Chapter 2 The Three Crisis Cases

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.

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

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

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

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

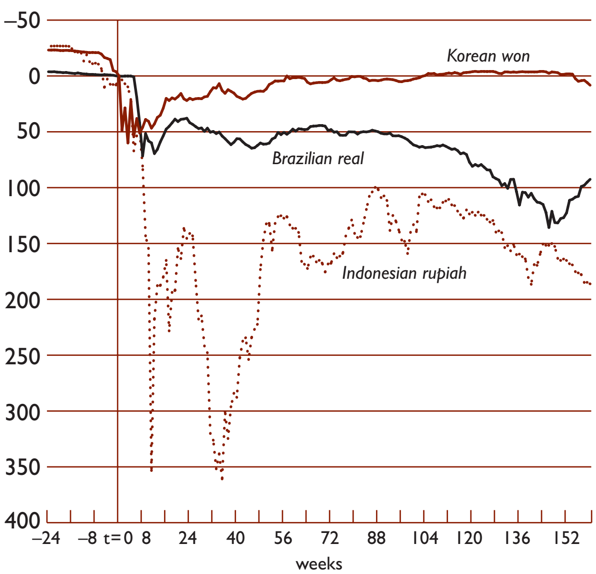
In the following sections, we present a brief summary of the crisis and the role of the IMF in each country, drawing on the detailed case studies in the annexes.

Indonesia

The background to the crisis

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

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



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

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

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

Indonesia's response to the crisis before the program

The crisis began in July 1997 with contagion from Thailand, which led to pressure on the rupiah. On July 11, 1997, the central bank, Bank Indonesia (BI), surprised the markets by widening the intervention margins of the crawling peg regime from 8 percent to 12 percent.[1] Speculation continued, however, and the authorities responded by tightening liquidity, raising interest rates, and intervening in the foreign exchange market. In mid-August, BI decided to float the currency, a step that the IMF strongly endorsed.

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

Worried by these developments, in mid-September 1997, the Indonesian authorities opened discussions with the IMF on a "precautionary" arrangement to restore confidence.[3] On their way to the IMF Annual Meetings held in Hong Kong SAR in October, the First Deputy Managing Director and a senior staff member visited Jakarta to see the economic team and President Suharto.[4] 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

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

[2] From September 4 to September 22, the rate was reduced to 21 percent in several steps.

[3] 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.

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

Table 2.1. Indonesia: Key Economic Indicators[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[2, 3]	34.0[2, 3]	13.9[2]	68.1[2]	32.5[2]	35.5	22.8	2.1
Broad money (M2, end-period, percent)	20.2	27.6	29.6	23.2	62.3	11.9	15.6	13.0
Current account balance (US$, billion)	–2.8	–6.4	–7.7	–4.9	4.1	5.8	8.0	6.9
Export growth (US$, percent)	8.8	13.4	9.7	7.3	–8.6	–0.4	27.7	–16.1
Import growth (US$, percent)	12.9	27.0	5.7	–2.9	–34.4	–12.2	39.6	–7.5
External debt (US$ billion, end-period)	100.9	113.7	121.1	146.6	159.8	158.4	149.6	139.8
International reserves (US$ billion, end-period)	12.1	13.7	18.3	16.6	22.7	26.4	28.5	27.2
Exchange rate (Rp/US$, end-period)	2,198	2,294	2,362	4,375	7,850	6,988	9,675	10,450
Real effective exchange rate[4]	100.2	100.0	103.9	62.1	65.8	72.7	62.9	66.3
Central government balance (percent of GDP)[5]	0.2	0.9	1.1	–1.3	–2.3	–1.5	–1.1	–3.7

Sources: IMF database, supplemented by APD staff estimates; and Datastream.
[1]Calendar years, unless noted otherwise.
[2]Fiscal years.
[3]Foreign currency stocks measured at constant exchange rates to avoid valuation changes.
[4]End-period; average of 1990 = 100.
[5]Fiscal years. Fiscal year 2000 covers nine months from April to December, as Indonesia's fiscal year changed from April–March to a calendar year in April 2000. The fiscal balance excludes privatization proceeds and includes the interest rate cost of bank restructuring.

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

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

The November 1997 Program

During October, the IMF negotiated a 36-month Stand-By Arrangement (SBA) for about US$10 billion, which was approved by the Executive Board on November 5.[5] Disbursements would be front-loaded, with two tranches of US$3 billion each by the end of March 1998.[6] The program also assumed US$8 billion in lending from the World Bank and the Asian Development Bank (ADB). The press notice also made a reference to the availability of additional financing from bilateral sources, if required, without including it in the headline figure.

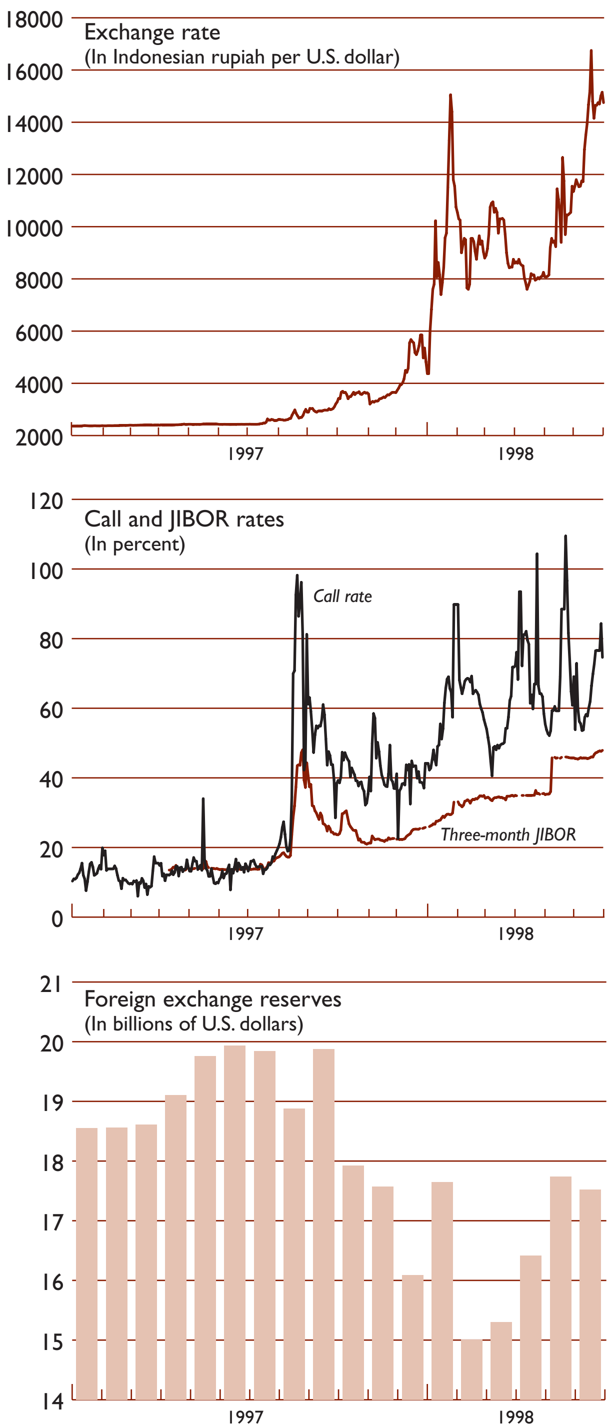
At this stage, the IMF believed that the crisis was a moderate case of contagion in which the exchange rate had overshot, so the program's key macroeconomic objective was to correct this overshooting. The staff recognized that, if one questioned this basic assumption, an entirely different approach would be necessary, though it never explored comprehensively what that alternative would imply. Internal documents show that both staff and management perceived the crisis as an opportunity to assist the reformist economic team in carrying out financial sector reform and deregulation, both areas that were earlier emphasized in IMF surveillance.

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

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

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

Figure 2.2. Indonesia: Key Economic Variables



Sources: Datastream; Bloomberg; and IMF database.

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

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

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

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

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

The changing nature of the crisis

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

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

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

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

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

The January program was never presented to the Executive Board because it failed to halt the collapse of the exchange rate. The rupiah continued to depreciate to levels that made the revised budget targets almost immediately irrelevant.[10] 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

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

[9]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.

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

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

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

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

However, political developments soon came to a boil, as fuel price increases introduced in early May sparked civil unrest. This ultimately led to the resignation of the President on May 21.[12] Vice President Habibie took over the presidency in accordance with the Constitution and he maintained continuity by retaining the Economic Coordinating Minister, who was responsible for implementing the IMF-supported program. The rupiah continued to depreciate through June 1998, reaching Rp 15,250 per dollar, but it began to strengthen thereafter, and inflation began to stabilize.

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

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

Korea

The background to the crisis

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

[11]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.

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

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

Table 2.2. Korea: Key Economic Indicators

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

Sources: IMF database, supplemented by APD staff estimates; and Datastream.
[1]End-period; average of 1990 = 100.

There were structural weaknesses below the surface and some of them were identified during IMF surveillance, but their seriousness, as a potential trigger for an external crisis, was not fully analyzed or stressed in surveillance reports. The large conglomerates (*chaebol*) that dominated the economy were very heavily leveraged, mostly through long-term borrowing from local banks.[14] 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.

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

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

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

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.

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

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

The onset of the crisis

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

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

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

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

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

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

The December 1997 program

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

[16]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.

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

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

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

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

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

Figure 2.3. Korea: Key Economic Variables

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

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

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

The rollover agreement

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

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

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

The macroeconomic effects of the crisis turned out to be severe but short-lived. Real GDP declined by 6.7 percent during 1998, and unemployment rose to 7.4 percent by year-end. Yet signs of recovery were already visible by the end of 1998 and growth rebounded to 10.9 percent in 1999, belying fears expressed by many that the recovery would be L-shaped.[19] The authorities moved quickly to rebuild reserves, which totaled US$52 billion at the end of 1998. Following the peak in early 1999, unemployment began to decline steadily, and the growth of real wages picked up strongly.

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

Brazil

The background to the crisis

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

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

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

Table 2.3. Brazil: Key Economic Indicators

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

Sources: IMF database; Datastream; and Central Bank of Brazil.
[1]Central Bank, INPC-based, end-period, June 1994 = 100.
[2]Valorized GDP is expressed in prices of December of each year.

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

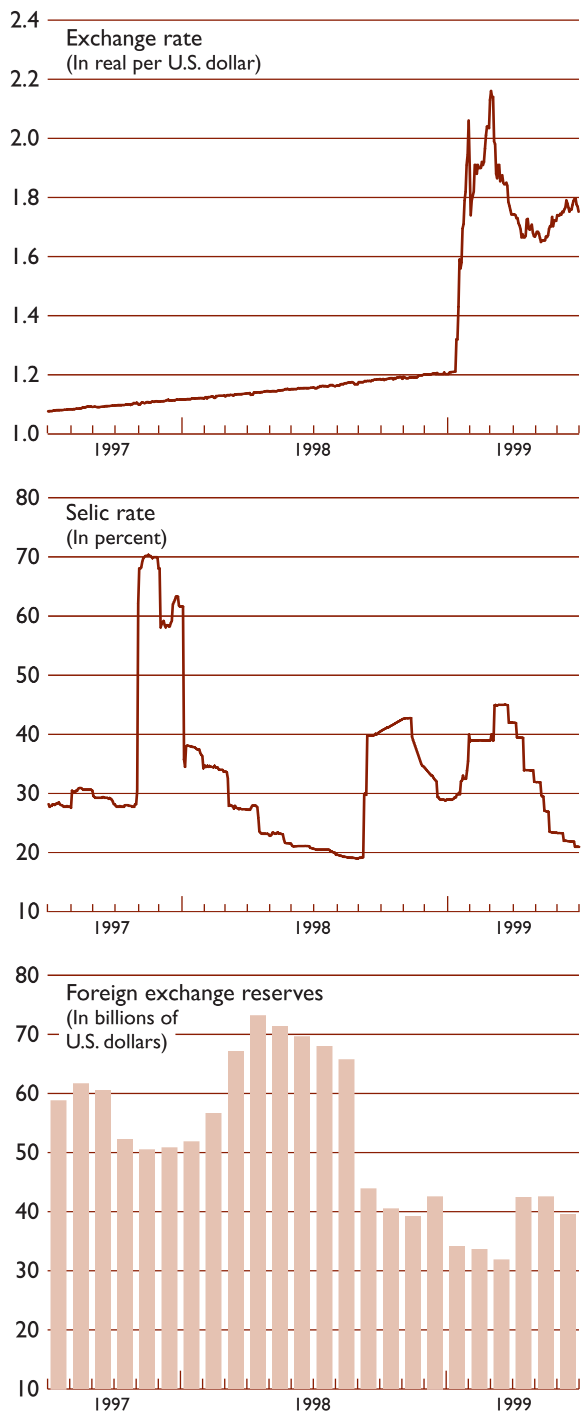
Another consequence of the policy mix was an overvaluation of the real. Following the nominal appreciation to R$0.84 per U.S. dollar in late 1994, the real was managed in a narrow range around R$0.85 from October 1994 to March 1995, when a crawling peg was adopted with a band. Although inflation came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

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

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

[20]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).

Figure 2.4. Brazil: Key Economic Variables



Sources: Datastream; and IMF database.

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

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

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

The December 1998 Program

Preliminary work began on the main components of an IMF-supported program in early September 1998, based on Brazilian proposals which emphasized fiscal tightening.[21] 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.[22] However, this gave way to the view that, in order to convince the markets, real money was needed.

[21]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.

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

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

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

The program, approved by the Board in early December 1998, envisaged maintenance of the existing exchange rate regime, but did not specify any immediate change in the rate of crawl.[23] The possibility that exchange rate policy might be modified at subsequent program reviews was left open. The program included strong, front-loaded fiscal adjustment (amounting to over 4 percent of GDP) and a commitment to supportive monetary policy. Conditionality on structural measures was limited mainly to critical areas in public finance and financial sector regulation. There was a very limited effort to coordinate the actions of private creditors, as the authorities feared that any stronger action would likely have adverse consequences for future flows. They only sought the voluntary support of private lenders for the program in meetings in a number of international financial centers. There was a generally favorable response to these requests, but rollover rates for international bank credits averaged only 65–70 percent.

Collapse of the peg and the revised March 1999 program

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

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

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

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

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

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

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

The revised program of March 1999 was unexpectedly successful in terms of its impact on the price level and output. A takeoff in inflation, which was greatly feared following the depreciation, was averted, and consumer price inflation was held at 9 percent during 1999. Stronger-than-expected external financing, particularly larger FDI inflows, facilitated a smoother external adjustment. In contrast to pessimistic projections of a decline in GDP of 3.8 percent in 1999, real output grew by 0.8 percent. The financial sector weathered the crisis well, in part owing to the extensive hedge against depreciation provided by the public sector, which also bore the brunt of temporarily increased interest rates.

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

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

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

[24]See Box 4.1 in Chapter 4 for the operational difference between structural performance criteria and structural benchmarks in IMF-supported programs.