreciation since June 1994 at 33 percent in terms of the general price index. By late 1996, however, there was a tendency to downplay these figures, possibly in response to the views of the Brazilian authorities who used a wide range of arguments to suggest that any overvaluation was at most moderate (see Franco, 2000).<sup>8</sup> The staff argued that the currency had been undervalued at the outset of the Real Plan and the subsequent significant real appreci-

ation had been offset to some extent by productivity increases which were not fully reflected in prices. It also indicated that a pickup in export growth during 1997 weakened their arguments in favor of accelerating the rate of depreciation, although export volume growth of 10 percent in 1997 in fact was no greater than the increase in world trade volume.<sup>9</sup>

The net result was that, in late 1998, staff believed that the exchange rate was overvalued by 15–20 percent. The behavior of the exchange rate, after it was allowed to float in 1999, as well as comparison with outside assessments, suggests that staff likely underestimated the degree of overvaluation. Recent Central

<sup>8</sup>The authorities’ argument was threefold. First, average-on-average price indices overstated inflation in the month of transition to the new currency. Second, some of the change in relative prices between tradables and nontradables was an equilibrium phenomenon typical of sudden disinflation and not a measure of real exchange rate misalignment. Finally, the substantial productivity gains should have been taken into account over and above their effects on price indices, as increased competitiveness of domestic producers might be reflected in higher profit margins rather than lower domestic prices.

<sup>9</sup>In this context, an important presentational change was made by the staff in late 1997, whereby the real effective exchange rate began to be calculated relative to the 1994 average, instead of the earlier use of the level prevailing prior to the introduction of the real. This presentational change represented an upward adjustment of almost 12 percent in terms of the base period, and may have reinforced the perception that any overvaluation was manageable.



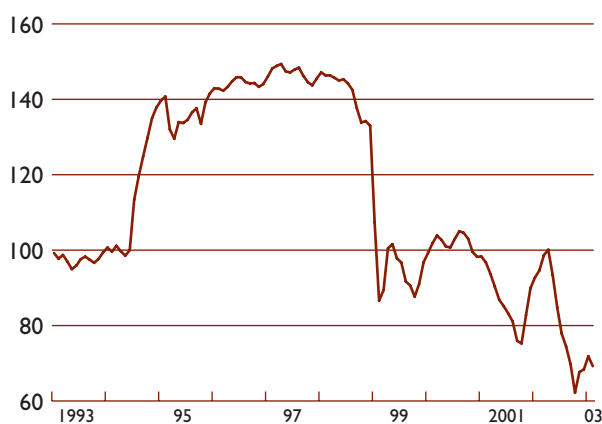
Bank estimates indicates that, measured by relative consumer prices, the real effective exchange rate had appreciated by 45 percent between June 1994 and December 1997, although this had fallen to 33 percent by December 1998. Contemporary analyses by the World Bank estimated the real to be overvalued by about 30 percent. The real effective exchange rate depreciated by some 35 percent in 1999 after the currency was floated. The exchange rate has fluctuated since then—and no doubt overshot at times—but peak levels of the real effective exchange rate have remained some 27 percent below the level of December 1998.

In retrospect, the IMF should have encouraged an earlier exit from the crawling peg regime at an opportune moment. This would have been consistent with the messages emerging from the IMF's own cross-country policy analysis of exit strategies from exchange rate-based stabilizations.<sup>10</sup> Indeed, there were windows of opportunity to exit from a position of strength in late 1996 or early 1997, and again in the first half of 1998. The limited pass-through to inflation of the eventual float in 1999 suggests that, if well handled, carefully timed and supported by appropriate policies, floating the currency would have been possible without reigniting rapid inflation. Of course, at that time it was not clear that such a step would not lead to high inflation, although by then price stability had been established for some time.<sup>11</sup> The immediate output impact of a float would likely have been greater than occurred in 1999 because the private sector was less hedged at that time. By the same token, the adverse impact on public debt would have been correspondingly smaller.

### Banking sector issues

In the post–Real Plan period, some private sector institutions encountered difficulties and three major banks failed as they lost income from the “float” after

**Figure A3.1. Brazil: Real Effective Exchange Rate<sup>1</sup>**  
(June 1994 = 100)



Sources: Central Bank of Brazil; and IEO staff calculations.  
<sup>1</sup>Based on INPC consumer price index.

inflation fell. The Brazilian authorities established two restructuring programs, which incorporated incentives to encourage the acquisition of weak private banks and privatization of weak state banks, resulting in a consolidation in the banking system. With strong encouragement from management, staff closely monitored these banking sector issues. The staff report for the 1996 Article IV consultation noted that the risk of a systemic problem had been effectively reduced through improvements in supervision, recapitalization, mergers, and the entry of foreign banks. The banking system, however, remained vulnerable to macroeconomic shocks and staff noted the desirability of further strengthening bank supervision.

By the time of the crisis, the IMF had analyzed in detail the risks to the financial system and rightly concluded that it was sound, with little foreign exchange risk and little systemic exposure to credit risks. The background Recent Economic Developments paper for the 1997 Article IV consultation included a detailed assessment of risks in the Brazilian financial system. The supporting papers for the 1998 SBA request included an annex on the soundness of the banking system. In relation to credit risk, staff concluded that, given low levels of lending, high capitalization, and strength of ownership, a further deterioration in asset quality was unlikely to cause strains. Currency risk in the financial sector was also small as a result of hedging through currency futures and dollar-indexed government securities.<sup>12</sup>

<sup>10</sup>For example, the 1997 *International Capital Markets* report noted that, while a significant part of the favorable capital market conditions was likely to prove permanent, “a lack of flexibility in foreign exchange arrangements [put] individual emerging market countries at increasing risk of being tested through a speculative attack on their exchange rate, combined with a potentially abrupt loss of access, whenever there [were] uncertainties regarding the sustainability of macroeconomic policies and structural weaknesses.” At the Executive Board discussion of the report, many Directors called for further analysis and recommendations on appropriate exit policies. A paper on this subject was prepared by December 1997, which stressed, *inter alia*, the importance of exiting “from a position of strength.”

<sup>11</sup>Cross-country historical data suggest that the pass-through of an exchange rate devaluation to the price level is likely to be smaller if the initial real misalignment is substantial, and the devaluation is supported by fiscal and monetary restraint. However, Brazil's unusual history of devaluation and pervasive indexation meant that the relevance of cross-country evidence was questionable.

<sup>12</sup>It is not clear whether the financial system was so well-hedged earlier in 1998, when many financial institutions engaged in the “carry-trade” by borrowing in dollars on the assumption that the crawling peg would be sustained until the election.



Problems in the state government-owned banking sector and in federally owned banks (Banco do Brasil and Caixa Economica Federal) were more intractable. Directed loans and prolonged regulatory forbearance had resulted in undercapitalized institutions with low-quality portfolios and operational inefficiencies. The IMF argued for the privatization or closure of “state” banks as a means of enforcing fiscal discipline at the state level. A restructuring scheme allowed states to deal with institutions under their control through privatization, liquidation, transformation into a nonfinancial institution, or an approved restructuring plan. By the time of the 1998 program, staff judged that the government had dealt comprehensively with the “stock” problem of the financial system in the states, and the risk that problems would reemerge had been reduced by placing state banks under the same regulatory framework as private banks.

### Capital account developments and vulnerability indicators

Developments in capital flows, including the authorities’ efforts to influence such flows with changes in taxes and regulations, were covered in surveillance, but these issues were not a central focus of the analysis. In response to comments from review departments, the staff appraisal of the 1996 Article IV consultation did note that much current account financing was in the form of capital flows that were highly susceptible to changes in investor sentiment. But elsewhere, the report downplayed these issues, taking comfort instead in an improvement in the “quality” of capital flows, noting that “volatile short-term flows” declined sharply, although the stock of short-term debt was still growing.<sup>13</sup>

Capital flow issues received greater focus in 1998, following the East Asian crisis. Management comments on a briefing paper in 1998 noted the importance of closely monitoring capital flows, and their potential as a source of vulnerability, notwithstanding the then strong foreign exchange reserve position. However, IMF staff was not fully informed of certain important indicators of vulnerability, including the composition of reserves, the extent of futures market intervention, and the size and composition of short-term debt. In part, this reflected deficiencies in the coverage of official data on short-term debt.

By early 1998, the IMF staff had become aware that official estimates likely excluded certain categories of short-term inflows, so that the stock of

short-term debt was being underestimated.<sup>14</sup> It turned out that much of the capital outflows that affected Brazil between August and December 1998 were from sources that may not have been adequately reflected in official short-term debt figures:

- “Leads and lags” in trade finance had built up strongly in previous years, encouraged by arbitrage between low international and high domestic interest rates, but this buildup was not reflected in the official short-term debt figure. Reversals in “leads and lags” between August and December 1998 amounted to some US\$10 billion.
- After strong inflows in the first half of the year, there were outflows of US\$6.5 billion from fixed income funds, one of the weak areas of official figures already identified by staff.
- Another factor relates to “CC5 accounts,” that is, bank accounts denominated in local currency but freely convertible to foreign currency. They were formally only available to nonresidents, but banks also offered their resident customers legal transactions through these accounts in order to take money out of Brazil. According to Central Bank reports, outflows of unregistered fixed income investments of *nonresidents* through CC5 accounts were likely a significant component of outflows (Franco, 2000). Since the accounts were held by nonresidents, the balances in these accounts should strictly have been included in external debt. To the extent that CC5 accounts were primarily a channel for outflows of *resident capital*, a broad assessment of vulnerability should have noted the extensive outflows that had occurred through these channels in previous years.

In September 1998, the staff noted that a reliable assessment of the pressures on reserves was hampered by gaps in information on short-term liabilities, leading to an intensive dialogue and investigation on these issues. Unlike Korea, however, these informational weaknesses did not have a critical impact on assessing the likelihood that a crisis would occur. In part, this reflected the relatively large cushion of remaining usable reserves (Figure A3.2).

There were also problems relating to the quality of reserves, some of which staff only became fully aware of during the intensive preprogram negotiations. These included:

- As of September 1998, some US\$6.8 billion of Brazil’s US\$45.8 billion in reserves consisted of

<sup>13</sup>There were numerous inconsistencies in the figures on short-term flows in the report, reflecting a lack of clarity in the data. For example, in medium-term projections, the stock of external short-term debt was shown as *declining* by US\$6 billion in 1996 when in fact it had grown strongly.

<sup>14</sup>In 1995, there was major discrepancy between short-term capital inflows in the balance of payment (US\$18 billion) and the increase in short-term external debt (US\$1.9 billion), which could have alerted the IMF to these shortcomings early.

holdings of Brazil's own Brady bonds, valued at their purchase price. Not only did these not constitute claims on nonresidents, but their market value was lower and there were doubts about their liquidity, particularly in a crisis when they might be needed.

- Some US\$5.8 billion of the reserves were held as deposits in overseas branches of Brazilian banks, notably Banco do Brasil. Some of this was on-lent to exporters on greater-than-overnight maturities and so was not available for the authorities' use.
- The Central Bank's futures position stood at about R\$35 billion in September 1998. A large futures market position had been initiated a year earlier, in September 1997, as the Central Bank intervened extensively, indirectly through the Banco do Brasil, to counter exchange rate pressures.<sup>15</sup> From market sources, IMF staff quickly became aware of the possibility that the Brazilian authorities might be intervening in the futures market through the Banco do Brasil, but for a long time did not know the size of this position. After being run down in the first half of 1998, the position was substantially rebuilt in August and September 1998. The size of the position was an important factor in assessing the potential impact of a sharp exchange rate depreciation on public debt, on the one hand, and on the financial and corporate sector, on the other. A further important consideration was the extent to which it posed a potential drain on reserves. These considerations were analyzed in a staff paper at the time of the 1998 program, which concluded that as counterparties were almost all residents hedging existing exposures, the unwinding of the Central Bank's futures book did not pose a threat to official reserves different from that posed by domestic liquidity in general.

However, in contrast to Korea, there was no disclosure of information that might have destabilized market expectations.

Given the importance of informational issues in other capital account crisis cases, it is surprising that greater efforts were not made to obtain such information earlier in surveillance. An initial effort by the IMF following the Mexican crisis to improve access to Brazilian data was not sustained. In part, this is the result of the IMF's lack of authority

<sup>15</sup>One source of this pressure was the need for the offshore operations of Brazilian financial institutions to meet margin calls on aggressively leveraged positions in international assets, including Brazilian Brady bonds.

**Figure A3.2. Brazil: Foreign Exchange Reserves<sup>1</sup>**  
(In billions of U.S. dollars)



Sources: IMF database; Central Bank of Brazil; and IEO staff estimates.  
<sup>1</sup>Net of IMF and BIS-coordinated credit.

to compel disclosure of information, particularly when there was no program. The authorities were reluctant to disclose market-sensitive information to the IMF because of the fears that it might quickly lead to its dissemination to the market. While Brazil published a good deal of detailed data, it was one of the few major emerging market economies that did not subscribe to the IMF's Special Data Dissemination Standard (SDDS). For much of the precrisis period, data on foreign exchange reserves were only published with a lag of about seven weeks.

In this respect, recent initiatives may be beneficial in closing gaps in the information available to the IMF and to the markets, particularly concerning foreign exchange reserves, provided that the SDDS is voluntarily complied with. The comprehensive "template" on foreign exchange reserves and potential drains on reserves, which was added to the SDDS in 1999, and to which Brazil now subscribes, would have required the dissemination of comprehensive detailed data on the composition and disposition of reserves, and the futures market position, after only a short lag.

The situation is less clear for short-term debt, given the inherent difficulty of collecting such data comprehensively in a timely manner. From March 2003, the SDDS requires the disclosure of data on short-term debt, and IMF guidelines for Article IV consultations also note that there should be a discussion of any known shortcomings in the coverage of official data. Moreover, a new Guide has been prepared by an IMF-chaired group of international agencies, providing comprehensive guidelines for measuring and presenting external debt

statistics.<sup>16</sup> These steps should contribute to the publication of more timely and comprehensive data on short-term debt in the future. However, the operation of the SDDS to date suggests that a country is likely to be formally treated as in compliance if it publishes timely short-term debt data, even if its coverage or quality is lacking in some respects.

### Impact of surveillance

The key themes of IMF policy advice during the precrisis period were the urgency of fiscal adjustment and the need to boost competitiveness, typically through more rapid depreciation of the crawling peg. The extent to which these recommendations had an impact on policy implementation was limited. In practice, little was achieved in fiscal consolidation, with the consolidated public sector remaining in approximate primary balance—or running a small primary deficit—between 1995 and 1998. Moreover, the modest exchange rate depreciation of 7 percent a year was kept unchanged from March 1995 until at least early 1998.

There were at least three reasons why the impact of IMF policy advice was limited. First, one explanation was the lack of effective dialogue between the IMF and the Brazilian authorities, particularly those at the Central Bank. Some participants interviewed by the evaluation team attributed this, at least in part, to the fact that the IMF did not back the Real Plan with a program, which made some of the architects of the Real Plan less receptive to IMF advice. According to staff, relations were satisfactory at the working level, but a lack of endorsement from senior levels inhibited the flow of information from the Central Bank, where the staff had limited direct access to sector experts.

On the central issue of exchange rate policy, the authorities were generally unreceptive to outside advice. Tensions within the Brazilian economic team over exchange rate policy, in the early stages of the Real Plan, led to the resignation of a Central Bank Governor in early 1995. Subsequently, according to some senior officials interviewed, discussion within the authorities of alternative exchange rate policies was infrequent and limited. In this context, the IMF clearly faced significant challenges in influencing exchange rate policy.

The IMF made efforts to improve relations with the Brazilian authorities from the mid-1990s, in part through providing technical assistance, and there is some evidence that the quality of dialogue—at least with the Finance Ministry—improved from about

1997 onward. Back-to-office reports in 1997 and 1998 describe the dialogue with the authorities as “open and candid.” However, it also appears that there was some tendency to tailor advice at the margins to build trust with the authorities, for example, in assessing exchange rate overvaluation. According to some IMF staff members interviewed, the IMF was inclined to give the Brazilian authorities the benefit of the doubt, in part because it had earlier been too skeptical about the Real Plan.

Although IMF missions and contacts typically focused on their direct counterparts in the Ministry of Finance and the Central Bank, there were some efforts to reach out to other parts of the government. Owing to the centrality of state and municipal finances to the key fiscal questions, surveillance missions visited state and local governments. There was also some limited interaction with key members of Congress with expertise in economic and financial issues. Broader and more formal interaction with Congress was viewed by the authorities as potentially counterproductive. Missions were aware of private sector perspectives through market contacts in Brazil, and at times derived important information from them, for example, on government intervention in futures markets.

Second, another reason why the impact of IMF advice on economic policy was limited was the lack of transparency in these matters. Little or none of the IMF’s analysis of developments in Brazil was made public, apart from references in the *World Economic Outlook* and *International Capital Markets* reports.

Virtually no analytical work on Brazil was published, given the sensitivity of the authorities, including the Brazilian Executive Director, to open discussion of policy issues involving Brazil. A higher-than-general degree of secrecy applied to Executive Board papers on Brazil, so that even staff reports for Article IV consultations were individually numbered and named to inhibit copying and leakage. There was also a high degree of sensitivity on the part of the authorities regarding the content of staff papers that, according to staff, inhibited the candid written expression of staff views, including to the Executive Board.

The IMF’s subsequent transparency initiatives have enabled some progress to be made in this area. Even with these initiatives, however, explicit authorization from the authorities is required before the staff’s detailed assessment and argumentation as expressed, for example, in staff reports for the Article IV consultations may be released to the public. Although Brazil has agreed to the publication of PINs and Technical Memorandums of Understanding, it has not yet agreed to the publication of staff reports or the Financial Sector Stability Assessment.

Finally, a third reason why the IMF’s policy advice had limited impact was the buoyant international cap-

<sup>16</sup>The Inter-Agency Task Force on Finance Statistics, *External Debt Statistics: Guide for Compilers and Users* (Washington: International Monetary Fund, 2002).

ital market conditions between mid-1995 and late 1997. Private lenders and investors were willing to finance the large current account deficit, irrespective of the IMF's concerns on particular policy issues. Spreads on Brazilian bonds declined in line with global liquidity conditions, to around 400 basis points in October 1997 from around 1,000 basis points at the start of 1996, although there was little evidence of improved macroeconomic fundamentals that would have warranted this reduction (Figure A3.3).

## Program Design

This section discusses major issues of program design in the IMF-supported program, as agreed in November 1998 and revised in March 1999 in light of the change in the exchange rate regime in January.

### Support for the crawling peg

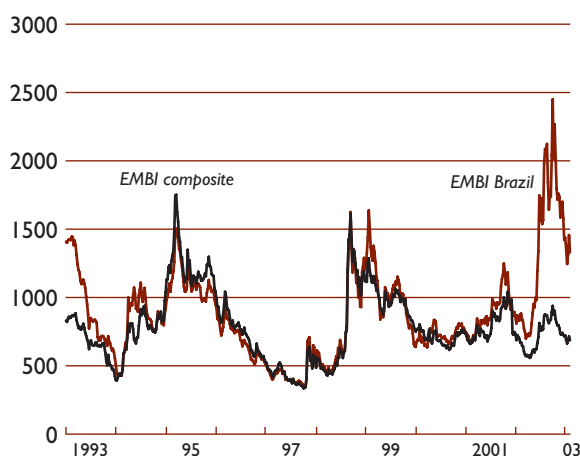
A central issue in program design was the decision to proceed with a program in October–December 1998, without substantial modifications to the exchange rate system (while allowing for possible modifications at the time of reviews). At an early stage in formulating a possible program, management requested the staff to prepare a paper on the options for exchange rate policy. In this paper, staff recognized that the authorities would take all feasible steps to prevent a devaluation in advance of the presidential election, but believed that they might afterwards consider a modification within the context of an IMF-supported program. This and other papers indicate that staff viewed greater depreciation as an essential component of a program and initially favored a combination of a faster crawl and a significant widening of the band. Subsequently, program negotiations centered on whether or not to accelerate the rate of crawl. From an early stage, staff preferred to avoid a discrete devaluation (or float) for fear that it would result in reindexation and reigniting high inflation. In contrast, in the staff's view, a faster rate of crawl could improve competitiveness substantially, with less risk of rekindling inflation.

A preliminary understanding was reached during the 1998 Annual Meetings, immediately after the presidential election, that the existing exchange rate regime could be maintained and that neither an upfront devaluation nor a float would be required, provided that reserves did not fall too low.<sup>17</sup> A joint public statement issued on October 8, 1998 empha-

<sup>17</sup>In the event of unsustainable reserve pressure, the staff's initial tentative preference was for a discrete adjustment of the exchange rate level, perhaps to the average 1994 level, followed by a renewed crawl with a wider band.

**Figure A3.3. Brazil and Emerging Markets Bond Index Spreads**

(In basis points)



Sources: JP Morgan Chase; and Datastream.

sized the authorities' "firm commitment to their current exchange rate regime" and IMF management's full support for that position. Nevertheless, IMF staff and management continued to press the authorities for a faster monthly rate of crawl, a wider band, or both, to achieve at least a 10 percent real depreciation against the U.S. dollar in the first year of the program. The authorities strongly resisted accelerating the rate of crawl, on the grounds that this would only yield a marginal improvement in the already expected real depreciation and risked both destabilizing market expectations and dissipating domestic support for fiscal adjustment. Ultimately, the program announced on November 13 did not specify any change in the rate of crawl.

There was considerable internal debate on exchange rate policy within the IMF. RES suggested, in early October, that management should consider the circumstances in which Brazil should be encouraged to abandon the existing exchange rate policy. Some other review departments favored the option of maintaining the rate of crawl initially, but possibly accelerating it after a short delay when market conditions might be more favorable. These included PDR, which supported the authorities' view that any change to the existing policy would likely be counterproductive in the aftermath of the Russian devaluation. A pure float risked overshooting and could lead to a devaluation-inflation spiral. The markets would be likely to judge any "acceptable" step devaluation to be insufficient, and this would trigger further capital outflows.

The unstable global market conditions in August–December 1998 also had an impact on the decision



to maintain the peg. Staff interviews and internal documents suggest that there were three main aspects. First, there was a view that an exit from the peg under such circumstances would likely lead to greater exchange rate overshooting, and hence a greater risk of returning to high inflation, than an exit in calmer circumstances. Second, there were systemic concerns about global liquidity following the Russian crisis and the Long-Term Capital Management problems. In this context, maintenance of Brazil's exchange rate peg became identified with international stability. Finally, there was concern that an exit from the peg under pressure could have a regional knock-on effect, particularly on Argentina.

The decision to support the peg was influenced by the judgment that any overvaluation of the real was moderate, and could be offset by further real depreciation over a 9–18-month period, if the pace of the crawl was accelerated. At a press conference following agreement on the program, management publicly criticized the view that the exchange rate was overvalued by as much as 25 percent. Internal papers noted that the 10 percent real depreciation the staff was seeking over the first year of the program would bring the real effective exchange rate “close to its average 1994 level.”

The IMF's major shareholders were briefed on the status of negotiations with Brazil during the Annual Meetings. The views of major shareholders on the sustainability of the peg diverged markedly. According to staff interviews, the U.S. authorities, who in particular kept close contact with IMF management and staff, took the view that the Brazilian authorities should not be forced to change the rate of crawl, although it would have been better to engage the support strategy around an exit from the peg if Brazil had been prepared to move. A number of other shareholder governments were in principle opposed to supporting the peg. Although they were prepared to approve the program when it was formally discussed, some Executive Directors expressed their frustration at the lack of a discussion in the Executive Board on exchange rate issues before the key features of the program were determined.

The strategy to support the crawling peg was known at the time of adoption to be subject to considerable risk, although staff interviewed believed at the time that the exchange rate regime probably could be sustained for a period, given strong implementation of the program. Ultimately, it was decided to give the Brazilian authorities the benefit of the doubt. The criteria for evaluating the decision therefore should be: Did the decision have a reasonable probability of success at the time? Were the conditions required for the success of the strategy correctly identified and discussed frankly in the Executive Board? In this context, did the IMF correctly

assess the ownership of the program, not only by the counterparts with whom it was directly negotiating, but also by the wider political system? What were the consequences of the failed attempt to support the exchange rate anchor, compared with the alternative of a more immediate move to a flexible exchange rate regime in October or November 1998?

In our view, the probability of sustaining the crawling peg was lower than IMF staff and management implicitly suggested to the Executive Board and the wider public. In particular, the staff report supporting the request for the SBA was not fully frank about the risks that the program—and exchange rate policy, in particular—faced,<sup>18</sup> although the Board discussion did highlight certain risks, particularly to implementing the fiscal program. As discussed below, the financing assumptions of the program were also overoptimistic, even allowing for the fact that they assumed that confidence would be restored rapidly.

The market's initial reaction to the announcement of the program was favorable, although considerable skepticism remained about the medium-term credibility of the peg. The speed with which the program went off track, however, resulted from a number of adverse shocks. The staff paper for the program review in March 1999 identified these as delays in congressional approval of key components of the fiscal package, doubts about the commitment of the states to meet their obligations to the federal government, and a premature and rapid reduction of interest rates.

These adverse developments resulted in part from the lack of broad ownership of the required supporting measures by the wider political system and the country as a whole. For example, the failure of the Central Bank to follow a sufficiently supportive monetary policy seems to have resulted from a lack of ownership of the monetary program at senior levels in the Central Bank, however strong its ownership of the crawling peg was. Reportedly, contrary to an understanding with the IMF, senior Central Bank officials did not feel bound to consult with the IMF on interest rate decisions. Concerns that interest rates were being reduced too fast were apparent from the time the Executive Board approved the program.

It is not clear if the IMF correctly judged the changing priorities and commitment at the highest political levels to maintaining the exchange rate regime. Initially, the ownership of the fiscal program was underlined by a high-profile speech by the President on September 23, 1998, just before the presidential election, in which he outlined the tough fiscal

<sup>18</sup>For example, RES comments on the draft report noted that the tone was too glowing to be fully credible and the staff faced difficulties in “squarely addressing the issue of the appropriate level of the real exchange rate.”



measures that would need to be undertaken early in the second term. The President also expressed to IMF management his commitment to the peg. Nevertheless, the President's commitment was subject to various political considerations. Powerful industrial circles were pressing for a faster reduction of interest rates, abandonment of the exchange rate regime, and a more "developmentalist" policy approach. According to some interviewed for the evaluation, a move to a more flexible exchange rate policy, linked with a change in the composition of the economic team, had originally been planned for early in the President's second term. No mention is made of these political tensions in internal papers seen by the evaluation team, or papers for the Executive Board, until the staff's note on recent developments for an informal Executive Board session in mid-December 1998.

The credibility of the IMF was clearly damaged by the rapid failure of a central element of the program. Some have argued that IMF support for the peg was justifiable, even if it only postponed the collapse of the peg, including during the period of program negotiations. International financial markets were exceptionally nervous at the time in the aftermath of the Russian default and the Long-Term Capital Management crisis, and devaluation in Brazil would have triggered major systemic effects. These considerations appear plausible and it is difficult to pronounce definitively on this issue. In retrospect, in view of what actually happened, the IMF likely overestimated the adverse impact of an earlier exit. Our assessment is that an orderly exit, as part of an IMF-supported program, from a peg, which was widely believed to be unsustainable, would have had limited systemic impact. It is more difficult to say, however, what would have happened if Brazil had insisted on maintaining the peg without the IMF support.

Some commentators have criticized the IMF-supported program for helping to "bail out" the Brazilian private sector by allowing it to build a government-provided "hedge" against exchange rate depreciation, with serious consequences for the public sector debt position. To the contrary, IMF staff and management were consistently critical of the authorities' provision of such a "hedge." Moreover, as noted, most of the exchange rate hedge, in the form of exchange rate-indexed government securities and futures market intervention, was in place before the program was agreed in November 1998. Between October and December, the authorities substantially reduced their futures market position (briefly to zero in early December), and the proportion of securities linked to the exchange rate fell slightly. With renewed pressure on the real, however, the Central Bank then rebuilt open futures positions to US\$10.5 billion (incurring a final loss of R\$8 billion) and used net reserves of US\$13.7 billion to defend the peg. The additional hedge that

was provided under the IMF-supported program was substantial, but it was made mainly during the final days of the peg and against the spirit of the program.

## Fiscal policy and debt sustainability

### Fiscal developments

The key fiscal issue in program design centered on the sustainability of Brazil's public debt. The initial 1998 program stated that the *main* objective of the government's fiscal adjustment program was to stabilize the ratio of net public debt to GDP at 47 percent in the calendar year 2000, declining thereafter (Figure A3.4). This was to be achieved through higher primary surpluses. Program projections, which assumed that domestic interest rates would decline to 17 percent by 2000 from an average 29 percent in 1998, made allowance for substantial revenue from privatization to reduce net public debt, as well as an allowance to recognize debt that had not previously been securitized.<sup>19</sup>

The revised program in March 1999 reaffirmed that the main aim of fiscal policy was to ensure the medium-term sustainability of the public debt. The sharp depreciation of the real in early 1999 had, however, substantially boosted the net public debt to GDP ratio to 52.2 percent in February 1999 from 42.6 percent at end-1998. This reflected the revaluation of external debt and foreign exchange-indexed domestic debt, as well as the Central Bank's losses on its open position in the futures market. As a result, the target for the primary surplus was raised to 3.1 percent from 2.6 percent of GDP in the original program in 1999, with 3.25 percent in 2000, and 3.35 percent in 2001.

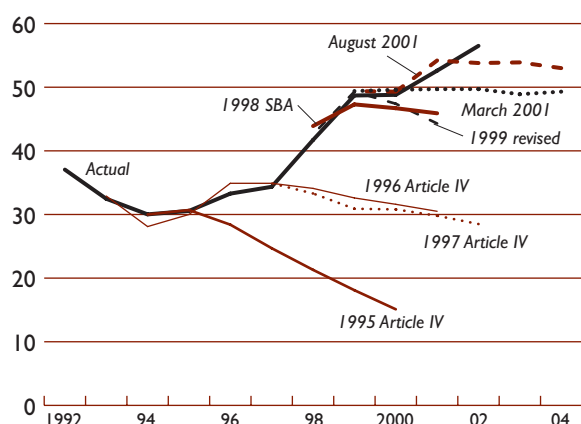
The IMF-supported programs were critical in coalescing support for a substantial and lasting improvement in the fiscal stance. Program targets for a substantial primary surplus were achieved in every year under the program, although the ratio of public debt to GDP increased markedly, from 34 percent of GDP in 1997 to a peak of 62.5 percent in September 2002, before falling back to 56.5 percent by the end of 2002. Indicative targets for the net public debt stock were frequently missed.

The root of the problem lay in the composition of Brazil's public debt, which now consists mainly of debt indexed to the short-term interest rate or the ex-

<sup>19</sup> These so-called "skeletons" typically had their origins in imperfectly transparent fiscal practices or in the suspension of indexation mechanisms under various historical stabilization plans. They included the recognition of losses related to the recapitalization of the workers severance payment fund (FGTS) and the housing mortgage insurance/subsidy fund (FCVS). It was assumed that recognition of debt skeletons would be equivalent to 1.7 percent of GDP in 1999 and 0.7 percent of GDP in 2000.

**Figure A3.4. Brazil: Debt Sustainability Projections**

(Net public debt as a percentage of GDP)



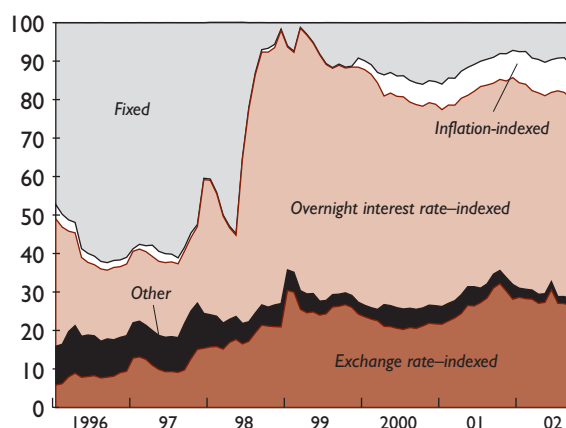
Sources: IMF database; and Central Bank of Brazil.

change rate (Figure A3.5). Following the Russian crisis, issuance of fixed-interest debt virtually stopped as the yields rose substantially, and was replaced by issuance of interest rate-indexed debt as a way of lengthening maturity and thus to reduce the rollover risk.<sup>20</sup> This, however, made the stock of public debt highly vulnerable to interest rate hikes. Moreover, the subsequent depreciation of the real increased the domestic currency value of domestic debt indexed to the exchange rate, issuance of which rose substantially following the Asian crisis as the markets began to anticipate a devaluation of the real. Selling exchange rate-linked debt also had the effect of mitigating direct pressures on the exchange rate. In 2002, the growing debt burden, and increasing market concerns over whether it could be sustained, also led to an increase in the “Brazil premium,” related to the risk of potential default, although domestic debt was not affected as external debt was.

After the sharp impact in early 1999 resulting from the floating of the real, exchange rate depreciation had only a moderate impact on the growth of the public debt stock in 2000 and 2001 (Table A3.2). There was a much greater impact in 2002, as the sharp exchange rate depreciation increased the net public debt stock by 9.5 percent of GDP. The effect of exchange rate changes on the debt stock was approximately evenly divided between external debt and domestic debt indexed to the exchange rate. Pri-

<sup>20</sup> In terms of achieving these objectives, interest rate-indexed debt was equivalent to exchange rate-indexed debt.

**Figure A3.5. Brazil: Composition of Federal Domestic Securities<sup>1</sup>**



Source: Central Bank of Brazil.

<sup>1</sup>Held outside the Central Bank.

vatization receipts also fell below projected levels. These receipts were equivalent to just 0.9 percent of GDP in 1999, well short of the 2.9 percent of GDP projected at the time of the 1999 program revision.

### Conditionality

The original program included a performance criterion on PSBR and an indicative target on the primary surplus of the consolidated public sector. In the revised program, it was the primary surplus—the fiscal variable that was under the greatest control of the authorities—that was instead subjected to a performance criterion. Indicative targets on the net debt of the consolidated public sector were also introduced.<sup>21</sup> It was intended to take into account deviations from these indicative targets in finalizing performance criteria on the primary balance.

IMF staff pressed the authorities to reduce the proportion of domestic debt linked to the U.S. dollar, for example, by rolling over a limited percentage of maturing securities. Rather than introducing a performance criterion, however, the IMF relied on specific, but informal, assurances from the authorities. The IMF was concerned that specifying a performance cri-

<sup>21</sup> There was a performance criterion in the original 1998 program, which specified a minimum level for the recognition of previously unregistered liabilities, net of privatization receipts. From the March 1999 program revision, the indicative target for the net debt of the consolidated public sector was automatically adjusted to the extent that debt recognition varied from the assumptions underlying the program.

**Table A3.2. Brazil: Factors Affecting Net Public Debt***(In percentage of valorized GDP)<sup>1</sup>*

	2000	2001	2002
Primary surplus	-3.4	-3.5	-3.4
Nominal interest	6.8	6.9	7.3
Exchange rate adjustment	1.6	3.0	9.5
Indexed domestic debt	0.8	1.5	4.9
External debt	0.8	1.5	4.5
Debt recognition	0.8	1.5	0.9
Privatization	-1.8	-0.1	-0.2
Memorandum item: Net debt to GDP	48.8	52.6	56.5

Source: Central Bank of Brazil.

<sup>1</sup>These ratios are expressed as a ratio of "valorized" GDP, that is, in prices of December of each year.

terion for reducing the foreign exchange-indexed debt, coupled with a binding floor on NIR, could excessively tie the hands of the Central Bank with respect to the markets and make things worse if a lack of compliance with this target under unfavorable market conditions also forced an interruption in IMF disbursements. The authorities did at times make some progress, as in the first half of 2000, but resorted to the sale of dollar-linked securities when market conditions became more difficult, and failed to achieve these informal targets. At times, little alternative was available to ensure the rollover of the domestic debt. At other times, however, a trade-off existed between the cost of selling fixed rate securities—buying "insurance" against the risk of future exchange rate depreciation—and that of selling dollar-linked securities, with a lower immediate interest rate cost, but with the public sector bearing the risk of future depreciation. While a definitive conclusion can only be based on the ex ante assessment of this trade-off involving probabilistic events, in the light of what actually happened ex post, the IMF-supported program would have been more successful in achieving its declared aim of reducing the debt-to-GDP ratio, thereby reducing the economy's vulnerabilities, if it had included stronger incentives (e.g., through stronger conditionality) for reducing dollar-indexed debt, particularly during periods of favorable external conditions.

The primary surplus targets set in successive reviews were satisfied, often with some ease. However, in some respects, these targets were unambitious and left insufficient leeway for the impact of shocks. In particular, given the greater-than-expected strength of economic activity in 1999 and 2000, the fiscal targets proved to be less demanding

than was originally intended, and there was scope to achieve a larger surplus. In 1999, 2000, and 2001, fiscal targets were exceeded in the early part of the year, but that was not sustained for the year as whole. Seasonal factors played a part, but there was also a discretionary easing of expenditure restraint toward the end of the year, once it became clear that the fiscal targets would be satisfied. Although the consolidated net public debt deviated from the indicative targets at times and this triggered more ambitious targets for the primary surplus, this process was not automatic. Substantially more ambitious targets would have been required to have a decisive impact on debt dynamics.

### Sensitivity analysis

Staff papers for the 1998 SBA and its successor included analyses of debt sustainability and related sensitivity analysis. In many respects, these analyses were more thorough than was common practice in the IMF at the time. Even so, they were not effective in pinpointing underlying vulnerabilities, owing to two key factors. First, the analyses had a tendency to underestimate the degree of exchange rate depreciation required to produce a given degree of adjustment in the external accounts. Second, there was a tendency to investigate only small deviations from the baseline assumptions, rather than the larger deviations that in practice would have the potential fundamentally to alter the prospects for sustainability.

Recent proposals within the IMF to improve the assessment of sustainability through more demanding "stress-testing" offer some promise of redressing such shortcomings in the future.<sup>22</sup> In the case of Brazil, however, it is unlikely that more demanding stress testing would have led to major differences in program design. Even without such formal analysis, staff and the authorities were clearly aware that the composition of debt carried significant risks for debt dynamics.

The original debt sustainability projections in both sets of programs were somewhat overoptimistic, in particular about the likely extent of exchange rate depreciation and its impact. Nevertheless, despite the later recurrence of more intense concerns over debt sustainability, public debt sustainability problems were not sufficiently severe at this stage to require a restructuring of public debt although, according to some market participants interviewed, there were expectations of such action for some time following the floating of the real. Such a measure would have had severe consequences for Brazil's financial sector, and for future access to in-

<sup>22</sup>See, for example, "Assessing Sustainability," SM/02/166, May 2002.

ternational capital markets. In our view, these debt sustainability concerns could have been better addressed by more prudent debt management policies and possibly more ambitious fiscal adjustment.

## Monetary policy

### The initial program

Monetary policy in the initial program was intended primarily to be supportive of exchange rate policy. The monetary program incorporated a mechanism through which a fall in international reserves beyond the programmed level would be sterilized only partially, and progressively less than proportionately so. There was also an understanding that the authorities and staff would consult ahead of interest rate decisions or if there were a rapid loss of net international reserves.

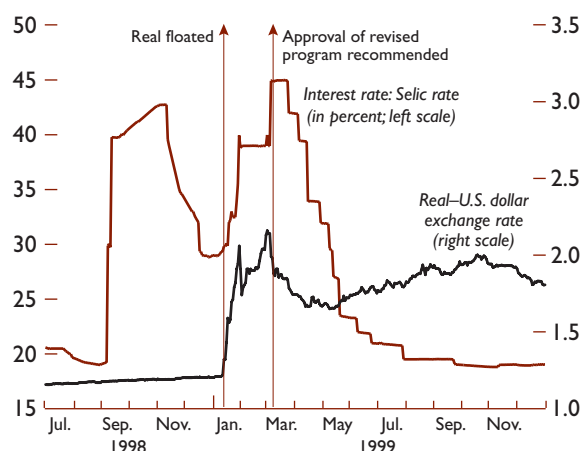
The detailed specification of the monetary program was somewhat unusual, owing to the narrow monetary base in Brazil (at the time just 4 percent of GDP) and strong day-to-day and seasonal fluctuations. The NDA targets were specified as an average of daily closing balances for each month, while NIR targets were specified as end-month balances. These targets would be adjusted to make allowance for uncertainty about how far the demand for base money would respond to the changes in the financial transactions tax (CPMF).

In the event, the program's performance criterion for the end-December 1998 level of NDA of the Central Bank was exceeded by a substantial margin. The program envisaged some gradual easing of interest rates as confidence returned, but from the time the program was approved there was concern that interest rates were being prematurely and excessively eased. At the same time, there were also concerns that high rates would not be sustainable because of the impact on public debt. The loosening of monetary policy (as reflected in lower interest rates) may have contributed to the timing—if not the eventuality—of the collapse of the crawling peg.

With the loss of the exchange rate anchor, monetary policy needed to be reformulated as the authorities, in consultation with the IMF, sought to prevent exchange rate depreciation from setting off an inflationary spiral. The interest rate increases that accompanied and immediately followed the floating of the real in January 1999 were moderate and tentative, and the exchange rate depreciated rapidly amid market concerns that a debt restructuring might be forthcoming (Figure A3.6).

IMF staff and management gave some consideration to the option of a currency board arrangement (CBA) in January 1999 and also discussed the possibility with the authorities. The authorities showed

**Figure A3.6. Short-Term Interest Rate and Real-U.S. Dollar Exchange Rate**



Source: Datastream.

little enthusiasm, and IMF management did not push the option, seeing strong country ownership as a necessary condition for a credible CBA.

### Inflation targeting under the revised program

It was agreed to adopt an inflation-targeting framework for the medium term. In the interim, an informal approach was adopted, with the ultimate aim of rapidly returning inflation to single digits. The IMF encouraged the Central Bank to raise interest rates sharply to arrest and reverse the depreciating trend in the very near term. An increase in interest rates to nearly 40 percent at the start of February led to an appreciation, but this proved only temporary. The exchange rate only stabilized decisively after the Central Bank under the new Governor increased the overnight rate to 45 percent in March 1999 and the expectations of a debt restructuring dissipated.

The revised program approved in March, 1999 pioneered the use of inflation targeting as the basis for conditionality in IMF-supported programs, eventually introducing consultation mechanisms with staff, and ultimately the Executive Board, in the event that the rate of inflation went outside the Central Bank's target bands (Fraga, 2000; Blejer and others, 2001). To assist Brazil's transition to a new monetary regime, the IMF organized a conference in Brazil to discuss the experiences of other countries that had introduced inflation targeting and invited high-level central bank officials from a number of countries. Brazilian officials interviewed indicated that the IMF had played a positive role in facilitating Brazil's transition to inflation targeting.



The transition was somewhat controversial, however. How to accommodate inflation targeting in an IMF-supported program was a subject of considerable debate within the IMF. The conventional NDA and NIR targets pose potential conflicts with the inflation-targeting approach, but some viewed them as useful as a disciplining and monitoring device and a trigger for consultation. Others viewed them as unhelpful to the credibility and transparency of monetary policy, because of the potential conflicts and the need, under inflation targeting, to maintain flexibility to respond to price developments.

In the event, NDA targets were maintained as performance criteria in the early part of the 1999 program, while the IMF relied informally on the credibility of the management team at the Central Bank while details were worked out. There were concerns, however, that the NDA framework might not be too helpful in an environment characterized, as in Brazil, by a small and volatile monetary base. Over time, uncertainties over inflation expectations and the impact of changes in CPMF created a willingness to revise the NDA framework in the course of program reviews.<sup>23</sup> Eventually, when the new framework became fully operational, NDA targets were downgraded to an indicative target in the fourth review, a few months after the inflation targets had been announced.

The inflation-targeting regime was successful in reducing inflation to just 8.9 percent during 1999, well below initial expectations (see “Program projections” below). A further reduction to 6 percent was achieved for 2000, although energy-market developments and the pass-through from exchange rate depreciation later caused inflation to rise and exceed the target bands by a substantial margin. Even so, the approach has been an effective mechanism for continued consultation between IMF staff and the monetary authorities, which represents a marked improvement over a simple discussion of whether NDA targets had or had not been met.

However, using measured 12-month inflation relative to target as a trigger for such consultations was probably too backward-looking. The arrangement would likely have been more effective if a more forward-looking mechanism (such as projected inflation) had been adopted. In January 2000, the Executive Board endorsed a review-based approach to conditionality where inflation-targeting was in operation, which incorporated a forward-looking element of this sort. This approach was not implemented in Brazil, in part because of a lack of agreement on the methodology for forecasting inflation and the potential resource costs.

With a rapid stabilization of the exchange rate and early signs of relative price stability, high interest rates did not have to be sustained for long and, given the relatively low level of corporate and household leverage, did not produce the recession that had widely been expected. As a result of the rapid increase in the proportion of floating rate public debt, the major balance sheet impact of the high interest rates was borne instead by the public sector, which also bore the brunt of the balance sheet impact of exchange rate depreciation.

### Structural measures

The structural content of both the initial program and its revision was modest. Policy measures were almost entirely drawn from the authorities’ existing policy agenda, and conditionality was limited to macro-critical areas (see Appendix A3.1). This was in strong contrast to the broad structural conditionality found in the East Asian programs, and in line with the principles of streamlining conditionality and focus on the importance of ownership that were adopted following the experience in East Asia. The relatively modest structural conditionality also reflected the fact that many of the distortions relevant in Asia did not exist in Brazil, at least to the same extent. Progress in structural reform, however, was mixed under the programs.

The initial program comprised a range of structural measures, including a Fiscal Responsibility Law, structural tax reform, labor market reform, social security and pension reform, and improvements in financial sector regulation. Formal structural conditionality in the program, as revised in March 1999, was more limited in scope, although the authorities’ agenda of structural reform was largely unchanged. In particular, although tax reform and labor market reform remained on the agenda and were mentioned in the Memorandum of Economic Policies, they were not subject to formal conditionality, in the form of performance criteria, structural benchmarks, or specific conditions for completing reviews.<sup>24</sup> Improvements in financial regulation, including progress on resolving state banks, remained an important area for structural conditionality throughout the program and there was significant progress. Structural conditions included requirements for statistical improvements, as well as for better provision of data to IMF staff.

Implementation of structural reforms was mixed, even when this process was subject to formal conditionality. In successive program reviews, only about one-half of the program’s structural benchmarks

<sup>23</sup>The monetary base ultimately increased by 23.6 percent during 1999.

<sup>24</sup>A draft tax reform law was submitted to Congress in December 1998, satisfying the conditionality of the original program.



were met, often because of difficulty in securing congressional approval. For example, passage of the final implementing legislation for the administrative reform was originally established as a structural benchmark in November 1999, with a target date of February 2000. After a long delay, Congress passed a law in June 2001 to complete the administrative reform, but this was not signed into law by the President.

The most critical structural measure under the IMF-supported program was the Fiscal Responsibility Law, which played an important role in achieving the program's targets for primary fiscal surpluses. The law established a general framework to guide budgetary planning and execution, with disciplinary mechanisms for any failure to observe its targets and procedures. The Fiscal Responsibility Law established prudential criteria for public indebtedness, defined strict guidelines for control of public expenditure, and established standing rules to limit budget deficits. It also forbade further refinancing by the federal government of state and municipal debt. A revised draft was submitted to Congress in April 1999. After some delay, the law was finally approved in May 2000. Other structural fiscal reforms were also subject to delays, as the authorities sought congressional approval for program measures and, in some cases, encountered judicial problems.

Progress on pension reform to link the level of pension benefits to the age and contribution history of workers was also slow. For example, there was considerable delay in the planned establishment of complementary pension funds for new civil servants to allow the capping of their pension benefits and the introduction of social security contributions for retired civil servants.

From an early stage, the authorities saw reform of the system of indirect taxation as the most difficult of the pending reforms. The aim was to limit the scope for "fiscal wars" among the states, reduce evasion, and minimize the distortions caused by "cascading" taxes, by streamlining a variety of existing federal, state, and municipal indirect taxes into a national VAT, to be shared by the various levels of government, complemented by a low retail sales tax and selected excise taxes. The legislation ran into difficulty in Congress and little progress was made, although successive IMF missions continued to press the authorities on the issue. It is unlikely that making the tax reform a structural benchmark would have led to substantially greater progress on the issue.

In our view, the concentration of structural conditionality on a limited number of macro-critical measures was appropriate. The limited progress in structural reform largely reflects the limits on Brazil's political implementation capacity, rather than shortcomings in program design. However, at the margin, slightly more ambitious structural conditionality

(possibly including central bank independence) would likely have reduced Brazil's vulnerability to confidence shocks.

## **Official financing and private sector involvement**

### **Official financing**

Calculations in October 1998 estimated the financing gap for the remainder of 1998 and 1999 to be some US\$27 billion, even if there were a 100 percent rollover of short-term debt, no further disinvestment by nonresidents, and no further capital flight. The gap could be double that size, if short-term debt was only partially rolled over and other drains occurred. RES, however, argued that some US\$100 billion in usable resources (including remaining reserves) was needed to deter capital flight and to prevent the program from failing. This would imply substantial additional financing from bilateral official sources or new money to be raised by the private sector, in addition to the rollover of existing exposure. RES further argued that the program was not sufficiently financed to restore confidence.

In the event, the original program assumed that the overall capital account balance for 1999 was US\$33 billion (Table A3.3). The package thus provided the IMF's own resources of US\$18 billion, supplemented by a further US\$15 billion in bilateral loans arranged through the BIS and a bilateral loan from Japan, and support packages from the World Bank and the IDB totaling about US\$4.5 billion each.<sup>25</sup> Brazil drew on both the IMF and BIS lines at an early stage in December 1998, in part to demonstrate that the announced bilateral support was indeed available, and not subject to the problems that bedeviled the "second line of defense" for Korea.<sup>26</sup>

The financing assumptions of the original program proved to be much too optimistic about how the program and the support package would affect market confidence and private capital flows. The eventual capital account balance for 1999 was US\$15 billion, even though FDI was underestimated by some US\$11 billion. There was an eventual net outflow of US\$7 billion in 1999 in "other" medium- and long-term capital compared with a program projection of zero, in part because medium-term amorti-

<sup>25</sup>Of this total, SDR 3.9 billion was from the credit tranches, with the remainder made available under the SRF. An innovative feature of the original program was that all SRF drawings after the first could be brought forward within a given quarter, subject to a separate Executive Board review, but this feature was not retained in the revised program.

<sup>26</sup>There were, however, some doubts over the continued availability of Japanese bilateral assistance at the time of the program revision in March 1999.

**Table A3.3. Brazil: Financing Assumptions and Outturns***(In billions of U.S. dollars)*

	1997	1998		1999		
	Outturn	Program	Outturn	Program	Revised program	Outturn
Current account balance	-33.3	-32.9	-33.6	-26.0	-16.5	-25.1
Capital account balance	25.4	19.7	15.9	33.0	5.5	14.5
Investments	20.8	19.7	20.6	22.3	18.6	30.0
Of which						
Foreign direct investment	16.9	23.9	25.9	18.8	17.0	30.0
Long-term capital	18.6	31.8	35.8	5.8	-6.8	-4.1
Multilateral agencies	1.6	2.6	2.7	5.2	5.8	3.0
Other	17.0	29.2	33.1	0.6	-12.6	-7.1
Other	-14.0	-31.9	-40.6	5.0	-6.3	-11.4
Of which						
Brazilian lending abroad	-1.8	-2.6	-2.8	0.0	-0.2	-0.7
Short-term bank lines	-14.9	-7.5	-2.8	8.0	-2.0	-0.5
CC5 accounts	{2.8}	-24.4	-24.8	-12.0	{-4.1}	-10.4
Other		2.6	-4.7	9.0		-0.7
IMF + bilateral support	0.0	10.2	9.3	11.7	15.5	3.0
Change in reserves (- = increase)	7.9	3.0	8.4	-4.6	-4.5	7.5

Source: IMF database.

zation due for 1999 was underestimated by about US\$10 billion.<sup>27</sup> Short-term bank flows were unrealistically assumed to be substantially positive. Moreover, some US\$9 billion of positive flows (excluding CC5 outflows) had to be assumed in the residual “other flows” category, in order to complete the financing picture.

The revised program in March 1999 incorporated a substantially less optimistic external financing picture than the original program. Overall, these projections proved to be too pessimistic, because they again substantially underestimated FDI. Other components of the financing projections, showing moderate net outflows of both short-term and medium-term capital, turned out to be broadly accurate.

The staff shared the view of the Brazilian authorities that new capital controls on outflows—such as limits on purchases of foreign exchange in the so-called “floating market”—should not be used, since

they were unlikely to be effective for more than a short time in a financial system as sophisticated as Brazil’s, and would have implications not only for Brazil’s future market access, but also for other countries in the region. Moreover, they feared that the imposition of extensive capital controls by Brazil could have adverse systemic consequences. There was some brief discussion within the Central Bank of imposing capital controls as the exchange rate came under pressure in December 1998 and January 1999, but this option was not seriously pursued (see Lopes, 2000).

The support package was not at first successful on its own in catalyzing private sector flows, although it probably contributed to some diminution in the pace of private outflows. However, once a more credible revised program was in place, private flows recovered and permitted emergency support to be repaid ahead of schedule. One feature that helped the support package eventually succeed was the assurance of market participants that the support was ready to be used, with NIR floors set so as to permit the use of some of the support for intervention. In arguing for such floors, management noted that, in view of the authorities’ insistence on maintaining the existing exchange rate policy and markets’ apparent doubts about its viability, it would be necessary to reassure potential lenders that their money would not be wasted in an all-out defense of the exchange rate.

<sup>27</sup>By the time of the revised program in March 1999, amortizations of medium- and long-term debt for 1999 had been revised up to US\$45.7 billion from US\$34.7 billion in the original program. Some of the medium-term debt flows that surged in the first half of 1998 had a maturity of just over one year in order to meet new Central Bank restrictions on minimum borrowing periods. At the time of the original program, official data on the debt stock, and hence the amortization schedule, had not been updated to include them. Staff papers in the first half of 1998 emphasized the strength of medium-term flows, and thus drew too sharp a distinction between short-term and medium-term capital flows.

### Private sector involvement

The original program included limited voluntary PSI. Even before the agreement was concluded, the IMF staff believed that it would be desirable to convince major creditor banks to maintain their exposure, possibly through concerted moral suasion by the Central Bank of Brazil and the authorities of creditor countries. The possibility of using some of the support package to catalyze “new money” was also considered. The Brazilian authorities, however, resisted pressure from some shareholder governments to incorporate mandatory PSI in the program. They believed that mandatory rollovers were unnecessary and rumors of such arrangements could increase uncertainty and cause creditors to retreat. They feared that the implementation of a mandatory rollover would have a long-lasting adverse impact on Brazil’s ability to borrow. Nevertheless, they agreed to visit a number of financial centers to approach creditor banks for voluntary commitments to maintain trade and interbank lines for Brazil. A number of Executive Directors, particularly those representing some of the European shareholder governments, indicated that their continued support for the program at the time of later reviews would depend on the achievement of an adequate rollover rate for private lending.

The IMF quickly helped establish a monitoring system based on the Central Bank’s existing information systems. The coverage of the monitoring system was limited primarily to interbank lines, with direct loans to corporations typically not covered. Initially, only the largest borrowing banks were included. Moreover, although bank lending was an important component of Brazil’s stock of short-term debt, there remained many other potential drains on Brazil’s reserves.

Although capital outflows did ease for a while, the impact of these “road shows” was limited, largely because of market concerns over the credibility of the program, and continuing fears that a more coercive approach to PSI might be introduced subsequently. Rollover rates for interbank credits varied between 65 percent and 71 percent between December 1998 and February 1999.

In March 1999, the revised program incorporated a renewed effort to obtain voluntary commitments from creditor banks to support Brazil, with the authorities again reluctant to impose a Korean-style rollover. In the event, major commercial bank creditors agreed to maintain their trade and interbank exposure at the level of the end of February 1999 through the end of August 1999. Although the commitment remained voluntary, greater official and peer pressure was invoked than had been the case in November 1998. Four senior international bankers were appointed to coordinate the private sector’s re-

sponse to the request. Representatives of the official sector were present at a series of meetings in major financial centers in early March 1999, where the commitments were made. The IMF facilitated by monitoring developments and providing information and technical support. It also put some pressure on creditors to agree, with the Managing Director publicly announcing that the effort to secure voluntary commitments “would be a key factor in the consideration of the program by the Executive Board.”

The agreement on the voluntary commitments stabilized markets, and expectations of a potential debt restructuring dissipated. In part, this was achieved by demonstrating to investors that bankers believed the revised program to be credible. The relatively light touch employed both by the authorities and the official sector, including the IMF, minimized any negative impact on future lending to Brazil. The agreement was not extended after it expired at the end of August 1999, but this did not result in a renewed reduction in exposure.

The voluntary approach to PSI was effective and broadly appropriate in the case of Brazil, and liquidity problems were rapidly overcome. In March 2000, the authorities indicated that, in view of the improved external position and outlook, they would repay in advance the purchases made under the SRF, along with the outstanding amounts received under the BIS-Japan facility, and would treat the IMF arrangement as precautionary.

Before the program could be completed, however, concerns over the external environment, including developments in Argentina, led the authorities to draw again on the arrangement and to agree on a further SBA. This arrangement was canceled in mid-2002 and replaced by a new arrangement, as worries over policy continuity after the approaching elections led to a large increase in spreads on Brazil’s external debt and an interruption in private capital flows. The success of the earlier voluntary approach encouraged a private-sector-driven effort to maintain lines in mid-2002, which helped mitigate capital account pressures for a time.

### Program projections

Staff projections turned out to be too pessimistic in both the original 1998 program and, to a greater degree, the March 1999 program, notably in terms of growth projections (Table A3.4). This was a marked contrast to the experience with the crisis countries in East Asia. Criticism of overoptimistic projections in East Asia influenced the projections adopted for Brazil. Even so, errors in the projections for both East Asia and Brazil reflect similar weaknesses in methodology. Staff noted, however, the difficulties posed for GDP projections by weaknesses in the na-

tional accounts available at the time, which made reconciliation of external developments with demand and output forecasts highly uncertain.<sup>28</sup>

In the original program, output was expected to contract by 1 percent in 1999, owing to front-loaded fiscal adjustment and high interest rates, before recovering. Staff drew attention to factors that were likely to operate in favor of a strong output performance, particularly the relatively sound banking system and low corporate leverage, as well as expectations of strong FDI. Inflation was expected to remain low. Import volume was projected to fall, because of weak demand and some real exchange rate depreciation. This would result in a narrower current account deficit of US\$26 billion.

Macroeconomic projections were altered substantially when the program was revised. The forecast for real GDP was brought down to an average decline of 3.8 percent for the year, owing to weaker external financing than was expected, which would require a substantial narrowing of the current account deficit. The depreciation was also expected to affect corporations' balance sheets, but little was known about the extent to which these were hedged against exchange rate risk. The Western Hemisphere Department (WHD) viewed the forecast as deliberately cautious, in order to convince the markets that the targeted fiscal path was consistent with sustainable debt dynamics, even if output developments were adverse.

Many observers, both within the IMF and outside, including a number of Executive Directors, nevertheless regarded the growth projections as optimistic, possibly reflecting the experience from East Asia. Internal comments from review departments, as well as some Executive Directors, also stressed that overoptimistic projections risked the program's credibility. The IMF's projection was broadly in line with those of the Brazilian private sector, but some international analysts were even more pessimistic.

In the event, the IMF projections proved overly cautious, and real GDP grew by 0.8 percent in 1999. Stronger-than-expected capital inflows resulted in a lower current account adjustment, and hence higher activity. An important reason for this outcome was that there was no financial crisis and the corporate sector was not dependent on debt finance. Because financial institutions were likely overhedged, the depreciation of the exchange rate and temporarily elevated interest rates had a limited (and possibly even benefi-

**Table A3.4. Brazil: Macroeconomic Projections**  
(In percent change; in billions of U.S. dollars)

	1998	1999	2000	2001
<b>Real GDP</b>				
1998 SBA	0.5	-1.0	3.0	4.0
Revised 1999	0.2	-3.8	3.7	4.5
Outturn	0.2	0.8	4.4	1.4
<b>Current account balance</b>				
1998 SBA	-32.9	-26.0	-25.7	-24.7
Revised 1999	-34.9	-16.5	-16.7	-17.3
Outturn	-33.6	-25.4	-24.6	-23.2
<b>Gross fixed investment</b>				
1998 SBA	0.7	-9.5	7.3	10.7
Revised 1999	-0.7	-18.2	7.4	10.9
Outturn	-0.7	-7.6	9.6	-0.2
<b>CPI</b>				
1998 SBA (end-period)	2.7	2.2	2.2	2.2
Outturn (end-period)	1.7	8.9	6.0	7.7
Revised 1999 (average)	3.8	8.6	7.8	5.2
Outturn (average)	3.8	4.8	6.2	6.8

Sources: IMF database; Central Bank of Brazil; and IEO staff estimates.

Note: The documentation for the first and second program reviews provides projections for consumer price inflation only in terms of "period averages" rather than end-period comparisons, as in the original program.

cial) impact on private sector balance sheets, albeit at the cost of a substantial increase in public debt. Growth was projected to recover strongly in 2000 and 2001, as confidence strengthened and external financing constraints eased. Although growth accelerated to 4.4 percent in 2000, this was not sustained. Growth declined to just 1.4 percent in 2001, owing to energy shortages resulting from drought.

The outcome in terms of inflation was unexpectedly good. In the revised program, the IMF projected an "average" rate of inflation of 8.6 percent measured by the consumer price index, and some 11–12 percent measured by the general price index.<sup>29</sup> This was consistent with inflation of 17 percent December-on-December, measured by the latter index. In contrast, RES had argued in light of the Mexican experience that inflation could reach 50 percent and warned that an inflation forecast of less than 25 percent would lack credibility. Outside the IMF, in February 1999, many international analysts expected inflation of over 50 percent, with local banks typically expecting about 30 percent.

Consumer price inflation, at just 4.8 percent on average, was much lower than the 8.6 percent projected in the program.<sup>30</sup> However, the general price index rose 20 percent during the year, slightly more than projected, because of higher price increases for nontradables. Several reasons have been suggested

<sup>28</sup>Quarterly national accounts broken down by expenditure categories were not available. Moreover, constant price data on aggregate demand components were based on 1985 prices, which probably substantially overestimated the weight of the foreign balance in real GDP. In addition, no historical series were available on the functional distribution of income, or the distribution of income between households and the corporate sector.

<sup>29</sup>The IGP-DI of the Getulio Vargas Foundation.

<sup>30</sup>Measured by the INPC index. The 4.8 percent average was equivalent to 8.4 percent, December-on-December.



for this lower-than-expected inflation, including depressed domestic demand, the beneficial impact of a good harvest, and the relatively closed Brazilian economy. Whatever the reason, the stabilization of the exchange rate and limited immediate pass-through prevented inflation from reaching a threshold that would have prompted reindexation.

## Conclusions

This section summarizes our assessment of the role of the IMF in Brazil's capital account crisis of 1998–99 by highlighting the major findings in precrisis surveillance, program design issues relating to the initial program of November 1998 (principally, the core strategy of supporting the crawling peg), and those relating to the revised program of March 1999.

### Precrisis surveillance

The IMF's diagnosis of the policy stance, particularly the mismatch between loose fiscal policy and tight monetary policy, was broadly correct, but there were important shortcomings. Despite the persistent large current account deficit, early concern about the extent of overvaluation was increasingly downplayed, as the IMF accepted the authorities' views on productivity gains and other mitigating factors. The IMF's policy advice should have placed greater emphasis on the need for the authorities to move quickly to a more flexible exchange rate regime, when the environment was favorable for such an exit.

Insufficient attention was paid to the buildup of short-term debt, as inflows were attracted by the difference between high domestic and low international interest rates. There were also some weaknesses in the IMF's knowledge base with regard to indicators of vulnerability prior to the crisis. This was due in part to limited transparency on the part of the authorities, but staff might also have pursued data limitations further. In the case of Brazil, however, such deficiencies were probably not critical, either in precipitating a crisis or in adversely affecting program design in response to the crisis.

The IMF paid considerable attention to banking sector issues, although it played little role in the restructuring process. By the time of the crisis, it had analyzed in detail the risks to the financial system and rightly concluded that it was sound, with little foreign exchange risk or systemic exposure to credit risks.

The impact of surveillance on policy implementation was limited and the policy dialogue between the IMF and the authorities was ineffective. In this respect, the IMF got the worst of both worlds. It had little influence as a confidential advisor, while at the

same time having little ability to influence the wider debate by publishing its views. Greater transparency, for example in publishing staff reports, would have contributed to a more open public debate and greater leverage for the IMF's policy advice, notwithstanding the generally buoyant international capital market conditions.

### The initial program

The decision to maintain the crawling peg was the single most important element of the original program. In the event, the peg soon failed, resulting in some loss of credibility to large-access IMF-supported programs. In our view, the probability of sustaining the crawling peg was lower than IMF staff and management implicitly suggested to the Executive Board. A number of adverse shocks did contribute to the speed with which the program went off-track, including setbacks in securing congressional approval for some of the programmed fiscal measures and the failure to implement supportive monetary policy as envisaged in the program. More fundamentally, the failure of the central element of the program reflected limited ownership by the wider political system.

As the program lacked credibility in the markets, rollover rates on short-term debt remained modest despite a limited attempt at voluntary PSI. Under these circumstances, tighter monetary policy would probably not have been sufficient to counter pressures on the exchange rate regime. The IMF staff and management should have placed greater weight on concerns about wider ownership and signaled these risks more clearly to the Executive Board. It would have been better if there had been more transparent discussion in the Board before determining key features of the program, including exchange rate policy.

The decision to support the crawling peg in the initial program only postponed the exit from the peg. The fear that devaluation might rekindle inflation was widely held at that time, and it was not unreasonable for the IMF to share that view. It has also been argued that, in the very uncertain international climate at the time, this delay may have led to a less turbulent exit than might otherwise have occurred. With the benefit of hindsight, however, our assessment is that the IMF overestimated the adverse consequences of abandoning the exchange rate peg. An earlier exit from a peg that was widely believed to be unsustainable would likely not have had major systemic effects, particularly if the exit was made in an orderly fashion as part of the IMF-supported program.

A government-provided "hedge" largely protected the Brazilian private sector from the effects of exchange rate depreciation but had serious consequences for the public sector debt position. In prac-



tice, this exchange rate hedge had been in place before the IMF-supported program was approved, and IMF staff and management were consistently critical of it. Following the approval of the program, however, additional hedge was provided as the authorities rebuilt futures positions in an attempt to defend the peg. The additional hedge provided under the IMF-supported program was substantial, but it was made largely during the final days of the peg and against the spirit of the program.

### **The revised program**

The revised 1999 program played a significant role in coalescing support for a substantial and lasting improvement in the primary surplus. This fiscal retrenchment was crucial to the success of the later transition to a regime based on inflation targeting and floating exchange rates. Nevertheless, the ratio of net public debt to GDP rose substantially by 2002, rather than declining as was the central declared aim of the programs. This was largely due to the debt composition and greater-than-anticipated exchange rate depreciation. The IMF encouraged the authorities to take advantage of favorable circumstances to reduce exchange rate-linked debt, including through informal agreements to limit rollovers. It would have been better to use stronger conditionality to generate greater incentives for the authorities to reduce the share of exchange rate-linked debt, particularly when the external environment was favorable.

Stress-testing of the debt projections was more thorough than was common practice at the time, but did not foreshadow the deterioration in the debt-to-GDP ratio that occurred in practice. Even so, more demanding stress-testing probably would not have led to major changes in program design, given the existing awareness of the risks that the debt composition posed for debt dynamics. More ambitious targets for primary surpluses would have contributed at the margin to more favorable debt dynamics, but the required tightening would have needed to be substantially more ambitious to have a decisive impact.

The voluntary approach to PSI was broadly appropriate. The voluntary approach encouraged a rapid return to international capital market access, which contributed to the repayment of much of the large official support package after a little more than a year. Factors affecting the initial success of the revised program included the flexibility to use some of the official support package to intervene in foreign exchange markets, and the abandonment of the exchange rate peg while foreign exchange reserves were still relatively high.

After the exit from the peg, substantially higher interest rates accompanied by judicious interven-

tion were effective in arresting and reversing the exchange rate depreciation. There was little adverse effect on the private sector, which was not highly leveraged, although there was some impact on the public debt position. In any event, interest rates were quickly eased once the exchange rate stabilized. The transition to inflation targeting was flexibly and successfully handled. However, the maintenance of NDA targets in the transition to a formal inflation-targeting framework added little to the credibility of policy, while compromising its transparency, because such targets were inconsistent with the authorities' own policy formulation process.

Implementation of the program was generally good, although there was some slippage on structural benchmarks, particularly during 2000 and early 2001, and some informal understandings were not fully implemented. Structural conditionality of the program was appropriately limited to a small number of macro-critical areas, with much of the authorities' agenda of structural reform not subject to formal conditionality. The Fiscal Responsibility Law, eventually passed in the spring of 2000, made a considerable contribution to achieving fiscal discipline. Progress on pension reform was more modest. Progress in structural reform outside the scope of IMF conditionality was limited under both the 1998 and the 2001 programs. In particular, little progress was made in reforming the tax system, and central bank independence was not established. The limited progress in structural reform largely reflects the limits on Brazil's political implementation capacity, rather than shortcomings in program design.

Program projections were too pessimistic with respect to output. The staff identified many of the factors that had contributed to the better-than-projected outcome, including limited leverage and the strength of the financial system but, in the light of experience in the earlier Asian programs, projections were overly influenced by concerns that they would lack credibility if they were seen to be as too optimistic. Weaknesses in methodology also contributed to this excessive pessimism.

Under the revised program, the IMF facilitated Brazil's transition to a more disciplined fiscal regime and a new monetary regime based on inflation targeting. However, fiscal adjustment turned out to be insufficient to achieve the debt management objectives. With a composition of public debt that was highly vulnerable to exchange rate and interest rate risks, Brazil remained vulnerable to external and domestic shocks that affected market sentiment. Underlying vulnerabilities were never eradicated, and concerns over the sustainability of Brazil's public debt burden led to renewed difficulties in 2002.

## Appendix A3.1

### Brazil: Selected Conditionality Under IMF-Supported Programs, 1998–2000

#### 1998 Stand-By Arrangement

1. Quantitative performance criteria:
  - Ceilings on the cumulative public sector borrowing requirement.
  - Ceilings on external debt of nonfinancial public sector.
  - Ceilings on new publicly guaranteed external debt.
  - Floors on net international reserves (NIR) of the Central Bank.
  - Ceilings on net domestic assets (NDA) of the Central Bank.

2. Indicative targets:

- Floor on cumulative recognition of nonregistered public debt, net of privatization proceeds.
- Floor on the cumulative primary surplus of the federal government.
- Indicative ceilings on total (public and private) short-term external debt.

3. Prior actions:

For approval.

- An increase in the rate of the Financial Transactions Tax (CPMF) to 0.38 percent to be under consideration in Congress by end-November 1998.

For completion of first review (i.e., no later than February 28 1999).

- Enactment of revenue and expenditure measures sufficient to give confidence that fiscal targets for 1999 were likely to be met.
- Enactment of a constitutional amendment for social security reform, for both the private sector social security system and federal public sector social security system.

4. Structural benchmarks:

The program included a number of structural benchmarks. There were no structural performance criteria. The benchmarks included:

By end-December 1998:

- Submission to Congress of draft legislation for the Fiscal Responsibility Law.

By end-March 1999:

- Submission of draft legislation for labor market reform.
- Submission to Congress of draft constitutional amendments for the structural tax reform.

By end-May 1999:

- Submission to Congress of draft legislation to regulate the social security reform.

By end-August 1999:

- Submission to Congress of multiyear budget plan.
- Implementation of administrative reforms in the social security system.

By end-December 1999:

- Enactment of the Fiscal Responsibility Law, structural tax reform, and complementary legislation for the social security reform.
- Resolution of most state-owned banks.
- Regulation of banks' market risk, based on Basel core principles.
- Implementation of a forward-looking loan classification scheme.

By end-December 2000:

- Full compliance with Basel core principles, especially in relation to provision of resources for supervision by the Central Bank.

Daily data on international reserves would be provided to IMF staff.

#### Revised Program (First and Second Reviews), March 1999

There were a number of changes in the quantitative performance criteria in the revised program. The ceiling on the cumulative borrowing requirement of the consolidated public sector was replaced by a floor on its primary balance. The indicative target on the primary surplus of the federal government was eliminated and an indicative ceiling on net public sector debt was included. The performance criteria on the floor on net international reserves of the Central Bank was replaced by a monthly ceiling on sales of foreign exchange. The indicative target on short-term external debt was modified to cover only public sector debt. Conditionality was also introduced requiring the central bank to refrain from new operations in foreign exchange futures or forward markets. The revised list of quantitative conditionality thus covered:

5. Quantitative performance criteria:

- Floors on cumulative primary surplus of the consolidated public sector.
- Ceiling on external debt of nonfinancial public sector.
- Ceiling on new publicly guaranteed external debt.
- Ceiling on short-term external debt of nonfinancial public sector.
- Ceiling on Central Bank foreign exchange sales.
- Central Bank exposure in foreign exchange futures market.
- Central Bank exposure in foreign exchange forward market.
- Ceiling on NDA of the Central Bank.

6. Indicative targets:

- Ceiling on net debt of the consolidated public sector.

7. Structural benchmarks:

The revised program incorporated "an accelerated and broadened structural reform and privatization effort." Formal conditionality on structural reforms was little changed, however, with much of the authorities' plans for structural reform remaining outside its scope. There were only moderate alterations in the coverage of structural benchmarks and no structural performance criteria were introduced. Labor market reform and reform of the tax system were no longer included as structural benchmarks. In the case of the tax reform, this was because a proposal was submitted to Congress in November 1998. Submission of laws on pension reform were introduced as benchmarks. Requirements for improvements in bank regulation were maintained essentially unchanged, apart from minor timing questions.

## Brazil: Selected Conditionality Under IMF-Supported Programs, 1998–2000 (concluded)

By end-May 1999:

- Submission to Congress of a law on the complementary private pension scheme.
- Submission to Congress of an ordinary law on pension system for private sector workers.
- Presentation to Congress of the Fiscal Responsibility Law.

By end-August 1999:

- New regulation on foreign exchange exposure of banks.
- Acceptance of obligations under Article VIII, with a timetable for removing any remaining restrictions.
- Action plan for statistical improvements to permit SDDS subscription.
- Implementation of administrative improvements in social security system.
- Submission of a multiyear plan to incorporate improvements in the budgetary process.

By end-November 1999:

- Submission of an ordinary law on the pension system for the public sector.
- Resolution of state-owned banks.
- Implementation of a forward-looking loan classification scheme.
- Implementation of a capital charge related to market risks, based on Basel Committee recommendations.

### 8. Provision of data:

The list of specific high frequency data to be provided to the IMF was extended to include: gross and net reserves and their composition; the Central Bank's foreign exchange futures position; the maturity composition of federal debt; individual bank data on balance sheets and foreign-currency and off-balance-sheet exposure for the 50 largest banks; and results of debt auctions.

### Third Review, July 1999

#### 9. Quantitative conditionality:

A performance criterion on NIR was introduced (US\$3 billion below the baseline path) replacing the earlier ceiling on Central Bank foreign exchange sales.

#### 10. Other:

Authorities agreed to regular weekly consultations with management and staff on the conduct of interest rate policy; and on the interest rate response to a loss of NIR.

### Fourth Review, November 1999

#### 11. Quantitative conditionality:

Reflecting the implementation of the inflation targeting regime, a consultation mechanism was introduced in the event of deviations of inflation from its targeted path. Excesses beyond the inner band (+ 1 percent) would trigger consultations with IMF staff about the proposed policy response; excesses over the outer band would suspend drawings until the Executive Board had reviewed the authorities' proposed policy response. In consequence, it

was decided to make the end-December 1999 target for NDA an indicative target, rather than a performance criterion. The consultation mechanism would continue to be supplemented by indicative targets for NDA for the first half of 2000.

#### 12. Structural benchmarks:

The following benchmarks were introduced for 2000:

By end-February 2000:

- Removal of Article VIII restrictions by lowering financial operations tax on credit card purchases abroad to less than 2 percent.
- Begin implementation of INSS reform with new formula for calculating pension benefits.
- Complete enactment and start implementation of regulatory legislation for administrative reform.
- Enact Fiscal Responsibility Law.
- Ensure enforcement of regulation on capital charge.
- Develop implementation plan and schedule for global consolidated inspections (GCIs) of commercial banks and savings banks.
- Complete audits of federal banks; make progress in preparing a comprehensive strategy to strengthen these banks.

By end-June 2000:

- Make progress in resolution of state-owned banks; conclude privatization of BANESPA.
- Make substantial progress in implementing the privatization plan, including privatizations of electrical and reinsurance companies, and sales of some minority shareholdings.
- Issue regulations to implement a capital charge related to equity and commodity risks.
- Define a comprehensive strategy for timely strengthening of federal banks.

By end-July 2000:

- Enact a system to tax oil products to offset revenue impact of scheduled liberalization of oil market.

By end-December 2000:

- First GCIs under way or completed for most financial institutions.
- Complete resolution of most state banks, including privatizing BEM, BEG, BEC, BEA, BEP, and BANESTADO.

In addition, a number of statistical benchmarks for publication of weekly data on reserves; publication of quarterly national accounts; and fiscal and debt statistics were introduced for end-June 2000.

### Fifth Review, May 2000

#### 13. Quantitative conditionality:

The indicative targets on ceilings on NDA were discontinued from June 2000.

#### 14. Structural benchmarks:

Some of the structural benchmarks were postponed, reflecting delays in the congressional approval of reform legislation. In the remainder of the program, structural benchmarks were concentrated on financial sector reforms.

## Appendix A3.2

### Brazil: Timeline of Major Events

Date	
10/28/97	Asian crisis sparks sharp fall in equity prices and pressure on currency.
10/31/97	Interest rates are doubled to 40 percent.
11/13/97	Fiscal package is announced.
2/9/98	Brazil reaccesses international bond market after Asian crisis.
7/1/98	Pension system reform postponed after congressional setbacks.
7/20/98	First press reports of Long-Term Capital Management difficulties.
8/17/98	Russian default and devaluation.
8/24/98	Measures taken to encourage foreign capital inflows.
9/3/98	Special "Regional Surveillance" meeting of Western Hemisphere Finance Ministers and Central Bank Governors with IMF, World Bank, and IDB concludes in Washington.
9/4/98	Moody's downgrades Brazil's sovereign credit rating from B1 to B2.
9/17/98	Brazilian government confirms discussions with the IMF.
9/23/98	President Cardoso makes speech affirming need for major fiscal adjustment.
10/4/98	President Cardoso reelected in first round.
10/8/98	Joint statement by IMF and Brazilian authorities that discussions would continue on a detailed program of macroeconomic and structural policies.
10/20/98	Joint statement by IMF and Brazilian authorities, announcing agreement on fiscal targets for primary surpluses.
11/11/98	Informal Executive Board meeting on structural elements of program.
11/13/98	Agreement on a Stand-By Arrangement announced. Letter of intent published.
11/16/98	Meeting in New York of Brazilian authorities, including presentation by IMF management, with U.S. bankers who indicate a willingness voluntarily to maintain exposure if program is firmly implemented.
12/02/98	IMF Executive Board approves US\$18.1 billion Stand-By Arrangement.
	Congress rejects increases in tax on pensions and in pension contributions.
12/18/98	US\$4.7 billion from the IMF, and US\$4.5 billion from BIS and Japan disbursed.
12/30/98	The Ministry of Finance announces tax package to compensate for delays in approving the CPMF and higher civil service pension contributions.
01/06/99	Governor of Minas Gerais declares 90-day moratorium on the service of his state's debt to the federal government.
01/13/99	Central Bank Governor is replaced. Narrow band replaced by "endogenous diagonal band." Exchange rate depreciates by 9 percent as it falls to the bottom of the new band amid heavy reserve losses, which continue on 1/14/99.
01/15/99	Real allowed to float.
01/16–17/99	Finance Minister and new Central Bank Governor meet in Washington with IMF management and staff.
01/18/99	Exchange rate float confirmed.
01/19/99	Interest rate increased to 32 percent.
01/28/99	Interest rate increased to 35.5 percent.
01/29/99	Interest rate increased to 37 percent.
02/02/99	Interest rate increased to 39 percent.
02/02/99	Central Bank Governor resigns and a new Governor is appointed.
02/04/99	Announcement by IMF of agreement in principle on key elements of the policy framework for the rest of 1999 and over the medium term. Policies include a formal inflation-targeting system for the medium term, and transitional arrangements using monetary policy to reduce inflation to a single-digit annualized rate by the end of 1999.
02/10/99	Federal government pays installment on Eurobond issued by the state of Minas Gerais.
02/26/99	New Central Bank Governor confirmed by the Senate committee.
03/08/99	IMF Managing Director recommends approval of revised program; Memorandum of Understanding published.
03/30/99	IMF Executive Board approves disbursement.
07/02/99	Revised Technical Memorandum of Understanding published; Managing Director recommends approval.
07/08/99	Government issues US\$700 million in Eurobonds.
09/14/99	Standard & Poor's upgrades Brazil's credit rating to BB–.
3/1/00	Standard & Poor's upgrades Brazil's credit rating from BB– to BB.
4/12/00	Brazil repays borrowing under the IMF Supplemental Reserve Facility and the BIS and Japan loan facilities in full and partly ahead of schedule.
5/4/00	Fiscal Responsibility Law signed into force.
7/5/01	Central Bank announces steady "linear" intervention in the foreign exchange market.
8/3/01	IMF Managing Director recommends approval of a new US\$15 billion Stand-By Arrangement for Brazil through December 2002. The authorities indicate that they intend to treat the arrangement as precautionary.
8/7/02	Agreement announced on a new 15-month Stand-By Arrangement with financing of an additional US\$30 billion.

Sources: Bloomberg, Reuters, and IMF.

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**Memorandum from First Deputy  
Managing Director  
Statement by Managing Director  
IMF Staff Response**

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**Summing Up of IMF Executive Board  
Discussion by Acting Chair**

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**MEMORANDUM FROM FIRST DEPUTY MANAGING DIRECTOR  
TO DIRECTOR, INDEPENDENT EVALUATION OFFICE,  
APRIL 30, 2003**

**Subject: IEO Report on the Role of the IMF in Recent Capital Account Crises**

Thank you for the opportunity to review this excellent report. Attached are comments prepared by Mr. Geithner on behalf of Fund staff.

**Attachment: Memorandum from Director, Policy Development and Review Department to Director, Independent Evaluation Office, April 30, 2003**

I would like first of all to express our appreciation for this first report examining the Fund's important and often controversial role in resolving capital account crises. The report is well-researched, interesting, readable, and balanced, and will be a valuable contribution to the learning culture of the Fund.

The report focuses mainly on the Fund's involvement in the early stages of the crises. While this phase clearly holds important lessons—and has been the subject of much previous attention, both inside and outside the Fund—it is not the whole story. The current report would have been all the stronger, and provided greater value added over existing literature, if it had focused, not just on the initial crises, but also the later successes of the programs in restoring confidence, stemming capital outflows, and putting in place structural reforms that have reduced vulnerabilities.

The report provides useful recommendations about crisis prevention and management, but it also confirms the impression that every crisis is unique in the problems it poses. Anticipating and managing crises will always require difficult judgments in the context of great uncertainty. The Fund faced enormous analytical and practical challenges as it sought to help the authorities deal with the onslaught of the crises examined. Stemming these crises would have required that Fund staff invent innovative solutions to problems that were clearly well beyond its control, such as a lack of adequate financing from bilateral donors and creditors. We should not expect future crises to be any less challenging, even with the benefit of these experiences.

We generally support the report's conclusions. Management has asked us to prepare a staff brief for the Board meeting that would relate the report's conclusions and recommendations to the staff's current work. We look forward to Executive Board discussion of the report and expect the Summing Up of the discussion will provide the basis for taking forward the report's recommendations in the Fund's work.

**STATEMENT BY THE MANAGING DIRECTOR ON THE EVALUATION BY THE  
INDEPENDENT EVALUATION OFFICE OF THE ROLE OF THE IMF IN RECENT CAPITAL  
ACCOUNT CRISES**

**Executive Board Meeting  
May 30, 2003**

The Independent Evaluation Office (IEO) is to be commended for its well-researched, balanced, and insightful account of the Fund's role in recent capital account crises. Circulation of this report within the Fund has already been helpful in disseminating the lessons for Fund practice and enhancing the learning culture of the institution.

On the whole, I welcome the recommendations in the report. I have asked staff to prepare a statement indicating how we envisage taking up the report's

recommendations in the period ahead, subject to the conclusions of the Board discussion. Given the wide-ranging nature of these recommendations, some of them will be raised in the context of policy discussions that are already on the Board's agenda, while others, related to the internal management of Fund staff, are in the sphere of management.

I look forward to Board discussion of these papers, which will provide the opportunity to draw out their implications for the Fund's policies and procedures.

## STAFF RESPONSE TO THE REPORT BY THE INDEPENDENT EVALUATION OFFICE ON THE ROLE OF THE IMF IN RECENT CAPITAL ACCOUNT CRISES

Executive Board Meeting 03/50  
May 30, 2003

1. *This report by the Independent Evaluation Office on the role of the IMF in recent capital account crises presents many lessons for improving the efficacy of the Fund's efforts at crisis prevention and resolution, complementing previous studies undertaken both within and outside the Fund.* Following up on the staff's response to the report (SM/03/171, Sup 1),<sup>1</sup> this statement addresses the report's main recommendations. Board discussions are scheduled on many of the areas covered by the recommendations, and staff will reflect the conclusions of the Executive Directors on this report in staff documents for these meetings.

2. *The report focuses mainly on the Fund's involvement in the early stages of the crises. While this phase clearly holds important lessons—and has been the subject of much previous attention, both inside and outside the Fund—it is not the whole story.* Most dramatically, in Korea, economic activity was recovering vigorously by the second half of 1998—less than a year after the worst of the crisis—following the restoration of market confidence and a resumption of private capital flows which permitted a substantial easing of policies; in 1999, real GDP rebounded by nearly 11 percent. In Brazil, the situation began to improve within a few months of the abandonment of the exchange-rate peg in January 1999, with the restoration of voluntary capital flows and some monetary easing in the context of inflation targeting; in 2000, growth reached over 4 percent. But with the immediate crisis over, the debt dynamics remained fragile, contributing to the country's vulnerability when market pressures re-emerged in 2002. Even in Indonesia, where the crisis was more severe, progress was made in tackling the fundamental problems in the financial and corporate sectors as early as the second half of 1998 and, as the government's ownership of the IMF-supported program strengthened and as the policies took hold, the economy's performance improved markedly. The current report would have been all

the stronger, and provided greater value-added over existing literature, if it had focused, not just on the initial crises, but also the later successes and challenges in restoring confidence.

3. *While we agree with the general thrust of the report, there are some specific issues on which the report's conclusions differ somewhat from our own.* The Executive Summary focuses almost entirely on what went wrong, without giving any sense of how the Fund responded to the challenges posed by the crisis; it also fails to reflect the complexities of program ownership and implementation which are amply examined in the main body of the report. As detailed in the staff's own extensive reviews of the crisis cases, there are cases where we conclude that programs put in place at the outset of the crises could have been improved. The IEO report echoes many of these conclusions: while it is broadly supportive of the overall strategy followed, it notes a number of aspects of the programs that did not work as planned. However, some of the report's criticisms of initial judgments in program design do not in our view provide a sufficiently complete sense of the feasibility and costs of the alternative policy options available at that time.

4. *Although the report provides an in-depth analysis of the IMF's policy advice, it does not sufficiently explore why these crises were so severe.* As a result, it overstates the contribution of individual aspects of policy design to the intensity of the crises. In the case of Indonesia, for example, the report, particularly the Executive Summary, could leave the impression that poor policy advice from the Fund (e.g., relating to bank restructuring) was a major factor magnifying the severity of the crisis. However, while with hindsight some aspects of the program might have been designed otherwise, the basic policy response advocated to address the early stages of the crisis was generally appropriate for the evolving circumstances. In the event, a confluence of factors overwhelmed the early program, causing what was initially viewed as a mild case of contagion to degenerate into a full-blown crisis. These factors included, most notably, a worse than expected deterioration of the crisis in the region; a complete loss of monetary

<sup>1</sup>This refers to the attachment to the memorandum from the First Deputy Managing Director, as reproduced on page 155. —Ed.



control caused by massive liquidity support to the banking system after the government decided against closing additional banks; uncertainty over the commitment of senior political authorities to the policy program; political uncertainty caused, amongst other things, by the President's ill-health; and the dynamic and self-aggravating instability caused by the massive foreign exchange exposure in the corporate sectors

5. *The report provides useful recommendations about crisis prevention and management, but it also confirms the impression that every crisis is unique in the problems it poses.* Anticipating crises will always require difficult judgments in the context of great uncertainty, and the capacity to prevent them will always depend principally on the actions of our members. The authorities and Fund staff faced enormous analytical and practical challenges as they sought to deal with the onset of crisis. Policy making during the crises frequently involved painful trade-offs—notably those associated with countering market pressures on the exchange rate in the presence of bank and corporate balance sheet weakness. Much of the economic trauma that followed was unavoidable and our collective capacity to contain the damage was limited by problems that were beyond the control of the member and the Fund. We should not expect future crises to be any less challenging, but we will be able to benefit significantly from a systematic effort to incorporate into the work of the institution the experience gained from these cases. With these general thoughts as a backdrop, this statement considers each recommendation of the IEO report in turn.

6. *Recommendation 1: To increase the effectiveness of surveillance, Article IV consultations should take a "stress testing" approach to the analysis of a country's exposure to a potential capital account crisis.* The staff supports this recommendation, especially on the need to integrate various dimensions of vulnerability assessments and stress testing into the regular surveillance role of the Fund. Considerable effort is now being made to bring stress testing and other analytical techniques to bear in the Fund's work. For instance, stress tests are an integral part of FSAPs, the vulnerability exercise, and the debt sustainability framework (which the Board will review in June 2003). There may be other areas to which it would be beneficial to apply this approach, such as in the area of liquidity risk and for low-income countries particularly vulnerable to external shocks, both of which are the topic of forthcoming staff papers. Issues regarding financial vulnerabilities will be addressed in an informal Board seminar on the balance sheet approach in June 2003 and further work incorporating analytical developments in various areas will be undertaken in the context of the 2004 Biennial Surveillance Review (BSR). The

critical challenge of course is not simply to explore the resilience and sustainability of a member's policy framework in the face of various types of shocks, but to identify the types of policy actions that can be taken in advance and in the event of crisis to mitigate those risks. These issues should rank high in the hierarchy of surveillance priorities. A related recommendation is that surveillance pay more attention to social and political constraints on policy making and on market perspectives on policies: the September 2002 Guidance Note on Surveillance calls for particular attention to be paid to these issues in Article IV consultations, and staff will follow this matter up in the BSR in 2004.

7. *Recommendation 2: Management and the Executive Board should take additional steps to increase the impact of surveillance, including through making staff assessments more candid and more accessible to the public and providing appropriate institutional incentives to staff.* Improving the focus and candor of staff assessments and encouraging more systematic public release of staff reports and the analytical work that supports them can improve the impact of surveillance. The staff sees considerable room for further progress in these areas. The Board will have the opportunity to address many of these issues in its review of transparency policy in June 2003. The issue of greater independence for teams conducting surveillance may be discussed by the Board in the July 2003 discussion on fresh perspectives in surveillance; the issue will be revisited in the 2004 BSR.

8. *Recommendation 3: A comprehensive review of the Fund's approach to program design in capital account crises cases should be undertaken.* Program design obviously plays an important role in determining the success of programs, recognizing that a broader range of factors ultimately plays the decisive role. Balance sheet interactions and the uncertainty associated with projecting the path of key variables in capital account crises are recognized as presenting important complications in the initial design of program strategy and reinforce the importance of using the flexibility provided in the program architecture to adapt the strategy as events unfold. Building on the work undertaken since the emerging market crises of the 1990s, the staff have initiated an examination of various dimensions of program design. As part of this effort, PDR is preparing a paper distilling lessons from capital account crises and the implications for program design. This paper will give us the opportunity to explore in detail the various recommendations included in the IEO report. The need to incorporate better assessments of financial vulnerabilities into staff analysis could be taken up at the June 2003 Board seminar on the balance sheet approach. The revised Guidelines on Conditionality, as

the IEO report recognizes, specify that conditionality should be streamlined and focused; the 2004 review of Conditionality will include an assessment of implementation of these new guidelines. Staff will also continue undertaking internal reviews of the experience with crisis cases, for instance with the forthcoming paper reviewing Lessons from the Crisis in Argentina.

9. *Recommendation 4: Since restoration of confidence is the central goal, the Fund should ensure that the financing package, including all its components, should be sufficient to generate confidence and also be of credible quality.* The level, terms, timeliness, and quality of official financing can be critical to the success of a program. The IEO offers valuable reminders about the uncertainty and damage to credibility created by some of the official financing packages that were announced in association with Fund arrangements in past crises. The staff supports the IEO's recommendations in this context, although in some cases their implementation depends on the actions of other official creditors. The periodic access reviews, as well as the forthcoming review (early 2004) of the experience in applying the new framework for exceptional access decisions, will provide an opportunity to consider experience in these areas in the future.

10. *Recommendation 5: The Fund should be proactive in its role as crisis coordinator.* The key recommendations offered by the IEO in this context—that management should play a more proactive role in identifying circumstances where concerted efforts can be useful in overcoming “collective action” constraints, that management should provide candid assessments of the probability of success (of a program), and that the technical judgment of the staff should be protected from excessive political interference—are welcome. The specifics of the Fund's role will have to be determined on a case-by-case basis, but several recent cases offer valuable

lessons on how the Fund can be more effective in this area. The new framework for exceptional access decisions provides a mechanism for encouraging more systematic early consideration of circumstances in which the success of a program would be enhanced by voluntary efforts to address collective action problems among private creditors and where steps to address an unsustainable debt burden need to be part of a strategy to restore growth and financial viability. Steps have been taken to strengthen the Fund's institutional knowledge in this area, including through the establishment of the International Capital Markets Department, and the Capital Markets Consultative Group provides an important new vehicle for improving the Fund's dialogue with the private sector.

11. *Recommendation 6: Human resource management procedures should be adapted further to promote the development and effective utilization of country expertise within the staff, including political economy skills, and to ensure that “centers of expertise” on crisis management issues allow for a rapid application of relevant expertise to emerging crises.* The proposed approach for establishing institutional arrangements to deliver a rapid response is, as the report notes, being reflected in the reorganization of MAE (with steps taken to provide dedicated and consistent support on crisis resolution matters), as well as recent changes within PDR (with the establishment of the Crises Resolution Issues Division), and is also being taken up in the review of Area Departments. Steps are being taken to ensure that staff have the necessary political economy skills. A Working Group is examining the role of resident representatives, including their involvement in surveillance and program design. The proposal to ensure that staff are protected from complaints from the authorities is welcome. Although there are no internal guidelines in this regard, there may be a need for greater positive recognition for candor.

**THE ACTING CHAIR'S SUMMING UP  
EVALUATION OF THE ROLE OF THE FUND IN  
RECENT CAPITAL ACCOUNT CRISES  
REPORT BY THE INDEPENDENT EVALUATION OFFICE**

**Executive Board Meeting 03/69  
July 16, 2003**

*General Remarks*

Executive Directors welcomed the second report of the Independent Evaluation Office (IEO report), which offers a comprehensive and thoughtful analysis of the Fund's role in capital account crises in three important country cases—Brazil, Indonesia, and Korea—and of the lessons to be learned from these experiences. They considered the report a useful complement to previous studies undertaken both within and outside the Fund. Directors broadly agreed with the report's analysis and conclusions, which they found to be generally consistent with those of earlier studies.

Directors stressed that several caveats need to be borne in mind regarding the findings and conclusions of the report. First, the report focuses mainly on the Fund's involvement in the early stages of crises. Many Directors considered that the report would have been more useful if it had also examined the later successes and challenges in restoring confidence, stemming capital outflows, and putting in place structural reforms that have reduced vulnerabilities. For example, in Indonesia progress was made in tackling the fundamental problems in the financial and corporate sectors as early as the second half of 1998 and, as the policies under the Fund-supported program took hold, the economy's performance improved markedly. It was recognized, however, that, in some cases, the IEO's mandate not to interfere in on-going operations constrained the extent to which the report could examine longer-term developments.

Second, the Fund has already taken steps in recent years to address many of the concerns raised in the report, in areas such as transparency, conditionality, standards and codes, financial sector surveillance, vulnerability assessments, and Fund-Bank collaboration. While the report acknowledges these changes and seeks to identify additional areas for improvement, some Directors felt that its usefulness might have been enhanced if it had spent more time assessing the adequacy of the changes that have already been made. However, Directors acknowledged that assessing how these changes might have affected the earlier crises would have been a complicated task.

Third, the report confirms that every capital account crisis is unique. Thus, anticipating crises will always require difficult judgments in the context of great uncertainty, and distilling lessons from past crises is no guarantee of future success. Directors stressed that there is no standard solution to capital account crises; the nature and adequacy of the policy advice will need to take into account the causes and specific circumstances of each crisis, and the capacity to prevent crises will depend to a large extent on the actions of member countries.

With these caveats in mind, Directors noted that most of the Fund's efforts to anticipate or deal with the three crises went in the right direction. Nevertheless, they shared the report's view that the Fund made some mistakes, and that the crises highlighted the need for improvements in the Fund's policies and procedures. Directors considered that the report has provided useful recommendations on how to further improve Fund surveillance and program design, and on how to enhance the catalytic role of Fund financing and the role of the Fund in coordinating crisis management and resolution.

Directors noted that the Board will have the opportunity to return to many of the issues discussed in the report during the forthcoming discussions on transparency, surveillance, financial soundness indicators, the balance sheet approach, information reporting requirements under Article VIII, data standards, and sustainability assessments. They encouraged management to address some of the issues related to personnel policies.

*Recommendation 1. To increase the effectiveness of Fund surveillance, Article IV consultations should take a stress-testing approach to the analysis of a country's exposure to a potential capital account crisis.*

Directors agreed that it is essential to strengthen the focus and effectiveness of Fund surveillance by extending and systematizing assessments of crisis vulnerabilities. Surveillance discussions should identify major shocks that the economy could face in the near future, explore the real and financial consequences of these shocks—including balance sheet

effects—and discuss the authorities’ plans for dealing with these shocks should they materialize. Directors emphasized that, within the general framework that has been endorsed by the Board, vulnerability assessments—and, in particular, stress testing—should not be over-generalized and exhaustive, but should focus on the key risks and economic realities facing the member in question. Furthermore, the assumptions underlying such assessments should be set out clearly to allow a proper interpretation of the results and to help inform the prioritization of reforms by authorities.

Most Directors agreed that the Fund should try to develop a greater understanding of the political constraints that may affect program implementation in a crisis, while cautioning that this should not lead to interference in domestic affairs. Some Directors stressed that this policy should be applied uniformly to all countries facing capital account crises. A number of Directors cautioned that a political economy focus could be counter-productive if it causes staff to lose focus and press for policies and reforms that are not macro-critical.

Given that restoring market confidence is essential to successful crisis resolution, Directors stressed the need for Fund staff to heighten their awareness of market perspectives on economic policies. They saw great value in systematic discussions with the domestic and international financial and business communities, including through the International Capital Markets Department, to better understand their concerns—but emphasized that the staff would need to assess private sector views critically.

*Recommendation 2. Management and the Executive Board should take additional steps to increase the impact of surveillance, including through making staff assessments more candid and more accessible to the public, and providing appropriate institutional incentives to staff.*

Directors strongly supported greater candor in the assessment of country risks and vulnerabilities in staff reports, building on the increase in candor that has already occurred. The provision of institutional incentives to the staff to facilitate such candor also was encouraged. Nevertheless, Directors expressed a range of views regarding the potential conflict between candor and transparency, and the implications of the proposed shift from voluntary to presumed publication of staff reports. Many Directors warned that greater candor could adversely affect both the Fund’s dialogue with countries and market confidence in the context of the publication of staff reports. Some of these Directors felt that what really matters is candor in face-to-face consultations with the key decision-makers in a country, rather than in the staff report. Many other Directors strongly supported presumed publication.

These believed that concerns about candor are overstated, and that surveillance would be more effective in building ownership and influencing policy if Fund analyses and recommendations are made public. It was agreed that the Board would return to the issue of presumed publication of staff reports during the discussion on transparency.

Many Directors considered that escalated signaling—a procedure the report recommends to be used when key vulnerabilities identified over several rounds of surveillance are not addressed—might be an idea worth pursuing. A number of these Directors reserved judgment on the suggestion until they had more information about how it would work. A few Directors felt that escalated signaling would undermine the Fund’s role as confidential advisor, and doubted that it would help in preventing crises or designing more effective programs.

Many Directors were not in favor of inviting second opinions from outside the Fund when the authorities disagree with the staff’s assessment on key policy issues. Whereas some Directors considered that a second opinion would bring a fresh perspective that could help resolve differences of opinions with the authorities, many were concerned that it could encroach on the role of the Board, and undermine the work of the staff. Furthermore, if extended to program cases, it would slow the process of designing Fund-supported programs and impair the ability of Fund-supported programs to resolve financial crises. A few Directors also noted that this approach has been tried and has failed.

*Recommendation 3. A comprehensive review of the IMF’s approach to program design in capital account crises should be undertaken.*

Directors recognized that program design plays a critical role in the determination of program success. They looked forward to the forthcoming staff papers on program design and the balance sheet approach, which they hoped would give due attention to the issues raised in the report.

Directors agreed that the primary objective of a crisis management program should be to help restore confidence by implementing a comprehensive set of policies that effectively address the root causes of the crisis. Directors noted that the Fund’s increased attention to financial sector surveillance has reduced the risk that vulnerabilities in the financial sector will be neglected in program design. At the same time, many Directors also concurred that much greater attention needs to be paid to the interaction of balance-sheet weaknesses and key macroeconomic variables, including the implications for aggregate demand, especially in capital account crises where the possibility of multiple equilibria exists—although it was acknowledged that the estimation



difficulties may be formidable. Several Directors reiterated that the balance sheet approach should be closely linked to debt sustainability analysis and, in particular, to the implications of the currency and maturity structure for the debt dynamics. Directors called for more analytical work to design a framework for dealing with “twin” (exchange rate and banking) crises, including the implications for the sovereign’s policies and financial position.

Directors agreed that program design should allow for a flexible response in case unfavorable outcomes materialize; that conditionality should be reviewed to see how it can be adapted to the rapidly evolving circumstances of capital account crises; and that, at a minimum, the broad outlines of the program should be communicated to the public and the markets. This is crucial to strengthening ownership, the Fund’s credibility, and market confidence. Program documents should fully set out the assumptions underlying the central projections, identify and explain as far as possible the risks to the program, discuss alternative scenarios, and spell out explicitly how macroeconomic policies will respond in the event that known program risks materialize. Directors noted the critical importance of country ownership in ensuring successful program implementation, and saw continued value in a formal mechanism to trigger consultation on monetary and fiscal policies. They also stressed the importance of designing programs to fit the particular circumstances of individual countries. Nevertheless, a few Directors cautioned against excessive emphasis on risks and alternative scenarios in program documents, since it would be difficult to know all risks upfront and since such emphasis could erode the program’s effectiveness in building confidence in the chosen action plan.

Directors supported the recommendation that a crisis should not be used as an opportunity to force long-standing reforms, however desirable they may be, in areas that are not critical to the resolution of the crisis or addressing vulnerability to future crises. They agreed that parsimony and focus should be the principles to guide the design of structural conditionality in a program whose objective is to restore confidence quickly. Directors noted that this recommendation is in line with recent initiatives by the Fund to streamline conditionality, and looked forward to reviewing the experience with the implementation of the conditionality guidelines.

*Recommendation 4. Since restoration of confidence is the central goal, the IMF should ensure that the financing package, including all components, should be sufficient to generate confidence and also of credible quality.*

Directors agreed that, to the extent that financing packages supporting the member’s program rely on

parallel financing from official or multilateral sources, it is essential that the terms of such support be clear and the amount be adequate. However, they noted that there are limits to the Fund’s influence over the conditions for parallel financing, which reflect the structure and organization of partner institutions. Directors fully supported the idea of moving toward more explicit procedures for collaboration with regional development banks and others and clear delineation of responsibilities, while noting that such procedures do not by themselves guarantee effective coordination.

Directors observed that experience with capital account crises raises important issues relating to Fund liquidity, exceptional access, and private sector involvement. They stressed that the policy on access to Fund resources in capital account crises agreed in September 2002 has to be observed. More fundamentally, Directors stressed that the high quality and credibility of a program, together with adequate financing, should be at the heart of successful Fund involvement.

*Recommendation 5. The IMF should be proactive in its role as crisis coordinator.*

Directors emphasized the importance of all members’ working together constructively during the period when a program is being negotiated. They noted that, for the Fund to play an effective role in coordinating efforts of other members, management should provide the Executive Board and member countries with candid assessments of the probability of success of a proposed strategy, including frank feedback when parts of a strategy favored by some members lower this probability; and they should protect the technical judgment of the staff from excessive political interference. While Directors were in favor of early involvement of the Board in program discussions, a number of them observed that the Board and major members should not seek to micro-manage the operational details of programs or influence Fund missions in the field.

Many Directors attached particular importance to the early involvement of the private sector in crisis resolution. They emphasized that the authorities, not the Fund, should play the leading role in negotiations with the private sector. However, they noted that the Fund has a responsibility to identify circumstances in which a more concerted effort is needed to involve the private sector, recognizing that decisions on the nature of such involvement will have to be made on a case-by-case basis.

*Recommendation 6. Human resource management procedures should be adapted further to promote the development and effective utilization of country expertise within the staff, including political economy*



*skills, and to ensure that “centers of expertise” on crisis management issues allow for a rapid application of relevant expertise to emerging crises.*

Directors generally agreed on the need to ensure that the Fund is in a position to respond rapidly with relevant expertise to member countries facing crises. While recognizing that proposals related to organizational and human resource activities are among management’s responsibilities, Directors expressed several views on these issues. Some Directors supported the creation of “centers of expertise” in crisis management, whereas others put greater emphasis on mechanisms for drawing upon available expertise and experience in the event of a crisis. A number of Directors favored longer country desk assignments to ensure that sufficient country experience is main-

tained within the staff, while others noted the importance of staff mobility in broadening the experience and perspectives of the staff and maintaining its impartiality. Most Directors favored a greater role for resident representatives in surveillance and program design, in countries with resident representative offices, with a few noting that only relatively senior resident representatives would be sufficiently acceptable to the authorities to play such a role. Directors also favored modifying internal guidelines and human resource procedures to create incentives for greater candor. They noted that management is already moving to improve the Fund’s crisis management capability—for example, through the reorganization of the Monetary and Financial Systems Department and the review of the area departments.