
Experience with Bailouts and Bail-ins

The financial crises of the last decade—as described in chapter 2—typically resulted in a gap between the foreign exchange the crisis country needed to cover its current account deficit, payments on maturing debts and predicted domestic capital flight, and the foreign exchange that the country had on hand or could be expected to raise in private markets. In the face of such external financing gaps, crisis resolution has three core elements:

- policy adjustments, whether a change in the exchange rate regime or in other macroeconomic policies;
- official financial support, whether from IMF rescue loans—loosely speaking “bailouts”—or the rescheduling of debts owed to bilateral creditors; and
- bail-ins or debt restructurings.

This chapter provides an overview of actual experience with bailouts and bail-ins, starting with Mexico’s 1995 crisis.¹ The first section assesses the success of official support packages—bailouts. The second section reviews experience with the restructuring of debts owed to private creditors (i.e., bail-ins), ranking bail-ins from most voluntary to most coercive.² The

1. See the comprehensive studies by Sachs (1989b, 1990) and Cline (1995) on the 1980s debt crisis and its resolution.

2. Table 2.1b provides a summary of recent experience with crisis resolution, paying attention to topics such as capital controls, domestic bank holidays, and scale of domestic macroeconomic adjustment that are not covered in detail in this chapter. Tables 4.1 and 4.2 in this chapter provide a more detailed review of major bailouts. Appendix table A.1 (at the end of

chapter then highlights the lessons that can be drawn from recent experience, whether lessons for the use of official financing, bond restructurings, or restructuring of bank claims.

Recent experience suggests, at least to us, that no one approach is likely to succeed in all circumstances. The challenge of crisis resolution is finding the right set of tools to address an individual crisis. That conclusion, however, begs the question of how best to map different tools to different crises. Here too, we think that the growing body of experience with bailouts, bond restructurings, and bank reschedulings is starting to suggest answers.

The success of official bailouts can be judged, in part, by the speed with which the country can repay the loan. Other definitions of success are of course possible, but the capacity to repay the official sector is a decent proxy for both the country's broader return to economic and financial health and the success of the IMF's policy conditionality.³ Judged on this basis, the most successful bailouts were provided to countries that had comparatively small debt levels and had the ability to make needed policy adjustments. These bailouts generally were provided to countries that encountered trouble as they were moving off a fixed—or heavily managed—exchange rate regime. It is still too early to judge the success of the IMF's recent experiments with providing large bailout packages to countries that have quite substantial debt levels—far above the levels of past success stories. Recent crisis countries have committed to making quite significant policy adjustments to offset their poor starting positions. They generally have delivered on these commitments, but adjustment alone has not been sufficient to put them in a position to repay the IMF quickly.

It is harder to find a single measure to gauge the success of efforts to obtain crisis financing from the country's private creditors. Success requires convincing private creditors to contribute, whether by deferring payments or by agreeing to reduce their claims on the crisis country. But it also requires that the private creditors' contribution not come at the expense of other goals—including preventing a sharp fall in output or digging the country into a deeper financial hole.

Recent experience with debt restructurings supports three general conclusions. First, bonds—including those that lack collective action clauses—can be restructured in a wide range of circumstances. Bond exchanges are necessary to clean up after a catastrophic default but also can be used to avoid default by deferring payments, as a country takes steps to stabilize its economy. Second, voluntary is not always better. In crisis conditions,

this book) provides comprehensive data on the official sector's exposure in different crises. Appendix table A.3 summarizes the main features of recent bail-ins.

3. There is a high empirical correlation between the speed with which a crisis country repays the IMF and the return to economic growth and financial stability of the country.

creditors left to their own devices either want to get out no matter what or demand a very high premium to “voluntarily” extend their exposure. Completely voluntary bank rollover arrangements have not prevented banks from cutting back their exposure, and completely voluntary bond exchanges have provided short-term debt relief on terms that have increased concerns about long-term solvency. Third, the official sector has an important role to play in the restructuring of debts owed to private creditors. Official action can catalyze private creditors to organize to overcome their coordination problems, reinforcing incentives to participate in a cooperative solution and increasing the cost of pulling out. The official sector is the actor best positioned to take a broad interest in the overall success of a complex restructuring. It could ensure that the various steps required for financial rehabilitation—including, among others, the restructuring of external bonds, Paris Club debt, and domestic debt—combine with the debtor’s own efforts to improve its policies to produce a coherent whole.

Experience with Official Financing

IMF Lending Norms and Facilities

Before presenting the data on the size of IMF rescue packages and our assessment of the success of such bailouts, it is useful to briefly review the IMF’s lending tools. The IMF has several lending facilities, each designed to meet—at least in theory—specific financing needs. Crisis lending to major emerging economies typically is done either through the IMF’s main lending window—so-called stand-by arrangements (SBAs)—or through a special facility designed to provide very large amounts of financing for a very short term in the event of sudden capital outflows—the supplemental reserve facility (SRF). The IMF also has facilities for providing concessional, long-term lending to the poorest countries, but these facilities are not relevant to this discussion.

The financial terms of an SBA and an SRF have important differences. A borrowing country is expected to start repaying an SBA after two and a quarter years and finish after four years; a borrowing country *has* to start repaying an SBA after three and a quarter years and finish after five years. Countries initially were expected to start repaying SRF loans in a year and complete repayment in one and a half years and were obligated to start repaying in two years and finish in two and a half years. However, the maturity of the SRF was slightly extended recently: Countries are now expected to repay in two to two and a half years and *have* to repay in three years. All SRF loans carry a substantial surcharge (3 to 5 percentage points); SBAs that exceed normal access limits also carry special surcharges. In broad terms, countries are expected to repay an SRF more

quickly than an SBA and to pay a “penalty” interest rate that encourages early repayment.

The IMF assesses the size of an IMF loan in relation to a country’s IMF quota. Quotas, in turn, are based on the size of the country’s financial contribution to the IMF. Countries with large quotas usually—but not necessarily—have larger economies than those with smaller quotas. A country normally can borrow up to 100 percent of its IMF quota in a year and 300 percent over three years. Anything more is considered exceptional.⁴ There is a presumption that access above the IMF standard lending limits should be provided through the SRF. But exceptional financing can also be provided on “stand-by” terms.

The SRF was not created until after the Mexican, Thai, and Indonesian crises. It was used for the first time in Korea in 1997 and subsequently in Brazil, Argentina, Turkey, and Uruguay (though only a tiny fraction of Uruguay’s loan was on SRF terms). Korea and Brazil (after 1999) were both able to repay the IMF relatively quickly. However, large amounts of financing increasingly have been provided through packages that combine SBA and SRF loans (Argentina, Turkey, and Brazil), in part because of growing concerns that the large payment spikes associated with the SRF could impede regaining market access.⁵ Moreover, in Argentina, Turkey, and Brazil, payments on the country’s initial SRF loans were effectively refinanced with new SBAs. This turned the initial two-and-a-half-year loan into a much longer five- to seven-year loan.

4. Country quotas are based on anachronistic, historical factors and often do not reflect the current economic size or potential financing needs of a crisis country. For example, Korea’s quota was historically very small relative to its economic size. Consequently, Korea’s emergency financial support package during its 1997–98 crisis was much larger relative to its quota than to its GDP. Reforming IMF quotas to better reflect the current relative size, importance, and potential borrowing needs of different countries is extremely contentious. Quota size is related to voting rights in the IMF—countries with a larger quota have a greater effective say and voting share in the IMF’s Executive Board. The 1998 quota increase provided the IMF with more resources but had only a marginal impact on the relative standing of different members. The IMF also has access to special credit lines from some of its main contributors for additional resources, on top of the committed capital or quotas, to address severe global financial turmoil. The General Agreements on Borrowing (GAB) was introduced in 1962 and the New Agreements on Borrowing (NAB) in 1998; they are only rarely activated.

5. In 1998 the IMF introduced another tool for exceptional financing, the contingent credit line (CCL). The CCL stressed *ex ante* rather than *ex post* conditionality. In theory, countries that prequalified for IMF support with sound and transparent macroeconomic and financial policies and data transparency could qualify for a CCL, which provided access to relatively large IMF resources in case of contagion, with relatively minimal conditionality. However, no member country ever applied for a CCL, despite a number of reforms since 1998 to make it more appealing, so this facility was phased out in 2003. The IMF also has facilities to provide subsidized (“concessional”) lending to very poor countries (enhanced structural adjustment facility or ESAF, now called poverty reduction and growth facility, or PRGF) as well as facilities to provide multiyear lending at slow repayment rates to countries with serious structural problems or in transition to a market economy (the extended fund facility, or EFF).

The mechanics of IMF lending are of obvious interest to IMF insiders. But why should the broader world care about the IMF's crisis financing facilities? The answer is simple: IMF lending facilities embody a theory about the appropriate use of IMF funds and consequently help to provide a basis for assessing the success of large IMF lending packages. For example, the SRF was built around the theory that larger loans—counterintuitively—could be repaid more rapidly than smaller loans, so exceptional levels of financing should be provided for shorter periods rather than normal financing. This is, in part, to assure that the IMF's funds “revolve”—that large amounts of money are not tied up in one country for a long time. The analogy to a domestic lender of last resort also influenced the SRF's design: Mobilizing overwhelming financial force would not only quickly stop capital outflows from the crisis country but also catalyze the rapid resumption of capital inflows. The quick return of market confidence, in turn, would allow the IMF to be repaid quickly.

Countries that borrow large sums but cannot repay the IMF quickly—whether because the IMF initially offered more generous repayment terms or because the initial loan had to be refinanced with a new loan—consequently are a rebuke to the theory that large amounts of money should be provided only for short terms. Slow repayment may indicate that the theory behind the SRF is wrong and that large sums cannot be repaid more quickly than small sums. Or it may indicate that the theory only works if IMF lends to the right set of countries.

One brief but important note: While the IMF measures the size of its loan in relation to a country's quota and denominates its loans in its own unit of account (special drawing right, or SDR), few others do the same. Private loans—and the bilateral loans that sometimes accompany IMF lending—are usually denominated in dollars, euros, or yen. To facilitate comparison with these financing sources, we have generally converted IMF loans into dollars. Also while the IMF defines “exceptional” lending in relation to a country's quota, we have generally opted to look at how much money the IMF is providing relative to a country's GDP or gross national income (GNI).

Size of IMF's Crisis Lending

The headlines announcing a new multibillion-dollar IMF bailout—sometimes backed by additional “bilateral” financing from major countries—often paint a misleading picture of the amount of money the IMF, along with bilateral creditors, actually makes available to a crisis country. In some successful cases, confidence was reestablished relatively quickly, and the country did not have to draw on its entire package. In some less successful cases, the amount of financing actually provided fell well short of the amount promised—whether because the country failed to meet its

policy commitments or because the combination of policy adjustment and financing failed to calm the markets, and the country defaulted before all available funds had been disbursed. Moreover, the desire to produce an impressive headline number has led to financing packages that include money from sources whose actual commitment was far weaker and less well-defined than the IMF's commitment. Bilateral commitments can be available for disbursement alongside IMF funds (first line of defense, as in Mexico, Thailand,⁶ and Brazil in 1998–99) or can be available only if conditions are worse than expected and if the debtor country reaches a supplemental agreement with countries providing the extra financing (second line of defense, as in Indonesia and Korea).

The headline commitments and the actual disbursements in major recent IMF programs are summarized in table 4.1.⁷ Only in Turkey and the most recent Brazil program have actual disbursements been close to the announced headline commitment.

A number of variables other than size are relevant for assessing a bailout's impact. A meaningful difference exists between countries that can repay their bailout loans quickly and those that cannot. A difference also exists between financing a temporary and a permanent fall in private exposure to the crisis country. In the worst-case scenario, the official sector finances a permanent fall in private-sector exposure to the crisis country and in turn is left with long-term exposure of its own to the crisis country.

“Catalytic” Lending and Rapid Repayments?

The typical case for large-scale official financing is that a large rescue loan is needed for a short period to stop a liquidity run. No effort is needed to seek explicit commitments from private creditors to maintain their exposure. Rather, the combination of financing and adjustment is expected to lead private creditors and investors to conclude that they should keep their money in the crisis country. This is the “catalytic” approach to crisis resolution.

Both relatively rapid repayment of the IMF and a fairly rapid halt to the fall in private-sector exposure should mark a successful “catalytic case.” Table 4.2 and figures 4.1 to 4.3 show how quickly various crisis countries have been able to repay their IMF and bilateral loans. Tables 4.3 and 4.4 show changes in the exposure of private external creditors—both international banks and international bondholders—during recent crises. A full accounting would also look at changes in the financial claims of domestic residents, but such data are not available on a cross-country basis.

6. The United States did not participate in Thailand's bilateral financing package.

7. Table A.1 at the end of the book provides more data with the exposure to the crisis countries of all official creditors, not just the IMF but also the multilateral development banks (MDBs) and bilateral creditors.

Table 4.1 IMF and bilateral first- and second-line financing
(billions of dollars, percent of GDP in parentheses)

Country	IMF plus bilateral commitment	Peak disbursement	IMF commitment	IMF disbursement	Bilateral commitment	Bilateral disbursement
Mexico (1995)	38.9 (9.6)	27.6 (6.8)	18.9 (4.6)	15.8 (3.9)	20.0 (5.0)	13.5 (3.3)
Thailand ^a (1997)	14.0 (7.7)	11.2 (6.2)	4.0 (2.2)	3.5 (1.9)	10.0 (5.5)	8.8 (4.8)
Indonesia (1997)	26.3 (11.6)	10.8 (4.7)	11.3 (5.0)	10.8 (4.7)	15.0 (6.6)	0
Korea (1997)	40.9 (7.7)	19.4 (3.7)	20.9 (4.0)	19.4 (3.7)	20.0 (3.8)	0
Russia ^b (1998)	15.1 (3.5)	5.1 (1.2)	15.1 (3.5)	5.1 (1.2)	0	0
Brazil (1998–99)	32.9 (4.1)	17.5 (2.2)	18.4 (2.3)	13.3 (1.6)	14.5 (1.8)	9.5 (1.2)
Turkey (1999–2002)	33.8 (17.0)	23.1 (11.6)	33.8 (17.0)	23.1 (11.6)	0	0
Argentina (2000–01)	23.1 (8.1)	13.7 (4.8)	22.1 (7.8)	12.7 (4.5)	1.0 (0.4)	1.0 (0.4)
Uruguay ^c (2002)	2.7 (14.5)	2.2 (11.8)	2.7 (14.5)	2.2 (11.8)	1.5 (8.0)	1.5 (8.0)
Brazil (2001–02)	35.1 (6.9)	30.1 (5.9)	35.1 (6.9)	30.1 (5.9)	0	0

a. Bilateral data for Thailand were available only on an annual basis.

b. Russia had already drawn on the IMF to support its overall transition, and it had \$14.2 billion in outstanding IMF loans when it received the additional \$15.1 billion commitment. If Russia had obtained the full new 1998 crisis package, total exposure could have reached \$29.3 billion, or around 7.5 percent of precrisis GDP.

c. Uruguay's bilateral loan was a four-day bridge to an augmented IMF program.

Note: Peak disbursement is not necessarily the sum of IMF and bilateral peaks. In some cases, IMF disbursements helped pay back bilateral financing, so the peaks came at different points in time. Data on bilateral financing are quarterly. Bilateral financing provided through the restructuring of Paris Club debt is excluded from these totals.

Sources: International Monetary Fund, www.imf.org/external/fin.htm, for financial data; Moody's Investor Services for GDP data; US Treasury for Mexico and Brazil's bilateral financing data; World Bank *Global Development Finance* for Thailand's bilateral data; and authors' calculations.

Mexico, Korea, and Brazil in 1999 fit the typology for a successful “catalytic” case reasonably well. Mexico fits nearly perfectly. After three years, Mexico had almost completely repaid its rescue loan, bank loans were only a little below precrisis levels, and Mexico's stock of outstanding bonds had gone up. Korea and Brazil also fit the basic typology reasonably well. Both were able to repay the IMF quickly, and in both cases, private creditors stopped pulling funds out relatively quickly. However, both countries also succeeded only after important mid-course correc-

Table 4.2. Rate of IMF (and bilateral first-line) loan disbursement and repayment
(billions of dollars, percent of GDP in parentheses)

Country	Peak disbursement	Quarters to reach peak	Quarters to repay half the peak disbursement	Pre-crisis external debt (percent of GDP)	Pre-crisis fiscal debt (percent of GDP)
Mexico	27.6 (6.8)	4	9	34	31
Thailand	11.2 (6.2)	12	17 ^a	60	5
Indonesia	10.8 (4.7)	13	—	43	24
Korea	19.4 (3.7)	4	8	32	12
Russia	5.1 (1.2)	2	4	35	52
Brazil (1998–99)	17.5 (2.2)	3	7	25	40
Turkey (2000–02)	23.1 (11.6)	13	—	57	56
Argentina	13.7 (4.8)	4	—	51	45
Uruguay	2.1 (11.3)	8 ^b	—	81	38
Brazil (2001–02)	30.1 (5.9)	9	—	44	65

— = The country has not yet repaid half its loan.

a. Thailand's IMF exposure peaked after nine quarters, and it repaid half of that exposure after 17 quarters. At that point in time, it had not repaid half its bilateral lending. However, we do not have data indicating Thailand's bilateral repayments after the end of 2001.

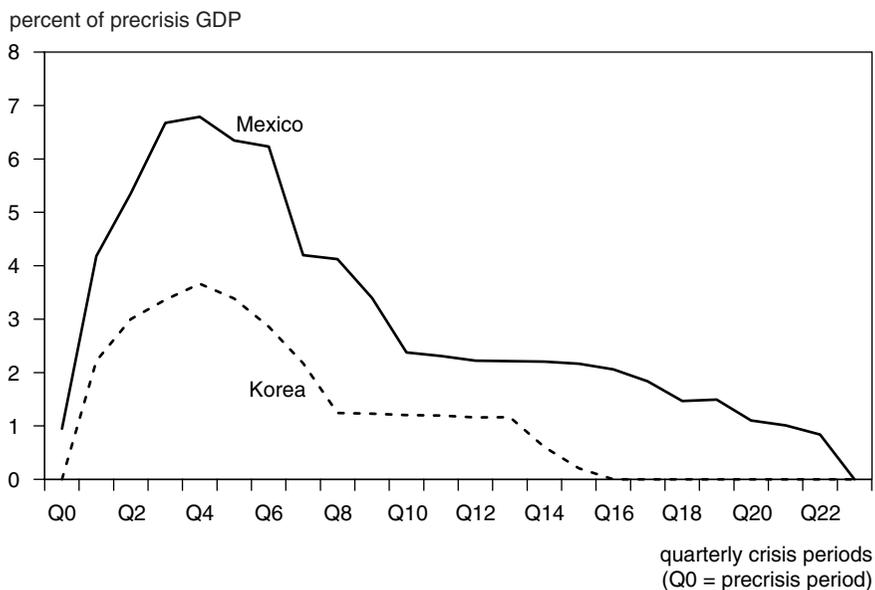
b. Debt levels are still rising.

Sources: IMF and bilateral first-line lending data are from IMF and the US Treasury; debt data are from Moody's Investor Service (apart from Mexico's pre-crisis debt data, which are from the IMF). Moody's debt numbers for Brazil are higher than other sources. The IMF, drawing on the government of Brazil's own definition of its debt, reports lower debt levels for Brazil: 35 percent in 1997 and 49 percent in 2000.

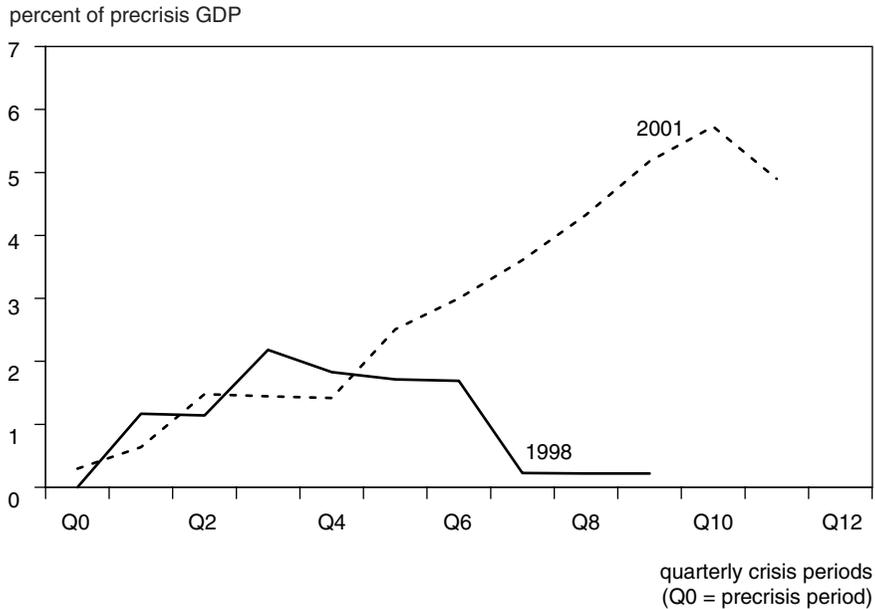
tions. As will be discussed in detail later, Korea had to supplement official support with a rescheduling of its interbank debts to obtain the time it needed to recover. Brazil's success came only after it managed to exit from its peg with less disruption than most expected, and it too actively monitored interbank rollovers after exiting from its peg. Nonetheless, the basic pattern was the same as in Mexico: Large IMF disbursements—complemented by commitments from private creditors—let the country avoid default, and large repayments to the IMF followed in relatively short order.

Figure 4.1 IMF and BIS loans outstanding

Mexico and Korea



Brazil 1998 versus Brazil 2001



Source: Data from International Monetary Fund, US Treasury, and Moody's Investor Service; authors' calculations.

Figure 4.2 IMF and ESF loans outstanding

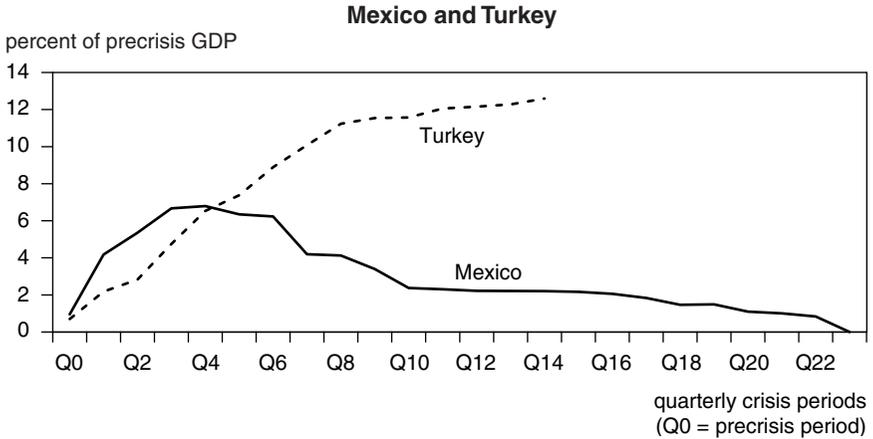
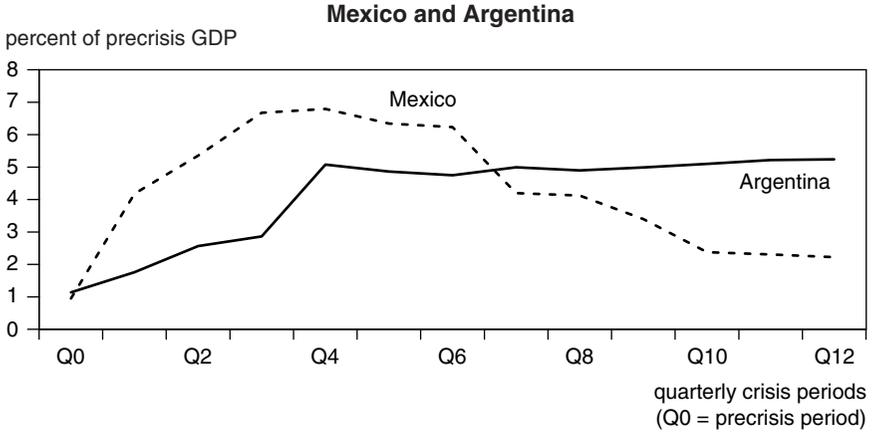
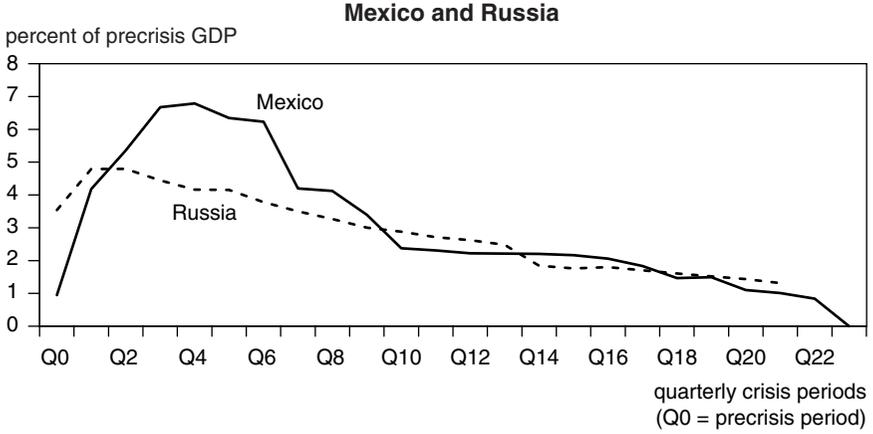
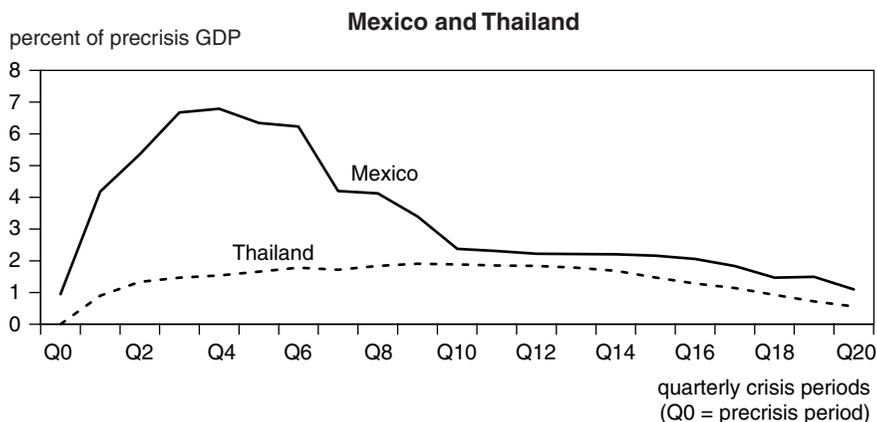
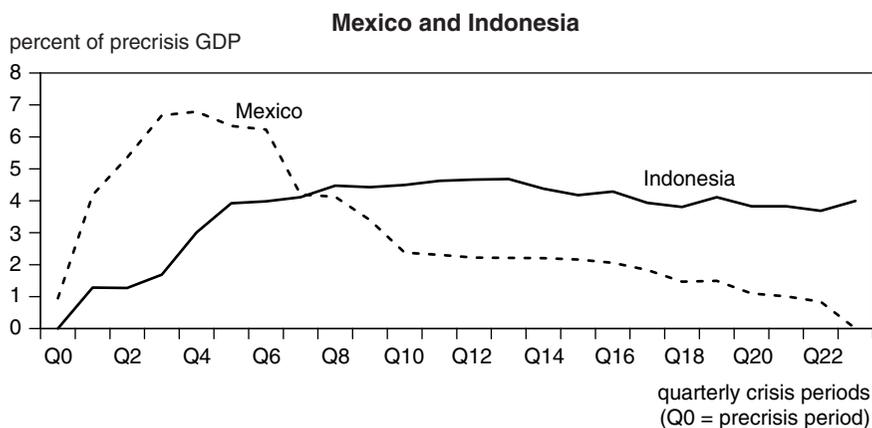
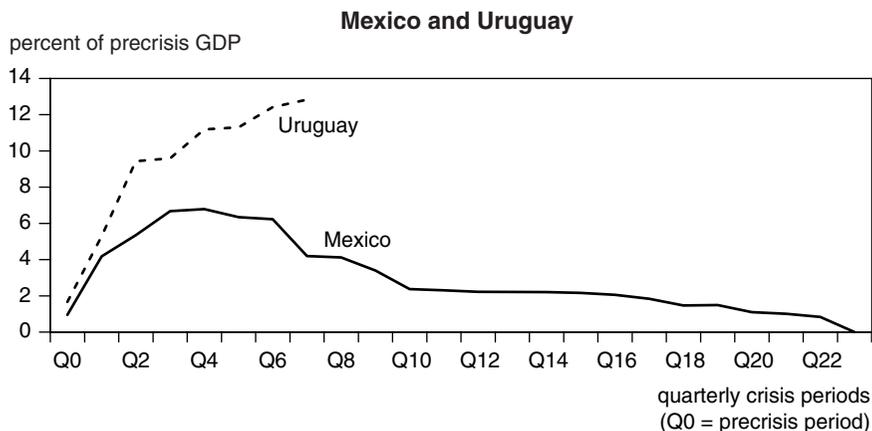


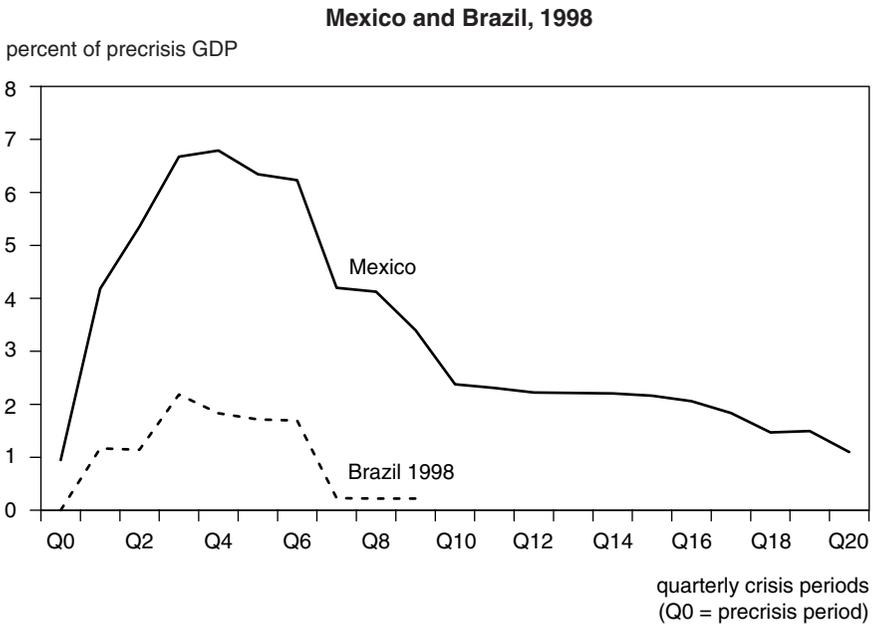
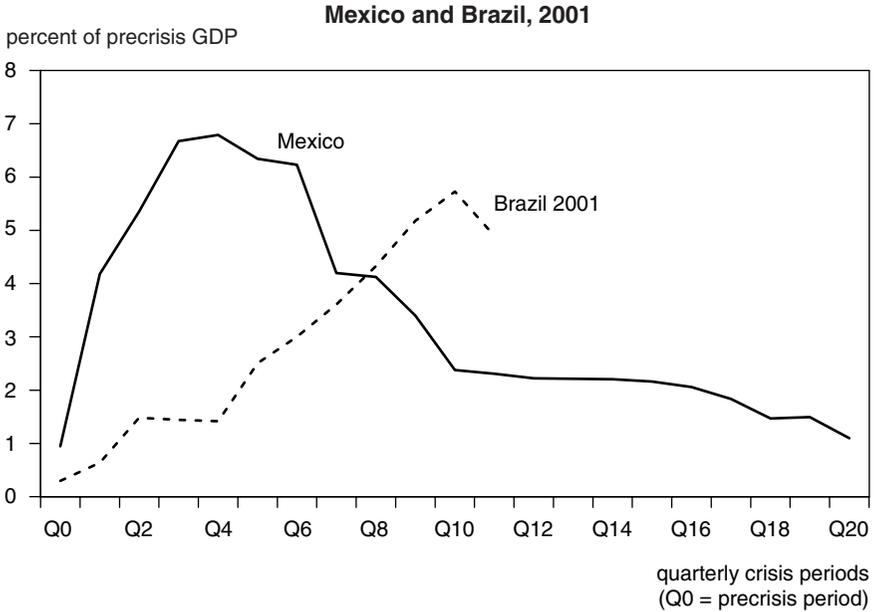
Figure 4.2 IMF and ESF loans outstanding (continued)



ESF = Exchange Stabilization Fund

Source: Data from International Monetary Fund, US Treasury, and Moody's Investor Service; authors' calculations.

Figure 4.3 IMF and bilateral loans outstanding



Source: Data from International Monetary Fund, US Treasury, and Moody's Investor Service; authors' calculations.

Table 4.3 Changes in IMF/bilateral exposure and international bank claims on crisis countries (billions of dollars)

Country	Net disbursements			Net change in external bank exposure		
	After one year	After two years	After three years	After one year	After two years	After three years
Mexico ^a	23.8	12.9	5.2	-7.3	-4.5	-3.3
Thailand ^b	2.8	3.3	3.3	-15.7	-30.0	-40.4
Indonesia	3.9	9.5	10.7	-8.3	-13.8	-18.3
Korea	16.8	10.8	6.0	-28.9	-36.9	-43.2
Russia	2.5	-1.1	-3.7	-24.1	-31.4	-38.9
Brazil (1998) ^a	17.5	1.8	3.7	-22.4	-17.5	-14.9
Turkey	11.2	20.2	22.1	-8.3	-12.5	-10.1
Argentina	8.9	9.3	10.5	-13.4	-40.7 ^c	-44.3 ^c
Uruguay	1.6	2.3	n.a.	-1.9	-2.5	n.a.
Brazil (2001)	10.8	26.2	n.a.	-7.0	-18.0	n.a.

n.a. = not available

a. Includes bilateral financing.

b. Thailand received additional bilateral financing, but this financing is not included because of a lack of quarterly data on bilateral disbursements and repayments.

c. Break in series with pesification; last observation from end of 2001.

Note: In Argentina, the international bank statistics include some of the dollar-denominated operations of foreign-owned local banks. Also Brazil started drawing on a precautionary facility with the IMF in 2001 as Argentina's crisis intensified; the scale of pressure on Brazil intensified significantly in 2002.

Sources: Data are from Bank for International Settlements, www.bis.org/statistics/hisstat8.htm (table 8, total foreign claims); US Treasury; and International Monetary Fund.

Rapid repayment in these cases was not a product of small rescue loans. IMF and US bilateral lending to Mexico totaled 6.8 percent of its precrisis GDP, IMF lending to Korea was 3.7 percent of GDP, IMF and bilateral lending to Brazil in 1998–99 was 2.2 percent of GDP (the total commitment to Brazil was closer to 4 percent of GDP, but not all was disbursed). While the amount lent to these countries was not as large in proportion to precrisis GDP as recent lending to Turkey, Uruguay, and Brazil in 2002–03, it was larger than the amounts provided in many other cases.

Rapid repayment seems primarily to have been the product of lending to the right countries. All three countries (Mexico, Korea, and Brazil) had relatively low precrisis debt to GDP levels. Both fiscal and external debt levels were manageable before the crisis and generally remained manageable after the crisis shock. All three had made policy mistakes that had drained the government's foreign-currency liquidity—notably hanging on to pegged or heavily managed exchange rates for too long. But all three

Table 4.4 Changes in IMF/bilateral exposure and in international debt securities outstanding (billions of dollars)

Country	Net disbursements			Net change in bond exposure		
	After one year	After two years	After three years	After one year	After two years	After three years
Mexico	23.8	12.9	5.2	2.3	15.3	23.7
Thailand	2.8	3.3	3.3	0.0	1.4	0.9
Indonesia	3.9	9.5	10.7	4.0	3.4	-1.2
Korea	16.8	10.8	6.0	7.6	4.8	4.7
Russia	2.5	-1.1	-3.7	5.9	4.9	3.1
Brazil (1998)	17.5	1.8	3.7	0.0	10.1	21.4
Turkey	11.2	20.2	22.1	-0.5	0.8	4.1
Argentina	8.9	9.3	10.5	15.2	14.6	16.7
Uruguay	1.6	2.3	n.a.	0.4	0.5	n.a.
Brazil (2001)	10.8	26.2	n.a.	10.9	17.0	n.a.

n.a. = not available

Note: International debt securities outstanding can go up as a result of Brady-to-eurobond exchanges, which are relevant for both Mexico and Brazil. The data series does not include outstanding Brady bonds. International debt securities outstanding can also increase as a result of the exchange of domestic debt for international bonds. This is relevant for Russia, which exchanged GKO for eurobonds in June 1998, and for Argentina, which exchanged domestic bonds for eurobonds in the megaswap.

Sources: Data are from Bank for International Settlements, www.bis.org/statistics/secstats.htm (table 15B, bonds and notes); US Treasury; and International Monetary Fund.

also were, with reasonable adjustments, effectively solvent. Brazil in 1998–99, though, is a less clear-cut case than Mexico and Korea. Its comparatively small export base created a high debt-to-exports ratio, and the crisis shock pushed its government debt stock toward potentially troublesome levels.⁸

Cases of Slow Repayment, Default, or Both

In other cases, large initial loans failed to create—or to create as rapidly as initially envisioned—conditions that allowed for the rapid repayment of the IMF’s initial loan. In most of these cases, the exposure of private creditors to the crisis country did not stabilize—or it stabilized at a low level

8. Brazil’s debt-to-GDP ratio sharply increased after 1999, but so did the primary balance. The primary balance went from approximately zero in the first Cardoso administration (1995–98) to a significant surplus above 3 percent of GDP in the second Cardoso administration (1999–2002). The increase in Brazil’s debt—and the substantial stock of both foreign-currency and short-term debt—left Brazil vulnerable to further difficulties. For more details, see the discussion on Brazil in chapter 2.

and then failed to rebound strongly. These “slow repayment” cases are worth a bit more scrutiny, in part because the causes of slower-than-expected repayment differed substantially.

Thailand and Indonesia

In Thailand and Indonesia, substantial amounts of official financing were made available but still fell well short of the amounts needed to cover all maturing short-term external debt. These programs were truly catalytic: The hope was that the available financing, combined with policy adjustments—monetary tightening following a float plus various structural changes to address weaknesses in the private sector—would combine to restore the confidence of the external creditors of Thai and Indonesian banks and firms. In neither case did the approach work as planned. Domestic balance sheet weaknesses were larger than anyone anticipated, and the needed restructuring of the domestic financial and corporate sectors ended up taking a long time and proved more costly than initially expected.

IMF lending failed—for a host of reasons—to stop the rolloff of external lending in both Thailand and Indonesia. These two cases nonetheless have important differences. Thailand had dug itself into a deep financial hole before its crisis by financing large current account deficits with short-term external debt—a topic covered in chapter 2. Its \$46 billion stock of short-term external bank debt was enormous, both absolutely and relative to Thailand’s economy.⁹ The Thais often complain that they did not receive as much financial support as other countries, in part because the United States did not contribute to Thailand’s bilateral support package. It is true that Thailand received a comparatively small IMF loan—\$4 billion, or a little over 2 percent of its precrisis GDP. But a \$10 billion commitment from other Asian economies and commitments from the World Bank and the Asian Development Bank augmented the IMF loan, and the overall amount of financing made available to Thailand by the end of 1998 (6.3 percent of precrisis GDP) was not significantly smaller than that made available to Mexico. Thailand’s real problem was that it simply had much more short-term external debt than most countries.

Thailand’s IMF program did succeed at stabilizing domestic financial conditions fairly rapidly, particularly after a new government took control in November 1997: Domestic bank depositors by and large did not flee; domestic financial conditions stabilized in the course of 1998; Thailand avoided a burst of inflation following its devaluation; and bank and corporate restructuring proceeded more rapidly than in Indonesia, though not as rapidly as in Korea. But domestic stabilization did not halt the

9. The overvalued baht overstated the true size of Thailand’s economy, when expressed in dollar terms. Consequently, even the ratio of short-term debt to precrisis GDP was extremely high—25 percent. This ratio actually understated the extent of Thailand’s debt problems.

exodus of external creditors. Table 4.3 shows that Thailand's external bank claims fell by \$35 billion between mid-1996 and mid-1999. A more complete measure of external exposure over a slightly longer time frame tells the same story: Total external claims on Thai banks, firms, and the government fell from \$102.2 billion at the end of 1996 to \$45.9 billion at the end of 2000 (World Bank's *Global Development Finance* 2003). Thailand's large current account surplus after 1997, not official lending, financed most of this \$56 billion fall in private external exposure. Between end-1996 and end-2000, Thailand ran a \$41.2 billion cumulative current account surplus.

Thailand's IMF program effectively tided it over until its precrisis current account deficit turned into a large postcrisis current account surplus that allowed it to pay back a large share of the external debts it had built up in the boom years. After 2000, Thailand had little trouble repaying the IMF out of its ongoing current account surplus.

Indonesia experienced a more dramatic and persistent collapse in output than Thailand. The combination of Indonesian firms scrambling for foreign exchange to pay their debts and Indonesian citizens withdrawing money from the domestic banking system in order to move their savings abroad led to a dramatic fall in the exchange rate. While Thailand was by and large able to avoid a domestic bank run, Indonesia was not, in part because initial bank closures were handled poorly.

But Indonesia's difficulties had deeper reasons. The country clearly needed to be willing to dismantle the tight nexus between the state, Suharto's family, and a set of well-connected businessmen in order to qualify for international help. The international community was reluctant to help Suharto unless he showed real commitment to reform. Yet any reform was sure to disrupt established business patterns. Suharto's regime had been around for a long time. As the economic and financial crisis deepened, many wealthy Indonesians with ties to the Suharto regime decided to hedge their bets and move more of their savings abroad. Creditors who had lent to firms closely tied to Suharto also had strong cause to get out if they could. The combination of the international community's reluctance to support Suharto unless he demonstrated clear commitment to change and the desire of Indonesia's elite to hedge against the risk of real change made resolving Indonesia's crisis unusually difficult.

Indonesia ended up receiving a significant amount of external support. But relatively little of that support came during the fall of 1997, the peak of Indonesia's crisis. Most of the assistance came as part of a program to help pick up the pieces during the course of 1998 and 1999. Table 4.3 also shows that Indonesia experienced a smaller fall in private exposure than Thailand. However, this smaller rolloff illustrates the difficulties of relying solely on the changes in the exposure of external creditors to assess the success of IMF programs. The most likely explanation for the smaller rolloff is that the more dramatic collapse in output and enormous fall in

the exchange rate left fewer debtors in a position to repay. Only after financial conditions stabilized did the external exposure to Indonesia start to fall rapidly. As in Thailand, the fall in private exposure exceeded the financing the IMF made available. The combination of the exchange rate depreciation and a sharp reduction in domestic output turned precrisis current account deficits into large postcrisis current account surpluses, and the foreign exchange these surpluses generated, in turn, helped to finance an orderly unwinding of the country's external debts. The substantial restructuring of interbank claims as well as the external debt of corporate borrowers needed to unwind the imbalances built up in the boom are covered in detail later.

Russia

Russia is an unusual case. The IMF program in the summer of 1998 obviously failed to avoid a default. However, Russia could still repay its 1998 IMF loan quite quickly, for two reasons. First, the amount of new IMF financing in the course of 1998 was quite small. Russia received only the first installment of its IMF loan, since the IMF cut off further financing after it became clear that limited financing and lukewarm (at best) implementation of fiscal reform had failed to calm the markets. IMF exposure only increased from around \$13 billion to around \$19 billion in the course of 1998 (an increase of \$6 billion, or 1.5 percent of Russia's precrisis GDP). Second, Russia's default and devaluation proved to be more damaging to the world and far less damaging to Russia than most expected.¹⁰

One key reason for the limited impact of Russia's sovereign default on its domestic economy is that Russia's small domestic banking system played little role in financing private business. Wiping out Russian banks had little economic impact, particularly because most domestic deposits in failed banks were just transferred to a large state bank—Sberbank. The positive impact of the devaluation on economic activity, as Russian production displaced imports, more than offset any negative impacts from a weak banking system. Finally, the loss of access to financial markets had the salutary effect of forcing Russia—and particularly the government of Russia—to live within its means. The combination of the economic rebound, lower debt payments to private creditors, improved fiscal policy, and above all a bit of good luck—a surge in oil prices—allowed Russia to start repaying the IMF relatively quickly.¹¹

10. Russia's default precipitated widespread contagion, in part because many leveraged international investors had taken out large bets on Russia.

11. Russia owed around \$14 billion to the IMF even before it encountered financial difficulties in 1998 as a result of the IMF financing to support Russia's transition. Our assessment focuses on how quickly Russia was able to bring its IMF debt levels back down to precrisis levels. By 2001, Russia had made net repayments back to the IMF well in excess of the additional funds it received in 1998.

Argentina

The January 2001 IMF program (the *Blindaje* or shield) provided enough money to cover all of the sovereign's financing needs in the first quarter of 2001. But even this substantial financing package (roughly \$15 billion, or 5.4 percent of GDP) would have worked only if Argentina were able to raise some funds from the markets in the remainder of that year.¹² When it became clear that the initial program was not working—the economy continued to shrink, external private creditors were not willing to provide additional financing, and a domestic bank run started adding pressure on reserves—the program was augmented by a bit more than \$8 billion in the fall of 2001. This brought the IMF's total commitment to \$23.8 billion (8.2 percent of GDP). The augmented program, however, collapsed before all these funds were disbursed. In December, Argentina was forced first to declare a bank holiday (the *Corralito* and then *Corralon*), then to default on its external debt and finally to devalue.

The IMF program did not primarily finance the repayment of Argentina's international sovereign bonds: Data from the World Bank's *Global Development Finance* indicate that public and publicly guaranteed external debt to private creditors—largely sovereign bonds—fell by only \$2 billion in 2001.¹³ In this case, however, the small reported fall is somewhat misleading: There is little doubt that domestic purchases of international sovereign bonds, notably \$3 billion by Argentina's pension funds, offset payments on international bonds held abroad in excess of \$2 billion.¹⁴ Moreover, Argentina had grown accustomed to financing interest payments on its existing bonds by selling yet more bonds, so its inability to place new bonds no doubt added to its financial troubles. Yet the \$9 billion in net lending from the IMF in 2001, the \$10.6 billion fall in Argentina's reserves, and a similar but harder-to-track fall in the banking system's own reserves did not primarily finance the repayment of international bonds. A domestic deposit run of roughly \$16 billion and a substantial fall in international banks' lending to Argentina's banks and private firms were far more important sources of pressure. Argentina's difficulties in accessing international markets no doubt contributed to the run by other creditors,

12. The initial program included a series of commitments by Argentina's domestic creditors (banks and pension funds) to provide additional financing. These commitments are discussed in detail later.

13. Public and publicly guaranteed external debt owed to private creditors fell from \$66.1 billion to \$64.1 billion (World Bank's *Global Development Finance* 2003). Technically, the domestic holdings of international bonds are not external debt, but many countries do not track who holds their international bonds and report all international bonds as external debt.

14. The government of Argentina estimated that \$5.5 billion of its maturing bonds in 2001 were held externally. Net payments to external creditors of \$5.5 billion and net domestic issuance of "international bonds" of \$3.5 billion would produce the fall of \$2 billion reported in World Bank's *Global Development Finance*. Around \$1 billion of the government of Argentina's short-term also was held externally.

but maturing international bonds were not the primary source of financial pressure on Argentina.

After default and devaluation, Argentina began to generate substantial current account surpluses. These surpluses have allowed it to pay interest and some principal on its loans to the IMF and the MDBs and, after the first part of 2002, to begin to rebuild its reserves. However, it is clear that Argentina could not—and would not—repay the IMF and the MDBs in full on time—a fact that was recognized in Argentina’s 2003 IMF program. Argentina is clearly a case where catalytic financing failed: The IMF loan helped to finance a permanent capital outflow, and the IMF was left with long-term exposure to a financially weak country.

Turkey

Turkey’s government so far has been able to raise the financing it needs to avoid default despite its large debt load and substantial annual borrowing. The Turkish lira has stabilized, the economy has started to grow again, and Turkey has generally delivered the large primary surpluses it promised. However, Turkey is not in a position to repay the IMF according to schedule. The IMF lent Turkey almost \$10 billion in 2001 and \$9 billion in 2002. The IMF’s total lending to Turkey—\$23 billion, or over 11 percent of Turkey’s precrisis GDP—is far more than what the IMF and the United States lent to Mexico in 1995. While Mexico was making substantial net payments back to the IMF and the United States in the second and third years of its crisis, Turkey has yet to start to make significant payments. Turkey therefore falls in a different class than Mexico, Brazil, and Korea.

IMF lending to Turkey effectively financed two things. First, the IMF was indirectly helping Turkey to finance its large budget deficits—a nominal deficit of 16 percent of GDP in 2001 and 14 percent of GDP in 2002. Large deficits meant that Turkey’s overall government debt was growing rapidly.¹⁵ The sums worked only if existing domestic creditors rolled over their debts and provided the government with some new financing, and the IMF provided the additional external financing needed to sustain large ongoing budget deficits. The IMF typically lends money to a country’s central bank, not to its government, but in this case the central bank acted as an intermediary, and the money the IMF provided was clearly used to provide noninflationary financing for the government.¹⁶ Second, the in-

15. These high nominal deficits were the result of the burst of inflation after the collapse of the peg in 2001; real, inflation-adjusted deficits were significant but much lower.

16. An increase in the government’s external debt is consistent with either growing reserves or a fall in the private sector’s external debt—as the external inflows that finance the government’s ongoing budget deficit also provided foreign exchange that can either be saved in reserves or finance net repayment of private debts. In 2001, there were large net payments on the private-sector external debts. In 2002, more of the inflow from the IMF was saved as reserves.

flow of foreign exchange from the government's external borrowing made it possible for the external creditors of Turkey's banking system to reduce their exposure without triggering a crisis. Directly and indirectly, the foreign exchange that the IMF provided to the government of Turkey provided the foreign currency that Turkey's banks needed to repay the cross-border loans that they had taken out before the crisis to finance their bets on high-yielding Turkish treasury bills. In 2001, \$10 billion from the IMF was matched by a \$10 billion fall in external bank lending to Turkey. External creditors stopped pulling funds out in 2002. This allowed the \$9 billion in the IMF lending in 2002 to finance an increase in Turkey's reserves.

Turkey's initial 2001 IMF program was based on extremely optimistic assumptions about Turkey's ability to repay the IMF quickly, though it should have been clear all along that Turkey had at best a need for medium-term—not short-term—financing. Turkey's high initial debt levels, large stock of short-term domestic debt, and high domestic real interest rates implied that growing debt levels would accompany a program based on disinflation and real fiscal adjustment. If all went well, the large increase in the government's debt stock that the IMF helped to finance would not generate future problems. With time, interest rates would come down, lowering the budget deficit and reducing Turkey's annual financing need. A growing economy would, over time, reduce Turkey's debt-to-GDP ratio, as it started to occur in 2003. Turkey eventually would be able to not only finance its ongoing budget deficits on its own but also raise the funds to repay the IMF. Any realistic assessment would have suggested that Turkey's fiscal stabilization was not going to happen quickly.

Turkey's finances have now improved, in part because the perception that it is now too strategically important to fail helped to lower the real interest rate it has to pay on its debts. Turkey has done its part as well, running a significant primary surplus and keeping inflation under control. Falling real interest rates on Turkey's domestic debt translate quickly into a smaller budget deficit, so it is possible that Turkey may be able to raise the financing it needs in 2004 without additional official support. Turkey, though, has the ability to tap into an \$8.5 billion medium- to long-term loan from the US government in 2004, should it choose to do so to limit the amount of debt that it needs to place domestically. Alternatively, Turkey might tap this loan to help repay the IMF.

Turkey is scheduled to repay the IMF \$8.9 billion in 2005 and an additional \$10.3 billion in 2006. These payments, though, will probably be deferred. It will be surprising if Turkey is able to make large repayments before 2007 or 2008, or even later. Since large-scale IMF disbursements started at the end of 2000, and the pace of IMF lending picked up in 2001, when all is said and done and assuming no further crisis occurs, the IMF is likely to have provided Turkey with a large six- to seven-year loan, not a large two- to three-year loan.

Brazil and Uruguay

It is still too early to make a definitive assessment of the success of recent IMF programs in Brazil and Uruguay. Both countries have recovered financially from their crises, but they certainly risk not being in a position to repay the IMF rapidly. Both have received large amounts of financing: Disbursements to date are 10.1 percent of Uruguay's precrisis GDP and 5.2 percent of Brazil's precrisis GDP. Brazil's debt levels increased substantially between 1998 and 2002, so both countries now have substantially higher debt levels than in the "quick repayment" cases of Mexico, Korea, and Brazil in 1998–99.

Brazil's commitment to fiscal adjustment has been impressive, and financial conditions have stabilized. In 2002, in contrast, the IMF loan and an IMF-approved fall in Brazil's own reserves effectively permitted a large rolloff of bank loans as international banks desired to sharply reduce their exposure to Brazil.¹⁷ However, this has had a price: Brazil's net reserves remain small, particularly in relation to the short-term external debt of Brazil's private sector and the government's own domestic dollar-linked debts. Brazil's low reserves, in turn, make it difficult for it to repay the IMF quickly without putting its own financial health at risk, even though domestic financial conditions have stabilized and external creditors have stopped pulling money out of Brazil.

Uruguay will be discussed in more detail later, since it combined large-scale IMF financing to stop a run by both external (largely Argentine) and domestic depositors with a debt exchange to extend the maturity of its government's bonded debt. But even after its bond exchange, Uruguay's high overall debt levels, its high rates of domestic dollarization, and its small net reserves call into question its capacity to repay the IMF quickly.

Experience with Bail-in Policies: Rollover Arrangements and Debt Exchanges

The announcement of an official rescue package lays out the official sector's entire commitment at one point in time—though, in some cases, this commitment is increased as the crisis intensifies. In principle, this makes it easy to calculate the resources that the official sector has put on the table to help resolve recent emerging-market crises. Summing up official com-

17. The Bank for International Settlements (BIS) reports that consolidated bank claims on Brazil fell from \$142 billion at the end of 2001 to \$103 billion at the end of 2002—a fall of \$39 billion. Brazil's net reserves fell by about \$12 billion during this period while the IMF's exposure increased by \$12.5 billion. Thus, the IMF's "catalytic" lending helped Brazil finance the exit of international banks without having its own (gross) reserves fall too much. The bank rolloff stopped in 2003, when Brazil's new government demonstrated its commitment to maintain a credible fiscal policy.

mitments, though, is not enough. As the previous section emphasized, a full assessment of the role official lending has played in crisis resolution requires looking at the share of the official sector's "commitment" that was actually disbursed, the scale of private outflows that this official lending has helped finance, and the speed with which the country was able to repay the IMF. Yet despite these difficulties, chalking up official crisis lending is still far easier than chalking up the various private financial contributions to crisis resolution. Private contributions are not always announced with the IMF lending package.

Dimensions of Bail-in Policies

Assessing Contributions from Private Creditors

A consensus definition of a private-creditor commitment to crisis resolution does not exist. Some commitments announced at the time of the initial program have been vaporware. Some real commitments were made only when the crisis intensified and thus were not part of the original program. Some private financial contributions have been entirely involuntary—the country just stopped paying and obtained financing from arrears until agreement was reached on a restructuring. Others were obtained after negotiations or through a "voluntary" exchange where creditors agreed to make concessions to avoid a worse outcome. Some creditors agreed to only a temporary delay in payment—though they may take a loss if they sell their claim in the secondary market. Others have agreed to a deep restructuring or a significant haircut on their principal's face value. This diversity complicates any survey of efforts to obtain crisis financing from private creditors.

Mexico defines one extreme. A \$39 billion commitment from the official sector meant that all investors who wanted to exit from the infamous short-term dollar-linked government debt (*tesobonos*) could do so.¹⁸ Recent sovereign defaults—Russia in August 1998, Ecuador in the fall of 1999, and Argentina at the end of 2001—clearly define the other extreme. Private creditors of these countries were "bailed in" most forcefully, as the debtor country first unilaterally extended the maturity of their debts by stopping payments and then often obtained outright debt reduction from its creditors in a restructuring before resuming payments on the restructured claims. However, a number of cases fall between a "full" bailout and a "full" bail-in.

18. About \$19 billion of this consisted of the IMF program, and the other \$20 billion came from the US Treasury's Exchange Stabilization Fund (ESF); see Rubin and Weisberg (2003) for a behind-the-scenes tale of how the US Treasury decided to use the ESF to support Mexico after the Republican Congress balked at its initial plan to have the US government guarantee a large loan to Mexico.

Crisis countries have convinced their external creditors to commit to maintaining their exposure to the country and—often with official-sector support—also put in place systems to monitor whether claims were, in fact, being rolled over. If the goal of the monitoring is nothing more than to provide creditors with the comfort that the actions of other creditors will be monitored, this can be very close to encouraging entirely voluntary refinancing of maturing loans. But when the commitment to roll over claims is stronger, a rollover agreement effectively becomes a rescheduling that extends the maturity of short-term claims. In other cases, a sovereign has asked its bondholders to agree to extend the maturity of their bonds in order to avoid the risk of outright default.

Five issues warrant further discussion before recent private contributions are assessed: the different roles the official sector can play in different cases; the complexities in a crisis that arise from the external borrowing of a country's private debtors; the difficulties in distinguishing between financing provided truly voluntarily to a crisis country and that provided as the result of coercive approaches; the importance of separating out the contributions domestic and foreign creditors made; and the importance of distinguishing between changes in an investment's market value and those in its financial terms.

Official Sector's Role

Debt restructurings are a part of borrowing and lending; they would occur in the absence of any official-sector intervention. We are interested in those cases where the debt restructuring is part of a broader crisis resolution strategy supported by the official sector. Possible roles for the official sector include the following:

- providing the country with some financing while leaving it up to the country to determine how to raise the remainder of the needed financing. In some cases, this is a sign that the country's problems are not severe, and it should need only a modest amount of financial support if it makes appropriate policy adjustments. In other cases, a large loan lets the country make near-term payments, in the hope that continuing to pay and policy adjustments will combine to make it possible for the country to regain access to market financing ("catalytic finance").
- linking official financing to the country's "voluntary" debt management operations. Voluntary swaps—like new issuance—are part of a well-functioning government's normal financial activity. This approach is very similar to allowing the country to determine how best to raise the financing it needs to supplement its official loan.
- linking the availability of official financing to the development of a system to monitor the rollover of private debts.

- linking the availability of official financing to reserve floors that commit the country to maintaining a high level of reserves. Reserve floors are a part of all IMF programs. If the floor is set at a level that allows substantial payments, then the IMF is allowing the country to borrow its funds to make payments to other creditors. But if the reserve floor is set at a high level, then it can preclude the use of the country's own reserves or reserves borrowed from the markets to make debt payments, effectively forcing the country to seek a restructuring.
- linking the availability of official financing to a debt restructuring in cases where the debt path has been assessed to be unsustainable. This is not the same as telling a country to default: In principle, the country could reach agreement with its creditors before a formal default.
- arm-twisting creditors to participate in a rollover arrangement or debt restructuring. The official sector generally has leverage over the debtor, not the debtor's creditors. However, the official sector sometimes can exert leverage directly over certain types of creditors—particularly banks. The official sector usually stops short of telling banks what to do. Nonetheless, major governments can make it clear that it is in the banks' collective interest to cooperate to avoid default by agreeing to roll over their exposure ("moral sausion").

In the first two cases, the IMF is not demanding that private creditors do anything that they would not want to do—and private financing that the country raises is part of a purely voluntary commercial transaction. We would not consider the financing raised in such operations to be a concession from private creditors to help the country through a crisis.

Restructuring Private-Sector Debts in Systemic Crises

The rolloff of a country's private-sector unguaranteed external debts can be a major source of pressure on a country's reserves and the source of a capital account crisis. A currency crisis is often the cause of the simultaneous distress of large segments of the financial and private corporate sectors, which can trigger a liquidity run on the private sector's cross-border short-term liabilities or create difficulties in servicing long-term foreign currency-denominated debt. In other cases—notably Argentina and Russia—the financial chaos that accompanied the sovereign's own financial crisis combined with a currency crisis to make it impossible for many private debtors to service their external debts. Debt-servicing problems of individual private-sector borrowers—a bank, another financial institution, or a nonfinancial corporation—are part of a well-functioning market economy. Yet there clearly is a difference between isolated financial difficulties in some firms and economywide difficulties in nearly all private firms. In these systemic crises, efforts to secure the "restructurings" of the

external debts of a country's private-sector borrowers are often a crucial part of a program for resolving a countrywide financial crisis. It therefore seems reasonable to include these restructurings as private creditors' contributions to crisis resolution.

Voluntary Versus Coercive Debt Exchanges

The line between a normal, voluntary market transaction—issuing a new bond or a voluntary debt exchange—and an involuntary concession to avert a crisis is not always clear. Some debt exchanges done in the context of an IMF program occur at market rates and are “catalytic” in spirit. They rely on the combination of official financing and adjustment to convince creditors to participate in the exchange on an altogether voluntary basis. Other debt exchanges are done at below market rates to avoid an imminent default, as creditors agree to accept less than full value to avoid a worse outcome. These transactions—and indeed all exchange involving the sovereign's external debt—are voluntary in some loose sense. The sovereign has no legal means to force external creditors holding claims governed by external law to give up their claims—though creditors also lack the legal ability to force a sovereign to make payments. Creditors who accept deep haircuts, in a sense, do so “voluntarily”: They prefer a deep haircut and the voluntary resumption of payments on the new debt to continuing to hold debt that the sovereign debtor is not willing (or able) to pay.

However, for our purposes, distinguishing completely “voluntary” transactions that offer a market return from those “voluntary” transactions that are done to avoid a worse outcome is important.¹⁹ Three features mark a completely voluntary transaction:

- The debtor pays the market interest rate on the new debt: A creditor is indifferent between holding the original claim and the new claim. Market value is not lost.
- The debtor intends to make full payments on all of its debt. Creditors who opt out of the debt exchange will be paid as their claims come due.
- The debtor does not pressure regulated domestic institutions to participate in the deal, and international authorities also do not pressure external institutions to participate.

Domestic Versus Foreign Debt

Efforts to mobilize crisis financing traditionally have focused on obtaining financing from external sources. In the 1980s, foreign bank creditors of

19. Indeed, credit rating agencies define debt restructurings made under the shadow of a debt default (and at below market rates)—cases such as Pakistan, Ukraine, and Uruguay—as default episodes.

sovereigns were generally bailed in, as their syndicated loans were temporarily rolled over (sometimes with new money to facilitate the repayment of interest), restructured, and then eventually converted into Brady bonds. In the 1990s, both interbank claims and external bonded debt were restructured to complement IMF financing.

Over time, however, it has become more common to include the restructuring of domestic debt—for the time being, the term “domestic” is being used to mean debt that a crisis country’s residents hold. So a bond denominated in foreign currency and governed by a foreign country’s law would count as domestic debt—as part of the private sector’s contribution to crisis resolution. This reflects two trends. First, emerging-market governments have more leverage over domestic creditors and often believe that commitments from domestic banks and pension funds are the easiest way to meet pressure from the IMF’s membership to demonstrate private-sector involvement. Second, the blurred line between domestic and external debt—a key theme of chapter 2—means that domestic debts increasingly do put pressure on a country’s reserves. If domestic residents do not roll over their short-term debts denominated in foreign currency, or if they pull their foreign currency-denominated deposits out of the banking system, the resulting capital outflows can put pressure on the government’s foreign-currency reserves.

The relative treatment of domestic and external debts in a restructuring is taken up in more depth in chapter 7. It is still necessary, though, to lay out the reasons why we have opted *not* to consider commitments by domestic residents in the same way as commitments from external creditors, even though the line dividing domestic from external is not always clear-cut.

- First, restructuring domestic debt does not necessarily address the concerns that bailing out external creditors will lead to moral hazard, since a domestic restructuring can free up resources for the repayment of external creditors. An expectation that IMF lending would be combined with a domestic debt restructuring to reduce domestic pressures on reserves while external creditors would have more time to exit would tend to encourage, not discourage, external creditors to lend to risky countries.
- Second, the restructuring of sovereign debt held by domestic residents—or a freeze on government-guaranteed bank deposits—can be thought of as a tax on certain kinds of domestic financial assets (a capital levy). Domestic residents are typically asked to contribute to crisis resolution in many ways: Taxes are increased, government spending is cut, an economic contraction reduces real incomes and imports, and devaluation reduces the external value of domestic wages and domestic financial assets denominated in the local currency. The fall in domestic welfare from these steps is as much a part of the domestic

adjustment effort as the domestic debt restructuring. Counting only the domestic debt restructuring hardly seems fair.

Changes in Secondary Market Prices Don't Count

The market value of a country's long-term international bonds typically falls in a crisis and rises if the country recovers. Similarly, the market value of many other securities—domestic debts and domestic stocks—will almost certainly fall in a crisis. The secondary market value of traded securities is certainly an important indicator of a country's financial and economic health. Investors who buy high and sell low also no doubt take losses. However, a country's contractual obligation to pay is independent of the value the market assigns to that commitment. Brazil has to pay just as much on its bonds at the end of 2003, when the market valued its bonds at close to par, as in 2002, when Brazil's bonds traded well below par value. In order to reduce the payments burden on the country, a restructuring needs to change the country's financial commitment to pay. As sovereign debt lawyer Lee Buchheit (2000b, 18) has noted, "A sovereign does not pay the net present value of its debts; it pays the gross dollar amounts of those claims as they fall due."

Foreign direct investors may also take losses in a crisis, particularly if they have not invested in the country's export sector. A crisis-induced contraction is not an ideal economic climate for any investor, and a foreign direct investor is—unless the firm hedges—taking on local-currency exposure with its investment. Consequently, the value of foreign direct investment (FDI) often falls as the crisis country's currency falls. FDI is an attractive way for an emerging economy to finance current account deficits precisely because it provides automatic risk sharing: Payments on traditional debt contracts are independent of economic conditions, but the return on equity investment like FDI is directly correlated with economic conditions. However, we do not believe that changes in the market value of foreign firms' local investments should be considered a contribution to crisis resolution any more than changes in the market value of long-term bonds.

Nonetheless, every rule calls for a few exceptions. A firm's contractual relationship with the government largely defines the return on some direct investments. Renegotiating such contracts to reduce the country's payment obligation has obvious similarities to renegotiating debt contracts and can be considered one way private investors do contribute to crisis resolution. For example, the foreign owners of privatized Argentine utilities had the contractual right to index their price to dollars. Like holders of dollar-denominated bonds, they were contractually protected from the risk of devaluation. Since Argentina clearly could not honor the original contractual terms after its currency board collapsed, sharing the

“downside” required breaking the underlying contract—whether unilaterally or through negotiation.²⁰

Real World Example

These definitional issues are not simply a question of semantics. Argentina’s large debt exchange in the summer of 2001 illustrates the implications these definitional issues have both for our survey and in the real world.

Argentina’s IMF package in December 2000 included a headline private-sector involvement (PSI) component of almost \$20 billion. This was largely a cosmetic effort to show that the private sector was being “involved,” since there was little real commitment of private money. Argentina largely was promising to continue with business as usual: domestic pension funds that had been buying large amounts of government bonds for some time would continue to do so, domestic banks promised to continue to roll over their short-term treasury bills (*letes*) at market rates, and the government of Argentina promised to continue its long-standing policy of actively managing its public-sector debt by engaging in various market-based debt swaps.²¹

As pressure intensified, Argentina decided to undertake a major sovereign debt exchange in June 2001—the so-called megaswap—to provide the government some needed cash flow relief through market-based voluntary “liability management.” The megaswap clearly was an integral part of Argentina’s approach to obtain private financing to supplement IMF financing. However, it is harder to assess whether or not the megaswap represents a contribution by Argentina’s external creditors to crisis resolution. While the exchange was aimed at Argentina’s international bonds—defined as bonds governed by an external governing law—many of them were held by domestic banks and pension funds. In economic

20. Argentina pesified utility tariffs and then froze the tariffs at precrisis levels even though inflation increased substantially in the year after Argentina’s devaluation. There is little doubt that this imposed significant losses on both the equity investors in Argentina’s utility sector and on the domestic and foreign creditors that had lent to the privatized utilities. It is worth noting that some losses to the owners of Argentina’s utilities would have happened even if the government did not take any action. Once the currency collapsed in Argentina, most users would have not been able to pay tariff rates linked to the dollar (these rates tripled as the currency went from 1:1 to over 3:1). The downward renegotiation of Argentina’s utility tariffs was inevitable, though tariffs did not need to be frozen in nominal peso terms and thus reduced in real terms. The apportionment of the losses associated with Argentina’s banking crisis among depositors, taxpayers, and the banks owners (often foreign banks) raises even more complex issues, which are covered in chapter 7.

21. Also, there was less to the promises by local banks and pension funds than met the eye. The pension funds promised nothing more than the continuation of their existing policy of investing 50 percent of the new “inflows” coming in the pension system in the government’s debt. The banks left the rate on their rollover of short-term government debt undefined. When conditions deteriorated in the summer of 2001, the banks demanded such a high rate that Argentina concluded it was better off just repaying the banks.

terms, debts held by local residents should be considered domestic debt even if a foreign law governs the debt contract. Moreover, domestic investors subject to pressure from the government of Argentina accounted for a disproportionate share of the bonds that participated in the exchange. Domestic residents accounted for over 80 percent of the \$30 billion of bonds that opted for the exchange.

There is little doubt that those creditors who agreed to participate in Argentina's June 2001 megaswap did so under the cloud of adverse economic conditions, and domestic banks and pension funds were under substantial pressure to participate in the exchange. This gave the exchange a somewhat less-than-voluntary tinge. But participating creditors also were fully compensated for any concessions they made: The bonds offered in the exchange carried market interest rates and offered investors an equal market value (or net present value neutrality) as their old bonds in the secondary market. Otherwise, no external investor would have participated in the exchange.²² Indeed, the high market rate on this large transaction only fueled serious concerns about Argentina's future debt sustainability.²³

All in all, this exchange was a private contribution to crisis resolution only in the loosest sense, as external creditors did very little to help Argentina despite the large headline size of the transaction. Most of the financing the exchange provided came from domestic investors—whose forbearance, along with new money raised in other transactions, helped the government sustain payments on its external debt for a few months longer. Those external investors who participated in the swap did so on a fully voluntary basis—the government had no ability to twist the arms of its external creditors—and received a market rate on their new bonds.²⁴

22. Equal market value means that the market value of the new instrument was equal to the market value of the old instrument on the day of the exchange. External investors holding the same instrument as domestic investors also may opt to participate in the deal if they think that domestic investors will go along with the deal, because "secondary" market trading is likely to be focused on the new instrument, rather than on the small old orphan instrument.

23. See the exchange between Mussa (2002a) and Cline (2002) on whether the megaswap was too costly; chapter 6 discusses this issue in more detail. Cline argues that the swap exchanged old bonds valued well below par for new bonds also valued well below par, so the high market yield on the new bonds did not necessarily imply a much larger debt burden than on the old bonds. Mussa, however, is right to note that offering market rates on a fully voluntary deal implied a substantial increase in the long-term debt burden of a country that was at least close to insolvency. Evaluated at an appropriate discount factor, the net present value of the new stream of payments was much larger than that of the old instruments.

24. In November 2001—only a few months after the megaswap—Argentina restructured for a second time those international bonds held by Argentine pension funds, banks, and other institutional investors. International bonds held domestically with a face value of nearly \$55 billion were restructured into new "guaranteed loans" governed by domestic Argentine law. The new loans preserved face value but had a coupon that was capped at 7 percent, and Ar-

Private Creditors' Contribution to Crisis Resolution

Appendix table A.2 shows changes in private exposure in the major financial crises of the last decade, and appendix table A.3 provides an overview of rollover arrangements and debt exchanges where private creditors' have contributed to the resolution of major financial crises over the last decade. Appendix table A.3 is a summary of the amount of PSI, so to speak, in recent crises. All of the restructurings were either done in the context of an IMF program or, if they were done while the country was formally off-track with the IMF, were ratified in a subsequent IMF program. Almost all also involved the sovereign's external debts—though sometimes the sovereign only incurred the debt after it guaranteed the external debt of private banks. In a few cases, the restructuring of the unguaranteed external debts of private banks and firms is also discussed.

Appendix table A.3 presents these restructurings chronologically. However, the following discussion ranks the restructuring in order of increasing coerciveness and greater financial losses. This helps facilitate analysis of different techniques for securing contributions from private creditors. Of course, any classification is partly arbitrary. Any given episode or bail-in tool could be ranked slightly above or below another one.

Full Bailouts

As discussed earlier, Mexico provides the clearest episode of a bailout with no bail-in, as sufficient financing was provided to allow Mexico to pay off its entire stock of maturing tesobonos. Efforts to explore a voluntary exchange offer to extend the maturities of the tesobonos did not go anywhere. But even with the very large official support package, the overall financing picture worked only if a broad swath of private investors was willing to maintain, voluntarily, its existing exposure to Mexico.²⁵ Rubin and Weisberg (2003, 13) noted "Even that [\$30 billion, enough to cover all tesobonos] might not be enough, taking into account other government debt, the external debt of Mexican banks, and the potential for capital flight as domestic holders of pesos converted them in dollars." Silent contributions from investors who voluntarily maintain their sav-

gentina pledged to the revenue from its financial transactions tax to back these loans. At the time, Argentina intended to do a second exchange to restructure its remaining international bonds. To no one's surprise, however, Argentina was unable to carry out the second exchange before falling into default. Some of these "guaranteed loans" were subsequently pesified—i.e., changed from dollars to pesos. Other holders of these loans—mostly pension funds that challenged the pesification—seem likely to be forced to go back to their original bonds. This transaction was much more coercive than the megaswap and failed to attract any significant external participation.

25. The central bank of Mexico did advance US dollars to its banking system to help manage the pressure on the banking system's liquidity from the rolloff of external and domestic dollar liabilities.

ings in the crisis country are vital in most cases, even though they are not formal commitments by creditors to help the country through difficult times.

Catalytic Financing

It is relatively common for an IMF program to provide substantial upfront financing and to hope that paying those debts coming due in the near term will help the country regain the confidence of its creditors and raise private financing at a later date.²⁶ If the initial disbursements and associated policy reforms fail to slow the pace of private outflows, the country can seek either additional official financing or direct commitments from its private creditors. The success of various catalytic IMF programs has already been discussed.

Requiring the Country to Raise New Money: Romania

IMF programs have occasionally included commitments by the crisis country to raise new money from the private markets. Often, the official sector initially requests the country to restructure a maturing payment but then drops the request in the face of opposition from the crisis country. The IMF would then let the country pay its maturing debt and instead accept a commitment to raise money in the future to offset the payment. Romania is the most obvious example. In 1999, the Romanian government used its dwindling reserves to pay a \$720 million maturing bond just before the conclusion of its negotiations with the IMF. The subsequent IMF program included a requirement that Romania raise \$600 million—80 percent of the \$720 million payment—to replenish its reserves. However, Romania was not in a position to quickly raise \$600 million at reasonable interest rates, and the IMF was not willing to cut off its financing just because the markets were not willing to lend to the country on sustainable terms. In the end, the IMF waived the program's private financing (PSI) requirement, and greater-than-expected current account adjustment let the country replenish its reserves.

Voluntary Debt Exchange: Russia, Argentina, and Turkey

As part of its IMF program, a country is committed to do voluntary market-based swaps at market rates to reprofile part of its debt. The country's creditors can get paid and exit if they are not satisfied with the rate the country offers in the swap; there is no commitment on their part. Russia, for example, tried to convince external investors in its short-term, domestic treasury-bill market to give up their very high-yielding ruble-denominated

26. See Corsetti, Guimaraes, and Roubini (2003), and Morris and Shin (2003) for an analytical formalization of IMF's catalytic finance.

treasury bills (GKOs) in return for protection from exchange rate risk by swapping into longer-term eurobonds in July 1998. However, participation in this exchange was relatively low.²⁷

Turkey and Argentina, in contrast, targeted domestic investors. In June 2001, Turkey exchanged about \$8 billion of short-term Turkish lira debt, mostly held by domestic banks and residents, into longer-term dollar and lira debt. Argentina, as discussed earlier, completed a megaswap in June 2001, which extended the maturity of around \$15 billion of government debt and capitalized all interest payments on another \$15 billion of long-term debt. Even though only 20 percent of the participants in Argentina's swap were external investors, 20 percent of \$30 billion is not a small number. Both Turkey and Argentina's swaps occurred at current market rates and were therefore quite expensive, but both also included some degree of implicit moral suasion to encourage domestic investors to go for the swap. Domestic investors were also aware that not accepting a deal risked leading to more coercive outcomes.

In our judgment, all of these exchanges took place at market rates and primarily attracted the participation of domestic investors. They consequently do not meet our criteria for a financial contribution from private external creditors. The rollover arrangements and debt exchanges that followed were more coercive and, when successful, generally resulted in private creditors giving up payment today in order to avoid a worse outcome tomorrow—not just to gain a higher rate of return. Consequently, the more coercive rollover arrangements and debt exchanges generally meet our criteria.

Voluntary Bank Rollover Arrangements: Brazil and Turkey

Brazil (in 1999 and 2002) and Turkey (in 2002) asked external banks to agree to maintain either their interbank credit lines or their existing trade credits and set up systems to monitor rollover rates.

In 1998 Brazil started to collect data on rollover rates from its domestic banks and to share that data with the IMF. However, it opposed any effort to go beyond data collection and directly encourage its international bank creditors to maintain their cross-border exposure.²⁸ This effort, however,

27. Over \$30 billion in GKOs were eligible for the exchange and only \$4.4 billion participated. Moreover, only one-third of the participants were foreigners. Most external investors preferred to take their chances on higher-yielding GKOs. This did not prove to be a good bet. The new eurobonds carried a rich 12.75 percent coupon and yielded 15 percent at the time of the exchange. Moreover, Russia did not default on these bonds during its crisis. One of the bonds that emerged from this exchange—the Russian Federation 28—traded at \$1.60 on the dollar at the end of February 2004.

28. Bank exposure sharply fell in the second half of 1998 as expectations of a currency crisis increased. The initial monitoring agreement was very soft and had no binding element whatsoever.

took on a different cast after Brazil devalued in early 1999. As part of its modified IMF program, Brazil obtained an informal agreement in March 1999 with the major international banks to maintain their interbank exposure. The IMF also monitored bank exposure on a daily basis. This agreement, however, only required banks to maintain their February 1999 exposure levels.²⁹ Since a large share—roughly 50 percent—of international bank exposure had rolled off between the summer of 1998 and February 1999, this was not a terribly demanding commitment. The banks had already reduced their exposure substantially. Still, the banks did broadly honor their February commitment.

Brazil's 2002 IMF program did not require the country to approach its bank creditors to obtain a commitment not to reduce their exposure. Brazil nonetheless decided to ask US and other international banks not to reduce their interbank exposure and trade credits before the presidential elections. The Brazilian government reached an informal agreement—though one with little effective enforcement—that the banks would maintain some types of exposure through the election. This agreement did not involve any IMF monitoring and had little impact: It was even milder than the 1999 rollover agreement.

Turkey's program required the country to approach its banks and seek their commitment to maintain interbank exposure. Turkey did obtain soft commitments and set up a system through its own central bank to monitor changes in interbank lines. However, the United States was opposed to any attempt to twist banks' arms. Official creditors proved unwilling to put any direct pressure on creditor banks (mostly US and German banks) or to "punish" Turkey for the rolloff of bank lines by reducing IMF disbursements. This effort was a failure: About two-thirds of the monitored interbank positions rolled off during 2001. Turkey's experience indicates that a rollover of interbank exposure only works with true commitment and real consequences for either the country or its creditors if the rollover rate is low: It is not enough just to put in place a system for monitoring daily positions.

Bank Rollover Arrangements/Reschedulings: Korea and Indonesia

Successful agreements to roll over interbank claims can be hardened into formal agreements to convert interbank lines into longer-term bonds. Korea converted \$22 billion of short-term interbank claims into one- to three-year bonds fully guaranteed by the Korean government. These bonds carried a significant spread over the London Interbank Offered Rate (about 270 basis points)—though this was less than the "market"

29. The new agreement was also fairly soft. The banks did not enter into a legally binding commitment, and the statements emerging from various meetings with the banks used different wording to describe the banks' commitment. For more details, see IMF (September 2000e).

spread in the late-1997 crisis period. Indonesia's restructuring managed to reschedule \$6 billion in interbank debts in two separate deals. In March 1998, Indonesia offered to exchange those interbank debts maturing before March 1999 for new claims that had a full guarantee from the central bank of Indonesia. As part of the rescheduling, the banks also committed to maintain their aggregate exposure to Indonesian banks at April 1998 levels for a year. While \$2.8 billion participated in the exchange, it was still a lower-than-expected figure. The rolloff of trade credits and other positions continued. A second exchange offer was made in March 1999 for debt maturing between April 1999 and December 2001, and \$3.2 billion of \$3.6 billion in eligible debt participated.³⁰

The Korean agreement had both voluntary and coercive elements. When Korea first sought a rollover arrangement, it lacked enough foreign exchange reserves to continue to honor its guarantee of the Korean banks' interbank debts. The threat of default was real. After \$10 billion or so in IMF lending failed to stop the run, the US government—and the governments of other countries with major international banks—concluded that further IMF lending would occur only if the banks agreed not to pull their funds out. The G-10 governments actively encouraged the banks to get together to discuss a coordinated rollover of their claims. Calls were placed from the US treasury secretary to the heads of major international banks (Rubin and Weisberg 2003, Blustein 2001). Moreover, inviting the banks to the New York Federal Reserve in late December 1997 also sent a clear signal—though the Federal Reserve and others stopped short of explicitly telling the banks what to do. Korea's experience contrasts directly with Turkey's rollover, when every attempt was made to distance the US government from even attempting to monitor rollover rates.

This agreement also had important voluntary aspects. The bank coordinating committee monitored rollovers, with help from the IMF and the G-10, to assure individual creditors that their forbearance would not finance others' exit. Official action tried to catalyze a private market solution to the creditor coordination problem that created the run. Agreement on the rollover and the subsequent rescheduling was reached in a semi-consensual process. The banks got their principal back with a lag of between one and three years, and the interest rate on the rescheduled claim, while below high crisis spreads, was only a bit above precrisis spreads on Korean debt (IMF September 2000e). Given that the banks were trading up to the sovereign in terms of the guarantee of their claims, and the sovereign in this case was clearly a better credit risk than the original bank, the terms were favorable to the creditors. International banks that lent even to a low-quality Korean bank ended up with a claim on the Korean

30. Bank Indonesia drew on a series of contingent credit lines (mostly from Japanese banks) to obtain additional hard-currency liquidity during the 1997 crisis. These credits were directly to the sovereign, and they generally have been restructured when they have come due.

government, and Korean taxpayers made up any gap between the Korean bank's domestic assets and overall liabilities.

The official sector was less involved in negotiating the agreement to restructure Indonesia's interbank credit lines. Interbank lines were less central to Indonesia's problems. Moreover, the negotiations of the bank rollover started only well after Indonesia had sunk into deep crisis: A Korean-type deal that averted a total collapse to the benefit of the crisis country and its creditors alike was not on the table. Indonesia's bank rescheduling was less about avoiding a bad outcome and more about cleaning up the financial mess that results when an economy and a financial system implode. Many international banks still decided that it was in their interest to extend the maturity of their loans to Indonesian banks in return for a sovereign guarantee rather than risk holding on to their original loan and not being paid.

Maturity-Extending Bond Exchanges: Pakistan, Ukraine, and Uruguay

In all of these cases, the sovereign's external bonds were restructured through an exchange offer under the implicit threat of default. The country generally was able to stay current on all or most of its obligations (one of Ukraine's bonds technically came due before the exchange was completed). The exchange pushed out maturities but maintained the face value of the restructured bonds and carried a substantial coupon—typically the precrisis coupon, though in Ukraine's case the coupon was reduced—but from an unusually high starting level. Yet these restructurings had a clear coercive component: Bondholders were being asked to accept a new bond with a market value of less than 100 cents on the dollar instead of receiving full payment at the time of maturity—something that makes financial sense only if there is a threat of default. Creditors who bought the bonds in the primary market and then sold after the restructuring took losses, though the bonds could increase in price if the country's prospects improved. Creditors who bought the bonds at the low preexchange price experienced immediate mark-to-market gains.³¹

Coercive Restructurings of Claims on Private Borrowers: Thailand, Indonesia, and Argentina

The policy tools for resolving systemic crises that arise from private firms' borrowing differ from those for resolving a sovereign crisis. Absent a guarantee that makes a private problem a sovereign obligation, the sovereign can encourage a private restructuring, often by providing some form of subsidy to a successful restructuring, or it can impose capital controls that prohibit payments of the private sector's unstructured external debt. Some countries, like Indonesia, have called for a pause in private

31. Appendix table A.3 provides the details of these bond restructurings.

payments because the private external debt of firms was at the center of the countries' financial difficulties. A surge in demand for foreign exchange from firms desperate for foreign currency to meet a surge in repayments put pressure both on reserves and the exchange rate. Otherwise, outright controls on private-debt payments have generally been imposed only in the context of a sovereign default.

Both Thailand and Indonesia experienced systemic crises that stemmed primarily from the external borrowing of private banks and firms. In both cases, the external debt of the banking system was treated differently than that of finance companies or private firms. External creditors who lent to the Thai banking system were generally paid in full. External creditors of the Indonesian banking system that did not exit in 1997 or early 1998 were able to obtain a full government guarantee in return for extending the maturity of their claims. In broad terms, those who lent to Indonesia's commercial banks ended up being paid in full but not on time. Other external creditors generally have done less well. Thailand suspended payments on the external liabilities of 56 restructured finance companies. To be sure, this accounted for only \$4 billion of Thailand's external debt—a relatively small amount (6 percent) of the total. Roughly half of the treated claims (creditors holding claims on the 40 finance companies closed in the second stage of the crisis) were converted into five-year maturity claims on the main state-owned bank at an interest rate of 2 percent. Despite the low interest rate, this restructuring was relatively generous: Creditors with claims on bankrupt finance companies obtained claims on a state-owned bank backed by a solvent government. The other half of these claims (those on the 16 finance companies closed in the first stage of the crisis) received only the proceeds from the auction of the assets of failed financial institutions.

Indonesian firms had substantially more external debt—\$66 billion—than Indonesian banks (\$17 billion). After the rupiah went into a free fall in 1997–98 and the economy suffered a severe recession, most Indonesian firms that were not affiliates of large multinational companies stopped servicing their external debts. When the government called for a pause in external debt service of private firms in January 1998, it largely was ratifying the status quo—most firms had already stopped paying at this stage, and the government lacked the ability to stop those that wanted to pay from continuing to do so.³² Payments were suspended on an estimated \$25 billion of debt.³³ Indonesia sought to put in place a framework

32. Because domestic banks were the largest creditors of Indonesia's bankrupt firms—and because the banks themselves were insolvent and under government control—it was effectively impossible to restructure the corporate system without also restructuring the banking system.

33. About half of the external debt of the Indonesian corporate sector was that of the local subsidiaries of multinational corporations. Most of this amount was regularly serviced. It was the debt of domestic Indonesian corporations that went into arrears.

for restructuring the external debt of its private firms. The resulting Jakarta Initiative—an agreement reached only after long negotiations among the World Bank, the IMF, the Asian Development Bank, Indonesia, and its external creditors—provided, at least in principle, a framework for the restructuring of Indonesia’s corporate debts, both domestic and external.³⁴ However, the need to coordinate an external restructuring with the restructuring of the firms’ domestic debts, the lack of an appropriately functioning judicial system, and delays in approving and implementing a new domestic insolvency regime all contributed to a very protracted and slow process. External creditors were not bailed out here: The case-by-case restructuring of these loans certainly did result in significant losses for many external banks that lent directly to Indonesian firms. Indeed, the absence of a strong judicial system willing to transfer ownership to foreign creditors probably resulted in larger losses than would have otherwise been the case.

Argentina’s private firms, including those that lacked any export revenues, borrowed heavily in dollars from external creditors and fell into default after the peso was devalued. The imposition of controls on the repayment of private debts accompanied the sovereign default, but most firms were bankrupt and in no position to pay to begin with anyway. These controls have been loosened and no longer impede payments. Most major firms are currently engaged in negotiations with their creditors on restructuring terms, but, by the end of 2003, only a few had reached agreement with their creditors. Argentina did not offer guarantees, exchange rate subsidies, or other inducements to facilitate the external restructuring.

Sovereign Default: Ecuador, Russia, and Argentina

Sovereign default cases can be divided into those where the sovereign default occurred because an initial, catalytic program failed (Russia and Argentina) and those where a sovereign default occurred in the absence of an IMF program (Ecuador).³⁵ Russia defaulted on \$14 billion in domestic-law, domestic-currency debt—the famous GKO (short-term treasury bills) and OFZ (federal bonds)—and on \$32 billion of Soviet-era hard-currency debt—interest arrears notes (Ians), restructured principal notes (Prins),

34. One component of the Jakarta Initiative was a proposal to provide unsubsidized exchange rate insurance to companies that reached agreement with their creditors on the restructuring. However, the insurance was offered at a point when the exchange rate was heavily depreciated and few worried about further depreciation. Without any explicit subsidy, this insurance did not prove to be popular and failed to catalyze the restructuring process.

35. At the time of the default in the summer of 1999, Ecuador did not have an IMF program in place. It did sign a letter of intent with the IMF in September 1999, but the negotiations on stand-by dragged until April 2000. Ecuador consequently had an IMF program at the time of its sovereign debt exchange in August 2000.

and past-due interest bonds (PDIs).³⁶ The GKO was restructured in 1999, while the Ians, Prins and PDIs (also called London Club debt) were restructured into eurobonds in 2000. Ecuador defaulted on one of its Brady bonds in September 1999 and on all \$6 billion of its Brady bonds and eurobonds by end-1999. These debts were restructured into roughly \$4 billion in new eurobonds in mid-2000. However, it is misleading to compare just the face value of the old and new bonds: Ecuador's old bonds were collateralized and carried a low floating-rate coupon, and the new bonds are uncollateralized and carry a relatively high fixed coupon—though the high coupon was phased in through a step-up structure.³⁷ The government of Argentina defaulted on \$47 billion in external debt owed to private (foreign) creditors in early 2002.³⁸ These restructurings are discussed in more detail in the section that draws lessons from recent bond restructurings.

Capital Controls

Capital controls can be used to prohibit residents' payments on external debt. They also can be used to restrict the ability of investors holding local assets to buy foreign currency or to move their funds abroad. These kinds of controls lock in domestic and external investors alike but tend to have a bigger impact on local investors since local residents own most domestic financial assets. Because capital controls prevent investors from moving funds outside the country and thereby put pressure either on reserves or the exchange rate, they can be considered a way of forcing private investors to contribute to crisis resolution. The controls do not necessarily

36. These treasury bills were worth substantially more before Russia devalued the ruble. For details of the restructuring of Russia's Ians and Prins, see Sturzenegger (2002).

37. Ecuador's exchange had two components. Its short maturity eurobonds and its uncollateralized Brady bond (the PDI bond) were restructured into a new eurobond in a complicated formula that favored holders of the short-maturity eurobond. Holders of the eurobonds agreed to maturity extension but no reduction in face value or coupon, while holders of the PDI did a bit more. The collateralized Brady bonds were restructured into a new long-maturity eurobond with a step-up coupon. The face value of the new bonds was substantially reduced. However, much of the apparent fall in face value stemmed from the early release of the collateral: Bondholders agreed to write off future collateralized principal payments in exchange for immediate access to the collateral locked in in the Brady structure. Assessing the debt relief in this exchange therefore requires comparing the uncollateralized payments on Ecuador's Brady bonds against the payments on Ecuador's new eurobonds rather than comparing the face value of the old bonds against that of the new bonds.

38. As discussed earlier, some of Argentina's eurobonds were held domestically. Argentina first converted these international-law bonds into dollar-denominated domestic-law loans, and then converted these loans into peso-denominated instruments in the pesification process. However, some domestic investors did not accept pesification. Argentina recently indicated that investors who did not accept pesification would get their original bonds back and participate in the external restructuring. This has increased the amount of international bonds outstanding and the size of Argentina's default.

stop payment but do stop investors from converting local payments into foreign currency.³⁹

Capital controls have been used in a number of crises. Thailand unsuccessfully introduced controls to defend an overvalued exchange rate in early 1997. Malaysia introduced capital controls on September 1, 1998, only after its currency substantially depreciated. Such controls did not imply a default on private-sector claims but severely restricted—albeit temporarily—domestic investors’ ability to shift from domestic to foreign assets and foreign investors’ ability to exit from their existing financial investments in Malaysia. Russia sharply tightened its controls in 1998. Ukraine avoided outright default in 1998 but also tightened its controls after its devaluation. Argentina introduced new capital controls in 2001, at the time of the sovereign payments default. These controls, as discussed earlier, blocked private firms from making payments on their external debt, though many of them in any case would not have been able to pay following the devaluation. They also sought to limit the capital flight and associated exchange rate depreciation that followed the sovereign default.⁴⁰

These differences are important. Thailand introduced controls to avoid any currency depreciation when it had a large current account deficit. Its controls failed but did make it harder for external investors (banks and hedge funds) to bet that the currency would depreciate and even forced some foreign investors to close out their short positions.⁴¹ However, local investors still had incentives to convert their local currency into foreign currency before the almost inevitable devaluation. Malaysia introduced draconian controls only after the ringgit had already substantially depreciated, with the objective of stopping further depreciation while it introduced a looser monetary policy. Malaysia’s new exchange rate peg—introduced in September 1998—held, and the country subsequently converted the controls into an exit tax that was then reduced. Its controls now have been largely eliminated.

Malaysia’s actual experience does not clearly support either proponents or opponents of controls. Malaysia’s controls seem to have been more ef-

39. Capital controls are discussed last even though they are clearly less coercive than defaults, in part because controls directed at supporting a given exchange rate stand a bit apart from steps that lead directly to a restructuring of external payments. However, it should be noted that controls limiting the ability of residents to purchase foreign assets are quite different from those that prohibit private firms from making external debt payments and thus lead to default. Chapter 6 discusses in more detail the merits of capital controls.

40. Pakistan has never liberalized its capital account, and it maintained widespread capital controls during its sovereign restructuring. However, any tightening of its controls stemmed not from its relatively small sovereign restructuring but by the need to limit capital flight following its nuclear tests and the subsequent imposition of economic sanctions.

41. See Blustein (2001) for a complete account.

fective than many expected—circumvention was limited, and the exchange rate peg held. On the other hand, it is quite possible that the ringgit would have stabilized even in the absence of the decision to repeg it and to introduce exchange controls. Pressures on all Asian exchange rates subsided significantly in the fall of 1998. Domestic interest rates fell by as much in countries like Korea and Thailand between September and December 1998 as in Malaysia.⁴² Indeed, one can argue that the primary impact of the peg was to prevent Malaysia's ringgit from appreciating like other Asian currencies during the fall of 1998. The long-term impact of the controls is also hard to assess. The controls did not stop Malaysia from honoring its external debts and had little impact on its ability to borrow on the international bond market. The controls presumably have had a greater impact on Malaysia's ability to attract domestic portfolio investment since they did lock portfolio investment in the country for a time and may have made Malaysia a less attractive location for FDI.

Exchange controls have also been employed following disorderly exits from exchange rate pegs that led to sovereign default, notably in Russia and Argentina. Imposing controls neither prevented further depreciation of either the Argentine peso or the Russian ruble nor stopped capital flight.

In Argentina and Russia, imposing capital controls in the midst of a deep crisis did not prevent further depreciation in the nominal exchange rate. This is not terribly surprising. Given the sharp increase in the demand for foreign currency and the panic that accompanies sovereign default and highly illiquid foreign exchange markets, it would have been unrealistic to expect that controls alone would have stopped the fall of the Russian ruble and Argentine peso. However, both the depreciation and the scale of capital flight could have been larger in the absence of the controls.⁴³ In Russia's case, the skills firms had developed in skirting pre-crisis controls may have limited the practical impact of the tighter post-

42. Renewed policy credibility and strong current account adjustment played a role in reducing speculative pressures. Capital-market developments also played a role. After the Russian default and the ensuing Long Term Capital Management crisis, a number of highly leveraged institutions had to unwind large speculative short positions, reducing pressure on many Asian currencies. In particular, the sharp appreciation of the yen in October 1998 led to massive losses to hedge funds and other leveraged players who had shorted the yen and played the carry-trade game against Asian currencies. Most of the large "macro" hedge funds and some of the proprietary trading desks of international financial institutions subsequently scaled back their operations, leading to an overall reduction in the scale of speculative positions. One can argue that Malaysia's controls were effective in part because they were not severely tested.

43. As part of its default, Russia imposed controls that prohibited private payments on external debts in order to protect its banking system. However, the banks would not have paid, with or without controls, and any counterfactual would need to factor in the disruptions inherently associated with the failure of banks to meet their external obligations.

default controls.⁴⁴ In Argentina's case, the controls—along with significant central bank intervention and high interest rates on performing central bank paper—seem to have played some role in helping to stabilize the peso following the default.⁴⁵ While the controls did not stop all capital flight, they did lock the peso cash flow generated by Argentina's regulated utilities into the domestic financial system and thus removed at least one potential source of pressure on the exchange rate.⁴⁶

Our analysis has not assessed how systemic banking crises that often accompany a sovereign debt or a currency crisis have been resolved. Systematic deposit freezes did take place in Ecuador and Argentina. More limited bank holidays and deposit restrictions were also introduced in Uruguay and Pakistan (in the latter case as a consequence of previous banking crises) to stem bank runs. While bank holidays are not formally controls on capital movement, they are a means of limiting pressure on the capital account: It is hard to move funds abroad if those funds cannot be withdrawn from the banking system. Consequently, a bank holiday can substitute for formal capital controls.

Finally, it should be noted that most countries did not introduce comprehensive capital controls during their crises—Mexico, Korea, Indonesia, Brazil, Turkey, and Uruguay all avoided major capital account restrictions.⁴⁷ Thailand flirted with controls before its devaluation but did not impose controls afterward. Only in cases of outright default have widespread capital controls and domestic deposit freezes been the norm. Of course, policies that “involve” private creditors by limiting payments on some forms of external debt—by a voluntary agreement if possible, by default if not—do restrict capital flows. However, restrictions both on the movement of portfolio flows across borders and to the ability of nondis-

44. Capital controls rarely prevent further depreciation in the exchange rate for several reasons: Capital controls are difficult to enforce; the hedging and speculative demand for foreign currency is large after a currency and debt crisis; and the foreign exchange market is thin in a crisis so it only takes a small surge in demand for foreign exchange to produce a sharp nominal depreciation.

45. Even in a sovereign default, the sovereign may remain current on some set of its debts. Argentina, for example, defaulted on its external foreign currency-denominated sovereign bonds and both froze and pesified most dollar-denominated bank deposits. However, the government continued to pay the low interest rate on its restructured and pesified “guaranteed loan.” On top of this, the central bank began issuing new, performing peso debt. But the amounts of this “performing” central bank paper were small in relation to the overall amount of nonperforming sovereign debt.

46. The regulated utilities generally were not paying any of their debts, so they were generating positive cash balances in pesos, even though they could not increase their prices in line with inflation after their contracts were “pesified.”

47. Some countries, such as Brazil, have some ongoing capital account restrictions, as their capital account regime is not fully liberalized yet.

tressed private firms to make their external debt payments generally have been avoided.

Lessons for the Official Sector

This section highlights the lessons that the official sector should take from this body of experience, both for the provision of official financing and for attempts to link official financing to commitments from private creditors. The following sections pull out more specific and technical lessons from recent bond and bank restructurings.

Lessons for Provision of Official Financing

Large-scale financing works better when debt levels are low and the country's commitment to reform is credible. Large official loans buttressed by policy reforms—and in some cases by efforts to encourage the rollover of private claims—were most successful in Mexico, Korea, and Brazil in 1999. All three countries experienced relatively rapid economic recovery, either regained market access (Mexico and Brazil) or saw their external debt stabilize at a lower level (Korea), and were able to repay the IMF and—in the cases of Mexico and Brazil—their bilateral creditors relatively rapidly. These three countries went into their crises with lower debt levels than other crisis countries and were willing and able to implement needed policy changes. In other cases, the commitment of even large amounts of financing did not prevent a default (Russia and Argentina). A combination of larger initial debts, rigid exchange rates, and poor policy performance—especially on the fiscal side—prevented catalytic IMF financing from generating the quick turnaround in market confidence needed to allow the country to finance ongoing deficits in the market.⁴⁸ The success of some recent cases of large-scale financing (Turkey, Brazil, and Uruguay) remains open to question. Exceptional support and policy adjustment have so far prevented default (but with a coercive debt reprofiling in Uruguay), but debt levels are high, and the political feasibility of maintaining large primary surpluses remains uncertain.

Large loans to countries with large debt levels are unlikely to be repaid quickly. Providing exceptional financing to countries with high debt levels exposes the IMF to large financial risks, even when the country is committed to making significant fiscal-policy adjustments. In the worst

48. For the IMF's own assessment of its recent programs, see IMF (July 2002a). For a comprehensive assessment of the official sector's role in crisis management, see Frankel and Roubini (2003).

cases, as in Argentina, the program may fail completely. Widespread default precludes rapidly raising funds to repay the IMF, and even in the best case, the threat that the country may default on the IMF may push the IMF into defensive lending. However, recent experience suggests that even in cases where IMF lending and the country's own efforts avoid default, relatively heavily indebted countries may not be in a position to obtain access to private financing on the scale needed to both cover their ongoing financing needs and repay the IMF quickly (Brazil, Turkey, and Uruguay). Here, the IMF is effectively lending for the medium and long terms, not the short term. Large loans to heavily indebted countries imply that the IMF will have a very large exposure to a small set of borrowers for some time, leaving the IMF's finances at risk, should conditions (domestic or external) turn sour.

Rollover arrangements can complement “catalytic” financing. In two success stories—Korea and Brazil in 1999—large IMF lending was supported—after a lag—by commitments from bank creditors to roll over their interbank exposures. These programs blurred the line between a pure “catalytic” approach, which provides financing to reassure investors so they won't want to exit, and more coercive bail-ins, since the commitments to roll over exposure themselves blurred the line between forced maintenance of exposure and a voluntary commitment. Such a strategy's success, however, depends on the circumstances. Argentina tried to supplement “catalytic” financing with a soft and relatively voluntary bail-in of domestic creditors (it targeted domestic creditors because it believed that they would be most inclined to voluntarily commit to maintaining their exposure and provide new financing). However, Argentina's overall finances were unsustainable, and this approach failed miserably.

Lessons from Efforts to Bail In Private Creditors

Linking IMF financing to a country's ability to raise new money does not work. The sovereign loses leverage over its creditors once it decides to make a payment. It may be able to raise new financing (on reasonable terms) from private creditors after making a payment, but it also may not. Strong policies alone are not enough to guarantee the quick resumption of market access. It is therefore dangerous to link IMF financing directly to a country's capacity to raise new private financing, as the Romanian experience suggests. The official sector, in practice, has been unwilling to penalize by cutting official financing a country that is unable to raise market financing. The lesson here is simple: Let bygones be bygones. Either seek a restructuring before the payment is made or let the country operate with a lower level of reserves and decide for itself when it is in a position to

raise new money from the markets without the pressure of IMF program timelines.⁴⁹

Bonds as well as bank loans can be restructured. The mechanics of a bond restructuring differ from those of a bank restructuring. Bond exchanges typically reprofile either the country's entire stock of bonded debt or a significant chunk of it, while it is often possible to reschedule bank claims as they come due. Other differences are overstated: Bond exchanges can be used to push out maturities, just as bank loans coming due can be rescheduled to provide a country with breathing space. Bonds also can be restructured before default. Indeed, depending on the maturity profile of its bonded debt, the debtor even may have more time to take preemptive action with bonds, typically long-term instruments, than with bank loans.

The official sector can play a constructive role in helping private creditors overcome coordination problems. Official prompting was necessary for the banks to get together and agree first to roll over and then to reschedule Korea's interbank debts. The resulting coordinated rollover and rescheduling was better for both the banks and Korea than outright default—yet outright default was the most likely outcome if the official sector had refused to intervene.

Official intervention is always controversial. But supplementing catalytic financing with efforts to encourage private creditors to coordinate and roll over their exposure has worked in the right conditions. If a coordinated rollover that avoids immediate default would serve the collective interests of the creditors, the crisis country, and the G-7 governments, it is reasonable for G-7 countries to actively encourage the debtor and its creditors to come to an agreement. Government intervention here is not telling creditors where to invest so much as indicating to creditors who already have invested in a country that they can either act individually and assure default or act collectively and avoid default.

The official sector needs to back rollover arrangements. The official sector took an active role in putting Korea's rollover arrangement in place.

49. Romania ultimately bore most of the consequences of its decision to deplete its reserves by paying rather than restructuring its external debt. Even with IMF support, the subsequent reserve buildup required deep domestic adjustment in 1999 and early 2000, as a sharp output contraction led to a sharp import contraction. On the other hand, Romania's payment record helped it maintain a high credit rating and ultimately regain market access at favorable spreads. Romania, though, is also unique. It had very little remaining private debt after making the large payment in 1999. In other cases, the costs of paying short-term debts may be born in part by creditors holding longer-term claims rather than the country itself. Longer-term creditors gain from holding a claim on a country with a solid payment record but can also lose out if the country is unable to sustain payments over time, as they are left holding claims on a country that has fewer reserves.

Phone calls were placed to the heads of the major banks, making it clear that the alternative to cooperation was a default: Additional official financing to Korea would be forthcoming only if there were an effective rollover arrangement. The official sector's role in Brazil's March 1999 rollover arrangement was less active but still important. Brazil's agreement was purely voluntary. The agreement itself did not contain sanctions for a bank that drew down its exposure. However, the official sector's concern with the overall success of the rollover created the risk of a large rolloff leading the IMF to ask Brazil to seek stronger commitments from the banks. In contrast, the official sector clearly indicated that its role in Turkey was only to help the government collect information. In the absence of any real threat of individual or collective sanction, first US banks and then some European ones sought to significantly reduce their exposure.

Monitoring alone may sometimes have an impact, and putting in place a monitoring system also creates the infrastructure, should the official sector decide to insist on a firmer commitment at a later point in time. Yet effective monitoring agreements have been backed by clear understanding that the country will lose access to official financing, the official sector will ratchet up direct pressure on the banks, or default is likely if the banks do not roll over their claims.

Voluntary is not always better: Too little debt relief can prove costly.

The official sector has tended to give catalytic financing a chance and, if that does not work, to let the country try a market-based rescheduling that alleviates short-term liquidity concerns as the country adjusts to address debt sustainability concerns. An additional restructuring is always possible if initial assumptions prove to be too optimistic. Caution, and a desire to protect the debtor's long-run reputation, suggests that it is better to err on the side of being generous than to encourage the debtor to seek a significant haircut from its private creditors. This can work. In Korea, maturity extension was sufficient to restore sustainability.

However, a decision to rely entirely on a market exchange at high crisis rates to extend maturities also can be costly. The rate the market charges on more voluntary deals can increase concerns about solvency, and the risk that the country may need to default/restructure again can be a drag on economic performance (the debt overhang problem). In two particular cases, the initial restructuring terms failed to provide the basis for a long-term recovery and instead prolonged the country's financial difficulty. Ukraine's 1998 and 1999 restructurings carried a high price tag (Sturzenegger 2002, 35–37) and created a new spike in debt service in 2000 and 2001 that made financial recovery difficult. Argentina engaged in a series of transactions in the course of 2001 that failed to provide sufficient debt relief—indeed, the June megaswap only produced a bigger and expensive

long-term hole.⁵⁰ In a third case, that of Russia, low participation rates limited the impact of Russia's voluntary GKO-for-eurobond swap. But had more participated, the outcome likely would not have been positive. Russia would have been left with a much bigger stock of high-coupon, dollar-denominated debt. Since Russia's exchange rate needed further adjustment, this additional burden of dollar debt likely would have been unsustainable after the ruble depreciated.

Preserving a bond's face value has real advantages, but only if the country can afford it. Many countries have sought to restructure their bonds by offering a new instrument that carries the same face value, around a 10 percent coupon and a longer maturity (Pakistan, Ukraine, and Uruguay). Such terms usually imply net present value losses for investors at the height of the crisis. But they also provide investors with a substantial upside, should the country recover, since the new instrument should trade around par.

These terms also offer important advantages to the crisis country. The country is offering its creditors a new instrument that looks a lot like a standard emerging-market bond, something that generally helps make it easier to convince creditors to participate in an exchange. Above all, such terms can avoid extensive fights about priority—the topic of chapter 7—because participating creditors are not being asked to make major concessions. Instruments held by domestic banks need not be exempted from this kind of restructuring, for example, to avoid a potential source of conflict on inter-creditor equity.

On the other hand, not all countries can afford such generous terms. Such a restructuring would probably have been insufficient to save Argentina, given its large currency mismatch and the overvaluation of its currency. We also have concerns, explored in more detail later, about the terms of Ecuador and Uruguay's restructuring.

The official sector needs to help coordinate the debtor's overall restructuring. It is unrealistic to believe that sovereign debt crises can be left entirely to the "market" to resolve, if for no other reason than the IMF, the World Bank, and Paris Club creditors (bilateral creditors) all usually have exposure to the crisis country. This reason creates a need, at a minimum, to coordinate the restructuring of the crisis country's debts to private creditors with the restructuring of the country's Paris Club debts and the provision of IMF and World Bank financing, which, if nothing else, may be needed to refinance the international financial institutions' existing exposure. These topics are discussed in depth in chapter 7. However, the official sector's role should go beyond protecting its narrow interests as one of many creditors of the crisis country. It also needs to actively coordinate

50. Chapter 6 provides a fuller accounting of the cost of this swap in the discussion of the use of voluntary exchanges as a tool for reducing pressure on reserves during crises.

the overall restructuring and to make sure the overall restructuring terms, in conjunction with the debtor's own policy changes, lay the basis for the return to sustainability. This implies that the IMF ought to play two roles.

Debtors tend to systematically resist making major policy shifts—a devaluation and a debt restructuring both have political costs—and often would rather take on new debt, whether from the official sector or the domestic banking system.⁵¹ The IMF has to be honest and firm about the need for a change in policies, including the need to change the exchange rate regime and to initiate a restructuring, and be prepared to withhold financial support when a debt restructuring is necessary. Relying on voluntary solutions can be especially dangerous in these circumstances, as the country's management may have incentives to strike costly deals to buy time to avoid taking necessary but politically damaging steps. This is a key lesson from Argentina: No one was willing to take responsibility for making the decision to devalue and seek a coercive restructuring. However, continued official support for Argentina's policy of trying to pay the debt and to avoid devaluation through fiscal adjustment promises and increasingly desperate voluntary debt exchanges progressively sapped the country's resilience, making the unavoidable default more costly.

There is an important but subtle distinction between providing a country with financing only if it is willing to seek a debt restructuring and telling a country to default. Conditioning new financing on a debt restructuring is not quite the same as insisting on a default: Ideally, the country will be able to reach agreement with its creditors on a cooperative restructuring that avoids formal default. The IMF cannot stop a country from running down its own reserves to sustain its debt payments, though in some cases the IMF should signal that nonpayment would be preferable to running down reserves to delay initiating an inevitable restructuring. Such linkages should not be controversial in principle. The official sector, like any creditor providing new financing or restructuring its own debt, can condition its money on a range of policy actions. There is no reason why one of those policy actions could not be a debt restructuring if it is needed to restore sustainability. Rhetoric against forcing countries to default is specious: The official sector cannot force a sovereign to change its policies; it can only indicate the conditions under which it is prepared to provide its financing. The decision to withhold such support can trigger a country that lacks own resources to change its currency regime and seek a restructuring, but the official sector is not forcing the default so much as indicating that it is unwilling to use its funds to avoid a devaluation, default, or both.⁵²

51. The collapse of a peg systematically leads to the sacking of the economy minister or, in cases like Argentina, to more radical political crises. Defaults are also politically painful.

52. The IMF's Articles of Agreement let each country choose its own currency regime. However, the IMF is under no obligation to support unsustainable exchange rate regimes with large loans.

In the event that a country has to seek a comprehensive debt restructuring, the IMF is unquestionably the actor best positioned to develop a framework that guides the overall restructuring. The IMF has leverage because of its capacity to provide new financing during a restructuring, and it is organized so that it has the capacity to use its leverage to pursue objectives other than maximizing its own private returns. No private agent is as well-positioned to condition its financing on changes in economic policies that can, over time, restore debt sustainability and lay the foundation for renewed growth. Moreover, it is difficult to see how private agents with disparate and at times competing interests could come together to negotiate macroeconomic policy conditionality—especially if that conditionality is linked to the provision of new money. Since the initiation of a comprehensive debt restructuring is usually highly disruptive and risks triggering the collapse of domestic asset prices and secondary runs, the IMF should plan in advance and be prepared to support a strategy that minimizes these costs. This is another lesson from Argentina: The official sector was unwilling to plan for a default and, for a host of complex reasons, unwilling to provide Argentina with effective policy guidance or financial support during the crucial period that followed the default and devaluation.

To be sure, IMF incentives are also not perfect. The IMF may act more like a creditor seeking to maximize its own repayment chances rather than like an impartial bankruptcy judge overseeing a complex restructuring (though history suggests the IMF usually tends to act less like a creditor and more like the representative of a coalition of governments). But other parties' incentives in the debt restructuring process are also less than pure. A debtor country's government, as discussed earlier, may have a political interest in delay, when the overall interest of the country would be better served by taking the painful steps to restore sustainability quickly. Each group of private creditors cares more about the terms of its own deal than those of the overall restructuring. The fees and commissions of the debtor's private financial adviser hinge on a successful deal with the debtor's private creditors—they could care less if that deal fails to provide the basis for overall sustainability or shifts a disproportionate burden onto other creditor groups. No disinterested party has leverage over a sovereign, and of all the interested parties, the IMF is the one best situated to take a broad view of the restructuring process.

Lessons from Bond Restructurings

Bonds have been restructured before default (Pakistan, Uruguay, and Ukraine). Bonds have been restructured after an extended period of default (Ecuador, Russia's securitized London Club debt and GKOs/OFZs).

Bonds held primarily by sophisticated institutional investors have been restructured (Ecuador, Russia's London Club debt). Bonds narrowly held by a few wealthy individuals and the domestic banking system have been restructured (Pakistan). Bonds that were spread among literally thousands of bondholders have been restructured (Ukraine and Uruguay had bonds that had been sold to many retail investors in Europe). Bond restructurings have extended maturities without lowering coupons (Pakistan and Uruguay), have extended maturities and reduced coupons while maintaining face value (Ukraine), and have provided face value debt reduction (Ecuador, Russia's London Club debt restructuring and GKO's/OFZs). Ecuador, Pakistan, and Ukraine all obtained participation rates above 95 percent in their exchange, and Uruguay obtained a participation rate above 90 percent.⁵³ Clearly, bond restructurings are possible in a wide range of circumstances.

Collective action clauses help but are not necessary. Policymakers and academics alike identified two reasons why the absence of collective action clauses in New York-law and German-law bonds could make these bonds difficult to restructure. First, New York-law bonds lacked the provisions typically found in English-law bonds that identified a process for calling a meeting of bondholders to work out restructuring terms. Since the holders of "bearer" bonds were anonymous, and bondholders could be widely dispersed and difficult to track, this was a source of particular concern. Second, many New York-law bonds required the unanimous consent of all bondholders to change the bonds' financial terms. The absence of provisions allowing a supermajority to amend a bond's financial terms gave a minority of bondholders the legal right to decline to participate in the restructuring and then litigate for better terms (see, among others, Eichengreen and Portes 1995).

However, collective action clauses have not proved to be necessary for a successful bond restructuring. Pakistan, Ecuador, and Uruguay all have conducted successful exchange offers without bondholder meetings. All "sounded out" the market to determine restructuring terms that would attract widespread participation but did so informally. Pakistan, notably, had bonds that allowed it to call a meeting and opted *not* to, in large part

53. Debtors usually have gone to great lengths to let "sleepy" holdouts that did not meet the original exchange deadline go into the original restructuring deal late, further minimizing their exposure to litigation. However, a debtor that already has convinced most creditors to enter into the deal does have an incentive to avoid the costs of litigation by buying out a small number of holdouts rather than facing a potential court fight. Ecuador, for example, was able to deaccelerate its remaining "orphan" Brady bonds and then "cure" its default by making relatively small interest payments on them. Ecuador's lawyer argues that holding an illiquid instrument that pays a trivial coupon and that cannot be accelerated in the event of default is a particularly cruel form of punishment for an international investor.

because it was afraid that bondholders might come together at the meeting and decide not to accept its restructuring terms.⁵⁴ Countries whose bonds lack collective action clauses have also found creative ways to limit the risk of holdouts—holding out means holding on to an instrument that most other investors opted to leave behind for new bonded claims. For example, the legal advisers for Ecuador and Uruguay made use of provisions in New York-law bonds that allowed the amendment of the bonds' *nonfinancial* terms as a surrogate for collective action clauses. Bondholders who agreed to participate in the exchange agreed, as their last act as holders of the old bond, to vote to change the old bond's nonfinancial terms in order to make holding out less attractive—such amendments are known as “exit consents” (Buchheit and Gulati 2000). This made holding out less financially attractive and reduced the risk of holdouts stopping payments on the new bonds.

While clauses that allow the amendment of a bond's financial terms are not necessary, they are certainly useful. Ukraine demonstrated how amendment provisions could be used in the context of a broader exchange offer. Four of Ukraine's five bonds contained majority action clauses, so Ukraine made a proxy vote in favor of amending the bond's financial terms a condition for participation in its exchange. It then called a formal meeting to amend the bond's terms. Other sovereigns are likely to similarly use their clauses: Bondholder meetings are out, exchange offers are in.

Finally, one country—Russia—avoided the difficulties associated with a bond restructuring by excluding its eurobonds from its general restructuring, even though they generally had collective action clauses. International investors in Russia happened to hold large quantities of two types of debts in which the government of Russia had a particularly strong legal hand: domestic debt and a Soviet-era state bank's debt. Russia therefore decided to restructure its domestic debt—domestic Russian courts would handle any litigation—and the portion of its external debt that a Soviet-era state bank rather than the Russian Federation formally owed. The state bank lacked assets, so had Russia acted in particularly bad faith, it could have simply declared the bank bankrupt, written off its equity in the bank, and left creditors holding claims on an empty shell.

Amendment provisions are not the only reason why participation rates in recent exchanges have been high. Ukraine, Ecuador, and Russia all put a significant upfront cash payment on the table to encourage participation. Other sweeteners are also possible: Ecuador released the Brady collateral, and Russia let creditors exchange claims on a Soviet-era bank for claims on the government of Russia. Creditors usually anticipate that the new bonds, after a successful exchange, will be worth more in the sec-

54. Pakistan also opted not to use the amendment provisions in its bonds at all. It seems to have believed—falsely—that it had to choose between calling a bondholders meeting to amend its bonds and an exchange offer. Its collective action clauses did provide a fallback option if the exchange failed.

ondary market than the old bonds. Recent restructuring deals have systematically provided mark-to-market gains to investors: Twenty percent for Ukraine, 32 percent for Russian Prins and 18 percent for Russian Ians, 3.5 percent for Pakistani bonds, and averaging over 30 percent for Ecuador's different bonds.⁵⁵

Finally, many investors value liquidity—the capacity to trade in and out of a bond. Liquidity requires an active secondary market, and after a successful exchange, trading moves to the new instrument. The holdouts are stuck with a small and often illiquid orphan bond. Early concerns that bondholders would prove more inclined to litigate than regulated banks discounted the value bondholders place on liquidity and how this would reduce incentives to hold out. Investors that do not specialize in litigation are often inclined to accept an offer if they believe other investors will accept it, simply because they value the ability to easily trade out of their position.⁵⁶

Multi-instrument exchange offers have emerged as a key mechanism for coordinating the restructuring of international sovereign bonds. Exchange offers have become the restructuring vehicle of choice. In part, this simply has made a virtue out of a necessity. Brady bonds lacked language describing a realistic process for amending the bond's financial terms. This pushed debtors to use exchange offers, which allowed the

55. A definitional issue is important at this stage. It is often said that restructuring deals imply net present value (NPV) losses for investors, i.e., they are not NPV neutral. But the term NPV loss is imprecise. Before a restructuring deal, the current price of the bond is often low and the spread high, if the country is deemed to be unable to pay its original debt in full and on time—both principal and interest. The discounted value of such a stream of debt payments—discounted at the current market yield—gives the current (low) market price of the bond. Starting from this baseline, a restructuring that stretches cash flows into the future and/or reduces such cash flows will provide, by definition, an NPV loss if the discount rate (the market yield on the claim) stays constant. But the market yield and the spread on the new claims do not have to be necessarily the same. A restructuring deal that improves ability and willingness to pay should reduce market yields and spreads. If such reduction in yields does occur, even a restructuring that would be NPV negative at fixed yields can provide a mark-to-market gain (in the form of a higher price for the new claims relative to the pre-deal market price for the old claims). Such a mark-to-market gain can—and has—occurred even in cases that reduced the face value of the original claims significantly, so long as the fall in market spreads that followed the deal was large enough to compensate for the reduced face value. For example, investors obtained mark-to-market gains in spite of significant face value haircuts in Ecuador and Russia. Thus, deals that look *ex ante* to be NPV negative may actually be characterized by significant *ex post* NPV (or mark-to-market) gains.

56. Local financial institutions—including local banks owned by foreigners (Banco Citi in Argentina, for example)—are often major holders of a sovereign's international bonds. Such local financial institutions are unlikely to hold out and fight, given their ongoing relationship with the sovereign. International banks have to weigh the benefits of their ongoing relationship with the sovereign—benefits that include the fees and commission from ongoing and future underwriting of a country's bonds and the franchise value of their commercial banking operations in the debtor country—against the gains of litigation.

debtor to issue new bonds in return for the old ones tendered in the exchange. Bondholders either could hold on to an old bond in default with its pleasing but unenforceable language promising that there would never be another restructuring or could accept the new bond and get paid.

Exchange offers also provide important advantages for both the debtor and the creditor when the debtor needs to restructure multiple instruments:

- The debtor is not obligated to go forward with an exchange if participation falls below the threshold the debtor and its advisers have set. Consequently, the debtor gets to see before going forward how many bondholders have accepted the overall deal and, more important, how many bondholders have declined to participate and are potential holdouts. If participation levels are too low and the risk from holdouts too high, the debtor can pull the offer from the table. Debtors had this right in the 1980s too: They would not go forward with a restructuring of syndicated bank loans that failed to provide “critical mass.”
- A multi-instrument exchange also provides creditors with information about the terms being offered to other bonds. Creditors can assess the restructuring terms offered to similar instruments and the payments profile that would result from a successful exchange before deciding whether to agree to restructure their particular instrument.

Indeed, in many ways, the investment bank advisers who help the debtor develop its exchange offer have assumed many of the coordination functions performed by bondholders advisory committees in the 19th century and by bank advisory committees in the 1980s. The advisers’ experience and knowledge of the market help the debtor develop restructuring terms that match investor preferences. A debtor that has placed bonds with retail investors generally asks the same financial institutions/advisers that convinced the retail investors to purchase the sovereign bonds in the first place to convince them to accept the terms of an exchange offer.

Litigation has played a small role in recent bond restructurings, but that may change with Argentina. Chapter 8 discusses the reasons why litigation against a sovereign is difficult even though sovereigns lack the formal protection of an international bankruptcy regime. Two points are key. First, it is hard to collect on litigation by seizing a sovereign’s reserves or other assets. Rather, potential litigants generally opt out of a restructuring deal and then the holdouts try to hold up payments on the new bond. Second, holding out and litigating makes sense only if the *risk-adjusted discounted net* value of holding the original claim is greater than that of the new claim. To date, the combination of relatively attractive exchange offers and the difficulty of collecting on litigation generally has deterred holdouts. Litigation is costly, the outcome of litigation is uncertain, and

the final payoff may occur years after a prolonged period of litigation. Vulture creditors who buy debt at deeply distressed prices in the secondary market are usually more interested in the mark-to-market gains from a successful exchange than in holding out and litigating. The infamous Elliot, the fund that successfully sued Peru, accepted Ecuador's exchange offer rather than pursuing a more risky holdout strategy.

Holders of one of Ecuador's collateralized Brady bonds did accelerate their claim after default out of concern that Ecuador would try to treat eurobonds and perhaps uncollateralized Brady bonds more favorably than collateralized Brady bonds. But they took no further legal action once Ecuador stopped payments on all its bonds. These bondholders sought to broaden the restructuring to provide a more equitable deal, not to secure a more favorable deal for themselves at the expense of other bondholders.

It seems likely, though, that litigation will play a larger role in Argentina. Argentina has remained in default longer, is seeking more relief from its bondholders than other crisis countries, and has plenty of small "orphan" bonds that lack collective action clauses among the 98 international bonds that it is not paying. Some small investors have initiated litigation on their own, as has one large player that bought a controlling stake in a single bond issue. More ominously, the courts have certified one class action lawsuit against Argentina. At some point, the balance will tip, and rather than refraining from litigation, most bondholders will conclude that they also should seek to obtain a judgment against Argentina if for no other reason than most other creditors also have judgments against it.

Comprehensive bond restructurings work better than piecemeal restructurings. One issue that arises in a restructuring is whether to adopt a *piecemeal* or *comprehensive* approach to the restructuring. In a piecemeal approach, each claim is restructured as it comes due, and the debtor goes through a series of small restructurings. A comprehensive restructuring, in contrast, seeks to restructure the complete set of bonded securities at one time.

Ukraine initially tried the piecemeal approach. However, this approach suffered from numerous problems. Creditors did not want to agree to extend the maturity of their individual instruments beyond early 2001, as they worried that they would be in the "payment shadow" of a large bond maturing in 2001. Because there was no hope that a piecemeal restructuring of relatively small instruments could significantly change the overall debt profile, creditors focused on extracting as much cash out of the debtor as possible while maintaining their position, should a subsequent restructuring prove necessary. Indeed, several claims were rolled over for very short terms at interest rates of nearly 20 percent. These efforts at market-friendly individual restructuring only made Ukraine's debt-servicing problem worse: Ukraine was paying high interest rates only to create a huge spike in payments in 2001. It was able to exit from

its crisis only when it recognized that a comprehensive restructuring of its bonded debt was necessary in the first half of 2000.

Russia, as discussed earlier, stands out as the only country that was able to exclude a significant share of its external debt—its Russian-era eurobonds—from a comprehensive restructuring. Russia's eurobond stock was not that large, no bonds were maturing in the near term, and Russia wanted to "preserve" the purity of its Russian-era eurobonds to facilitate new borrowing. However Russia was able to carry this strategy out only because its London Club debt was technically an obligation of a Soviet-era state bank, Vnesheconombank, not the Russian Federation. Creditors holding the Soviet-era debt (London Club debt) could sue only to stop further payments by Vnesheconombank, not further payments by the Russian Federation.⁵⁷

Restructuring terms have not necessarily ensured medium-term debt sustainability. Sustainability has two components. First, the overall debt burden has to be consistent with the country's overall capacity to make payments. This is the standard definition of sustainability. Second, the payments profile on the debt structure has to be consistent with the country's likely capacity to access market financing. After all, many of the countries that got into trouble did so primarily because a large fraction of their total debt was coming due in the near term and the country found it difficult to raise the financing it needed.⁵⁸ A restructuring can produce a sustainable debt profile without reducing the face value of the debt, so long as the coupon on the new debt is consistent with the debtor's payments capacity, the restructuring eliminates payments humps by pushing out maturities, and the debtor takes advantage of the respite from market pressure to implement reforms to increase its long-term payment capacity. Conversely, debt reduction does not guarantee a sustainable debt profile, particularly if a lower face value is offset by higher coupon payments.

Creditors want the debtor to agree to the highest level of debt service consistent with the debtor's ongoing financial viability. They want to challenge the debtor, but it is also not in their long-term interest to reach agreement on a payments profile that the debtor cannot sustain. Unfortunately, several recent debt restructurings have not obviously succeeded in

57. Some of the same creditors owned Russian-era eurobonds and Soviet-era London Club debt, reducing the incentive for the holders of the Soviet-era debt to broaden the restructuring to include Russian-era debt.

58. Some have argued that a solvent sovereign should always be able to raise new financing. However, long-term creditors want assurance that short-term payment problems will not destroy the value of their investment before they are willing to supply long-term financing. Consequently, there is good reason to believe a potentially solvent sovereign would have difficulty raising new long-term financing if it faced a near-term spike in payments that might result in default.

restoring medium-term debt sustainability. The ability of some debtors to service their new obligations often depends on favorable economic results (high growth), sustained implementation of demanding adjustments, and some good luck (the absence of commodity price shocks and favorable global capital market conditions).

- The restructurings in Russia and Ukraine appear to be successes. Even though progress on economic reform has been limited, Ukraine's core problem was that its entire public debt stock was coming due in a 16-month period rather than being too high relative to its ability to pay it (it is estimated to be slightly above 30 percent of GDP at the end of 2003, down from 48 percent in 1999). Russia had too much debt (especially relative to its public revenues, a 147 percent ratio in 1997), in particular too much short-term debt that carried very high real interest rates. However, the London Club and GKO restructurings wiped out a large fraction of Russia's debt and eliminated the risk of a series of bad domestic debt auctions leading its debt burden to spiral out of control. Improved economic policies, renewed growth, and high prices of oil and metals have dramatically strengthened the fiscal deficit and debt position of both sovereigns: Russia's public debt to GDP ratio is estimated to have fallen to 32 percent (and the debt-to-revenue ratio to 80 percent) in 2003, and its fiscal balance is in a surplus. Both Ukrainian and Russian bonds traded in 2003 and 2004 at levels that suggested the markets believe their debt burden is sustainable. Both countries could access the market if they wanted to.
- Pakistan's overall debt is not sustainable—its overall public debt levels remain high (83 percent of GDP in 2003), particularly in relation to the government's anemic revenues (debt to revenue was over 500 percent in 2003). But blame should be placed on the unwillingness of official bilateral creditors to consider debt reduction, not on the terms of the 1999 bond restructuring. The amount of external bonded debt is too small relative to claims held by official creditors to drive overall debt sustainability.
- Ecuador's medium-term sustainability is an open question: Its public debt-to-GDP ratio has fallen (but troubling signs indicate that this decline may be because inflation has led to a real overvaluation), and the public debt-to-revenue ratio remains very high.⁵⁹ Even with rapidly rising dollar GDP, high oil prices, and a decent primary surplus, Ecuador has had difficulty avoiding domestic payment arrears and staying current on its Paris Club debt. The coupon on Ecuador's large

59. Some market analysts also were concerned that Ecuador's deal would keep the country in a state of likely insolvency; see Goldman Sachs, *Emerging-Market Daily Comment*, July 1998, 2000.

eurobond will continue to increase until 2006.⁶⁰ Further restructuring could be difficult to avoid if fiscal adjustment slips while oil prices remain high or if oil prices slip while fiscal adjustment remains high. It is disturbing that after a combined restructuring of its Paris Club debt and external bonded debt, Ecuador remains at best on the cusp of sustainability.⁶¹

- Uruguay's debt-to-GDP ratio remains extremely high after its restructuring (it was estimated to be above 90 percent of GDP at end-2003), and the initial maturity-extending debt restructuring risks not being sufficient to provide enduring sustainability. The official sector is filling near-term financing gaps, but medium-term sustainability requires both sustained policy adjustment and a bit of good luck. A new restructuring that would reduce the face value and coupon of Uruguay's bonds cannot be ruled out.⁶²

The terms of the domestic and external debt restructuring usually differ. Whether domestic and external debt should be restructured simultaneously and on similar terms is a controversial issue. It will be discussed in more depth in chapter 7. Two lessons, though, emerge clearly from recent experience. First, most sovereign debtors in deep trouble end up restructuring both domestic and external debt. Second, the timing, terms, and conditions of the domestic and external debt restructurings usually differ. Only Uruguay has sought to restructure both its external and domestic bonded debt on similar terms in a single exchange. The fact that Uruguay was only seeking maturity extension, not debt reduction or a reduction in interest rates, no doubt made it easier to treat all creditors similarly.

Lessons from Restructuring of Bank Claims

Sharp falls in international bank lending to crisis countries have often been the most important source of pressure on a crisis country's reserves. This is as true in recent crises in Argentina and Brazil as it was in East Asia, even though the recent Latin American crises are typically thought to be primarily "sovereign" crises. Banks that lend short-term can run much faster than long-term creditors. Since the total stock of international bank claims

60. After 2006, the coupon will have stepped up to a level where the ongoing burden of the new debt stock is basically equal to the ongoing burden on Ecuador's old debt stock (the exact comparison hinges on assumptions for the London Interbank Offered Rate (LIBOR); the new debt has a fixed rate while some of the old debt carried a floating rate).

61. Ecuador's per capita GDP did not allow it to qualify for HIPC (heavily indebted poor country) relief from the Paris Club back in 2000, even though its debt-to-exports ratio and debt-to-government revenue ratio are both well above HIPC criteria for significant debt reduction.

62. Debt data are from Moody's Investor Service (2003); end of 2003 data are estimates.

on emerging markets dwarfs the total stock of internationally traded sovereign bonds, it is not surprising that—before Argentina—the total size of bank restructurings dwarfed that of bond restructurings. Rollover arrangements in Korea, Indonesia, Brazil, and Turkey easily covered well over \$50 billion in bank loans—even if Turkey’s unsuccessful rollover is excluded. The bonded debt restructured in Ukraine, Ecuador, Pakistan, and Uruguay totaled only around \$12 billion.⁶³ What lessons should be learned from the interbank rollover agreements of the last decade?

Costs of failure need to be clear. Korea is both the most successful example of a bank rollover arrangement and the case with the highest costs of failure. Korea’s reserves had been nearly exhausted by the end of 1997: The alternative to a rollover was a default. There was no possibility of the banks reducing their exposure by another \$10 billion and Korea learning to live with \$10 billion less in reserves. Neither Brazil (in 1999) nor Turkey (in 2001) was out of reserves when they asked their interbank creditors to maintain their exposure. The cost of Turkey’s failed rollover was something more diffuse and less tangible than outright default. Turkey ended up with both fewer reserves and fewer external debts of its banks. The fall in reserves meant that the country’s remaining private creditors and its new official creditors had claims on a riskier country.

Key banks need to take ownership of the rollover. The informal institutions for coordinating the rollover of bank claims that were put in place in the 1980s have not disappeared entirely. Once the official sector made clear that a rollover was necessary, the bankers could call on the network of contacts made in the 1980s to quickly put in place mechanisms for coordination. This was particularly important in Korea since there was little time to obtain the commitment of the necessary banks and to put in place the needed monitoring system. The support of major banks—and some key individuals—can also make a difference. The bankers know each other and can encourage others to roll over their claims, reducing the need for outright official intervention. The support of key banks can demonstrate that agreeing to the rollover has a sound commercial reason.

The support of major banks also helps for another reason: The ultimate success of the rollover may depend on the major banks’ ability—and willingness—to convince their clients to agree to the rollover as well. One reason why Turkey’s rollover failed is that the major international banks were not willing to make such an effort. International banks argued that

63. There have also been a number of restructurings of long-term bank loans that have been partially securitized. Russia’s London Club restructuring is the prime example. Russia was restructuring a long-term syndicated bank loan, and several banks held a significant share of the loan. But about half of the bank loans also had been securitized before the restructuring and sold to classic “bond market” investors. Consequently, this restructuring has characteristics of both a bank and a bond restructuring.

many credit lines that appeared to be “cross-border” lines were in fact the by-product of services that the banks offered to investors, not actual bank exposure. An investor wanting exposure to the local Turkish market might deposit dollars in a New York bank, the New York bank would then lend dollars to its Turkish branch, and the local bank would sell the dollars and invest in the lira overnight market. The profits (or losses) on this chain of transactions would all go back to the New York investor. The bank in effect was only providing the service of converting the dollars into lira and investing the lira in the local market.⁶⁴ International banks argued that they could not control the rolloff decisions of such investors—often highly speculative hedge funds—but it also seems unlikely that they seriously tried. The difficulties with informal institutions for coordination among banks, which were apparent in Turkey, suggest that over time more formal institutions for coordination—such as rollover options in bank loans—may become more necessary.

Adjustment alone does not guarantee success. Both Brazil and Turkey generally delivered on their commitments to policy reform. Brazil’s international banks had reduced their exposure substantially in 1998 before the agreement in 1999. It is possible that they had reduced their exposure to a level that they were comfortable with and would have maintained their exposure at that level, even absent the monitored rollover agreement so long as Brazil delivered on its policy commitments. However, any significant slippages on Brazil’s fiscal adjustment would have likely led to a significant additional rolloff in 1999. Turkey’s 2001 devaluation—and perhaps the scale of the fiscal losses that the government of Turkey was assuming as a result of the domestic bank bailout—was more of a surprise. International banks had less time to reduce their exposure before the agreement and had more exposure to Turkey than they wanted. Consequently, they continued to cut back on their exposure to Turkey throughout 2001, even though Turkey, by and large, delivered on its promises of fiscal reform.

Government guarantees of interbank lines have been widespread. In theory, interbank lines are an obligation that one bank owes to another. They are not claims on the government’s reserves. The bank that takes out a cross-border loan should maintain sufficient hard-currency reserves of its own to limit the risk of a run.⁶⁵ In practice, most governments step in

64. Rob Kahn of Citigroup brought this point to our attention.

65. Without implicit access to the government’s reserves to limit liquidity risks, it would be hard for emerging-market banks to make money by borrowing short-term money from international banks to lend to their domestic clients. Without “liquidity insurance” from the government, emerging-market banks financing themselves from abroad would have to maintain large and costly buffers of liquid reserves. This undermines profitability: A large share of the funds the bank is borrowing from abroad at a premium over LIBOR has to be invested in low-yielding US treasuries.

and offer a full government guarantee to all cross-border interbank lines at the early stages of a crisis. Full guarantees of cross-border interbank positions were provided in Thailand, Korea, Indonesia, and Turkey to stop—not always successfully—a cross-border run. Until such guarantees are no longer the norm, however, the short-term debts of the banks have to be considered a major potential drain on the government's reserves. The issues about the use of such guarantees are discussed further in chapter 6.

Anticipated forced rollovers may bring the bank run forward. The risk of the country imposing a semivoluntary rollover agreement before it has exhausted its reserves can make cross-border lenders more inclined to flee at an early stage. This is a well-known perverse side-effect of anticipated capital controls, debt suspensions, or bank holidays. Such measures—if unexpected—may successfully lock in international investors, but if they are expected, they may lead creditors and investors to take flight earlier. This perverse effect was at work in Brazil in 1998. International banks remembered their experience in Korea. When the pressure on Brazil increased, rumors that a similar coercive rollover would be imposed on interbank lines in Brazil—as well as concerns that capital controls such as those recently imposed by Russia and Malaysia may also be applied in Brazil—contributed to the large fall in this cross-border exposure in 1998. International banks reduced their exposure to Brazil by 30 to 50 percent before they committed to maintain exposure at February 1999 levels. Of course, it is hard to separate a reduction in cross-border exposure that stems solely from fears of a coerced rollover or capital controls and a reduction that stems from fears that the country will just run out of reserves—it makes sense for a risk-averse bank to get out, if it can, in either case.

A rollover agreement does not prevent banks from reducing their overall exposure. Modern financial markets provide banks with a number of ways to hedge against the risk of losses on the debts that have been caught up in a rollover arrangement. A couple of examples are illustrative. First, international banks often have local affiliates. Even if the international bank's cross-border exposure is frozen, its local affiliates can reduce their local lending to shrink the bank's overall exposure. For example, major international banks have encouraged their local Brazilian operations to reduce their exposure to government debt during times of stress. Second, derivatives can be used to reduce exposure. For example, international banks shorted the external debt of the country—especially the highly liquid C-bond—to hedge against losses in Brazil. The purchase of a credit default swap, a derivative that provides insurance against the risk of a sovereign default, would have the same effect.

Not all hedges, however, are created equal. The crisis country would much rather have the international bank hedge by shorting the sovereign's long-term international debt or by buying a creditor default swap

than by asking its local bank to cut its own exposure. If a local affiliate sells its local government bonds and purchases dollars, its activities are generating capital outflows that offset the bank's international commitment. An international bank, in contrast, can only short a country's debt if another investor agrees to go along. Demand for a short can put pressure on the secondary-market price of the country's debt, but moves in the secondary-market price of long-term international bonds do not directly result in any outflows from the country.⁶⁶

Conclusions

Newspaper headlines can paint a deceiving picture of how recent crises have been resolved. The decision to provide a country with a large rescue package is usually front page news, but the amount of financing actually provided is not. Few casual observers of the international financial system know that Russia received only \$5 billion of its \$20 billion rescue package in the summer of 1998, or that, thanks to an unexpected rebound in oil prices, it was able to pay this loan back surprisingly quickly. Similarly, Russia's default was front-page news, while the details of the restructuring agreement it reached with its creditors were confined to investment newsletters. If the amount of financing the IMF actually provided is compared with the financial terms of Russia's debt restructuring, there is little doubt that private creditors contributed far more "emergency financing" to Russia than the IMF.

This is but one example of how bail-ins have been an important component of crisis resolution in emerging-market crises in the last decade. The fact that Korea's bank creditors were called to roll over their debts after an initial burst of IMF financing failed to stop the run is relatively well known. The lower-profile restructuring of \$6.4 billion in interbank claims in Indonesia—and default and subsequent slow restructuring of roughly \$15 billion in hard-to-track bank loans to Indonesian firms—is often left out of the story of Indonesia's crisis. Yet the total amount of financing these restructurings provided exceeds the \$10 billion that Indonesia received from the IMF and even the \$14 billion that Indonesia received from the IMF and the MDBs combined. More recently, the maturity of \$5.5 billion of Uruguay's bond debt was combined with a \$3 billion IMF loan that effectively bailed out the domestic banking system. In some cases, like Korea and, we hope, Uruguay, a restructuring played a key role

66. Obviously, there would be an impact on the capital account if the bank were able to go short only because a local investor took the long position. A credit default swap sold by an international bank to an international investor is different from a credit default swap sold by a local bank to an international investor. More broadly, movements in the secondary-market price of international debt can be correlated with other outflows that do put direct pressure on reserves.

in averting a deeper financial collapse. In other cases, a restructuring was necessary to clean up the mess that resulted when an initial IMF loan failed to avoid a deep collapse.

Of course, private creditors have not contributed as significantly to the resolution of all recent crises. Mexico's external creditors were not asked to do anything in 1995. More recently, Brazil and Turkey's external creditors have been let almost entirely off the hook even as the official sector has supplied enormous amounts of financing. Argentina is seeking major concessions from its external creditors after its default, but its program initially was built around a large IMF loan and financial commitments from "captive" domestic financial institutions—not around any commitment from Argentina's external creditors.

If the first lesson of experience is that private creditors have been more involved in the resolution of recent crises than many think, the second lesson is that there is no one way to "involve" private creditors in financial crises. The cases reviewed in this chapter demonstrate how hard it would have been to apply any mechanical rules to obtain greater contributions from private creditors. A different subset of private creditors held different claims on a different set of local actors in each case. The country's chances for carrying out a preemptive restructuring to avoid a default varied, as did the techniques used to execute the restructuring.

While the cases in this chapter make clear that bail-ins can play a role alongside official financing in resolving emerging-market crises, there clearly has been a strong tendency to steer away from heavy-handed efforts to involve private creditors at the early stages of most crises. The first step in the official sector's response to almost every crisis has been to provide official financing as the crisis country undertakes policy adjustments and to hope this combination convinces private creditors to stop pulling money out. More coercive approaches were adopted only if policy adjustment and official financing did not work. Bail-ins have been tools of later resort, if not of last resort.

This approach reflects the preference of most crisis countries not to take steps that would jeopardize their future market access, as well as concerns that the use of coercive approaches in systemically important countries would trigger domestic runs, contagion, and jeopardize the flow of market financing to emerging economies. It also reflects the real uncertainties that confront policymakers: Is a country simply illiquid or is its illiquidity a symptom of deeper insolvency? Are policymakers in the crisis country truly committed to making policy adjustments? How will markets respond to the proposed combination of policy adjustments and official financing? In the face of these uncertainties, the IMF and its major shareholders have been reluctant to deny some countries liquidity solely on their judgment about the strength of the countries' financial position. It is far better to provide the country with some money and let the market decide whether the country has to seek a restructuring.

Any decision to seek a debt restructuring does risk making the country's difficulties worse, at least in the near term. Consequently, it often makes sense to see if credible policy adjustments supported by official financing can spare a country the risks of a restructuring. However, the preference to keep the hope of avoiding a restructuring alive also reflects a bias toward giving catalytic financing a chance, even when the odds of success are low. In chapter 9, we return to this problem and argue that the standard sequencing of catalytic financing first and then a restructuring if catalytic financing fails does not always offer the most effective response to a country's crisis. In some circumstances, it may be more effective to initiate a restructuring early on, particularly if the restructuring of some problematic claims can be combined with an IMF loan that seeks to prevent the restructuring from triggering a broader run. No one solution is right for all crises.