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To: Members of the Executive Board

From: The Secretary

Subject: **Evaluation of the Role of the Fund in Recent Capital Account Crises—Report by the Independent Evaluation Office—Volume I**

Attached for consideration by the Executive Directors is Volume I of the Independent Evaluation Office's (IEO) report on the role of the Fund in recent capital account crises, which is tentatively scheduled for discussion on **Friday, May 30, 2003**. Volume I contains the main evaluation report and an executive summary. Volume II contains country annexes providing detailed assessments of the role of the Fund in the capital account crises of Brazil, Indonesia, and Korea. It is expected that comments by Fund management, and any IEO response to those comments, will be circulated later.

The Director of the IEO proposes that after the Executive Board completes its discussion, the paper be posted on the external IEO website together with management comments, any IEO response, and a summary of the Board discussion. It would also be published in hard copy.

Questions may be referred to Mr. Takagi (ext. 35676), Mr. Mansoor (ext. 38527), and Mr. Cohen (ext. 39805) in IEO.

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INTERNATIONAL MONETARY FUND

INDEPENDENT EVALUATION OFFICE

EVALUATION OF THE ROLE OF THE IMF IN RECENT CAPITAL ACCOUNT CRISES

MAIN REPORT[1]

May 9, 2003

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[1] This report was prepared by a team headed by Shinji Takagi and including Ali Mansoor, Kevin Barnes, and Benjamin Cohen, and was approved by Montek S. Ahluwalia, Director of the Independent Evaluation Office (IEO). 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, David Peretz, and country authorities. However, the final judgments are the responsibility of the IEO alone. Research assistance from Misa Takebe, Shauqie Azar, Minkyung Kim, and Leandro Rothmuller is gratefully acknowledged.

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
BPK	Supreme Audit Agency (Indonesia)
BOK	Bank of Korea
CBA	Currency Board Arrangement
CCL	Contingent Credit Line (IMF)
CPMF	Financial Transactions Tax (Brazil)
EFF	Extended Fund Facility (IMF)
EMEAP	Executives' Meeting of East Asia-Pacific Central Banks
FDI	Foreign Direct Investment
FSAP	Financial Sector Assessment Program (IMF)
FSC	Financial Supervisory Commission (Korea)
FSS	Financial Supervisory Service (Korea)
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	Indonesian Debt Restructuring Agency
ITC	Investment Trust Company (Korea)
JIBOR	Jakarta Interbank Offered Rate
KAMCO	Korean 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)
MOF	Ministry of Finance
MOFE	Ministry of Finance and Economy (Korea)
NDA	Net Domestic Assets
NIR	Net International Reserves
NPL	Non-Performing Loan
OECD	Organization for Economic Cooperation and Development
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 Rights (IMF)
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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EXECUTIVE SUMMARY

1. This 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.

2. 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, i.e., 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.

3. 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. A separate volume contains the three country annexes that form the basis for our judgments in the main report.

A. Overall Assessment of the Role of the IMF

4. 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 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

5. 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.

6. The single greatest cause of the failure of 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.

7. 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

8. 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.

9. The first Korea 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 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.

10. 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

11. 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.

12. 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 LTCM 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.

13. 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.

B. Pre-crisis Surveillance

14. 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.

15. 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 macrocconomic risks it posed, and surveillance reports were less candid on these issues.

16. 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.

17. 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 toolkit.

18. 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.

C. Program Design and Implementation

Macroeconomic framework and projections

19. 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 macroeconomic 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.

20. 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 (i) the large currency depreciation which might occur in view of the possibility of multiple equilibria, and (ii) 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.

21. 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

22. 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 not be sufficient to achieve the objective of stabilizing, and then reducing, the debt-to-GDP ratio.

Monetary policy

23. The stance of monetary policy in all three countries was initially set tight, with an explicit recognition of the tradeoff 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.

24. 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.

25. 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.

26. 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

27. 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.

28. 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 non-implementation 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.

29. 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

non-market 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.

30. 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 Brazil 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

31. 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.

32. 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

33. 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.

34. 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.

35. In Indonesia, many governance-related measures were included in the January 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 non-implementation, both of which damaged confidence.

Communications strategy

36. 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.

37. 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.

D. Internal IMF Governance and the Mode of Operations

38. 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 MAE and the area department; insufficient utilization of available internal knowledge; and the failure to mobilize staff members with up-to-date country knowledge.

39. **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 technical 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.

40. 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.

E. Recommendations

41. 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 VI be read in conjunction with this Executive Summary.

I. INTRODUCTION

1. 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 International Monetary Fund (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.

2. 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.

3. 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 which may have produced better results. However,

it is extremely difficult rigorously to establish such a counterfactual. This is especially so in areas where there is lack of consensus in academic and policy making 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: (i) was there a reasonable ex ante assessment of the probabilities, with the information available at the time; (ii) could more useful information have been obtained if different procedures had been used; and (iii) 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.

4. The evaluation makes extensive use of primary information made available to the IEO. This includes staff reports for Article IV consultations,[2] 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.[3] 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.[4] 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.

5. 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

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[2] 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.

[3] Some of these Board policy papers have been published, including on the IMF's website. Citations for these papers are made in footnotes, however, except when they are available in print form.

[4] Management refers to the group of senior IMF officials consisting of the Managing Director, the First Deputy Managing Director, and two Deputy Managing Directors.

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 is attached to the report.

6. The report comprises two parts. The main report presents a summary of our major findings on the role of the IMF in the pre-crisis surveillance phase and the crisis resolution phase in each country and our recommendations. An accompanying volume contains the three detailed country annexes.

7. The main report is organized as follows. Chapter II 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 III presents our assessment of pre-crisis surveillance. Chapter IV discusses our assessment of the IMF experience in seven central areas of program design and implementation, that is, (a) the macroeconomic framework and projections, (b) fiscal policy, (c) monetary policy, (d) official financing and private sector involvement, (e) bank closure and restructuring, (f) structural conditionality, and (g) communications strategy to enhance ownership and credibility. Chapter V addresses internal governance issues within the IMF. Finally, Chapter VI presents conclusions and recommendations.

II. The Three Crisis Cases

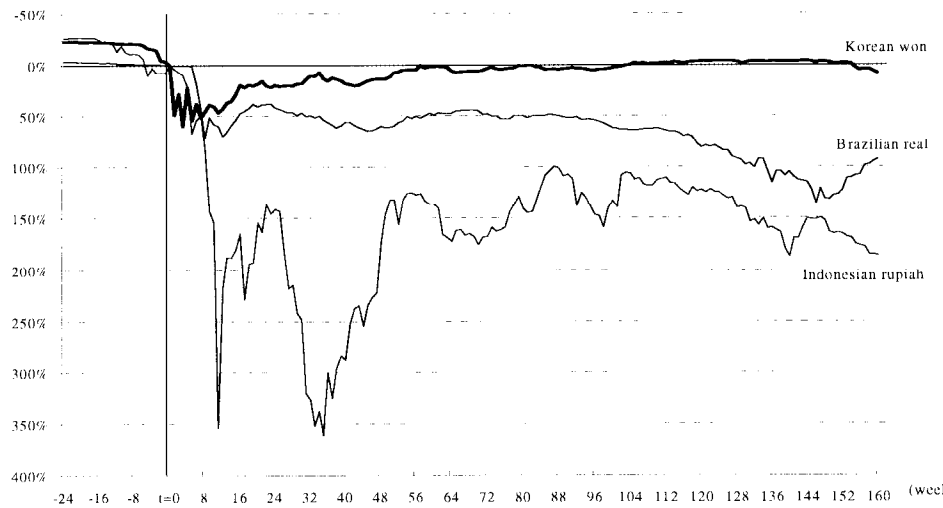
8. The three cases covered by this evaluation share several features common to capital account crises. In each case the crisis occurred because of massive reversals of capital flows triggered by a shift in market sentiment. Short-term flows played a prominent role in the process, and contagion was an 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.

9. There were also notable differences which 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.

10. 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.

11. 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 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.

Figure 1. Indonesia, Korea, and Brazil: Exchange Rate Against the U.S. Dollar Under IMF-Supported Programs
(Percentage change from the date of program approval)



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

Source: Datastream.

12. 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.

13. 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.

A. Indonesia

The background to the crisis

14. Before the 1997 crisis, the Indonesian economy was characterized by strong economic performance (Table 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 strong, however, and asset prices rose steadily during the 1990s and kept rising until their peak in early August 1997.

15. IMF surveillance in the pre-crisis period generally applauded the strong performance but it did identify some areas of vulnerability: (i) large capital inflows and the associated foreign debt; (ii) the fragile state of the banking system which was linked to governance problems; and (iii) 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

16. 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 to 12 percent.[5] 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 which the IMF strongly endorsed.

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[5] See Soesastro and Basri (1998) and Djiwandono (2000) for details.

Table 1. Indonesia: Key Economic Indicators, 1994-2002 [1/]

	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 [4/5/]	34.0 [4/5/]	13.9 [4/]	68.1 [4/]	32.5 [4/]	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
Intl. reserves (US$ billion, end-period)	12.1	13.7	18.3	16.6	22.7	26.4	28.5	27.2
Exchange rate (Rp/$, end-period)	2,198	2,294	2,362	4,375	7,850	6,988	9,675	10,450
Real effective exchange rate [2/]	100.2	100.0	103.9	62.1	65.8	72.7	62.9	66.3
Central government balance (in percent of GDP) [3/]	0.2	0.9	1.1	-1.3	-2.3	-1.5	-1.1	-3.7

Source: IMF database supplemented by APD staff estimates; Datastream.
1/ Calendar years, unless noted otherwise.
2/ End-period; average of 1990=100
3/ 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
4/ Fiscal years.
5/ Foreign currency stocks measured at constant exchange rates to avoid valuation changes.

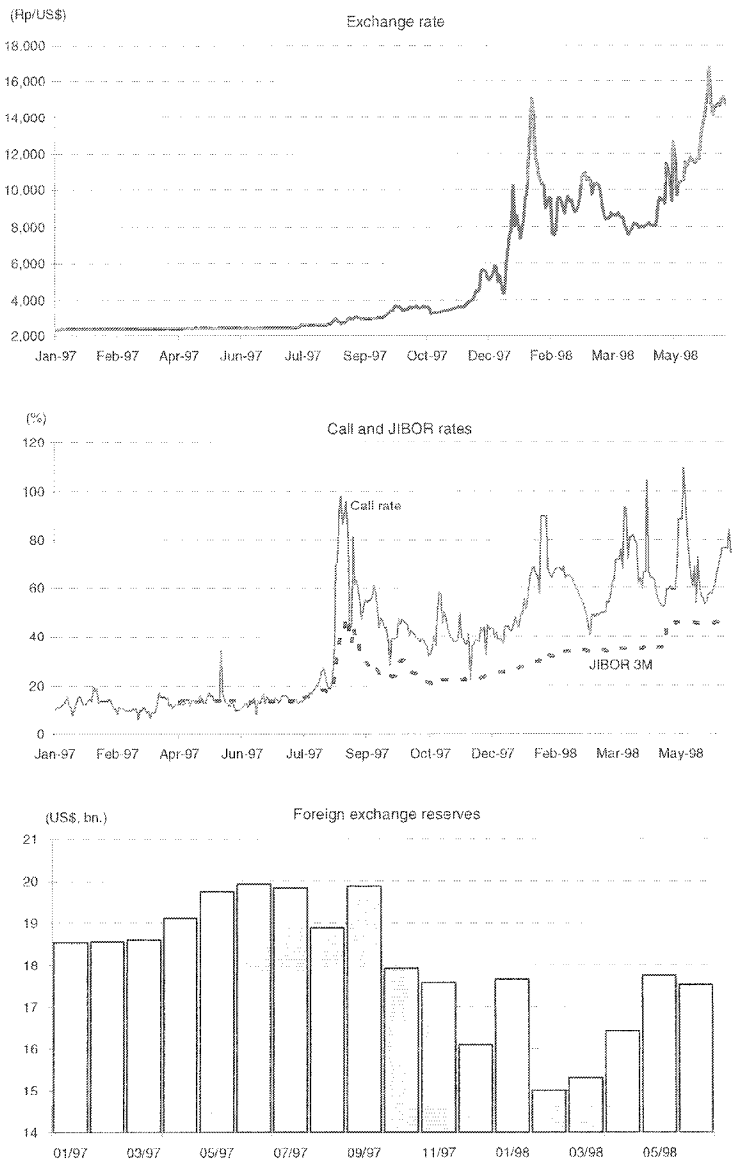
17. Following the float, BI raised the interest rate on 90-day central bank certificates (SBI) to 28 percent from 11.25 percent and also tightened liquidity by transferring a large amount of public sector deposits out of commercial banks.[6] In early September, the government announced a delay in infrastructure 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).

18. Worried by these developments, in mid-September 1997, the Indonesian authorities opened discussions with the IMF on a "precautionary" arrangement to restore confidence.[7] 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

[6] From September 4 to 15, the rate was reduced to 21 percent in several steps.

[7] 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.

Figure 2. Indonesia: Key Economic Variables, January 1997 - June 1998



Sources: Datastream; Bloomberg; and IMF database.

team and President Suharto.[8] 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 be closed or merged to protect the solvency of the financial sector. In a memo to the Managing Director, the First Deputy Managing Director indicated that the President seemed interested in IMF advice but not in its financial assistance.

19. In early October, 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 (non-precautionary) arrangement. A deputy director of APD was sent to join the staff already working in the field.

The November 1997 Program

20. 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.[9] Disbursements would be frontloaded, with two tranches of US$3 billion each by the end of March 1998.[10] 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.

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[8] 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.

[9] SDR 7,338 million or 490 percent of quota.

[10] The frontloading 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 frontloaded than the Mexican program.

21. 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.

22. The November program aimed to restore market confidence by (i) maintaining already prudent macroeconomic policies through a mild increase in the targeted fiscal surplus combined with a limit on base money expansion, (ii) addressing fundamental weaknesses in the financial sector, including the closure of 16 banks (along with a partial deposit guarantee) as a prior action, and (iii) 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 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.

23. 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.

24. 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.[11] By the end of November, base 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

25. 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 programs 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.[12] The IMF staff also pressed the authorities to raise interest rates, but to no avail.

26. 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.

27. 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.

28. 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

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[11] Much of this liquidity support was later determined by official audits to have been used for questionable purposes.

[12] As reported by the Managing Director to the Executive Board upon his return to Washington.

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 program, was actively involved in designing the conditionality on structural reform in the revised program.

29. 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.[13] 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.

30. 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.[14] 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 reported to have indicated that (i) he would wage a "guerrilla war" against the IMF; (ii) he would not necessarily fulfill all agreed conditions in the LOI; and (iii) 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.

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[13] 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.

[14] 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.

31. 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,[15] as well as with some opposition from within the government, the CBA proposal was finally abandoned and a revised program agreed in April 1998.

32. 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.

33. 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.[16] 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.

34. 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

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[15] 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.

[16] 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 their advice, reflected the President's renewed confidence that he was fully in charge of the economic and political situation.

successfully secured relief for the corporate sector from foreign creditors and a rescheduling of external public sector debt through the Paris Club.

35. 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.

B. Korea

The background to the crisis

36. 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). 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.[17]

37. 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

[17] Chinn (1998) 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) 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.

Table 2. Korea: Key Economic Indicators, 1994-2001

	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
Intl. reserves (US$ billion, end-period)	25.6	32.7	33.2	20.4	52.0	74.0	96.1	102.8
Exchange rate (W/$, end-period)	789	776	845	1,695	1,204	1,138	1,265	1,314
Real effective exchange rate 1/	95.2	99.1	97.3	62.5	76.0	80.7	81.3	82.3
Central Government Balance (in 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; Datastream.

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

borrowing from local banks.[18] 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.

38. 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

[18] 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 et al., 2002).

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.

39. 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.

40. IMF management and staff shared many of these concerns. The Article IV consultation mission that visited the country in October 1997 included a banking 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.[19]

The onset of the crisis

41. 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 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.

42. 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 to 16 percent). The BOK accelerated its

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[19] The staff report for the 1997 Article IV consultation was prepared but never presented to the Executive Board, as it was overtaken by events.

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.

43. 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.

44. 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.

45. 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 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.[20]

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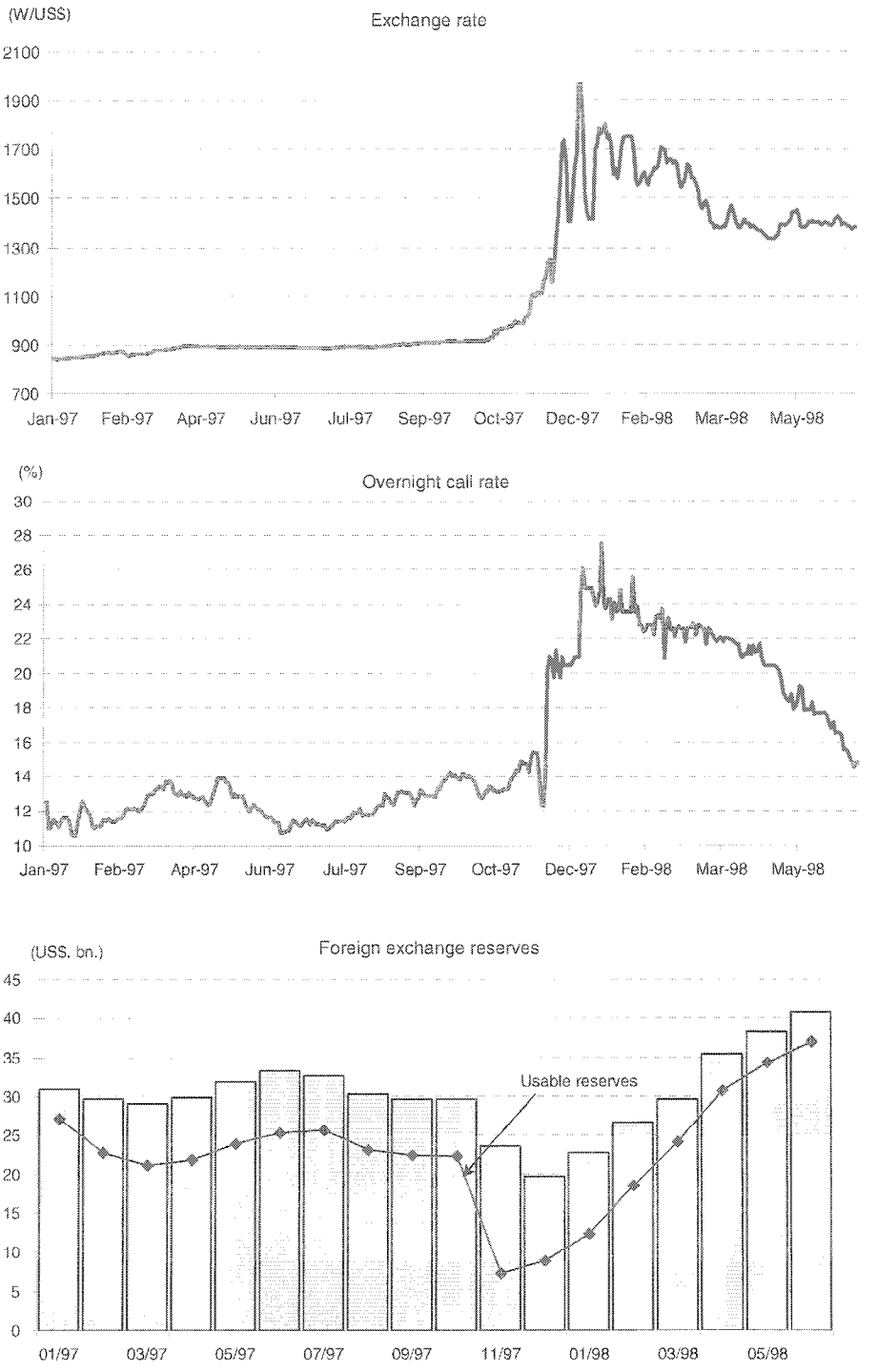
[20] The Emergency Financing Mechanism, introduced in 1995 following the Mexican crisis, is a set of exceptional procedures for close communication with the Executive Board when management intends to bring a proposed arrangement to the agenda more quickly than under the usual procedures.

Figure 3. Korea: Key Economic Variables, January 1997 - June 1998



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

The December 1997 program

46. On December 4, the IMF's Executive Board approved the program to provide about US$21 billion under a three-year SBA.[21] The disbursements were to be substantially frontloaded, 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."

47. 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.

48. 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.

49. The initial market response was moderately positive, but after a few days the situation took a turn for the worse.[22] 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

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[21] 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.

[22] The won moderately appreciated from W1,249 to W1,156 per U.S. dollar from December 4 to 5, followed by a renewed slide.

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 (Figure 3).

50. 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

51. 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 rollover 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.

52. Three initiatives—the strengthened reform program, the accelerated disbursements, and the coordinated private-sector rollover of short-term debt—were announced on December 24. 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.

53. 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 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 W1,965 to the dollar on December 24, to a range of W1,600-1,800 in January, W1,400 by the end of March, and W1,200 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.

54. 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.[23] 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.

55. 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.

C. Brazil

The background to the crisis

56. 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 3).

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[23] The IMF's quarterly review, dated November 18, 1998, projected that Korea's GDP would decline by 1.0 percent in 1999. Likewise, the World Bank's projection for 1999, released in December 1998, was for moderate growth of 1.0 percent (World Bank, 1999a).

Table 3. Brazil: Key Economic Indicators, 1994-2002

	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
Intl. 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$/$, end-period)	0.844	0.971	1.039	1.116	1.208	1.788	1.955	2.320	3.533
Real effective exchange rate 1/	137.7	141.6	144.1	145.6	133.0	96.8	98.2	89.8	68.4
PSBR (percent of GDP)	44.3	7.1	5.9	6.1	7.9	10.0	4.6	5.2	4.7
Primary balance (in percent of GDP)	4.3	0.3	-0.1	-1.0	0.0	3.2	3.5	3.7	3.9
Net public debt (in percent of valorized GDP) 2/	30.0	30.6	33.3	34.4	41.7	48.7	48.8	52.6	56.5

Sources: IMF database, Data Stream, and Central Bank of Brazil.

1/ Central Bank, INPC based, end-period, June 1994=100.
2/ Valorized GDP is expressed in prices of December of each year.

57. 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, 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.[24]

58. 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

[24] For example, Bevilaqua 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).

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 effective 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.

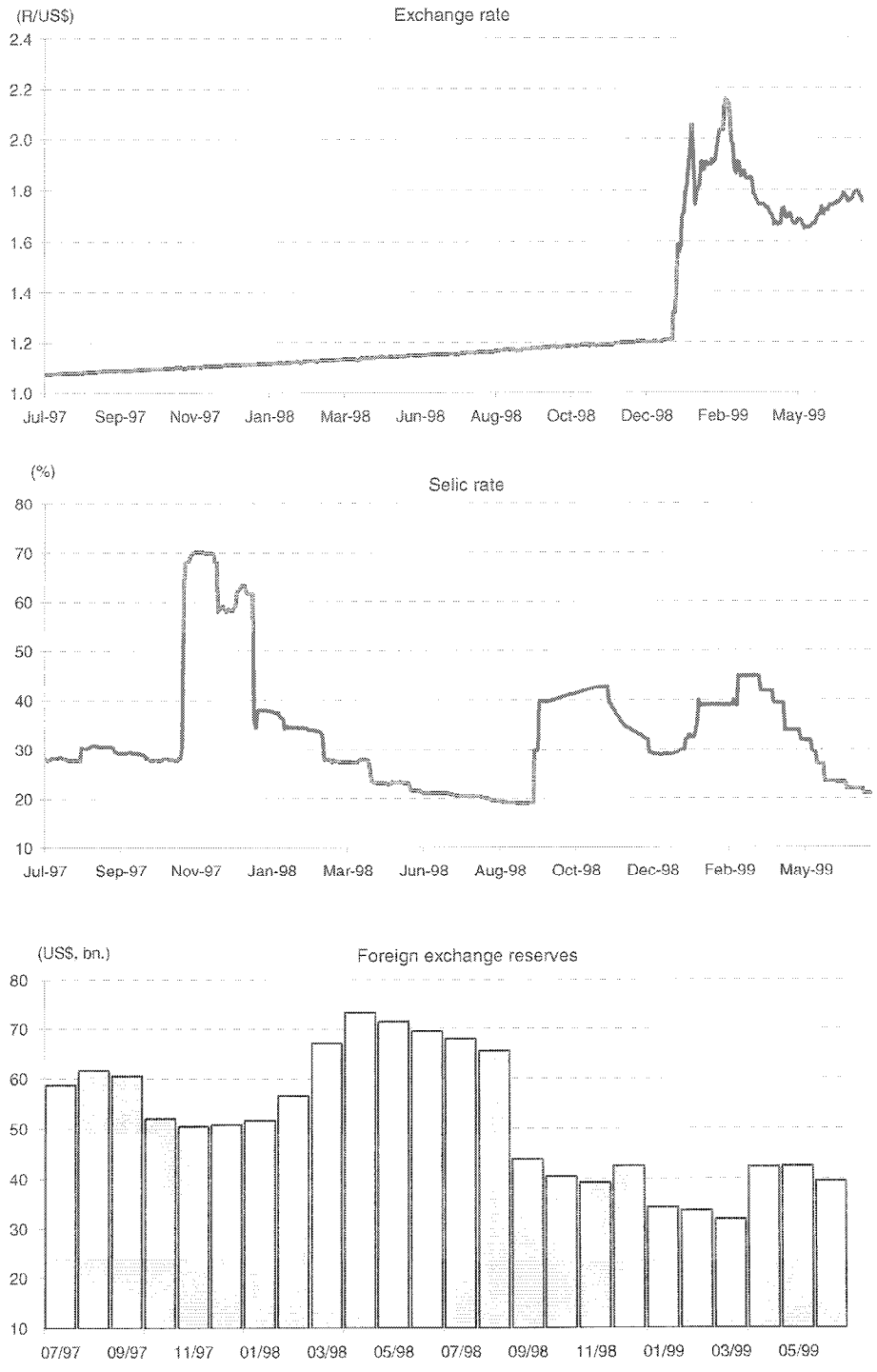
59. The IMF's surveillance in the pre-crisis period correctly identified the overvaluation of the real and other vulnerabilities associated with Brazil's policy mix in the post-stabilization era and argued for faster exchange rate depreciation. The IMF's leverage was limited during the pre-crisis period 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.

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

61. 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 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.

62. 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 4), but failed to stem capital outflows.

Figure 4. Brazil: Key Economic Variables, July 1997 - June 1999



Sources: Datastream; and IMF database.

The December 1998 Program

63. Preliminary work began on the main components of an IMF-supported program in early September, based on Brazilian proposals which emphasized fiscal tightening.[25] 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.[26] However, this gave way to the view that, in order to convince the markets, real money was needed.

64. Contacts intensified after the presidential election in early October, in which President Cardoso was reelected 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.

65. 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).

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[25] 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.

[26] 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.

66. The program, approved by the Board in early December, envisaged maintenance of the existing exchange rate regime, but did not specify any immediate change in the rate of crawl.[27] 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

67. 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).

68. 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

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[27] 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.

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.

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

70. 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.

71. 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).[28] 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.

72. The revised program of March 1999 was unexpectedly successful in terms of its impact on the price level and output. A take-off 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 external financing, particularly larger FDI inflows, facilitated a smoother external adjustment. In contrast to pessimistic projections of a decline

[28] See Box 1 in Section IV for the operational difference between structural performance criteria and structural benchmarks in IMF-supported programs.

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.

73. 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.

74. 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 cancelled 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.

75. 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.

III. PRE-CRISIS SURVEILLANCE

76. In this chapter, we present our assessment of IMF surveillance in the pre-crisis 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.

A. The Diagnosis Role of Surveillance

77. 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 pre-crisis 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.

78. 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.

79. 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.[29] 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 build-up 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.

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[29] 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.

80. 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 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.

81. 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 V).

- 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.[30]

- 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

[30] As discussed in Section F of Chapter IV, the Executive Board adopted a revised approach to governance issues in mid-1997.

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 policymakers 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 analytically and in terms of the availability of crucial information.

B. The Impact of Surveillance

82. 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.[31] 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.

83. 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 RES 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.[32] 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.

84. Second, **in some cases country authorities were not receptive to the IMF's policy advice,** typically reflecting domestic political constraints (e.g., deregulation in Indonesia). When an issue of highly sensitive nature was involved, such as exchange rate policy in Brazil, there were honest differences of view.

85. 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.

86. 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 et al., 1999, henceforth "the Crow Report") noted, the absence of hard numerical evidence on financial sector weaknesses, reserves, and external debt limited the

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[31] 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.

[32] The existence of perverse internal incentives was also noted in the IEO's evaluation of prolonged use of IMF resources (IEO, 2002).

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.

C. The Role of Transparency

87. In practice, few of the IMF's assessments during the pre-crisis 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.

88. 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.[33] 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 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.

89. Since the crises, each of the three countries has agreed to the publication of Public Information Notices (PINs)[34] 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

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[33] 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.

[34] Publication of PINs began in May 1997.

the IMF's transparency policy.[35] 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.

D. Recent Initiatives and Further Steps to Strengthen Surveillance

90. 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*,[36] 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,[37] 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.

91. 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

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[35] 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.

[36] 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.

[37] At the height of the Asian crisis in March 1998, there was an 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 for 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.

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.

- 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.

92. 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.[38]

- **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 studies 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 et al. (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 Section V). A sharper

[38] A framework for assessing external and fiscal sustainability is suggested in "Assessing Sustainability" (SM/02/166), May 2002.

delineation of the issues surveillance is expected to cover in this area (see above) will also help to promote candor.

93. 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.

IV. Program Design and Implementation

94. Given 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.

A. Macroeconomic Framework and Projections

95. 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).[39] 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.

[39] 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. Real GDP and Investment Projections and Outturn in Crisis Countries

	Original Projections	Revised Projections 1/	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.

1/ March 1999 for Brazil, April 1998 for Indonesia.

96. 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 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.

97. 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.

98. 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.

99. 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 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 (i) the large currency depreciation which might occur in view of the possibility of multiple equilibria and (ii) 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.[40]

Assessment

100. 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: (i) 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 (ii) 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,

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[40] 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 et al., 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.

not least because the markets would then quickly learn to discount the pessimistic bias in IMF projections.

101. 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 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.

B. Fiscal Policy

102. 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 Brazil 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.

103. 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.

104. 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.

105. 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, 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.

106. 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.[41] This was appropriate, as fiscal sustainability was a factor driving the evolution of the crisis. The main objective of the 1998 program was to stabilize

[41] 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."

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.

107. 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

108. 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.

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

110. 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.

C. Monetary Policy

111. 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 et al., 1999; Corsetti et al., 1999).

112. Internal documents reveal that, in all three cases, monetary policy targets were set on the basis of an explicit consideration of the tradeoff 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 5 for the comparative level of real interest rates in these countries).

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

Table 5. Real Interest Rates in Selected Countries 1/

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 2/		4.6	15.2	Sep-92
Indonesia		4.9	49.1	Aug-97
Korea		6.2	18.1	Jan-98
Brazil 3/		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 4/				
Mexico	01/95-06/95	11.5	29.6	Mar-95
Philippines	07/97-12/97	9.4	17	Oct-97
Thailand	08/97-01/98	8.3	15	Sep-97
Indonesia	11/97-04/98	-8.4	0.5	Jan-98
Korea	12/97-05/98	14.8	18.1	Jan-98
Brazil	11/98-04/99	33.7	37.5	Mar-99

Source: IMF database.

1/ Interest rates are 3-month Treasury bill rates for G7 (except for Japan) and Sweden, 60-day government securities rate for Japan, 3-month interbank rates for 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.

2/ Until December 2001.

3/ From January 1995.

4/ 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.

114. 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.[42] Monetary 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 which it did in terms of exchange rate stability. Although the economy undoubtedly suffered enormous damage in November and December, the blame cannot be put on the tight monetary policy advocated by the IMF since this was not implemented.

115. 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.

116. 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.

117. 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

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[42] 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.

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.

118. 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.

119. 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 take-off 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.

120. The contrasting cases of Korea and Brazil point to the importance of having a clear framework to guide monetary policy in the post-stabilization 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 targetting 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

121. 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.[43]

122. 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.[44] Empirical research has been unable to settle the matter.[45] 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.

123. 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." [parenthesis 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

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[43] Subsequently, Hong Kong SAR and Malaysia resorted to less conventional measures: purchases of stocks in the secondary market and controls on capital outflows, respectively.

[44] 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.

[45] 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.

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.

D. Official Financing and Private Sector Involvement

124. 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 normal, 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, e.g., 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

125. In all three cases, the IMF was able to provide a large volume of its own financing combined with a substantial recourse to official financing from other international financial institutions (IFIs) and bilateral sources (Table 6). 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.[46] 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.[47]

126. 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

[46] 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.

[47] 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).

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.

Table 6. Official Financing Assumed in Initial IMF-Supported Programs

(In millions of U.S. dollars)

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

Source: Ghosh et al (2002).

1/ Not included in the financing assumptions.

2/ 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.

3/ BIS-coordinated bilateral financing and Japanese assistance.

127. 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.

128. 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.

129. 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.[48] Certainly, private capital flows to emerging market economies have been very subdued since these capital account crises, a trend which 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

130. 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.

131. 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 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.

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[48] See Ghosh et al. (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.

132. 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

133. 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.

134. 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.

135. 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 non-market 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.[49] 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 Korea case illustrates that a more concerted approach to overcome "collective action" can work in some circumstances (for example, 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 credit-worthy firms are protected through official guarantee and other schemes.

E. Bank Closure and Restructuring

136. 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.

Lessons from the East Asian experience

137. 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

[49] In the case of Indonesia, while the ADB agreed to provide US$2.8 billion in quick-disbursing loans, it also cancelled 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 which had already been approved in September 1998 but had not yet been disbursed (IDB, 2001).

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 on-going 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.

138. 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 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.

139. 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 competently 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 proved to be one of the major weaknesses of crisis management.

The blanket guarantee

140. 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 et al., 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.

141. 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 et al., 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.

142. 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 percent 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

143. 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.

144. In establishing the IBRA, the IMF staff believed that (i) 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 (ii) 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 et al., 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.

145. 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 establishment 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

146. 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.[50] 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.

147. The experience of Indonesia and Korea, however, is less clear on the exact modality of public sector involvement in the restructuring process (that is, consolidated vs. non-consolidated 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.

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[50] "A Framework for Managing Systemic Banking Crises," SM/03/50, February 2003. Also see Andrews and Josefsson (2003).

F. Structural Conditionality

148. Structural conditionality was present in all three cases, and has been the subject of much controversy (see Box 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, 1998). However, there is an alternative view, which holds that restoring market confidence required addressing the structural cause of the problem (Summers, 1999; Goldstein, 2002).

Box 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 (that is, they must be met before the next review, while others are longer term (that is, they should be completed by the end of the program).

(i) **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.

(ii) **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.

(iii) **Performance criteria** govern disbursement (that is, 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.

(iv) **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.

149. 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." [51] 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 non-critical measures

150. 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.

151. 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.

152. 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

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[51] "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.

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.

153. 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.

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

Assessment

155. 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." [52]

156. 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 domestic 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.

G. Communications Strategy to Enhance Ownership and Credibility

157. 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

158. 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.

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[52] "Managing Director's Report to the International Monetary and Financial Committee—Streamlining Conditionality and Enhancing Ownership," IMFC/Doc/4/01/6, November 6, 2001.

Building credibility

159. Given the need to restore market confidence, the communications strategy must also address the need to build the credibility of a crisis management program 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.

160. 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.

161. 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.[53]

Assessment

162. 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

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[53] 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).

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 report). 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.

163. 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.

164. 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.[54] 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.

V. Internal Governance

165. The 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.

A. Human Resource Management

166. 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

[54] See, for example, "A Review of the Fund's External Communications Strategy," SM/03/69, February 2003.

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.[55]

167. 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 eventually occur, but only once the crises were already well underway.

168. 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.[56] 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.

169. 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.[57] Only a relatively small number of participants in the

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[55] 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.

[56] "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: (i) MAE tended to move too slowly in reaching a firm position on policies that were needed to address urgent problems; and (ii) 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.

[57] The Central Asia Department and the South Asia and Pacific Departments were merged to form what is now APD, effective January 1, 1997.

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, 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).

170. 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.

B. The Role of Major Shareholders and the Executive Board

171. 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.

172. 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.

173. 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.[58]

174. 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."[59] 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 micro-management of operational details.

C. The Relations with Other International Financial Institutions

175. 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 which could not have been supportive of the efforts to restore confidence.

176. 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.

177. 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

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[58] The country annexes provide some examples where such interaction did take place and had some adverse effects.

[59] "The Role of the Fund in Governance Issues" (EBS/97/125), July 1997.

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.[60] 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.

178. 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, were 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.[61]

179. 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

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[60] 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.

[61] 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.

differences of view on strategy did not follow a simple IMF-World Bank divide.[62] 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.

VI. Conclusions and Recommendations

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

A. Conclusions

Pre-crisis surveillance

181. 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.

182. The impact of surveillance was generally limited, because of (i) 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; (ii) lack of receptiveness of country authorities to the policy advice of the IMF, when there were political constraints or honest differences of view; (iii) limited IMF leverage in a non-program setting, particularly in an environment of buoyant capital flows to emerging

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[62] 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).

markets; and (iv) 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

183. The three country cases illustrate the enormous difficulties in designing macroeconomic policy in capital account crises, which stem from (i) the possibility of multiple equilibria which implies the potential for large exchange rate changes; and (ii) 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.

184. 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.

185. 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 (for example, the first Korea program), or not fully owned by the authorities (for example, Indonesia), or having an unsustainable policy package (for example, the exchange rate regime in the first Brazil program).

Fiscal policy

186. 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.

187. 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 which 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.

188. 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 which materialized soon after the period covered by our evaluation.

Monetary policy

189. Monetary policy under the IMF-supported programs shared similar objectives, but ultimately differed 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.

190. 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

191. 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.

192. 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.

193. The role of the IMF in promoting PSI was fairly limited in all three cases, largely reflecting the prevailing rules of the game which 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

194. 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 (that is, consolidated vs. non-consolidated restructuring supervision).

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

Structural conditionality

196. 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."[63]

197. 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 wide-spread 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

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

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[63] Managing Director's Report to the International Monetary and Financial Committee—Streamlining Conditionality and Enhancing Ownership, November 6, 2001.

Internal governance

199. 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.

200. 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).

B. Recommendations

201. 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 pre-crisis surveillance, program design, and the role of the IMF as crisis coordinator.

Pre-crisis surveillance

202. **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.[64] 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 policy making 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.

203. **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 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.

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[64] Allen et al. (2002) sets out much of the framework that would be necessary for such an analysis.

- **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.**[65] 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.**[66] 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.

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[65] 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.

[66] The Crow Report also recommended routine publication of all staff reports for Article IV consultations.

- **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

204. **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 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

205. **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.

206. **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.

207. **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 (APR) exercise could be enhanced to give greater weight to the ability and willingness to make independent, candid judgments.[67] 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.[68]

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[67] The APR form for IMF managers already contains sections calling for the assessment of competences that are relevant to this issue (e.g., sound judgment/analytical skills, and strategic vision) but does not address it directly.

[68] 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.

The IMF's Financial Arrangements with Three Crisis Countries, 1997-2000 1/

A. Overview

	Board Approval	Expiration or Cancellation	Amount Agreed	(Percent of Quota)	Amount Drawn	Amount Outstanding	Quota
			I. Indonesia				
Stand-By Arrangement	11/5/1997	8/25/1998	7,338 2/	(490)	3,669	367	1,498
Extended Arrangement	8/25/1998	2/4/2000	4,669 3/	(312)	3,798	3,798	1,498
			II. Korea				
Stand-By Arrangement	12/4/1997	12/3/2000	15,500	(1938)	14,413	0	800
Of which: Supplemental Reserve Facility	12/18/1997	12/17/1998	9,950	(1244)	9,950	0	800
			III. Brazil				
Stand-By Arrangement	12/2/1998	9/14/2001	13,025	(600)	9,471	2,687	
Of which: Supplementary 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: Supplementary Reserve Facility	9/14/2001	9/5/2002	9,951	(328)	9,951	6,634	

B. 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.

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

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

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

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 seminars 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.

A. International Organizations

World Bank:

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

ADB:

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

IDB:

Ricardo Santiago

OECD:

Yutaka Imai
Eva Thiel
Val Koromzay
Pierre Poret

B. Member Country Officials

Indonesia:

Saleh Afiff
Boediono
Djunaedi Hadisumarto
Bacharuddin Jusuf Habibie
Kwik Kian Gie
Moerdiono
Heri Akhmadi
Hendro Budiyanto
Ginandjar Kartasasmita
Sri Hadi
Jimly Asshiddiquie
Anwar Nasution
Moh Arsjad Anwar
Dorodjatun Kuntjoro-Jakti
Miranda Goeltom
Cyrillus Harinowo
Mar'ie Muhammad
Benny Pasaribu

Radius Prawiro
Sjahril Sabirin
Bambang Subianto
Bambang Widianto
Wiranto
Putu Gede Ary Suta
Bambang Soedibjo
Surjadi Sudirdja
Widjojo Nitisastro
Glenn Yusuf
Rizal Ramli
Soedradjad Djiwandono
Ali Wardhana
Agus Widjojo

Korea:

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

Brazil:

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

Other countries:

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

C. Academics and Other Private Sector Individuals

Tony Addison
Marcos Arruda
Orley Ashenfelter
Rodrigo Azevedo
Faisal Basri
Anne Booth
Gongpil Choi
Tenji Dobashi
Austregésilo Ferreira
Yukiko Fukagawa
Rachmat Gobel
Steve Hanke
Bara Hasibuan
Raja Iyer
Joseph Joyce
Chungwon Kang
Yuzuru Kato
Taejoon Kim
Takeshi Kohno
Fabian Lefrancois
Kyu-Hwang Lee
Rajeev Malik
Peter McCawley
Riefgi Mura
Kenichi Ohno
Celso Pinto
Changyong Rhee
David Roland-Holst
Mohamad Sadli
Sam Santoso
Palgunadi Setyawan
Sayuri Shirai
Davinder Singh
Hadi Soesastro
Henry Stipp
Hariyadi Sukamdani
Suryo B. Sulisto
Atmono Suryo
Tulus Tambunan
Jeremy Wagstaff
Yunjong Wang
Junssok Yang
Sri Adiningsih
Tadahiro Asami
Haryo Aswicahyono
Iwan Aziz
Mohamad Chatib Basri
Charles Calomiris
Susan Collins
Michael Dooley
Kristin Forbes
Mayling-Oey Gardiner
Morris Goldstein
Koichi Hamada
Ricardo Hausmann
Hasung Jang
Fikri Jufri
Soedjai Kartasasmita
Kazunari Kawashima
Toshihiko Kinoshita
Masataka Komiya
Jongwha Lee
Muhammad Lutfi
Suhadi Mangkusuwondo
M. Bert McPhee
Nopirin
Raden Pardede
Farid Prawiranegara
William Rhodes
Nouriel Roubini
Felia Salim
Shahputra Sekarjati
Jeffrey Shafer
Pande Radja Silalahi
Douglas Smee
Steve Sondakh
Ana Maria Stuart
Widigdo Sukarman
Sudarno Sumarto
Tugagus
Petrus Tjandra
Mark Walker
Thee Kian Wie
Masaru Yoshitomi
Arif Arryman
Shinji Asanuma
Raymond Atje
Dominic Barton
Paul Blustein
Yunje Cho
Charles Dallara
Martin Feldstein
Naoto Fujita
Edimon Ginting
Anton Hermanto Gunawan
Hartojo Wignjowijoto
Shinichi Ichimura
Paul Murray John
Ceci Vieira Jurua
Hasan Katadjoemena
Peter Kenen
Nobutaka Kitajima
Bayu Krisnamurthi
Keat Lee
Nono Anwar Makarim
Carlos Mariani Bittencourt
Yasuhiro Morita
Cherie Nursalim
Jae Ha Park
Teddy Rachmat
Sung-tae Ro
Kurya Rusad
Pedro Moreira Salles
Roberto Setubal
Takuya Shikatani
Djisman Simandjuntak
Natalia Soebagjo
Ernest Stern
Nancy Suhut
H. Tjuk Kasturi Sukiadi
Anton Supit
Mangara Tambunan
Andres Velasco
Sofjan Wanandi
Dooyong Yang

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