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## **Coping with Weak Private Debt Flows**

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EBT FLOWS TO DEVELOPING COUNTRIES from private-sector creditors were weak again in 2002. For the second year in a row, new loans to, and bond issues by, developing countries were less than the amount of their maturing debt. Developing countries' repayments to private-sector creditors in 2002 exceeded new debt by \$9 billion, coming on top of the 2001 figure of \$24.8 billion (table 3.1). Gross market-based debt flows fell to \$138 billion, from \$145 billion in 2001 and \$171 billion in 2000 (table 3.2).<sup>1</sup>

But recovering investor confidence in the last quarter of the year brought a narrowing of credit spreads, particularly on investment-grade, emerging-market sovereign debt. Thus it is likely that the third quarter of 2003 was the bottom of the current credit cycle. Any rebound is likely to be very hesitant, however. Net debt flows to developing countries are projected to be slightly positive in 2003 (table 3.3). Gross market-based debt flows are likely to rise somewhat, to about \$155 billion. As in 2002, much of this activity will come from European and East Asian borrowers, with Latin America most likely registering another year of weak flows.

#### Table 3.2 Gross market-based debt flows to developing countries, 2000–2002 (billions of dollars)

(billions of dollars)	
Table 3.1 Private-sector debt flows to developi           countries, 1991–2002	ng

	1999	2000	2001	2002
Total net flows	0.5	5.1	-24.8	-9.0
By region:				
East Asia and Pacific	-24.1	-25.0	-15.5	-6.0
Europe and Central Asia	16.6	22.2	0.5	7.2
Latin America	10.7	10.0	-8.7	-9.1
Middle East and North Africa	0.5	-3.6	2.9	1.3
South Asia	-2.0	2.9	-2.7	-1.0
Sub-Saharan Africa	-1.2	-1.4	-1.3	-1.4
By component:				
Disbursements	201.7	203.5	195.3	164.3
Amortization	179.9	189.1	203.9	167.2
Change in short term, net	-21.4	-9.4	-16.2	-6.1
Bond financing, net	29.6	17.4	10.1	18.6
Bank and other, net	-29.1	-12.3	-34.9	-27.6

Source: World Bank De	btor Reporting System.
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				2002			
	2000	2001	Q1	Q2	Q3	Q4	Year
Total	171	145	35	38	30	35	138
Bonds	58	59	19	17	6	13	55
Banks	113	86	16	21	24	22	83
East Asia	27	17	6	11	5	11	34
Bonds	5	7	4	5	1	3	12
Banks	21	10	3	6	5	8	21
South Asia	4	3	0	1	0	1	2
Bonds	0	0	0	0	0	0	0
Banks	4	3	0	1	0	1	2
Europe and Central Asia	37	27	7	8	8	10	34
Bonds	14	11	5	5	1	5	15
Banks	23	16	3	4	8	5	19
Latin America	83	75	16	9	8	10	44
ex-Argentina	64	69	15	9	8	9	41
Bonds	35	34	10	4	3	5	22
Banks	48	41	5	5	6	7	22
Sub-Saharan Africa	12	11	3	2	3	1	9
Bonds	1	2	1	2	0	0	3
Banks	10	9	2	0	3	1	6
Mid. East and North Africa	9	12	3	6	5	1	15
Bonds	2	5	0	1	1	0	3
Banks	6	7	3	5	3	1	12

Source: Dealogic Bondware and Loanware.

Table 3.3 Forecasts of private-sector debt flows, 2001–2004

(billions of dollars)

	2001	2002	2003f	2004f
Total net flows	-24.8	-9.0	5.0	10.0
Bond financing, net Bank and other net	10.1 -34 9	18.6	20.0 -15.0	25.0 15.0
Gross market issuance	145	138	155	157

*Note:* f =forecast.

*Sources:* World Bank Debtor Reporting System and staff estimates; Dealogic Bondware and Loanware.

In the recent history of international credit cycles, the downswing of 2001-02 has been unusual in several respects. It was influenced directly by the market's perception of political risk associated with general elections in Turkey and Brazil, by the impact of Argentina defaulting on its international bond obligations, by the generalized retrenchments of international banks from crossborder exposure to developing countries, and by intense risk aversion. The strength of that aversion revealed deep uncertainty about the global economy, the possibility of military conflict with Iraq, the sharp deterioration in corporate credit in major developed countries, and the emergence of a string of corporate accounting scandals in the United States that undermined investor confidence and induced high volatility in credit markets.

From a longer perspective, 2002 also bore witness to a number of important regulatory and legislative initiatives, market developments, and multilateral measures affecting the pattern of capital flows to developing countries. Two are worth noting.

First, the market has come to make distinctions in the credit quality of emerging market borrowers, both sovereign and corporate, and to price its products accordingly. And it has moved beyond its preoccupation with a single asset class, which grew out of the Brady bonds initiative of the 1980s. An important implication of the new distinctions and of the divergence between the supply and cost of private debt capital—is the reduced likelihood of financial contagion, as investors should be less prone to sudden, generalized reversals of capital flows. Another implication is the establishment of meaningful yield curves based on particular types of credit issue—sovereign, corporate, or project and in line with each issue's underlying economic fundamentals and quality. The trend toward greater discrimination has its broader reflection in virtually all segments of international bond markets, where investors' search for quality and safety have resulted in demand for transparent accounting, better corporate governance, and solid protection covenants.

In the second significant development, the restructuring of sovereign debt took center stage in 2002, with new proposals from the official sector generating considerable interest—as well as intense debate. Bond debt has increased significantly as a share of developing countries' total private foreign debt. Because sovereign default will continue to occur occasionally, and given the characteristics of bond instruments—the diversity and anonymity of the investor base, and differences in governing law for internationally issued bonds—consensus is building for new approaches to sovereign bond restructuring that could minimize the costs of debt restructuring and contribute to the efficiency of international debt markets.

The new approaches include a relatively modest contractual approach, entailing the use of collective action clauses in the legal documents of bonds issued internationally, and a much more ambitious statutory approach that would create a legal foundation for collective action by creditors. The first approach has been favorably received in the marketplace, even though it provides only a partial solution to the collective action problem. In the absence of an international code to facilitate debt restructuring for sovereign borrowers as bankruptcy statutes do for companies, the IMF has proposed a sovereign debt restructuring mechanism, details of which are being worked out. The general idea is to provide a framework that would offer temporary protection to sovereign borrowers against hostile creditor action, to aggregate creditors, and to provide an international forum for dispute resolution-all backed by the force of an international treaty.

Financial innovations often emerge in troubled times, which give rise to novel ideas, new organizational structures, and new ways of doing business. The current global financial turbulence and the credit downswing in developing countries have produced their share of financial innovations, which, if reinforced by appropriate policies and measures, portend well for the stability of capital flows to developing countries. The first innovation discussed in this chapter is the development of significant local bond markets, particularly in Asia. The second is the expansion of markets for the transfer of credit risk, ranging from basic-credit default swaps to sophisticated credit-derivative products such as collateralized debt obligations. The third significant innovation is the movement of the international banking industry from crossborder lending to local financial services. The fourth is the emergence of a nascent market in project bonds designed to finance investments in infrastructure in developing countries.

Taken together, these developments present opportunities for the international financial and policy communities to provide salutary stability to capital flows to developing countries.

#### **Debt-market developments in 2002**

The weakness in private debt flows as reported in the World Bank's Debtor Reporting System is corroborated by a wide range of other indicators.

Gross market-based debt-raising activity reported by Dealogic Bondware and Loanware showed a drop in 2002, with total gross debt flows falling to \$137 billion from \$145 billion in 2001 and \$171 billion in 2000 (table 3.2).

The dynamic between the two components of gross lending flows—bank lending and bond issues—shifted as 2002 progressed. Gross bank lending dropped in the first quarter but rebounded by mid-year before fading again at year end. The volume of bank lending was thus almost evenly split between the first and second halves of the year. By contrast, bond issues were strong through the first half of the year but fell sharply at mid-year. Only 34 percent of the year's bonds were issued in the second half of the year, a phenomenon related to Brazil's actions in the run-up to its presidential elections in October.

Also contributing to the drop in overall bond activity was the severe decline in bond issues denominated in euros. Many Argentine bonds had been raised in euros and sold to retail investors in Europe. Losses on these bonds made European investors reluctant to buy new bonds in 2002, leading to a drop in the share of euro-denominated bonds (figure 3.1). Issues denominated in yen virtually disappeared, despite the fact that the currency offers the lowest absolute borrowing costs. The result Figure 3.1 Currency composition of new bond issues, 2001 and 2002



Source: Dealogic Bondware.

was a sharp rise in the share of issues denominated in U.S. dollars.

The region most dramatically affected by the drop-off in debt flows was the one most heavily dependent on market-based debt financing: Latin America. Gross market-based flows to that region were down by 48 percent in 2002. The weakness in Latin American gross market activity since 2000 in part reflects the virtual disappearance of Argentina from the lending and issuance data. But that occurred mainly in 2001 (when flows to Argentina were down by 68 percent). In 2002, gross flows to Latin America, excluding Argentina, were still down a substantial 40 percent.

Gross debt flows to other parts of the developing world dropped nowhere near as far as they did in Latin America. Flows to the two other regions with sizeable market activity—Europe and Central Asia and East Asia—rose in 2002 over 2001. Flows to East Asia doubled.

Market-based debt flows remain concentrated in upper- and middle-income countries. Lowincome countries are not wholly excluded from countries, 2001-2002



Figure 3.2 Debt-market issuance by low-income

Source: Dealogic Bondware and Loanware.

#### Figure 3.3 Breakdown of bond issuance by credit rating, 2002

Billions of dollars





the markets, although most of their market-based finance is raised through bank lending (figure 3.2).

Increasingly, market flows are tiered based on credit quality. As the year progressed, flows shifted toward higher-rated borrowers (figure 3.3). In the first half of the year, below-investment-grade issuers accounted for 56 percent of total bond issuance. In the second half of the year, however, these issuers accounted for 44 percent of the total. The tiering in credit quality helps account for the wide variation in the performance of regional flows, as the average credit rating in Latin America is not only well below that in East Asia or Europe

Figure 3.4 Average regional credit quality, 1997-2003







Sources: Dealogic Bondware; J.P. Morgan Chase.

and Central Asia, but also has been deteriorating in recent quarters (figure 3.4).

The pattern of a solid first half followed by a weak third quarter is also evident in spreads on emerging market bonds (figure 3.5). Narrowing through April, spreads spiked up to a high point at the end of September. This pattern was driven by developments in Brazil, where spreads widened from a low of 700 basis points in March to a peak of 2,450 basis points in late September. Since then, they have narrowed considerably, signaling an improvement in market conditions that contributed to a revival in bond issuance in the fourth quarter.

Putting the rise in secondary-market spreads into historic context (figure 3.6), the severity of the rise ahead of Argentina's default in 2001 and Brazil's problems in 2002 is notable but pales in comparison with the run-ups experienced at the time of the Mexican crisis in 1995 and the Russian crisis in 1998.

Importantly, the degree of uniformity of movement in spreads continues to decline. For example, the recent difficulties in Argentina and Brazil did spill over to raise Mexican spreads at

Figure 3.6 Secondary-market spreads on emerging markets, 1990–2002

Basis points



*Note:* Country names mark date of financial crisis. *Source:* J.P. Morgan Chase.



Figure 3.7 Secondary-market spreads on Brazil and Mexico, 1991–2002

Basis points

*Note:* Country names mark date of financial crisis. *Source:* J.P. Morgan Chase.

various points over the past couple of years, but the degree of co-movement was much reduced relative to 1995 and 1998 (figure 3.7).

## Debt-market prospects for 2003 and beyond

The rally in emerging markets in the fourth quarter of 2002 not only made net debt flows to developing countries less negative for 2002 as a whole than had seemed likely at the end of the third quarter, but also allowed flows in 2003 to begin on a relatively strong note.

It is likely that both gross and net capital market debt flows to developing countries will be higher in 2003 than in 2001–02 (table 3.3):

- Net debt flows are projected to be positive for the first time in three years, although they will remain subdued relative to the peak years of the 1990s. Net issuance of bonds is forecast to be much higher than net bank lending. Indeed, continued bank retrenchment will cause net bank lending to be negative for yet another year in 2003.
- Gross capital market flows to developing countries are expected to rise to \$155 billion in 2003 from \$137 billion in 2002. By 2005, gross flows of bank lending and portfolio securities together are expected to rise to around \$165 billion. This outlook is based on econometric models of capital flows to developing countries that integrate the effects of supply conditions in industrial countries with the demand factors in developing countries. The econometric framework used for generating the forecasts for capital market flows to developing countries is the same as was used in *Global Development Finance 2002* (World Bank 2002).

## Debt flows partly reflect lower demand

The drop in debt-related flows to developing countries over recent years is not wholly due to the reluctance of creditors to supply funds. In many cases, reduced *demand* for external debt finance lies behind the diminished flows.



This is especially true for the economies of Asia, which have shifted from being substantial net borrowers in the years leading up to the 1997–98 crisis to a position where they no longer need external debt. Sustained current-account surpluses and steady inflows of FDI mean that many countries in the region have an external financing surplus to deploy. The surplus is being used to pay down external debt and accumulate external assets, either in the form of foreign exchange reserves or privately held assets.

It is hard to determine with precision whether lower flows (and stocks) are a reflection of reduced borrower demand or investor supply. There have been episodes during which identifiable exogenous factors have affected the supply curve, as in the sudden loss of confidence in the Asian crisis of 1997–98, which triggered a considerable fall in domestic investment in all affected countries. In the case of the most recent credit downswing, no major exogenous factor can be identified; hence, the identification problem is not trivial.

Some guide can be provided by pricing, however. In a simple supply-demand framework, a reduction in demand would be associated with a fall in quantity *and* price, while a fall in supply (in this context, reduced availability of debt financing) would be associated with a fall in quantity but a rise in price.

The relevant price in consideration here is not just the interest-rate spread over the risk-free rate

(U.S. Treasury securities) offered by the debt in question, but also how that spread has developed in recent quarters relative to similarly rated debt. In the case of Latin America, bond spreads in 2002, on average, rose both absolutely and relative to similarly rated benchmarks (figure 3.8a).

For East Asia, however, the opposite is true: spreads narrowed both absolutely and in relation to similarly rated (investment-grade) benchmarks (figure 3.8b). Evidently, there is a shortage of foreigncurrency-denominated bonds issued by East Asian borrowers relative to the demand for such claims often from bond funds within the region—leading to the emergence of what some market commentators have called an "Asia premium."

## Creditors focus on credit risk, not return

A lthough reduced demand can account for part of the drop-off in debt flows to developing countries, much of the move must be interpreted as a supply shift due to the increased reluctance of investors to hold debt claims on developing countries.

A key ingredient in creditors' willingness to take on debt held by developing countries is the prevailing pattern of interest rates (both short- and longterm) in the major markets. Low returns in the major markets might be expected to promote a flow of funds to higher-yielding developing-country debt,



## Figure 3.9 Net debt flows and G3 interest rates, 1984–2002

Sources: World Bank Debtor Reporting System; Bloomberg.

while high returns in the major markets would be an attraction to keep this capital at home. Such a "push" factor was commonly identified as a key driver of capital flows to developing countries in the literature of the early 1990s (Calvo, Leiderman, and Reinhart 1993).

From the late 1980s to 1996, this inverse relationship between bond yields in the major industrial countries and net private debt flows to developing countries did indeed hold (figure 3.9). The correlation coefficient between yields and net flows was -0.7. In this framework, it is not difficult to understand what became known as the "Tequila crisis" of 1994–95, when net debt flows to Latin America became anemic. In 1994, G3 bond yields rose by 120 basis points, having fallen steadily from 1990, when the flow of debt finance to developing countries first began to accelerate in earnest.

Since 1996, however, this negative correlation has broken down, and the relationship between net private debt flows and yields has become *positive*. In most years, yields and flows have dropped together. If the pre-1996 relationship between net flows and yields had held in 2002, net debt flows would have been about \$160 billion, compared to the drop of \$9 billion that was realized.

To make sense of this regime shift, it is important to recognize that investors in developing countries have become more concerned with credit risk than return in their lending attitudes to developing countries. As concerns about overexposure to developing countries mounted in the late 1990s, lower short-term G3 interest rates failed to promote a resumption of capital flows. Indeed, the mass exodus of capital from high-risk developing (and developed) markets to the safety of G3 government bond markets during episodes of severe risk aversion in recent years has helped drive down bond yields in the G3, thus contributing to the positive correlation between flows and yields evident since 1997.

Increased investor wariness about holding lower-rated debt claims can be illustrated by the pattern of investors in the bond market. J.P. Morgan, the investment bank that has typically accounted for the largest share of secondarymarket business in developing-country debt, maintains data on the counterparts with which it does business (figure 3.10). These have shifted significantly since the crisis years of 1997–98.<sup>2</sup>

Most important is the notable shrinkage in the share of the market accounted for by institutions with a relatively high tolerance for risk. For example, dedicated emerging-market and macro hedge funds accounted for about 30 percent of this market in December 1998, but only 10 percent in September 2002. By contrast, the share of demand accounted for by "cross-over" high-grade investors has more than tripled, from 9 percent to 32 percent, over the same period. The result has been an increased appetite in the aggregate to hold the debt of higher-rated developing countries, but a reduced appetite to hold the debt of lower-rated borrowers.

#### A new market in credit derivatives

Investor concern over the risks of investing in developing countries has led to the development of a variety of instruments to manage risk—and new markets in those instruments—just as the intensification of currency and interest rate risk in the 1980s, following the breakdown of the Bretton Woods system of fixed exchange rates, ushered in the development of markets in currency and interest rate derivatives.

Instruments providing insurance against defaults and other credit events have been developing rapidly in global fixed-income markets; with developing-country debt markets at the higher end of the credit-risk spectrum, it is only natural for them to become part of this market.



Figure 3.10 The shifting investor base of emerging-market bond markets

Source: J.P. Morgan Chase.

Markets for credit-risk transfer have registered strong growth in recent years, even though global financial market conditions have been generally subdued. Between 1997 and 2002, the global market expanded more than ten-fold, reaching \$2 trillion in outstanding notional amount; it is expected to increase to \$4.8 trillion by the end of 2004 (British Bankers Association 2002). As the market has come of age, it has proven resilient to financial turbulence and high-profile corporate and sovereign defaults, gaining confidence as an efficient means of hedging exposure to credit risk embedded in a variety of debt.

For the buyer of default protection, a credit derivative is a type of insurance contract. In the most common arrangement, the credit default swap (CDS), the buyer of credit-default protection pays a periodic premium to the seller. In the event of a default on the underlying credit instrument, the seller pays the buyer an agreed-upon amount.

By providing opportunities to transfer credit risk from banks and other institutions having a comparative advantage in credit relationships and funding to institutions and investors that are prepared to take on risk as part of their diversification and investment strategies, such as insurance companies, credit derivatives have the potential to fundamentally alter the traditional approach to credit-risk management and thereby the lending and borrowing business. Relative to other vehicles of credit protection, such as financial guarantees, credit derivative products offer flexibility, liquidity, and the advantage of standardized trading of credit risk as a separate asset class. Furthermore, as banks enhance their ability to diversify their credit exposure across markets and sectors, they are less likely to be vulnerable to risks (sector- or borrower-specific shocks) emanating from loan concentration—and thus less prone to make sudden changes in their supply of credit.

The natural *buyers of default protection* are institutions with debt exposure against which they prefer to hedge rather than sell. For example, growing concerns about Brazil's ability to service its sovereign debt in 2002 led many financial institutions with illiquid exposures in the country to seek ways to hedge their risk, raising the demand for default insurance. The natural *sellers of default protection* are investors, particularly insurance companies.

#### A market-based solution to credit risk

Several forces have driven the rapid growth of the credit derivatives market—among them regulatory arbitrage, advances in risk management technology and practice (including the application of value-at-risk methodology), and renewed interest in hedging credit risk as a way of dealing with deteriorating credit quality and rising corporate and sovereign defaults.

Yet the use of credit derivatives to manage credit risk is still only about 2 percent of their use in managing interest rate and currency risks. And the notional amount of credit risk being transferred through credit derivatives is a very small fraction of the debt held by major banks and bondholders.

Credit-derivative deals transacted on emergingmarket debt have so far been limited, but the potential for growth seems to be large. Two important characteristics of emerging-market debt flows are likely to make emerging-market debt the new frontier for credit derivatives. First, in times of financial distress, emerging-market debt indexes tend to spike to levels that may not be warranted by a particular country's long-term creditworthiness or underlying economic fundamentals. And, second, the universe of investment-grade emerging-market debt issuers is expanding. Several, including Mexico and Poland, now have investment-grade ratings. Infrastructure project bonds, accompanied by credit enhancements such as political risk insurance (guarantees from multilateral bodies or national exportcredit agencies), provide new avenues of emergingmarket long-term debt.

#### **Types of investments**

Single-name CDSs accounted for about half of the credit-derivatives market at the end of 2001; collateralized debt obligations (CDOs) accounted for 23 percent (British Bankers Association 2002). Other products—total return swaps, credit-linked notes, and credit-spread put options—each accounted for 13 percent or less of the market.

The CDS market offers standardized credit protection on rated corporate and sovereign entities, including emerging-market borrowers. As the CDS market has grown, it has provided valuable price information, supplementing information available in the credit markets and thereby enhancing financial stability and efficiency. In a typical CDS transaction, the maturity is five years and fees or premiums, expressed in basis points on the notional contract amount, are paid quarterly. Trade takes place primarily in the inter-dealer market based on the standard documentation of the International Security Dealers Association (ISDA). The CDS has also provided the building block for the more sophisticated structured products, such as CDOs, which offer investors exposure to a portfolio of reference assets.

In a CDS transaction, the payout to the buyer of credit protection is triggered by a credit event, the precise definition of which is of the utmost importance. ISDA's 1999 credit-derivatives definitions cover six types of events: bankruptcy, obligation acceleration, obligation default, failure to pay, repudiation/moratorium, and restructuring. The definitions have helped market development, but they have not eliminated recourse to courts for dispute resolution.

The 1999 ISDA definitions are under review in response to objections by ratings agencies concerning their liberal language on evidence of a credit event. A fourth draft of the 2002 ISDA creditderivatives definitions was distributed in November 2002 for consultation.

#### **Bank retrenchment in context**

s noted earlier, commercial banks as well as Abondholders have become more cautious about extending credit to developing countries. European banks, which led the rapid growth in claims on developing countries through much of the 1990s, are now leading this retrenchment. Even at the end of the decade, when banks of other nationalities began to cut back (especially the Japanese), European banks continued to expand in developing countries, possibly because of the shrinking opportunities offered in the domestic market (due to rapid consolidation of the industry after the successful introduction of the euro). As a result, the share of total claims on developing countries accounted for by European banks has risen to about 77 percent in recent quarters, up from about 64 percent in 1990.

One factor contributing to greater caution on the part of Europe's banks over the near-term will be the path of their stock prices through recent quarters. Europe's banks were hardest hit by the widespread global declines in commercial bank stock prices in 2002 (figure 3.11). The decline reflected growing concerns about credit losses in Argentina and about large corporate losses in North America and Europe.

Beyond the immediate causes of the retrenchment lies a fundamental shift in commercial banks' strategy in recent years away from cross-border lending and toward greater participation in the



Figure 3.11 Performance of bank stocks, January 2002–January 2003

Source: Bloomberg.

local banking market. The shift is best illustrated using data collected by the BIS, which now breaks total claims into local claims, which have been growing rapidly in recent quarters, and crossborder claims, which have been declining (box 3.1).

This trend in bank behavior matches the global shift in external financing from debt to equity. When BIS-area banks focused on cross-border lending, loans invariably were funded in the international market, undertaken in foreign currency, and appeared as a net debt inflow on the capital account of the balance of payments. Local claims, however, are generally denominated in local currency and funded locally, leaving no record of balance-of-payments financing beyond the infusion of equity capital required to establish and capitalize a local banking presence.

In principle, a local banking presence brings with it benefits that extend well beyond the small increase in balance-of-payments financing. It should help improve the efficiency of the local financial intermediation system—thus mobilizing scarce domestic savings more efficiently. These benefits apply to poor countries as well. The significant presence of BIS-area deposit-taking institutions is one of the most important ways in which the poorest developing countries are connected to the global financial system (World Bank 2002).

In recent years, foreign banks invested heavily to create a local market presence in Argentina. The 2001 financial crisis led to severe losses on these investments, raising concern that banks may reconsider their local-market presence in developing countries, especially Latin America. Late in 2002, Spain's Santander bank sold its business in Peru, and Germany's HBV, its business in Brazil. In both cases, the buyer was a local bank.

#### **Basel II**

"he prospect of international banks' involvement in developing countries will also be significantly shaped by certain global regulatory initiatives, particularly the newly revised Capital Adequacy Accord (Basel II), now under consultation. Scheduled for initial implementation in late 2006 by the member countries of the Basel Committee on Banking Supervision (BCBS), the new accord replaces and in many ways improves the original 1988 accord. The new accord is designed to enhance the safety and soundness of the banking industry worldwide through a better alignment of regulatory capital with banking risks, including credit, market, and operational risks. The minimum capital requirement under the new accord—that is, the ratio of bank assets put aside as a cushion to absorb unexpected losses-would be the same as under the 1988 accord.

The new accord will be based on three pillars: (a) a revised risk-based, minimum-capital requirement rule, (b) a new supervisory review mechanism, and (c) enhanced market discipline. Reflecting the changes that have taken place since 1988 in banking, risk management, and supervisory practices, the new accord emphasizes greater sensitivity to risk, particularly sovereign- and corporatecredit risk, and encourages the development of internal risk-control and management capabilities as an important part of the regulatory approach to the banking industry.

In moving toward a more risk-sensitive approach to credit risk, the accord provides three approaches for assessing capital adequacy: a "standardized" approach and two "internal ratings based" (IRB) approaches that sophisticated banks will be able to use under extensive supervisory review and disclosure requirements. The standardized approach builds essentially on the 1988 methodology of risk-weighted assets and a minimum capital ratio—but with a more refined approach to credit risk. First, risk weights would be set for a bank's exposure to sovereigns, corporations,

### Box 3.1 International versus local-currency bank claims

The foreign assets of banks reporting to the BIS can be broken into two components. The first is cross-border claims (or international claims) funded in the international markets. For such claims banks secure deposits (liabilities) in markets other than the country to which the funds are lent (assets). Usually, the funds are raised in the headquarters of the bank. The second component of the bank's foreign assets are its local-currency claims. These are funded by attracting deposits directly in emerging markets.

International claims are the outcome of the traditional business of international banks in developing countries. Local-currency claims, by contrast, are of more recent genesis. They reflect the growing amount of foreign direct investment in the banking and financial sector of emerging markets. Local-currency claims arose from banks' desire to:

- Expand globally into new markets
- Pursue a more equitable growth of assets and liabilities
- Provide protection in the event of exchange-rate and debt crises, such as those of the 1980s and late 1990s.

The local-currency claims of BIS banks operating in emerging markets have risen sharply in relation to international claims (see figure at bottom left)—shooting up from about \$130 billion at the end of 1996 to a peak of close to \$490 billion at the beginning of 2002. The largest increases were in Latin America, where such claims grew from \$66 billion in 1996 to over \$290 billion by the beginning of 2002. In Europe and Central Asia local claims went from \$12 billion to \$87 billion over the same period.

BIS banks' claims on emerging markets, 1983–2002

The big jump for East Asia came between 1999 and 2000, when claims jumped from \$63 billion to \$83 billion.

The two asset components pose different risks. International claims expose banks to currency and crossborder-transfer risks, since their claims on borrowers (that is, their assets) are funded in foreign currency (liabilities). Local-currency claims, being funded most often in local markets seldom pose such risks. However, they retain other risks associated with the country—political, legal, and economic.

Local lending is broadly matched by local deposit taking (see table below). By contrast, BIS-area banks have slumped from being net lenders in the cross-border market to being net borrowers (see figure at bottom right). As of March 2002, deposits from emerging markets in BIS-area banks far exceeded their borrowings.

The shift from international claims to local-currency claims, while reducing some risks for both banks and emerging markets, has brought about other risks that are only now beginning to surface. A good example is the case of Argentina, where the disparate treatment of locally funded foreign-currency assets and liabilities, enacted earlier in 2002 in the wake of currency pressures, has prompted some banks to become more cautious about expansion in developing countries in general.

Position of BIS banks for emerging markets, June 2002 (billions of dollars)

	Assets	Liabilities
International claims	793	949
Local currency	472	421



Emerging-market assets minus liabilities, 1983–2002

Billions of dollars 275 200 125 50 Local currency -25 Cross-border -100 175 1983 1986 1989 1992 1995 1998 2001

and other banks based on ratings from major creditrating agencies and approved domestic agencies. Second, the system of risk weights for corporate lending would be enlarged to include four weights (20, 50, 100, and 150 percent), replacing the present single weight of 100 percent applied to all corporate exposures regardless of underlying credit quality.

The IRB approaches include a basic (or "foundation") approach and an advanced approach. In both, banks are allowed to use their internal ratings of each borrower's creditworthiness to assess credit risk in their portfolio, subject to certain methodological and disclosure requirements. The advanced version gives banks more discretion; it is expected to be adopted by more sophisticated institutions.

The new method of assessing the minimumcapital requirement is expected to have important implications for emerging-market economies, principally because capital charges for credit risk will be explicitly linked to indicators of credit quality, assessed either externally under the standardized approach or internally under the two ratings-based approaches. The implications include the likelihood of increased costs of capital to emerging-market borrowers, both sovereign and corporate; more limited availability of syndicated project-finance loans to borrowers in infrastructure and related industries; and an "unleveling" of the playing field for domestic banks in favor of international banks active in developing countries.

Concerns over the increased cost of capital under Basel II relate to the cross-border lending of international banks, and the potentially higher capital charges associated with such lending, particularly under the internal, ratings-based approaches that international banks are expected to adopt. The regulatory capital requirements would be significantly higher in the case of non-investment-grade emerging-market borrowers than under Basel I. At the same time, borrowers with a higher credit rating would benefit from a lower cost of capital under Basel II. A quantitative assessment of such effects is not straightforward, as the results are sensitive to a number of factors, including banks' loan pricing policies and, in particular, the extent to which banks' economic capital, which derives loan pricing, may exceed the minimum capital charges under the IRB approach. A recent study by the OECD (Weder and Wedow 2002) estimates the cost in spreads for lower-rated emerging borrowers to be possibly 200 basis points. If, as expected, most domestically owned banks in emerging-market economies adopt the standardized approach to credit risk, they will be at a comparative disadvantage vis-à-vis cross-border lending by international banks when attempting to lend to high-quality domestic borrowers. On the other hand, they will have a comparative advantage in lending to low-quality domestic borrowers (Fischer 2002, Hayes 2002).

Finally, the prospects for capital flows for infrastructure projects from the market in syndicated commercial-bank loans depends on how the BCBS ultimately elects to treat structured credit products, including project finance. The current proposal places project loans in a higher risk category than corporate loans, leading the BCBS to recommend higher capital requirements that could reduce the availability of syndicated projectfinance loans and possibly increase their cost to borrowers in infrastructure and other sectors. But according to evidence provided by the private sector in response to the BCBS's recommendation, project-finance loans outperform unsecured corporate loans, both in default rates and recovery performance, thus requiring lower capital charges, not more (Berner and others 2002). The BCBS is reportedly considering this evidence.

## The emerging bond market really is emerging

The weakness of international bond issuance by developing countries and the high level of spreads through most of 2002 belie the fact that the so-called emerging bond markets of developing countries really are emerging in several important ways—some of which have important policy implications.

The first notable development is the continued shift from Brady bonds to more conventional eurobond issues in the international market. Buyback and swap activity began in 1996 and peaked in 2000 (figure 3.12). It slowed in 2002, in part because of unfavorable market conditions for new eurobond issues, but also because the outstanding stock of Bradys has fallen by so much that there is not much more of this transformation to complete. Of the \$150 billion in Brady bonds



## Figure 3.12 Volume of Brady swaps and buybacks, 1996–2002

Note: 2002 data are through September. Source: World Bank staff estimates.

originally issued, only \$50 billion are still in circulation. Mexico has reduced its outstanding stock of Bradys from an original issue of \$33 billion to just \$5 billion. There are two basic reasons for this transformation:

- *Cost.* Brady bonds have consistently traded at a discount to the comparable eurobonds of the same issuer, possibly due to the complexity in the pricing of Bradys (for example, pricing-out collateral). As long as the Brady-eurobond spread differential is positive, sovereign borrowers can realize debt-service savings by exploiting this arbitrage.
- *Reputation enhancement.* Bradys carry with them the stigma of previously rescheduled debt.

The second development is that various features of truly developed markets are now more evident in the markets for developing-country bonds. The emergence in the 1990s of a nascent project bond market to fund long-term infrastructure projects in developing countries—such as electric power plants, roads, ports, airports, telecommunications networks, and water and waste water facilities which were traditionally the preserve of the public sector, merits attention for several reasons. First, project bonds are a potentially major source of long-term private debt capital linked directly to economic growth and competitiveness. Second, they are a new asset class in the emerging-market debt spectrum, offering asset diversification and investment opportunities particularly to institutional investors, such as insurance companies and pension funds, whose long-term liabilities match the long-term tenor of project bonds. Third, they mirror the shift in the pattern of capital flows from bank loans to publicly issued bonds.

Although the volume of capital raised in the project-bond market remains relatively small, the market has matured, delivering a series of highprofile transactions—among which are the \$1.2 billion bond issue by Qatar for the Ras Laffan liquid natural gas project, a \$1 billion issue by the República Bolivariana de Venezuela for the Petrozuata oil project, and a \$125 million issue by the Philippines for the Quezon power project-and encompassing a broad range of projects, issue sizes, and terms. One important factor contributing to the growth of this market has been the design of creative bond covenants that have provided bondholders contractual protection against certain risks inherent in such projects. An examination of a sample of project bonds issued between January 1993 and March 2002 reveals that project indentures contain the standard covenant provisions aimed at mitigating conflicts of interest arising from asset substitution, dividend policies, claim dilution, and underinvestment. In addition they contain clauses that serve as commitment and incentive devices for host governments and other contracting parties to the project. All sample project bonds were issued under New York Law, under which market practice does not normally include collective action clauses in bond indentures.

The third and most significant development is the shift away from bond issuance in the international markets in favor of issuance in localcurrency bond markets. This shift is most important for government issuers, although nascent local-currency bond markets are already an important source of funding for private-sector borrowers in much of Asia. An important rotation from external to domestic debt has already occurred in the pool of public-sector debt in the major emerging economies (figure 3.13). In several countriesamong them Brazil, Chile, Hungary, India, the Republic of Korea, Malaysia, Mexico, Poland, South Africa, and Turkey-local-currency fixedincome markets have grown considerably in recent years. In response to several institutional and policy initiatives, they also have undergone



Figure 3.13 Emerging economies: public debt stocks, 1996–2001

considerable modernization in terms of trading practice, clearance and settlement mechanisms, and electronic transfer of securities, as well as in market capitalization and pricing procedures. Such markets now offer a range of money market, treasury bill, and longer dated securities. They have adequate liquidity, particularly on the government side, and the depth to respond to the debt issuance needs of the public and corporate sectors. And in countries such as Chile, the Republic of Korea, and Malaysia, which have well-developed local institutional investors (insurance companies, pension funds), local debt markets have developed the capacity to meet needs for long-term infrastructure investment.

A country may choose to develop a localcurrency fixed-income market for several reasons. Virtually all developing and transition economies have access to international credit markets only through the use of the hard currencies in which international debt instruments are denominated. But this practice exposes the borrower to the vicissitudes of currency risk—a danger brought home painfully by the East Asian crisis of 1997–98. Local-currency markets provide a natural hedge for domestic borrowers. They may also be attractive as assets that generate returns for foreign investors who seek diversified investment opportunities, particularly in the current environment of subdued returns in more established global financial markets.

The evolution of local fixed-income markets has been helped along by liberalization measures intended to ease or remove barriers to the entry of foreign investors. In India, for instance, foreign institutional investors were allowed as early as 1997 to invest in local fixed-income markets, including government securities. The Republic of Korea took a significant step forward in 2001 when it made the won fully convertible on the capital account. The scope for further reform is great. Although most countries have achieved currency convertibility in their current-account transactions, their currencies are not convertible for capital account transactions. Capital-account transactions in most developing countries are still subject to exchange-rate restrictions and controls.

There are a number of very important features about the movement toward debt denominated in local currency and traded in local markets.

First, the shift toward domestic debt is a natural aspect of the move to floating exchange rates. When governments were choosing to peg their own currencies to another, usually the dollar, borrowing externally in foreign currency was a way of minimizing borrowing costs while signaling to the market the government's commitment to maintain the foreign-exchange peg. The government, of course, was thus vulnerable to considerable exchangerate risk, one reason why the currency crises in the 1990s often turned quickly into government debt crises. With the move to floating foreignexchange rates, governments have a greater incentive to borrow in their own currency.

Second, the shift toward domestic debt was fostered by the growing success of macro policy in many developing countries. Developing countries' success in controlling inflation in the new environment of generalized floating foreign-exchange rates has given domestic and foreign investors the confidence to buy locally denominated debt. The key to creating credibility on inflation has been the combination of an operationally independent central bank and a responsible, coherent fiscal policy. Where such necessary conditions have been met, it has proved possible for countries to develop deep and relatively liquid local bond markets and to issue securities with the same long maturities previously seen only in the international market (box 3.2).

Third, locally denominated debt is an important way for countries to overcome "original sin" the inability of governments to borrow in their own currencies in *international* markets (Eichengreen, Hausmann, and Panizza 2002). Few currencies are

### Box 3.2 Local 10-year bond markets

A key step toward stable local-market funding for the public sector is the development of a benchmark 10-year, fixed-rate, coupon bond. To be able to issue such a bond in its own currency, not only must a government achieve an adequate credit rating in the market, but also it must convince market participants, both local and foreign, of its ability to control inflation over the long run. The fact that so many developing countries, including some that suffered severe financial crises in recent years, now have 10-year benchmark issues is an indication of how far their reputation for fiscal soundness has come.

As impressive as the emergence of these long-maturity securities is the convergence in their yields (see figure). For a basket of developing countries, spreads over the core markets of the United States and the Euro Area (Germany) have narrowed to a weighted average of not much more than 250 basis points, down from almost 400 basis points at the start of 2001. Typically, bond-yield convergences such as these have taken much longer to occur, as it takes time to build reputation. The fact that it is happening so quickly for many developing countries is a testament to their policy efforts, to be sure, but it may also reflect the

used in international markets, and the dollar remains dominant, so it is little surprise that emergingmarket governments have made little headway in these markets. Local-market investments in developing countries, by contrast, have become increasingly attractive for bond-market investors in mature markets, partly because yields in the mature markets are so low. Foreign investors are attracted not only by the higher yields offered by developingcountry bonds, but also by the prospect of capital gains arising from interest-rate convergence. This phenomenon has been especially visible in recent quarters in the former transition economies of Eastern Europe. To the extent that such crossborder inflows are seen as desirable (which is likely to be the case if they allow developing-country governments to repay foreign-currency debt and thus shift foreign-exchange risks to the investor), then policy measures to develop domestic market infrastructure and regulation will prove as important as the more fundamental policy improvements noted above (IMF and World Bank 2001).

*Fourth, there is some risk of crowding-out.* If the government borrows in the local market when

buoyancy of private-sector debt looking for "safe" developing country investments.

Ten-year benchmark government bond yields, 2001–2002



it could have access to foreign saving through international markets, it might raise the cost of local bond finance to private-sector borrowers. This crowding-out effect might be offset by the boost to the local bond market liquidity that the supply of government benchmarks might provide, however.

Finally, domestic debt shifts the nature of the risks facing borrowers, but it does not remove them. One advantage of borrowing in foreign currency is that the term of the loan is often relatively long. By contrast, most debt issues in emerging local markets are concentrated at the short end of the curve—until the government develops a credible record for good macroeconomic policy. Short maturities leave government borrowers open to considerable rollover risk in the early stages of their transition from international to local markets. Indeed, the interaction of high rollover risk with other adverse macro shocks lies behind many of the crisis episodes of the past 10 years. (For Brazil's experience, see box 3.3.)

The moral of the story is that a government cannot avoid a debt crisis simply by shifting from a pegged to a floating currency. While a floating

### Box 3.3 Brazil's experience in 2002

Brazil's experience in 2002 highlights some of the vulnerabilities that can develop even as a government shifts its funding from international to local markets.

Brazil's markets initially responded to the default of neighboring Argentina with remarkable resilience. The currency strengthened during the fourth quarter of 2001 as Argentina plunged into a disorderly default. Moreover, bondyield spreads narrowed through the first quarter of 2002. Although not immediate, the hit from Argentina was real, however, and led to a reduction of many flows to Brazil, including FDI and trade finance. Partly as a result, markets weakened sharply through the second and third quarters, as bond yields spiked and the currency dropped by almost 40 percent between the end of March and the end of September. This deterioration was eventually halted and partly reversed by the IMF program that began in early September.

Uncertainty about the presidential election in October was another key factor in the country's difficulties. As Lula da Silva, the left-of-center opposition candidate and eventual winner, gained in the polls, markets weakened even though, as a candidate, Lula made a commitment to the strong monetary and fiscal policies that had characterized the Cardoso administration. Once in office, Lula reiterated his commitment to adhere to sound policies and there was a remarkable improvement in Brazilian markets that has lasted through the early months of 2003.

But political uncertainty is by no means the only explanation for Brazil's problems in 2002. Three other factors are important:

- By objective standards, Brazil has a heavy load of external debt. Indeed, World Bank classifications put Brazil in the "severely indebted" group of middleincome countries, although well over half of this stock is owed by private-sector borrowers. With investors increasingly unwilling to hold debt from higher-risk developing countries, Brazil suffered.
- The economy entered 2002 with a relatively high current-account deficit and a declining inward flow of FDI. With debt investors retrenching, this left little option but to engineer a rapid adjustment in the trade and current-account balances. The real thus came under sharp downward pressure.
- The domestic public debt structure made the country vulnerable. The currency was supported at various points in 2001 and 2002 by heavy issuance of dollar-linked government paper. As external adjustment pressures pushed the real lower, the government's debt-to-GDP ratio began to rise sharply, raising concerns in both local and international financial markets. The government was obliged to offer high interest rates and shorter-dated maturities as it rolled over its short-term debt, further raising market worries about debt sustainability. As noted, these concerns faded quickly after both the successful political transition and the announcement by the new government that it would raise the target for the primary budget surplus in 2003, to 4.25 percent of GDP.

foreign-exchange regime may help the country absorb adverse shocks—as well as alleviating the need for the authorities to push interest rates to damagingly high levels to avoid a complete loss of reserves—it does not guarantee government solvency. Only a sustainable long-run fiscal policy can do that.

Until such policies become generalized throughout the developing world, the specter of sovereign debt defaults will haunt financial markets and leave developing countries open to the damage done by frightened creditors hastening to cut their losses. Recently, collective action clauses and a proposed "sovereign debt reduction mechanism" have been developed to keep debt problems from becoming downward spirals of panic and penury. These are discussed in the next section.

## Sovereign debt defaults—past, present, and future

The desire of investors to trim their holdings of developing-country debt and shift toward the stronger end of the credit spectrum has put many borrowing countries under severe pressure. For some, this pressure could worsen domestic economic and political problems sufficiently that the outcome is default. According to Beers and Chambers (2002), six sovereign borrowers defaulted in 2002: Argentina (which formally defaulted in January), Gabon, Indonesia (which restructured its syndicated bank credits as required under its Paris Club agreement), Madagascar, Moldova, and Nauru, taking the number of countries in default of their debt to 28 at year end the highest incidence since 1992. Of these six countries, Indonesia originally reached an agreement for debt restructuring in 1998—thus the country's 2002 bank-debt rescheduling was part of the clean-up begun at that time. Nauru is not classified by the World Bank as a developing country. But it is the magnitude and the potential impact of the Argentine default that have put the issue of sovereign default and bankruptcy back on the international policy agenda. (See the annex to this chapter for a discussion of defaults in 2002, plus a tabulation of commercial-debt restructurings since the 1980s.)

#### The history of sovereign default

Sovereign borrowers have defaulted on foreign debt since the dawn of international lending (Dammers 1984). In the fourth century B.C., the Attic Maritime Association, to which a majority of Greek city-states belonged, defaulted on loans from the Delos temple. England's King Edward III repudiated his debts to Italian bankers in 1357. France ceased payments on its debt an average of once every 30 years from the 1500s to the 1800s.

Modern lending to emerging markets got under way in the 1820s in the aftermath of the Napoleonic wars (Chancellor 2000). Since that time, sovereign defaults have occurred in four waves (the 1820s, the 1870s, the 1930s, and the 1980s), in part driven by broad cyclical movements in the global economy (figure 3.14). Although the





default. Sources: Suter 1992; Beers and Chambers 2002.

number of countries currently on default in their debt (28) is higher than the peaks of the pre-1980s upturns, the *share* of countries in default is currently much lower (28 out of 202 borrowers).

In the 1820s the newly independent countries of Latin America issued bonds in London. The firms arranging these bond issues generally retained at least two years of interest and amortization (Dammers 1984). When these funds were exhausted, all but one of these countries defaulted. Some European countries (e.g., Denmark following the Napoleonic wars; Ramphal 1989) also defaulted. Several states of the United States defaulted in the 1830s and 1840s (Eichengreen 1991).

The second wave of Latin American defaults (accompanied by Turkey and Egypt) came in the 1870s, during a deflationary period for the global economy. Most of these defaults were settled by the 1880s. Lending to emerging markets grew rapidly following World War I and debt difficulties eased. By 1927, only 5 percent of foreign-government obligations were in default, if one excludes prerevolutionary Russian bonds. The world recession of the 1930s led to widespread and sustained defaults, however, and industrial-country bond markets became effectively closed to developing countries until well after World War II.

There were some notable features to the way that the international capital markets handled sovereign defaults before the First World War.

Defaults during the 19th and early 20th century were often resolved relatively efficiently through private negotiations (Eichengreen and Portes 1995). Bondholders' committees were established to facilitate coordination among investors, and the creation of permanent bondholder committees (without government participation) in the United Kingdom was credited with reducing the cost of negotiations.

Not all defaults were resolved privately, however. In some cases, navies of creditor countries blockaded ports until debt service resumed, seized liquid assets, or took over and ran customs offices of debtor nations (for example, the Arab Republic of Egypt by Britain, Turkey by France). The United States intervened in the Dominican Republic, Haiti, Honduras, and Nicaragua against governments that defaulted on their debt (Dammers 1984). But creditor governments usually viewed defaults as a matter of business rather than politics, and most British governments were reluctant to use their power or influence to support creditor rights in emerging markets.

Creditors demonstrated some flexibility in dealing with default, in part because repayment could rarely be enforced through the seizure of assets (except for the use of gunboat diplomacy) due to a broad interpretation of sovereign immunity. The courts could be contemptuous of attempts to enforce collection of foreign loans. In 1877, an English court characterized Peruvian bonds as essentially unenforceable "engagements of honor" (the equivalent of gambling debts; Kaletsky 1985). Rescheduling agreements and the capitalization of interest into new bonds were common, and often reflected debt relief rather than repayment in full (Ramphal 1989). In general, settlement typically did not involve complete repayment of interest and principle (Cole, Dow, and English 1994).

Default did not necessarily mean exclusion from the capital markets for a lengthy period. Many countries were able to obtain new loans relatively soon after settling their old debts (Cole, Dow, and English 1994). Practice changed in the course of the 19th century. The time from default to the restoration of market access averaged 14 years from 1821 to 1870, a figure that fell to just six years after 1870 (Suter 1992).<sup>3</sup> In general, some settlement was a prerequisite for obtaining new loans. Even after long periods of default, one of more than 50 years, old debts were settled before new loans were made available. Relatively easy access to new loans by defaulted states that agreed to settle their obligations generally reflected changes in regime that indicated more accommodating policies toward foreign creditors. From 1841 to 1843, eight U.S. states and one territory defaulted on obligations that were held largely by residents of other states or Britain. Those states that settled their debts were able to regain access to international credit in the 1850s, while states that refused to settle were for the most part unable to access foreign loans (English 1996). There were even cases of serial defaulters. Guatemala defaulted in 1828, 1864, 1876, 1894, 1900, and 1917, each occasion leading to debt restructuring, followed by successful attempts to raise fresh capital (Ramphal 1989).

By contrast, defaults by a majority of sovereign debtors during the 1930s effectively closed New York, London, and Paris bond markets to foreign sovereign borrowers, particularly less developed countries, until the late 1960s. This likely was due to the breadth and severity of the world recession and the interruption from the war, rather than a change in attitude by lenders. The collapse in commodity prices and rising protectionism cut the export revenues of 41 primary product exporters by about half from 1928–29 to 1932–33, and real interest rates rose to more than 15 percent (Ramphal 1989). In such difficult conditions, countries that did not default (such as Argentina) enjoyed no better capital market access than defaulting countries (Jorgensen and Sachs 1998).

#### Sovereign default in the 1980s

When sovereign lending from the developed to the developing world began to revive in earnest in the 1970s, the source of lending shifted. The main creditor group was not bondholders, but commercial banks. From 1970 to the late 1980s, banks accounted for about 90 percent of developing countries' public external debt to private creditors (figure 3.15).

Several factors dictated the reemergence of sovereign borrowing in the form of bank loans:

Banks were flush with liquidity with the recycling of oil wealth and the drop in real interest rates that accompanied rising inflation during the decade. The U.S. long-term bond yield averaged between 6 and 8 percent in every year from 1970 to 1978, while consumer prices increased by almost 7 percent a year.

### Figure 3.15 Composition of external debt to private creditors, 1970–2000

Public and publicly guaranteed debt (percent)



Source: World Bank Debtor Reporting System.

- It was hoped that banks, with their long-term relationships with emerging markets, would be a more savvy source of funds than bond investors.
- Many emerging markets were experiencing respectable growth rates, which bolstered lenders' confidence in repayment prospects. For example, GDP rose by 5.9 percent per year in Latin America in the 1970s (this compares with the average of about 2 percent that prevailed over the subsequent two decades). Moreover, booming commodity prices led to substantial windfall income gains for many developing countries.
- Despite the historical experience, the belief prevailed that major emerging markets would not default, either because "countries do not go out of business"<sup>4</sup> or because the creditor governments would not permit a default, given the vulnerability of their major banks.

The boom in bank lending came to an end with the sharp tightening in U.S. monetary policy at the end of the 1970s. Countries that had borrowed when U.S. real interest rates were close to zero and global growth was buoyant suddenly had to face high real interest rates, depressed global demand, and plunging commodity prices. In the three years following the Mexican payments suspension in August 1982, 24 middle-income countries were forced to renegotiate their debt with commercial banks.

At this point, the concept of a sovereign default became a little murkier. In the end, the defaults and write-downs on bank debts followed a three-stage process in most countries:

Reschedulings. At first, the banks and countries agreed on the rescheduling of principal for the following year-this on the expectation that interest rates would fall, global growth would resume, and countries could quickly return to full payment on their external debts. For example, the agreements reached with Argentina and Brazil in 1983 covered only 12 months; the agreement with the Dominican Republic, 13 months; and the agreement with Mexico, 28 months (reached in August 1983, it consolidated debt over the previous 15 months and the next 12 months) (see annex to this chapter). These agreements involved simply a delay in repayments, with interest accruing on the rescheduled debt, rather than any reduction in the debt burden.

This rescheduling was facilitated by the concentration of holdings of claims. For example, in the United States the top nine banks held more than 60 percent of major U.S. banks' assets in eight of the largest emerging market debtors (Kaletsky 1985). Initially, at least, such rescheduling operations allowed all sides to claim that default had been avoided. For policymakers in the industrial countries, this was a welcome fix, as many important industrial-country banks had very large exposure to developing countries, so that a default could threaten the solvency of industrial-country banking systems. For example, as of March 1984, nine money-center U.S. banks had loans totaling 179 percent of their equity in six developing countries with severe debt difficulties (Kaletsky 1985). Many debtor countries entered into a series of agreements with commercial banks to restructure debt (Mexico had eight in the 1980s; Argentina, Brazil, and the República Bolivariana de Venezuela each had four).

*Multiyear restructuring agreements.* As the 1980s wore on, the restructuring period grew longer. Multiyear restructuring agreements with commercial banks were introduced in 1984, which economized on time spent in negotiations and reduced the cost of rescheduled debt. But the debt problems remained unresolved, reflecting the failure of simply postponing repayment to address the debt burden, coupled with policy failures by some borrowers and recurrence of external shocks. By 1988, despite significant trade surpluses in many debtors, their nominal level of debt relative to income was as high or higher than it had been in 1982 (figure 3.16).

Moreover, debt continued to trade on secondary markets at a substantial discount to face value, confirming the market's skepticism that debt would ever be repaid in full.<sup>5</sup>

In September 1988, the secondary market price of 13 major debtors traded at an unweighted average of 44 cents on the dollar. The continued debt overhang was believed to constrain growth in the major indebted countries. Expectations that voluntary commercial bank lending would resume to the debtors who rescheduled debt service payments and undertook structural reforms (key elements of the Baker initiative—a U.S. government–led plan to allow countries to grow their way out of debt difficulties along with net new lending) were frustrated. Net commercial bank lending to the 17 countries involved in the Baker initiative averaged less than \$3 billion per year from 1985 to 1988.



Figure 3.16 Ratio of debt to gross national income for select countries, 1982 and 1988

The Brady initiative. The Brady initiative, supported with funds from the World Bank and the IMF, finally provided the framework for a reduction of the debt burden. From 1989 to 1995, 13 countries with \$191 billion in commercial bank debt completed debt and debt service reduction (DDSR) operations, which provided for the reduction of nearly 20 percent in the nominal value of commercial bank debt. The DDSR programs included a variety of instruments: buybacks at a discount, exchanges for discount bonds at market rates, par bonds at below-market interest rates, and in some cases, partial payment of arrears and new money bonds. The new obligations were generally securitized, that is, issued in the form of bonds and enhanced by collateral for principal and interest payments. As a result of debt reduction and, in many countries, some rise in growth rates, the average debt to gross national income ratios of the major debtors listed in figure 3.16 fell from 57 percent in 1988 to 43 percent in 1994.

#### Debt crises in the 1990s

Developing countries' access to bond markets increased as their problems with commercial bank debt declined. Net bond flows to developing countries rose from \$11 billion in 1991 to a peak of \$40 billion in 1997–98, before dropping with the fallout from the East Asian Crisis.

The rise in bond finance can be attributed to improved prospects and greater stability in many debtor countries; the opening of capital markets, which encouraged greater lending to domestic firms (including state enterprises); market innovations, such as derivatives and securitization, which facilitated greater risk sharing and hence a greater supply of capital; and the reduction of inflation in industrial countries during the 1980s, which made the supply of bond finance more attractive.

As in past episodes, however, the expansion of finance was accompanied by debt crises. Mexico (1994–95), East Asia (1997–98), the Russian Federation (1998), Brazil (1999 and 2002), Turkey (briefly in 1994 and 2000–01), and Argentina (2001–02) all suffered massive economic (and in some cases political and social) dislocations as either the government or the private sector struggled to meet its obligations. The economic cost was huge: output in the eight countries most directly affected by the financial crises of the 1990s fell by almost 3 percent during crisis years, compared with a rise of almost 5 percent in the years before and after the crisis.

Growing official support for countries in crisis. The most striking aspect of the strategy adopted to handle debt crises in the 1990s was a massive increase in official support, despite the fact that the threat posed by emerging-market financial crises to industrial-country banks had eased since the 1980s. Severe debt service problems were often met by financing packages from creditor governments and multilateral institutions, at times (for example, the Republic of Korea) combined with undertakings by commercial banks to roll over short-term credit lines. IMF disbursements jumped beginning in 1995, with the bulk of funds devoted to large rescue packages designed to restore financial stability in major debtors (figure 3.17). Since 1995, 10 major emerging markets have received IMF programs that exceeded 400 percent of quota, whereas 300 percent of quota had been set as a maximum in 1992, with exceptions allowed for extraordinary circumstances (Porzecanski 2002).

Three factors appear to have encouraged this strategy shift to more aggressive official intervention:

 Policymakers became concerned that crises affecting a few borrowers would spill over rapidly to many other securities markets,

Source: World Bank Debtor Reporting System.



Figure 3.17 IMF disbursements, 1984–2002

Note: Major packages are defined as those having disbursements in excess of \$1 billion. Source: International Monetary Fund.

including those in both the developing and developed world. Aggressive lending was thus a public good, designed to head off widespread contagion.

- The central role played by bond finance made it difficult to coordinate many diffuse market participants. Adding emergency funding was a way of keeping bond markets liquid at a time of severe selling pressure.
- Political and economic ties between creditor governments and major debtors had strengthened. This was especially important in the U.S.-led support for Mexico in early 1995.

The availability of official resources to refinance debt service has undoubtedly reduced the number of countries forced to declare formal default on their external debt. In this sense, the policy can be viewed as a success.

Legitimate concerns have been expressed about the extent of reliance on official finance during recent crises, however. Most important, the increasing openness of capital account transactions has raised the amount of official resources required to restore confidence.<sup>6</sup> This raises an inherent credibility problem, as a package large enough to reassure creditors completely may have to be so large as to be politically untenable for the major industrial countries. Moreover, such large official financing packages are more likely to increase moral hazard and thus encourage greater risk taking by lenders.<sup>7</sup> Also, as a result of the official support, the country may be even more vulnerable because of the larger amount of inflexible debt on its books.

Market-based approaches to resolving crises. The task of ensuring that private-sector creditors contribute to resolving crises has become more complicated due to the increasing importance of bonds in emerging market debt. During the 1980s debt crisis, holders of 85 percent of a country's debt could be represented by 15 banks with powerful incentives to cooperate, including similar institutional interests, the desire to secure future business with the debtor, a reluctance to oppose their regulators, and the legal obligation to share the proceeds of any litigation with all other creditors (Krueger 2002a).8 By contrast, bondholders are more numerous and may be anonymous. They generally do not have long-term relationships with debtors or regulators, and their incentive to sue is greater because they often do not have to share the proceeds of litigation. Thus the potential has increased for coordination failures and disorderly debt restructurings, characterized by competition among creditors to collect and legal disputes among creditors and between creditors and the debtor.

A disorderly process can increase the economic disruption suffered by the debtor economy, further impairing the debtors' ability to pay and thus reducing potential payments to creditors (Chari and Kehoe 1998, Miller and Zhang 1998). The potential for an extremely costly default can lead insolvent debtors to delay formal default, for example by increasing the amount of debt at extremely short maturities, forcing domestic institutions subject to regulatory authority to lend to the government, and drawing down reserves to dangerously low levels. Such measures increase the costs to the debtor's economy when default finally occurs. Disorder also can lead to an unpredictable and inequitable allocation of payments to creditors, thus increasing uncertainty and reducing the supply of finance (Cornelli and Felli 1994). Moreover, the likelihood of a disorderly restructuring process can reduce incentives for creditors to participate in necessary restructurings by holding out the promise of higher returns through legal action. Lipworth and Nystedt (2001) argue that the shift from commercial bank lending to Eurobonds following the 1980s debt crisis in part occurred

because creditors believed eurobonds would be extremely difficult and costly to restructure.

While the dangers of a disorderly restructuring are real, recent negotiations of bonded debt have been resolved without great difficulty despite the potential for litigation, the requirements of unanimous consent by creditors, and the problems involved in identifying and coordinating the actions of thousands of bondholders. Pakistan (1999), Ukraine (1999 and 2000), and Argentina (2001) undertook voluntary bond exchanges, under which some form of sweetener was included to enhance investor participation, which reached almost 99 percent in Pakistan and Argentina, and 85 percent in the 2000 Ukraine operation. Some observers have cited these examples in claiming that market-based approaches are efficient ways to address sovereign defaults (Roubini 2002).

Despite these successes, there are two reasons why market-based approaches may not deal efficiently with future crises:

- These bond exchanges typically covered just a few bond issues, in a few cases with relatively small amounts of debt (Bolton 2002). The Pakistan issue had a relatively homogeneous investor base that facilitated negotiations. It has not been shown that bond exchanges can be used to deal with a default covering very large amounts of debt and involving multiple instruments.
- Many of these operations did not reduce the present value of the debt (Chuhan 2001), and the Pakistan and Ukraine deals provided significant mark-to-market gains for creditors (substantial upfront cash was included in the Ukraine operation). It is not clear that the operations have restored the solvency of the countries involved (Roubini 2000) (by now the failure of the Argentine operation has become clear). Thus these operations do not demonstrate that private negotiations have achieved an efficient resolution of crises involving bonded debt that restored debt sustainability.

Ecuador and the Russian Federation implemented concerted bond restructurings in August of 2000 that did involve debt reduction—an average of 40 percent in Ecuador and 37 percent in the Russian Federation (see table 3.4). Creditor participation in both operations was high (97 percent in

Table 3.4	Select	bond	exchanges,	1999-	-200 <sup>°</sup>
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	Voluntary			Concerted		
	Argentina	Pakistan	Ukraine	Ecuador	Russia	
Debt eligible	29.5	0.6	2.7	6.7	31.8	
Debt reduction (%)	0.0	0.0	0.0	40.0	37.0	
Amounts exchanged	29.5	0.6	2.3	6.6	31.8	
Exchange bonds issued	30.4	0.6	2.3	4.0	21.1	

Source: Chuhan 2001.

Ecuador). The Ecuador operation was particularly interesting because negotiations took less than a year (much shorter than many of the bank debt restructurings), and the legal advisor was able to cram down the terms on holdouts. While Ecuador's bonds required unanimity to change payment terms, only 51 percent agreement was required to change the nonfinancial terms, so "exit consent" clauses were used to change the terms of the old bond and make them less appealing to potential holdouts. Despite the existence of acceleration and cross-default clauses, creditors did not take legal action to enforce their rights, presumably because litigation is costly and sovereign assets are relatively difficult to attach, despite the increased use of waivers of sovereign immunity for commercial transactions (Roubini 2000). Thus, the Ecuador case does provide some comfort that the restructuring of bonded debt, which involves a write-down of claims, does not have to be disorderly.

Nevertheless, recent legal cases show that the potential for a more disorderly restructuring process remains. Earlier attempts to buy distressed debt and sue for full payment were generally unsuccessful. Lawsuits were filed during the restructuring of Latin American bonds during the late 1980s and early 1990s, but they achieved little success. Lawsuits also have been filed against Brazil for nonpayment of commercial debt (Priest 2001), with little result.

More recent cases have shown that such a strategy may be profitable. A fund bought some \$20 million in Peruvian defaulted debt at a discount of almost 50 percent and obtained court injunctions to prevent the government from repaying other creditors until its claims were settled (ICN 2000). After a New York court ruled in its favor in 2000, Peru faced the potential for a breakdown of the Brady restructuring, which would have further deepened the country's economic difficulties. The government then settled the case, paying the fund

a substantial premium over what other creditors received. The same fund has also secured significant payments by suing, or threatening to sue, Panama and Vietnam (Brady Forum 2000). Similar issues arise regarding the restructuring of debt in the Democratic Republic of the Congo (Krueger 2002b). There were reports last year that vulture funds were active in buying Argentine securities (Priest 2001). Some commentators expect "an avalanche of lawsuits against the Argentine government," particularly if foreign bondholders are not provided the same terms as domestic bondholders (Latin American Advisor 2002). Thus, there remains some potential for the disruption of future restructurings of bonded debt.

## The search for better crisis management

Reluctance to rely on the provision of large amounts of official finance to resolve debt service difficulties, coupled with potential problems in coordinating bond creditors, have led to increased interest in improving the framework for the restructuring of bonded debt. Two proposals have been the focus of recent debate: the greater use of collective action clauses to facilitate coordination, and international agreement on a legal framework similar to domestic bankruptcy law. In addition, work is continuing on the development of a voluntary code of conduct that would help improve the environment for the resolution of debt difficulties (Krueger 2003).

#### Collective action clauses

Collective action clauses are provisions of bonds that specify procedures for selecting bondholders' representatives in debt negotiations and provide for the modification of terms on bonds by a substantial majority. They generally prohibit individual bondholders from initiating litigation and require that any funds recovered through litigation be shared with all creditors (Eichengreen 2002). Greater use of collective action clauses could help impose majority-supported debt restructuring agreements on minority creditors, thus reducing the probability of a disorderly default. Bonds issued under U.K. law (which a few years ago accounted for just under 50 percent of the stock of emerging market eurobonds; see Haldane 1999) already have provisions for collective representation, majority, and sharing of repayments. However, bonds issued under U.S. law do not automatically have such provisions.

Empirical research indicates that collective action clauses have either no impact or a positive impact on the terms on lending. Eichengreen and Mody (2000) found that bonds subject to U.K. governing law (which thus include collective action clauses) had lower spreads than bonds subject to U.S. law for more credit-worthy issuers, who appear to benefit from the potential for a more orderly debt restructuring. In contrast, less creditworthy issuers may pay higher spreads on bonds with collective action clauses. With higher default risk, investors may be more sensitive to the potential for moral hazard implied by making defaults more orderly. However, Becker, Richards, and Thaicharoen (2001) find that neither more nor less creditworthy issuers are charged higher spreads in bonds with collective action clauses.

Collective action clauses could play an important role in facilitating debt negotiations. They provide important protections for the rights of the majority of creditors within a single instrument to achieve agreement with the debtor when a restructuring of debt is necessary. At the same time, greater use of collective action clauses is unlikely to adversely affect the market for sovereign debt. No radical change to existing rules would be required to encourage collective action clauses. Mexico's recent issuance of a bond with a collective action clause is a positive signal that is likely to encourage other investment-grade developing countries to follow suit. And efforts to develop model language for these clauses should facilitate their adoption.

Despite all of these positive aspects, however, two factors suggest collective action clauses are, at best, only part of a solution:

 Collective action clauses played only a marginal role in recent bond restructurings. They were invoked in some of Ukraine's bonds, which may have helped to bind holdout creditors. On the other hand, Pakistan's bonds did have collective action clauses, but they were not used. And bonds issued by Ecuador and the Russian Federation did not have collective action clauses, but holdouts did not disrupt the deal (Roubini 2000). Thus their contribution to resolving future disputes over debt restructurings is uncertain.<sup>9</sup>

Collective action clauses may not provide sufficient protection against a disorderly restructuring. They only bind acceptance of a debt negotiation by creditors with the same instrument, so they would not help resolve disputes across instruments or classes of creditors. That is, they would not aggregate claims across creditors. Nor would they address the large portion of the existing stock of debt that does not include collective action clauses. And it may be difficult to get some issuers (particularly issuers rated below investment grade) to include such clauses in bond instruments for fear that this would signal the intention to default and erode the issuer's competitive position in the international debt markets.

#### A sovereign debt restructuring mechanism

The IMF recently proposed a formal bankruptcy procedure (the sovereign debt restructuring mechanism, or SDRM) to enable an insolvent government to seek legal protection from external creditors while negotiating a restructuring of its debt.<sup>10</sup> The proposal is in part modeled on corporate bankruptcy law (see box 3.4), and is still being refined. Only the broad outlines of the proposal are thus discussed here.

The SDRM would be activated at the sovereign's request (Krueger 2002b). The SDRM would provide a legal mechanism for binding a minority of creditors to a debt restructuring agreed upon between a supermajority of creditors and the debtor. New finance would be shielded from restructuring. At the same time, creditor interests would be protected, including the prohibition of payments to nonpriority creditors and sanctions against abuse of the mechanism.<sup>11</sup> It is envisioned that this framework would be invoked rarely and would be applied only to insolvent (as opposed to illiquid) debtors. It would gain force of law through an amendment to the IMF's Articles of Agreement, which requires agreement by three-fifths of the IMF's members holding 85 percent of voting power, and which would be binding on all members.

Approval of the final restructuring would be vested in the debtor and a supermajority of creditors. Disputes could be adjudicated by an independent dispute resolution forum that also would register creditor claims and oversee voting. The role of the IMF, which is both a major creditor and an organization controlled by creditors (Hurlock 1995), would be limited to avoid a conflict of interest. The IMF proposal would not envision the restructuring of multilateral credits, since these are designed to provide a public good rather than to gain commercial advantage.

Potential advantages. The SDRM would address important issues that can impede the resolution of sovereign debt crises. The provision that minority creditors would be bound to a decision by a supermajority of creditors, and for the sharing of proceeds from litigation, would virtually eliminate the incentive for creditors to hold out or undertake legal action that would disrupt a debt restructuring agreement. Thus creditors and debtors would find it easier to reach agreement on a restructuring and ensure that the agreement is implemented. Insolvent debtors would have less incentive to take costly measures to avoid an inevitable default, which could reduce the cost of future defaults. The SDRM would not make default costless. however. nor necessarily reduce the incidence of crises. But it could play a role in encouraging earlier recognition, and thus less costly resolution, of unsustainable debt positions.

To the extent that the SDRM reduces the incentives for insolvent borrowers to delay default, it would also reduce the pressure on international financial institutions to provide emergency finance for insolvent debtors. Thus private lenders would be forced to evaluate the prospects for repayment with a reduced likelihood of official financial support, meaning the costs of borrowing would more accurately reflect actual risks.

The SDRM also could facilitate the attraction of new financing from private sources (referred to as "debtor in possession finance" in domestic bankruptcy procedure) by giving seniority to new loans. Even if the SDRM were rarely invoked, it would encourage negotiations between creditors and debtors and thus facilitate more orderly resolution of debt service difficulties.

Potential disadvantages. The SDRM also has potential drawbacks. An important point is whether radical changes to the international framework for treating sovereign defaults really are necessary to avoid disorderly debt restructuring for insolvent debtors. Recent negotiations over

# Box 3.4 Sovereign debt restructuring and domestic bankruptcy law

F acilitating coordination among creditors is an important goal of bankruptcy law. Bankruptcy legislation typically provides for: (a) a stay on legal actions against the debtor to avoid a grab race for assets that lowers the return to creditors as a whole; (b) liquidation or maintenance of the firm as a going concern, depending on which course provides the greatest return to creditors; (c) seniority for new finance, where the firm continues to operate; (d) imposition of a majority-agreed reorganization on potential holdouts, which facilitates a speedy resolution; and (e) monitoring or replacement of management, to safeguard creditor interests against asset stripping and insider payments.

At the same time, these steps to protect creditor interests provide debtors with the potential to undertake strategic defaults: a debtor may seek protection from its creditors through bankruptcy, even though the debtor has the resources to pay.

#### Balancing the interests of creditors and debtors

A key goal of domestic bankruptcy law is to maintain an appropriate balance between the interests of debtors (becoming free from unpayable debts) and the interests of creditors (maximizing the value of the firm after bankruptcy and ensuring that the incentives to repay debt are maintained).

Considerable differences exist among legal systems in the balance between creditor and debtor interests. Bankruptcy codes have changed over time; no approach to bankruptcy law is clearly superior to all others. In the United States, the treatment of bankrupt railroads in the 19th century evolved from a liquidation procedure to debt reorganization, which preserved the value of the railroad as a going concern. During the 1930s, Chapter 10 of the Chandler Act mandated an administrative model for bankrupt firms, augmenting the power of an independent trustee at the expense of both debtors and creditors, and frequently leading to liquidation. Firms tended to avoid Chapter 10 in favor of Chapter 11, which provided greater potential for maintaining the firm as a going concern. The 1978 Bankruptcy Act, which facilitated the use of the more debtor-friendly provisions of Chapter 11, may have contributed to the boom in the corporate bond market in the 1980s. By contrast, the administrative process under the U.K. bankruptcy law provides more leverage to creditors, who appoint a receiver to take control of the firm. In France and Germany, where the court appoints an administrator to run the firm, bankruptcy institutions tend to be

more debtor friendly. In France, maintaining employment is a stated goal.

#### Sovereign governments are not firms

Differences in the nature of sovereign governments versus firms have important implications for the balance of creditor versus debtor interests. Sovereigns cannot be liquidated and the ability to seize their assets is limited. Thus there is no lower limit to the return to creditors (the liquidation value of the firm in corporate bankruptcy), and creditors' leverage in defining the reorganization agreement and ensuring a speedy resolution is less than in corporate bankruptcies. Moreover, sovereigns cannot be taken over by creditor-imposed management. Thus, creditors cannot ensure that the government's policies are consistent with maximizing their return. The absence of these safeguards for creditor rights is a major reason why many creditors believe that the SDRM would provide excessive leverage to debtors, as compared with the position of firms under domestic bankruptcy legislation.

Other differences between sovereigns and firms provide greater leverage to creditors than in corporate bankruptcy. Sovereigns are ultimately accountable to their people for domestic economic activity. Suspensions of debt service can be met by a flight from domestic assets, resulting in a massive exchange rate devaluation, a banking crisis, and perhaps widespread corporate bankruptcy. Capital controls and bank holidays may be inadequate means of addressing such shocks to the financial system. These economic costs often lead to the replacement of political leadership following a result of a crisis. Thus, sovereigns may face sufficient incentives to repay debt, even if a sovereign bankruptcy system improved their leverage vis-à-vis creditors.

Municipal bankruptcy may provide a closer analogy than corporate bankruptcy to the issues facing the SDRM. Like sovereign nations, municipalities also cannot be liquidated. In the United States the court cannot interfere in a municipality's political or governmental powers. Modeling a sovereign bankruptcy framework on U.S. municipal bankruptcy laws would tend to improve the leverage of debtors. For example, stakeholders such as citizens' groups and labor unions (who are unlikely to have creditor interests at heart) can be represented in bankruptcy procedures, and their interests may be taken into account by the court.

Adopting this approach to sovereign bankruptcy would likely tilt the balance too far in the direction of debtor interests. In the U.S. context, creditor rights can be

### Box 3.4 (continued)

protected by state oversight, which can limit municipalities' ability to declare bankruptcy or shelter revenues from being used as debt service during bankruptcy. This constraint would not be available in sovereign bankruptcy. Thus relying on the municipal bankruptcy model could lead to arbitrary infringements of creditor rights, as the court would have a larger role in shaping the debt restructuring plan. In contrast, the SDRM is a relatively marketfriendly procedure, with the debt restructuring plan the outcome of bargaining between the creditors and debtors.

Sources: Bolton 2002; Kreuger 2002b; Miller and Zhang 1998.

bond restructurings have largely taken place without disruption and with little difficulty in coordinating creditor positions or reaching agreement between debtor and creditors. As noted above, these restructurings often failed to restore solvency and involved relatively few instruments, and recent legal cases have raised concerns regarding the potential for greater disruption in future negotiations. Thus while it is not clear that recent restructurings are useful precedents for a massive default by a major creditor, so far the historical record does not demonstrate that bonded debt restructurings are necessarily more disruptive than commercial-bank debt restructurings.

The availability of orderly bankruptcy through the SDRM could encourage "strategic defaults," suspensions of debt service by countries with the means to repay. If a solvent debtor can choose to default and use the SDRM as a shield against legal redress, then creditors would be less willing to provide funds in the first place (see box 3.5 for views on the sanctions that make sovereign borrowing feasible). However, creditors could refuse to support a restructuring proposal (or a proposal relating to priority financing) by a debtor they considered solvent (IMF 2002). Moreover, the current proposal would enable creditors to terminate the use of the SDRM. Thus, the ability of solvent debtors to use the SDRM as a shield against making debt-service payments is limited.

The SDRM could increase investors' uncertainty regarding their legal rights in case of a crisis. Protection of creditor rights (for example against running down reserves or removal of collateral) may be weak, almost certainly weaker than provided under domestic bankruptcy proceedings. For example, in the United States the court has the power to replace management of firms under Chapter 11 of the bankruptcy code and oversee financial manipulations of municipalities subject to Chapter 9 (Eichengreen 2002).

The SDRM could increase investor uncertainty regarding the outcome and fairness of negotiations. An investor might be willing to agree to a collective action clause that facilitates restructuring of an individual bond by a majority of the bondholders, but be reluctant to commit to a restructuring dictated by a majority of all creditors. The investor might lack knowledge about the composition and interests of all creditors and the terms on other instruments, and be more uncertain about the outcome of a debt negotiation involving all creditors. An investor might be concerned that larger creditors could impose a restructuring that serves their longer-term interests (for example, maintaining relationships with the debtor) rather than gains the maximum from current negotiations. Investors also could worry that parties connected to the sovereign could purchase debt in an attempt to influence the terms of the restructuring (although presumably this practice would be open to challenge under the mechanism envisioned to adjudicate disputes). This potential underlines the importance of increasing the information on the universe of a country's creditors in the context of bond offerings.

Defining the debts potentially covered by the mechanism would be controversial and could distort market valuation of different instruments. Including domestic debt is not envisioned, as the government already has the legal tools required to minimize the collective action problems inherent in restructuring debt subject to the jurisdiction of domestic courts (IMF 2002). However, excluding domestic debt in a world of open capital accounts could lead foreigners to escape the SDRM by

### Box 3.5 The cost of default

It is difficult to identify the nature and extent of the costs that are directly attributable to the decision to stop payments on external debt. The declines in output associated with debt crises are typically huge. Hutchison and Neuberger (2001) estimate that currency and balance of payments crises over the 1975–97 period reduced output by about 5–8 percent, even after controlling for other determinants of growth. These costs reflect several factors, including the endogenous macroeconomic responses to the boom/bust cycle that usually characterizes debt crises.

There is indirect evidence that defaults are costly, in that borrowers suffering debt service difficulties and with little hope for voluntary access to additional external loans nevertheless make significant net transfers to their creditors, even during times of severe economic stringency. Thus Latin American debtors that rescheduled during the 1980s paid more than 3 percent of their annual output to private creditors for five years following a rescheduling agreement, and emerging market debtors on average paid more than 2 percent of output for three years after rescheduling, in both the 1980s and 1990s (see figure below). (The net transfer from countries that avoided a crisis and did not enter into a rescheduling agreement was close to zero in both decades.) Presumably these payments reflected the desire to avoid some penalty if debt service payments ceased entirely.

The penalties for default that underpin economists' models of sovereign borrowing include restricted access to

#### Net transfers to private creditors

Percentage of GDP, 3, 5, and 10 years after rescheduling



*Note:* LAC is Latin America and the Caribbean. *Source:* World Bank Debtor Reporting System.

future loans (Eaton and Gersowitz 1981), foreign seizure of assets or other interruptions to international trade (Bulow and Rogoff 1998), and a creditor run that precipitates a crisis and severe loss of output (Dooley 2000a):

- Losing access to future loans seems like a weak incentive for maintaining debt service during a crisis. Bulow and Rogoff (1990) find that pure reputation-based debt is not sustainable (that is, the cost of default is too low to provide creditors with adequate assurance that debt will be repaid) under a broad range of assumptions, unless the loss of reputation affects more than simply credit markets. For example, governments are likely to place value on their political ties to other countries, making them reluctant to default (Rogoff 1999).
- The seizure of assets and making it difficult to trade is potentially a severe sanction that could encourage repayment of debt. However, such actions are rarely observed (Dooley 2000b), although cases have been brought to seize sovereign assets (Miller and Zhang 1998). Only a small proportion of a state's assets is usually available to creditors, as most are located on the sovereign's territory, while exports can be transferred to other owners before they leave the debtor country (Miller and Zhang 1998).
- The potential for default to cause severe financial disruption is clear. If debtors and creditors cannot quickly renegotiate contracts, then financial intermediation within the country may break down following a default. Even if governments can discriminate against external creditors in favor of domestic creditors, the former may precipitate a run on the currency, requiring the imposition of capital controls. In turn, capital controls will make it difficult for banks and corporates to service external debts, leading to domestic bankruptcies. Moreover, a default on external debt, particularly one accompanied by limits on access to foreign exchange, is likely to impair overall confidence in the government and the banking system. The growing participation in external borrowing of developing country residents and businesses makes it very difficult to cease payments to foreigners without imposing a considerable cost on the domestic economy. In this view, the output loss from the breakdown of financial arrangements is the cost of default, and it is this threat that makes sovereign borrowers seek to service their debts, and thus makes sovereign borrowing possible.

lending to the government through domestic residents. Also, governments have felt compelled during some crises to assume the external debt of banks and private corporations, and the treatment of such liabilities may become an important issue. Some flexibility in the treatment of debt would probably be beneficial, but that may not be consistent with a consistent legalistic approach. More broadly, defining what debts are covered in the SDRM is likely to encourage market reactions to lend through other channels. One might expect greater reliance on securitized debt, where the collateral is outside the control of the government (for example, future flow receivables where receipts are paid into an escrow account).

Implementation issues. The SDRM may face challenging implementation problems. The difficulties in reaching agreement on a change in the IMF Articles that would attempt to override domestic law should not be underestimated. Essentially, the SDRM faces considerable opposition, but near-consensus is required for passage. Even if political agreement could be reached, there is some uncertainty whether domestic courts would recognize that the country's treaty obligations (as reflected in the Articles) would override domestic law, particularly in countries that have not approved the change in the Articles. Moreover, the judges appointed to adjudicate disputes would not be accountable to any institution, raising questions about the legitimacy of their decisions (Eichengreen 2002). Thus, the SDRM may not mean the end of litigation, while such disputes could foment greater uncertainty about the ultimate outcome of debt negotiations.

The transition costs of moving toward the SDRM also need to be considered. The current

period of reduced flows to emerging markets is likely due to the global economic slowdown and the problems facing some of the major emerging markets. But some creditors may be waiting to see how the controversy over the SDRM is resolved before committing substantial funds. A speedy resolution of this issue is necessary to clearly define the legal framework facing sovereign loans.

Weighing the potential benefits versus the costs of the SDRM is obviously difficult. And this trade-off may vary considerably, depending on the ultimate form of the proposal that will be submitted for approval. One issue worth emphasizing, which is not often addressed in either the academic or official literature on dealing with sovereign bankruptcy, concerns how the implications of financial crises for income distribution and poverty should affect one's view of this trade-off. Debt crises have severe implications for the poor, who had no role in making decisions on borrowing.12 Whatever the relative cost of crises for different income groups, it is clear that the total cost to the economy is not fully internalized by the borrowers. Thus, institutions concerned about poverty may view the potential costs and benefits of changes in the international financial architecture governing sovereign borrowing very differently from creditors and sovereign borrowers. It may be preferable to undergo considerable expense to reduce the costs of default, even if uncertainty exists concerning whether these steps are necessary and whether they have the potential to reduce the supply of finance by providing too much leverage to sovereign debtors. These concerns are likely one reason for the widespread support for the sovereign bankruptcy proposal among groups concerned about distributional issues.13

# Annex: Commercial Debt Restructuring

HIS ANNEX PROVIDES A TABULATION OF commercial-debt restructuring activities of developing countries since 1980. It does not include restructuring undertaken voluntarily by sovereigns for the purpose of liability management, such as exchanging existing debt for new fixed-income securities. However, it does include debt buybacks by countries undertaken to preempt formal restructuring of debt or reduce debt hangovers, and aided by official financing.

In 2002, three countries defaulted on their foreign-currency debt. The most prominent default was by Argentina, which formally suspended payments on its public foreign debt of \$95 billion-the largest such sovereign default ever. Argentina also defaulted on \$2.2 billion of local-currency bonds. While the moratorium on public foreign debt was announced in November 2001, the default was not formalized until January 2002. As of February 2003, formal negotiations to restructure Argentina's foreign-currency debt had not commenced. In April 2002. Gabon defaulted on \$30 million worth of bank loans that had been restructured in 1994 under the auspices of the London Club of commercial creditors. The third country to default was Moldova (in June 2002), which for the second time defaulted on a \$75 million bond issued in 1998. The outstanding amount on the bond had declined to \$40 million and, after the default, was restructured to mature in 2009 instead of 2002. In addition.

Madagascar, which remains in default on its foreign-currency debt, defaulted on about \$200 million worth of local-currency debt in 2002.

Two countries restructured their previously defaulted debt in 2002. Indonesia completed the restructuring of bank loans worth \$1.5 billion, as stipulated under the agreement with the Paris Club of official creditors in April 2001. In August, Seychelles cleared about \$70 million in arrears owed to commercial banks.

The International Development Association (IDA) created a Debt Reduction Facility in 1989 to help low-income countries manage their commercial debt burdens. Although there were no IDAsponsored debt buybacks in 2002, three countries were at an advanced stage of buyback procedures. In April 2001 Tanzania completed a first buyback operation in which \$156 million of debt was extinguished. A second and final buyback is expected during 2003. Tanzania's buyback is sponsored by the IDA Debt Reduction Facility and the governments of Germany and Switzerland. Cameroon reached an agreement with the London Club, under the auspices of the IDA Debt Reduction Facility, to buy back about \$600 million in eligible debt (including interest arrears) at a price of 14.5 percent of the principal outstanding. The financing proposal for this deal will soon be submitted to the IDA Board for consideration. Negotiations for Mozambique's debt buyback were also in progress.

#### How to use these tables

The dates shown are those of agreements, not of missed payments. Deferment refers to short-term rollover of current maturities. Rescheduling refers to consolidation of debt into new long-term obligations. It may include arrears as well as future maturities. Interest and short-term debt are included only if indicated in country notes. New money refers to loans arranged for budgetary or balance-of-payments support in conjunction with debt rescheduling, usually in proportion to each creditor bank's exposure. This is sometimes referred to as concerted lending. Short-term credit maintenance refers to understandings by banks to maintain the size of existing trade or other short-term credit facilities, arranged in conjunction with debt rescheduling. The figures for Brady deals include the face value of buybacks and of all debt exchanges. The Brady deals were also known as officially supported debt- and debt-service-reduction agreements.

#### Albania

Bank debt restructurings

July 1995: Restructuring of \$501 million due to commercial banks. Of the total, \$371 million was bought back for \$96.5 million, funded by grants from IDA Debt Reduction Facility and other donor countries, and \$130 million was converted into long-term bonds.

#### Algeria

- Bank debt restructurings
- Feb. 1992: 1991–93 Financing Facility, designed to refinance liabilities due between October 1991 and March 1993. Tranche A covered debts with a maturity of 2 years or more and was repayable in 8 years including 3 years grace bearing interest at London Interbank Offered Rate (LIBOR) + 1½ percent. Tranche B covered debts with a maturity of more than 360 days and less than 2 years and was repayable in 5 years including 3 years grace.
- June 1995: Rescheduling of \$3.2 billion in maturities starting March 1994.

#### Argentina

- Bank debt restructurings
- Jan. 1983: Bridge loan (\$1.3 billion).
- Aug. 1983: New money loan (\$0.5 billion).
- Aug. 1985: Rescheduling agreement of maturities in January 1982–January 1986 (\$9.8 billion); new long-term money (\$3.6 billion); maintenance of short-term credit lines (\$3.1 billion).
- Aug. 1987: Revised restructuring agreement covering amounts under 1983 and 1985 agreements and loans falling due subsequent to those arrangements (\$24.3 billion); new long-term money (\$1.3 billion); maintenance of short-term credit lines (\$3.5 billion).

Brady deal

April 1993: Outstanding stock of \$19.3 billion exchanged for either (i) 30-year bonds yielding a market interest rate (LIBOR + 13/16 percent) at a 35 percent discount, or (ii) 30-year par front-loaded interest reduction bonds (FLIRBs)—(first year interest rate 4 percent, rising to 6 percent in year seven and remaining there until maturity. Both bonds were collateralized for principal and contained rolling 12 month interest guarantees. Agreement also included \$9.3 billion of past due interest; \$0.7 billion was paid in cash at closing; \$400 million was written off; the remainder was exchanged for bonds (17-year maturity), repayable in rising installments and yielding LIBOR + 13/16 percent.

Bond market defaults and restructurings

Jan. 2002: Announcement of a moratorium on public foreign debt in December 2001. In January 2002, formalization of default on \$95 billion of foreign currency bonds and default on \$2.2 billion of local currency bonds. The local currency bonds were exchanged for new debt, which carried covenants less favorable than the original debt. Bonds maturing before 2010 were extended by three years, and the coupon was reduced to 7 percent or less. As of January 2003, the foreign currency bonds were still to be restructured. Stand-by credit facility (\$2.98 billion) by the IMF for transitional financial support until August 2003.

#### Bolivia

- Bank debt restructurings
- Dec. 1980: Deferment of \$200 million of maturities (including short-term debt) in August 1980-March 1981.
- April 1981: Rescheduling of \$411 million of maturities (including debt deferred in 1980) in April 1981-April 1983.
- July 1988: Commercial bank debt retired through a buyback (\$272 million) and a local currency bond exchange (\$72 million). This was a rolling program and applied only to previously deferred loans.
- May 1993: Buyback of \$170 million commercial bank debt, funded by grants from IDA Debt Reduction Facility and other donor countries. Brady deal
- July 1992: (i) Cash buyback at 84 percent discount; (ii) Collateralized interest-free 30-year bullet-maturity par bonds; (iii) Short-term discount bonds (84 percent) convertible on maturity into local currency assets at a 1:1.5 ratio, exchangeable into investments for special projects. Past-due interest canceled under all options. Value recovery clause was based on price of tin.

#### **Bosnia and Herzegovina**

Bank debt restructurings

Dec. 1997: London Club Agreement to restructure \$1.3 billion of principal and past-due interest owed to commercial banks. Past due interest of \$700 million was written off. Eligible principal of \$600 million was exchanged for \$400 million of uncollateralized discount bonds. 37.5 percent of the new bonds carried a 20 year maturity, including 7 years' grace and stepped-up interest rates rising from 2.0 percent in years 1–4 to LIBOR + 13/16 in years 11–20. Servicing on 62.5 percent of the new bonds was linked to economic

performance. The country was not required to make principal or interest payments for the first 10 years. After that the country was required to make debt service payments if per capita income exceeded \$2,800 for two consecutive years. Per capita income in 1997 was estimated at \$1,079.

#### Brazil

Bank debt restructurings

- Feb. 1983: Rescheduling agreement of \$4.8 billion of maturities January 1983–January 1984; new long-term money (\$4.2 billion); maintenance of short-term credit lines (\$15.7 billion).
- Jan. 1984: Rescheduling agreement of \$5.9 billion of maturities in January 1984–January 1985; new long-term money (\$6.5 billion); maintenance of short-term credit lines (\$15.1 billion).
- July 1986: Deferment of \$9.6 billion and rescheduling agreement of \$6.6 billion of maturities in January 1985–January 1986; maintenance of short-term credit lines (\$14.7 billion).
- Nov. 1988: Rescheduling agreement of \$61.5 billion of maturities in January 1987–January 1994; new long-term money (\$5.2 billion); maintenance of short-term credit lines (\$14.8 billion). Also included a broad package of creditor options.
- July 1992: Clearance of interest arrears as of December 31, 1990. Cash payment during 1992: \$863 million. When term sheet concluded for long-term debt, the balance was to be converted into 10-year bonds (3 years grace), bearing market interest rates.
- Brady deal
- April 1994: Four components of debt were restructured totaling \$48 billion: (i) debt to foreign banks under the 1988 multiyear deposit facility agreement (\$32.5 billion); (ii) debt to Brazilian banks under the multiyear deposit facility agreement; (iii) debt resulting from the 1988 new money facilities (\$8.1 billion) and (iv) interest arrears accruing from 1991 to 1994 (\$6.0 billion). The first category of debt was restructured following a 6-choice menu: (i) discount bonds, 35 percent discount, 30-year bullet maturity yielding LIBOR + 13/16 percent with principal collateral and a 12-month rolling interest guarantee (\$11.2 billion); (ii) par bonds with a reduced fixed-rate interest (yielding 4 percent in the first year and gradually rising to 6 percent in year seven), 30-year bullet maturity, also with principal collateral and a 12-month rolling interest guarantee (\$10.5 billion); (iii) front-loaded interest reduction bonds (\$1.7 billion), with interest rising from a fixed rate of 4 percent in year one to 6 percent in years five and six and then reverting to LIBOR + 13/16 percent from year seven to maturity. 15 years maturity including 9 years grace, 12-month rolling interest guarantee; (iv) C-bonds, par reduced interest rate bonds with capitalization of interest (\$7.1 billion), with repayment terms of 20 years maturity including 10 years grace, interest beginning at 4 percent and the applicable rates in the first 6 years being capitalized, no collateral; (v) conversion bonds (\$1.9 billion) combined with new money bonds in a 1:5.5 ratio, interest is LIBOR + 7/8 percent, terms are 18 years maturity including 10 years grace for the conversion bonds and 15 years including 10 years grace, interest reduction loan with capitalization, maturity of 20 years including 10 years grace, interest reduction loan with capitalization, maturity of 20 years including 10 years grace, interest reduction loan with capitalization.

#### Bulgaria

Brady deal

July 1994: Creditors agreed to restructure \$8.3 billion in public external debt, including about \$2.1 billion in passed-due interest (PDI). The menu for the original debt included: (i) buyback at 0.25 cent per US Dollar (\$0.8 billion); (ii) discount bond, 50 percent discount on face value (30 years bullet maturity, market rate, \$3.7 billion), the discount bonds were collateralized for principal; (iii) FLIRBs. 18 years maturity, 8 years grace interest beginning at 2 percent, rising to 3 percent in the seventh year and thereafter LIBOR + 13/16 (\$1.7 billion). The FLIRBs have one year's interest rolling interest guarantee. Interest arrears were cleared with a cash payment of about 3 percent, a buyback (\$0.2 billion), a write-off of \$0.2 billion, and the issuance of PDI par bonds (\$1.6 billion) with a 17 year maturity, including 7 years grace and a yield of LIBOR + 13/16 percent.

#### Cameroon

Bank debt restructurings

May 2002: Buyback of \$600 million (including interest arrears) of commercial bank debt on which the country has been in arrears since 1985, 14.5 percent of the principal amount due.

#### Chile

- Bank debt restructurings
- July 1983: Rescheduling agreement of \$2.1 billion of maturities in January 1983–January 1985; new long-term money (\$1.3 billion); maintenance of short-term credit lines (\$1.7 billion).
- Jan. 1984: Consolidation of short-term debt of \$1.2 billion.
- June 1984: Provision of new long-term money (\$0.8 billion).
- Nov. 1984: Short-term debt rolled over to June 30, 1985.
- Nov. 1985: Short-term trade credit rolled over to 1990. Rescheduling agreement of \$3.9 billion of maturities in January 1985–January 1988; new long-term money (\$1 billion); maintenance of short-term credit lines (\$1.7 billion).
- June 1987: Rescheduling agreement of \$9.7 billion of maturities in January 1988–January 1992; Maintenance of short-term credit lines (\$1.7 billion).
- Aug. 1988: Interest spread reduced to 13/16 percent. Also cash buybacks (\$439 million).
- Dec. 1990: Rescheduling agreement of \$4.2 billion of maturities in January 1991–January 1995, including previously rescheduled debt; new long-term money (\$0.3 billion). New money bonds not tied to existing banks' exposure.

#### Congo, Republic of

#### Bank debt restructurings

- Oct. 1986: Agreement in principle, but never concluded, to restructure 1986–88 maturities, repayable in 9 years including 3-year grace, bearing interest at LIBOR + 2% percent. Approximately \$200 million of debt would have been restructured. In addition there was a new money provision of \$60 million.
- Sept. 2002: Debt rescheduling agreement with Paris Club. See the chapter 6 annex for details.

#### Costa Rica

#### Bank debt restructurings

- Sept. 1983: Rescheduling agreement of \$0.7 billion of maturities (including principal arrears) in January 1983–January 1985; new long-term money (\$0.2 billion); maintenance of short-term credit lines (\$0.2 billion).
- May 1985: Rescheduling agreement of \$0.5 billion of maturities, including deferment of revolving credit (\$2 million) due in January 1985–January 1987; new long-term money (\$75 million).

Brady deal

May 1990: Cash buyback at 84 percent discount (\$992 million), debt-for-bond-exchange (\$579 million), and write-off of \$29 million of pastdue interest.

#### Côte d'Ivoire

#### Bank debt restructurings

- Mar. 1985: Rescheduling agreement of \$0.5 billion of maturities in December 1983–January 1985; new long-term money (\$0.1 billion).
- Nov. 1986: Multiyear rescheduling agreement (MYRA) of \$0.9 billion of maturities in January 1986–January 1990;
- April 1988: Agreement designed to replace the MYRA. Included new money to refinance interest. Interest on the new money portion was LIBOR + 1½ percent. Agreement was not put into effect because interest arrears were not cleared, and current interest payments were suspended in April 1988.

Brady deal

May 1997: Agreement for restructuring \$6.5 billion of principal and past-due interest. For eligible principal of \$2.3 billion, creditors agreed to (i) exchange \$159 million for discount bonds (50 percent discount) subject to stepped-up interest rising from 2.5 percent in years 1–2 to LIBOR + 13/16 in years 11–30; (ii) exchange \$1.4 billion for FLIRBs with a maturity of 20 years, including 10 years' grace, and stepped-up interest rising from 2.0 percent in years 1–7 to LIBOR + 13/16 in years 14–20; (iii) buyback \$0.7 billion at 24 cents per dollar. Principal was collateralized with 30-year U.S. Treasury zero-coupon bonds for the discount bonds, but not for the FLIRBs. A six-month rolling interest guarantee was required for the FLIRBs, but not for the discount bonds. For past-due interest of \$4.2 billion, \$30 million was settled in cash at closing, \$0.9 billion was exchanged for bonds with a 20-year maturity (half a year of grace period) repayable on a graduated amortization schedule, and \$3.3 billion was written off.

#### Cuba

- Bank debt restructurings
- Dec. 1983: Rescheduling agreement of \$0.1 billion of maturities in September 1982–December 1984; maintenance of short-term credit lines (\$0.5 billion).
- Dec. 1984: Rescheduling agreement of \$0.1 billion of maturities in January 1984–December 1985; maintenance of short-term credit lines (\$0.5 billion).
- July 1985: Rescheduling agreement of \$0.1 billion of maturities in January 1985–December 1986; maintenance of short-term credit lines (\$0.5 billion).

#### **Dominican Republic**

Bank debt restructurings

- Dec. 1983: Rescheduling agreement of \$0.5 billion of maturities in December 1982-December 1983 (including short-term debt).
- Feb. 1986: Multiyear rescheduling agreement of \$0.8 billion of maturities in January 1985–December 2000 (including arrears as of December 31, 1984).

Brady deal

Aug. 1994: Agreement covering principal and interest past-due (\$1.2 billion). The agreement had a menu consisting of (i) buybacks (\$.4 billion); (ii) discount exchange bonds (\$.5 billion) 35 percent discount, to be repaid 30 years bullet maturity, interest rate LIBOR + 13/16 percent; (iii) past-due-interest bonds (\$171 million) bearing interest at LIBOR + 13/16 percent, with 3 years grace and 15 years maturity. The accord also included a write-off of \$112 million of past-due interest, and \$52 million paid in cash at closing.

#### Ecuador

- Bank debt restructurings
- Oct. 1983: Rescheduling agreement of \$2.8 billion of maturities in November 1982–December 1983; new long-term money (\$0.4 billion); maintenance of short-term credit lines (\$0.7 billion).
- Dec. 1985: Multiyear rescheduling agreement of \$4.2 billion of maturities in January 1985–January 2000. New long-term money (\$0.2 billion); maintenance of short-term credit lines (\$0.7 billion).
- Nov. 1987: Replaces the multiyear rescheduling agreement.

Brady deal

- Feb. 1995: Agreement restructuring \$7.8 billion of principal and part-due interest. For principal, creditors agreed to exchange \$2.6 billion for discount bonds (45 percent discount) yielding LIBOR + 13/16 percent and \$1.9 billion for par reduced-interest rate bonds. Both bonds had a 30-year bullet maturity, were collateralized for principal, and had a 12-month rolling interest guarantee. The interest rate on the par bonds was 3 percent for the first year, rising to 5 percent in year 11. For past-due interest, \$75 billion was to be settled in cash at closing, \$2.3 billion was exchanged for bonds with a 20-year maturity (no grace period) repayable on a graduated amortization schedule, \$191 million was exchanged for interest equalization bonds, and \$582 million was written off.
  Bond market defaults and restructurings
- Aug. 2000: Agreement to exchange about \$5.9 billion in defaulted Brady bonds and eurobonds for \$3.9 billion in new 12 and 30-year global bonds. The new 12-year issue was priced to yield 12 percent, and the new 30-year issue carried the multi-coupon with the initial coupon rate of 4 percent. This operation resulted in a 40 percent reduction in principal for the bondholders.

#### Ethiopia

#### Bank debt restructurings

Jan. 1996: Debt buyback at 8 cents per U.S. dollar of \$226 million owed to commercial banks. Funding for the operation provided by the IDA Debt Reduction facility.

#### Gabon

#### Bank debt restructurings

- Dec. 1987: Rescheduling agreement of \$27 million of maturities in September 1986-December 1987.
- Dec. 1991: Rescheduling agreement of \$75 million of maturities in January 1989-December 1992.
- May 1994: Rescheduling of \$187 million of maturities. Principal due through 1994 on debt contracted prior to September 20, 1986 (debt covered by the 1991 agreement, which had not been implemented) was rescheduled. Terms: 10-year maturity including 2½ years grace. Interest: LIBOR + 7/8 percent. Arrears of interest and arrears of post cut-off maturities as of July 1, 1994, were to be repaid between 1994 and 1996.

April 2002: Default on \$30 million of bank loans, which had been restructured in 1994.

#### Gambia, The

#### Bank debt restructurings

Feb. 1988: Rescheduling of debt outstanding as of 18 December, 1986; new long-term money (\$19 million).

#### Guinea

#### Bank debt restructurings

April 1988: Rescheduling of short-term debt of \$28 million.

Dec. 1998: Buyback of \$130 million under the IDA Debt Reduction Facility at 13 cents per US Dollar, financed IDA DRF and other donor countries

#### Guyana

#### Bank debt restructurings

- Aug. 1982: One-year deferment of \$14 million of maturities in March 1982-April 1983.
- June 1983: Extension of \$12 million due in July 1983-December 1983, previously deferred in 1982.
- July 1984: Extension of \$11 million due in August 1984-August 1985, previously deferred.
- July 1985: Extension of \$15 million due in August 1985–December 1986, previously deferred.
- July 1988: Deferment of \$8 million.
- Nov. 1992: Buyback of \$69 million under the IDA DRF at 14 cents per US Dollar.
- Dec. 1999: Buyback of \$55.9 million under the IDA DRF at 9 cents per U.S. dollar, financed IDA DRF and the Switzerland government.

#### Honduras

#### Bank debt restructurings

- June 1987: Rescheduling agreement of \$248 million of maturities due April 1987–December 1989. As two previous agreements (in 1983 and 1984) were not implemented, this agreement incorporated 1981–85 maturities as well, although it too was not signed.
- Aug. 1989: Bilateral rescheduling of \$101 million, including interest arrears, due to two commercial banks.
- Aug. 2001: Buyback of \$13 million under the IDA DRF. The buyback price was set at 18 cents per dollar of the principal amount. The IDA and the governments of the Netherlands, Norway, and Switzerland provided funding for the operation.

#### Indonesia

#### Bank debt restructurings

June 1998: Agreement on a framework for restructuring \$80 billion of the Indonesian private debt. The inter-bank loans were extended into new government-guaranteed loans with maturities of 1 to 4 years, at interest rates of 2.75, 3, 3.25, and 3.5 percent over LIBOR. The corporate debts were to be rescheduled over 8 years, including a 3-year grace period for repayment of principal. Over 8-year rescheduling period, the real interest rate was set to be 5.5 percent, but it would decline to 5 percent for debtors who agree to repay in 5 years. There was also an agreement to pay off trade financing arrears to maintain trade financing from foreign creditor banks.

Sept. 2002: Completion of restructuring of \$1.5 billion in syndicated bank credits, as required under the agreement with Paris Club.

#### Iran, Islamic Republic of

Bank debt restructurings

- Mar. 1993: Rescheduling of \$2.8 billion of debt outstanding as of March 1993.
- Dec. 1994: Rescheduling of \$10.9 billion of debt outstanding as of December 1994.

#### Jamaica

#### Bank debt restructurings

- April 1981: Rescheduling of \$126 million of maturities in April 1979-April 1981.
- June 1981: Rescheduling of \$89 million of maturities in July 1981-March 1983; new long-term money (\$89 million).
- June 1984: Rescheduling of \$164 million of maturities in July 1983-March 1985.
- Sept. 1985: Rescheduling of \$359 million of maturities in April 1985-March 1987.
- May 1987: Rescheduling of \$366 million of maturities in January 1987-March 1990; included reduced spreads on earlier rescheduling.
- June 1990: Rescheduling of \$315 million of maturities in January 1990–December 1991. Also, reduced spreads on earlier rescheduling.

#### Jordan

#### Bank debt restructurings

- Sept. 1989: Rescheduling agreement in principal of \$580 million of maturities in January 1989–June 1991.
- Nov. 1989: Provision of new long-term money (\$50 million); short-term credit (\$50 million) to meet obligations due between January 1989 and June 1990.

#### Brady deal

Dec. 1993: Agreement restructuring \$736 million of principal and \$153 million of past-due interest. For restructured principal, a small amount was repurchased at 39 cents per U.S. dollar, \$243 was exchanged for discount bonds (35 percent discount); and \$493 million was exchanged for par fixed interest bonds. Both bonds had a 30-year bullet maturity with principal collateral and a 6-month rolling interest guarantee. The discount bonds yielded LIBOR + 13/16 percent interest; the yields on par bonds began at 4 percent in the first year, rising to 6 percent in year seven. Regarding past-due interest, \$29 million was paid at closing. \$91 million was exchanged for non-collateralized bonds with a 12-year maturity including 3-years grace and yielding LIBOR + 13/16 percent, and \$33 million was written off. Up-front costs totaled \$147 million, all of which was provided from Jordan's own resources.

#### Korea, Republic of

- Bank debt restructurings
- Jan. 1998: Agreement to restructure the short-term foreign debts owed to foreign commercial banks. Eligible short-term debt of \$21.4 billion was converted into new government-guaranteed loans with maturities of between 1 and 3 years and floating interest rates set between 2.25 and 2.75 percentage points over LIBOR. The commission charged by the government was set between 0.2 and 1.5 percentage points based on the credit rating (Moody's Investors Service or by S&P, and the BIS capital adequacy ratio) of the debtor. Also, the debtor had to meet a reserve requirement of 3 percent of total guaranteed amount in US dollars.

#### Liberia

Bank debt restructurings

- Dec. 1982: Rescheduling of \$29 million of maturities in July 1981-June 1982.
- June 1983: Consolidation of \$26 million of oil facility debt.

#### Mauritania

Bank debt restructurings

Aug. 1996: Debt buyback of \$53.0 million, at a 90 percent discount, owed to commercial banks. Funding for the operation provided by the IDA DRF.

#### Madagascar

Bank debt restructurings

- Nov. 1981: Arrears (\$155 million) on overdrafts consolidated into long-term debt.
- Oct. 1984: Restructuring of entire stock of debt (\$379 million), including arrears.
- June 1987: Modification of the terms of the October 1984 restructuring agreement.
- May 1990: Rescheduling agreement in principal of \$49 million of maturities in April 1990-August 1995.
- Jan. 2002: Default on \$200 million in local currency debt, in addition to continuing default on foreign currency commercial bank loans.

#### Malawi

Bank debt restructurings

- Mar. 1983: Rescheduling of \$59 million of maturities in September 1982-August 1984.
- Oct. 1988: Rescheduling of balances as of August 21, 1987 (\$36 million).

#### Mexico

Bank debt restructurings

- Aug. 1983: Rescheduling of \$23.3 billion of maturities in April 1982-August 1984; new long-term money (\$5 billion).
- April 1984: New long-term money (\$3.8 billion).
- Mar. 1985: Multiyear rescheduling agreement of \$28 billion, including previously rescheduled debt, maturing in January 1987–December 1991.
- Aug. 1985: Multiyear rescheduling agreement of \$20.3 billion of maturities (not previously rescheduled) in January 1985–December 1990.
- Oct. 1985: Deferent of first payment (\$0.9 billion) under the March 1985 agreement.
- Mar. 1987: Modification of terms of earlier agreements covering \$44.2 billion of maturities; new long-term money (\$7.4 billion).
- Aug. 1987: Rescheduling of \$9.7 billion of private sector debt maturing in January 1988–December 1991.
- Mar. 1988: Exchange of debt for 20-year zero-coupon collateralized bonds (\$556 million).

Brady deal

Mar. 1990: Agreement restructuring \$48.2 billion of debt. In addition to new money of \$1 billion, the agreement provided for the exchange of \$20.5 billion of debt for bonds at a 35 percent discount, an exchange of \$22.4 billion of debt at par for reduced interest rate bonds, and conversion bonds totaling \$5.3 billion. The latter were not collateralized and had a tenor of 15 years maturity, including 7 years' grace, and an interest rate of LIBOR + 13/16. The total base also included \$693 million not committed to any option.

#### Moldova

Bond market defaults and restructurings

June 2002: Second default on \$75 million foreign currency bond (privately placed) originally issued in 1997. Outstanding amount of the bond reduced to \$40 million after the initial default. This time around the maturity of the bond, due in June 2002, was extended until 2009.

#### Morocco

Bank debt restructurings

- Feb. 1986: Agreement in principle (initiated August 1983) rescheduling \$531 million maturing in September 1983–December 1984; Short-term credit maintenance (\$610 million).
- Sept. 1987: Rescheduling of \$2.4 billion of maturities in January 1985-December 1988.

#### Brady deal

June 1990: Rescheduling of \$3.2 billion of maturities outstanding as of December 1989. Phase one of this agreement restructured debt; phase two was a Brady deal that would take effect if Morocco had signed an EFF agreement with the IMF by December 31, 1991.

#### Mozambique

Bank debt restructurings

- May 1987: Rescheduling of outstanding stock of debt (\$253 million), including interest arrears.
- Dec. 1991: Buyback of \$124 million of outstanding commercial bank debt at a 90 percent discount, funded by grants from the IDA DRF and from France, the Netherlands, Switzerland, and Sweden.

#### Nicaragua

Bank debt restructurings

- Dec. 1980: Rescheduling of government debt (\$582 million), all maturities, including arrears.
- Dec. 1981: Rescheduling of nationalized bank debt (\$192 million), all maturities, including arrears.
- Mar. 1982: Rescheduling of debts of nonfinancial enterprises (\$100 million), all maturities, including arrears.
- Feb. 1984: Deferment of service on rescheduled debt (\$145 million) due between July 1983 and June 1984.
- Dec. 1995: Buyback of \$1.1 billion of outstanding commercial bank debt at 8 cents per US Dollar.

#### Niger

Bank debt restructurings

- Mar. 1984: Rescheduling of \$29 million of maturities in October 1983-March 1986.
- April 1986: Rescheduling of \$36 million of maturities in October 1985-December 1988.
- Mar. 1991: Buyback of all commercial bank debt at 82 percent discount (\$107 million). Resources provided by grants from the DRF for IDA-only countries (\$10 million), Switzerland (\$3 million), and France (\$10 million).

#### Nigeria

Bank debt restructurings

- Nov. 1987: Rescheduling of \$4.7 billion of maturities, including short-term debt, due between April 1986 and December 1987.
- Mar. 1989: Rescheduling of \$5.7 billion of short-term debt, including arrears on line of credit.

Brady deal

Jan. 1992: Agreement rescheduling \$5.3 billion of debt. The terms provided for a cash-back at 60 percent discount on \$3.3 billion, and debt exchanges on \$2 billion for collateralized 30-year bullet maturity par bonds with reduced interest rates: 5.5 percent for the first three years, 6.25 percent thereafter. Creditor selections: 62 percent for the buyback; 38 percent for the debt-reduction bond. A third option, new money combined with conversion bonds, was not selected by participating creditor banks.

#### Panama

Bank debt restructurings

- Sept. 1983: Provision of new long-term money (\$278 million); short-term credit (\$217 million).
- Oct. 1985: Rescheduling of \$578 million in maturities in January 1985–December 1986; new long-term money (\$60 million); maintenance of short-term credit lines (\$190 million).

Brady deal

May 1996: Creditors agreed to restructuring of \$3.9 billion in public external debt, including \$2.0 billion in past due interest. The menu for the principal included: (i) discount bonds at a 45 percent discount of face value (30 years bullet maturity, market rate, \$87.8 million); (ii) Par bonds with reduced interest rates and a 30 year bullet repayment (\$268.0 million); and (iii) FLIRBs for \$1,612.2 million with a tenor of 18 years maturity including 5 years grace period. The discount and the par bonds are collateralized with respect to the principal by U.S. Treasury zero-coupon bonds, and with respect to interest in the form of a 9-month rolling interest rate guarantee in the first year rising to 12 months in 2–3 years. The FLIRBs do not require guarantee for the capital, but include a six-month rolling interest guarantee. PDI settlement included progress payments of \$30 million, a payment at closing of \$100 million, a write-off of \$590.4 million arising from the recalculation of penalty interest rate of LIBOR + 13/16 percent. Neither principal nor interest was guaranteed. Moreover, Panama could capitalize for the first six, the difference was positive between LIBOR + 13/16 and 4.0 percent p.a.

#### Peru

Bank debt restructurings

- Jan. 1980: Rescheduling of \$364 million of maturities in January 1980-December 1980.
- July 1983: Rescheduling of \$432 million of maturities in March 1983–February 1984; new long-term money (\$650 million); maintenance of short-term credit lines (\$2 billion).

Brady deal

Nov. 1996: Creditors agreed to restructuring of \$8 billion in public external debt, including \$3.8 billion in PDI. The menu for the principal included: (i) discount bonds at a 45 percent discount of face value (30 years bullet maturity, market rate, \$947 million); (ii) par bonds with reduced interest rates and a 30-year bullet repayment (\$189 million); (iii) FLIRBs for \$1,779 million with a tenor of 20 years maturity including 8 years grace period; and (iv) a buyback of \$1,266 million at 38 cents per US Dollar. The discount and the par bonds were collateralized with respect to the principal by U.S. Treasury zero-coupon bonds, and with respect to interest in the form of a six-month rolling interest guarantee secured by cash or permitted investments. The FLIRBs did not require guarantee for the capital, but included a six-month rolling interest guarantee. PDI settlement included progress payments of \$83 million, a payment at closing of \$225 million—a buyback of \$1,217 million at 38 cents per US Dollar; and PDI par bonds

of \$2,284 million with 20 years' maturity, including 10 years grace, and interest rate of LIBOR + 13/16 percent. Neither principal nor interest was guaranteed. Moreover, Peru could capitalize for the first six, the difference was positive between LIBOR + 13/16 and 4.0 percent p.a.

#### Philippines

Bank debt restructurings

- Jan. 1986: Rescheduling of \$5.9 billion in maturities in October 1983–December 1986; new long-term money (\$925 million); maintenance of short-term credit lines (\$2974 million).
- Dec. 1987: Rescheduling of \$9 billion in maturities in January 1987–December 1992; maintenance of short-term credit lines (\$2,965 million). Brady deal
- Jan. 1990: Agreement provided for \$1.3 billion of buybacks at a 50 percent discount.

Dec. 1992: Following implementation of a cash buyback of \$1.3 billion on May 14, 1992, banks selected debt exchanges from three options; (i) front-loaded interest-reduction par bonds, yielding LIBOR + 13/16 percent from year seven to maturity (15 years for series A and 15<sup>½</sup> year for series B, both including seven years grace); (ii) collateralized step-down/step-up interest reduction bonds yielding 6.5 percent from year six to maturity (25-year bullet maturity for series A and 25<sup>½</sup> year for series B); and (iii) new money combined with conversion bonds in a 1 : 4 ratio, with both bonds attaining 17<sup>½</sup> (series A) or 17-year (series B) maturity, including five years grace and yielding LIBOR + 13/16 percent. Interest payments on both interest-reduction bonds covered by a rolling 14-month guarantee. Creditor choices (total, \$4.4 billion, 96 percent total eligible debt); buybacks, \$1.3 billion (27.5 percent): option (a), \$0.8 billion (46.3 percent); option (b), \$1.9 billion (41.1 percent); option (c), \$0.5 billion (11.7 percent).

#### Poland

- Bank debt restructurings
- April 1982: Rescheduling of \$1.9 billion of maturities in March 1981-December 1981.
- Nov. 1982: Rescheduling of \$2.2 billion of maturities in January 1982-December 1982.
- Nov. 1983: Rescheduling of \$1.3 billion of maturities in January 1983-December 1983.
- July 1984: Rescheduling of \$1.5 billion of maturities, including some short-term trade credits, due in January 1984–December 1987.
- Sept. 1986: Rescheduling of \$1.9 billion of maturities, including debt rescheduled in 1982, due in January 1986-December 1987.
- July 1988: Multiyear rescheduling agreement of \$8.3 billion of maturities due in January 1988–December 1993; maintenance of short-term credit lines (\$1 billion). Also improved the terms of earlier agreements.
- June 1989: Agreement in principal to defer principal due May 1989–December 1990 (\$206 million), until December 1991; and in October, the interest due in the fourth quarter of 1989, \$145 million, was deferred until the second quarter of 1990.
- Brady deal

Oct. 1994: Creditors restructured \$14.4 billion. Three categories of debt were affected: (i) long-term debt covered by the 1988 restructuring agreement (\$8.9 billion); (ii) debt due under the Revolving Short-Term Arrangement (RSTA) (\$1.2 billion); (iii) past-due interest not otherwise restructured (\$4.3 billion). The first category was subject to a menu approach: \$2.1 billion of long-term debt was repurchased at 41 cents per US Dollar, and \$0.3 billion of RSTA debt was repurchased at 38 cents per US Dollar. For the remaining long-term, creditors chose between: (i) discount bonds-45 percent discount (\$5.4 billion); (ii), par reduced fixed interest bonds (\$0.9 billion); (iii) conversion bonds combined with new money bonds equal to 35 percent of the amount converted (\$0.4 billion). The discount bonds and par bonds had 30-year bullet maturities and featured collateralization of principal only. Interest on the discount bonds was LIBOR + 13/16 percent. Interest on the par bonds was 2.75 percent for the first year, rising to 5 percent for year 21. The conversion bonds had a 25-year maturity, including 20-year grace. Their yield in year one was 4.5 percent, rising to 7.5 percent in year 11. The new money bonds had a 15-year maturity, including 10-year grace and yield LIBOR + 13/16 percent. The new money and conversion bonds are not collateralized. The RSTA debt not repurchased (\$0.9 billion) was exchanged for 30-year bullet maturity fixed interest bonds, with similar (but slightly different) step/down-step/up arrangements as the par bonds, starting at 2.75 percent in year one and gradually rising to 5 percent in year 21. For past-due interest, \$0.8 billion was repurchased with related long-term and RSTA principal. A portion was to be settled with cash payments at closing (\$63 million). A portion was written off (\$0.8 billion), and the remainder (\$2.7 billion), was converted into fixed-interest rate bonds yielding 3.25 percent in year one, rising to 7 percent in year nine. Maturity was 20 years, including 7-years grace. Amortization was graduated.

#### Romania

- Bank debt restructurings
- Dec. 1982: Rescheduling of \$1.6 billion of maturities in January 1982-December 1982.
- June 1983: Rescheduling of \$0.6 billion of maturities in January 1983-December 1983.
- Sept. 1986: Rescheduling of \$0.8 billion in previously rescheduled debt maturing in January 1986–December 1987.
- Sept. 1987: Agreement in principal to reschedule \$0.8 billion of maturities in January 1986-December 1987.

#### **Russian Federation**

Bank debt restructurings

- Dec. 1991: Deferment of principal due in December 1991–March 1992 on pre-1991 debt. The deferment was extended for each consecutive quarter until the end of 1993.
- July 1993: Rescheduling of the stock of FSU debt contracted prior to January 1, 1991 (S24 billion), to be repaid with 15-year maturity including 5-year grace. In the fourth quarter of 1993, \$500 million was to be paid on interest accruing during 1993. At the end of 1993, all remaining unpaid interest (estimated at \$3 billion) was then to be consolidated and repaid at a 10-year maturity, including 5 years' grace. The 1993 interest payments were not made; the agreement was not implemented, mainly because Russia refused to accept bankers' requirement that sovereign immunity be waived. However, an understanding was reached on October 5, 1994, that the banks would drop their insistence on a waiver of sovereign immunity and that the Vneshekonombank (or another public entity) would guarantee the debts.

- Nov. 1995: Agreement in principle to comprehensively reschedule \$33 billion in debt outstanding as of 15 November 1995. Heads of terms were signed for rescheduling debt of the former Soviet Union in the amount of \$25.5 billion of principal outstanding and \$7.5 billion in accrued interest due. The eligible principal was to be repaid over 25 years, with 7 years of grace, beginning December 15, 1995, in 37 semi-annual payments on a graduated schedule at LIBOR + 13/16 percent per year. It was further agreed that an interest note for \$6 billion would be issued with a 20-year maturity and 7 years' grace from December 15, 1995, that would be the same interest rate, listed on the Luxembourg Stock Exchange. The remaining \$1.5 billion in interest arrears was paid over 1995–96. By September 1996, the minimum subscribership by commercial banks of \$20 billion in outstanding principal was reached which triggered the Russian agreement to the rescheduling package.
- Nov. 1998: Outline of an agreement to restructure \$13.5 billion of defaulted Treasury bills (GKOs and OFZs). Under the restructuring plan, 10 percent of the defaulted bills was to be redeemed in cash rubles, and 20 percents of the debt was to be exchanged for three-year zero-coupon bonds. The remaining 70 percent of the debt was to be restructured into 4-year and 5-year variable coupon bonds.
- Feb. 2000: Agreement to restructure \$31.8 billion Soviet-era debts owed to the London Club of commercial banks. The London Club's creditors agreed to write off \$11.6 billion of the principal and a 7-year grace period for principal repayments, and swapping the rest of its defaulted debts (PRINs and IANs) for a new 30-year eurobonds. The interest rate on a new eurobond was set at 2.25 percent for the first six months, 2.5 percent for the second six months, and 5 percent for years two and seven—yielding 7.5 percent a year.

#### São Tomé and Principe

Bank debt restructurings

Aug. 1994: Buyback under the IDA debt-reduction facility at 10 cents per US Dollar. \$10.1 million of principal was extinguished (87 percent of eligible debt).

#### Senegal

Bank debt restructurings

- Feb. 1984: Rescheduling of \$96 million of maturities in May 1981-June 1984.
- May 1985: Rescheduling of \$20 million of maturities in July 1984-June 1986.
- Jan. 1989: Rescheduling of \$37 million.
- Dec. 1996: Debt buyback at 8 cents per US Dollar of US\$80.0 million owed to commercial banks. Funding for the operation provided by the IDA DRF.

#### Sierra Leone

Bank debt restructurings

- Jan. 1984: Rescheduling of principal arrears (\$25 million) outstanding as of December 31, 1983.
- Aug. 1995: Buyback, at 13 cents on average per US Dollar, of US\$235 million due to commercial banks funded by grants from IDA DRF and other donor countries.

#### South Africa

Bank debt restructurings

- Sept. 1985: Deferment of \$13.6 billion maturing in August 1985–Decemebr 1985.
- Mar. 1986: Rescheduling of \$650 million of maturities in August 1985-June 1987.
- Mar. 1987: Rescheduling of \$4.5 billion of maturities in July 1987–June 1990.
- Oct. 1989: Rescheduling of \$7.5 billion of maturities in October 1989-December 1993.
- Sept. 1993: Rescheduling of \$5 billion, including interest arrears.

#### Sudan

Bank debt restructurings

- Nov. 1981: Rescheduling of \$593 million of maturities due in January 1980–March 1982, including principal arrears and some short-term debt.
- Mar. 1982: Rescheduling of \$3 million of interest arrears and modification of 1981 agreement.
- April 1983: Rescheduling of \$702 million of interest arrears and modification of 1981 agreement.
- Oct. 1985: Rescheduling of \$1,037 million (including interest arrears).

#### Suriname

Bank debt restructurings

Dec. 2001: Clearing of \$36 million in principal arrears owed to commercial banks.

#### Tanzania

Bank debt restructurings

April 2001: Buyback of \$76.6 million of eligible principal debt and about \$79.2 million of associated interest under the IDA DRF. The buyback price was set at 12 cents per dollar of the principal amount with a 5% of foreign exchange risk margin. The IDA and the governments of Germany and Switzerland provided funding for the operation.

#### Togo

- Bank debt restructurings
- Mar. 1980: Rescheduling of \$69 million of debts owed to French banks, including arrears of principal. Interest rates varied by currency.
- Oct. 1983: Rescheduling of \$84 million of debts owed to all commercial bank debt, including previously rescheduled debt.
- May 1988: Rescheduling of \$48 million restructuring in 1983.
- Dec. 1997: Debt buyback at 12.5 cents per dollar of \$46.1 million owed to commercial banks. Funding for the operation was provided by the IDA DRF.

#### Trinidad and Tobago

#### Bank debt restructurings

Dec. 1989: Rescheduling of \$473 million of maturities in September 1988-August 1992.

#### Turkey

Bank debt restructurings

Mar. 1982: Improvement on the terms of the August 1979 agreement, affecting \$2.3 billion of debt.

#### Uganda

Bank debt restructurings

Feb. 1993: Buyback of \$153 million commercial bank debt funded by grants from IDA DRF and other donor countries.

#### Ukraine

Bond market defaults and restructurings

- July 1999: Agreement to restructure a 10-month \$163 million eurobond (including principal and interest). Instead of making the \$163 million repayment due in June 1999, Ukraine was to repay 20 percent of bond in cash and swap the remaining 80 percent into a D-mark-denominated eurobond with a maturity of 3 years and coupon yield of 16 percent.
- Feb. 2000: Agreement to restructure \$2.7 billion of the short-term debt obligations. No debt forgiveness or reduction in principal was required from bondholders, and all accrued interest on existing eligible bonds was to be paid in full and in cash; and all accepting investors were to be offered a new 7-year eurobond, denominated either euros or US dollars, at an interest rate of 10 percent for euro-denominated bonds and 11 percent for dollar-denominated bonds.
- Mar. 2001: About \$21.5 million of the external debt was exchanged for a 6-year eurobond, denominated in either Euro at an interest rate of 10% or U.S. dollar at an interest rate of 11%. Bonds eligible for the exchange were Deutsche Mark 16% eurobond due in February 2001, Euro 10% amortizing notes due in March 2007, U.S. dollar 11% amortizing notes due in March 2007, and U.S. dollar 11% amortizing notes due in March 2007.

#### Uruguay

- Bank debt restructurings
- July 1983: Rescheduling of \$555 million of maturities in January 1983–December 1984; new long-term money (\$240 million).
- July 1986: Multiyear rescheduling agreement of \$1.7 billion of maturities due in January 1985–December 1989.
- Mar. 1988: Rescheduling of \$1.5 billion of maturities in January 1990–December 1991, including improvement of terms of the July 1986 agreement.
- Brady deal
- Feb. 1991: The agreement provided for cash buyback at a 44 percent discount (\$628 million), collateralized debt reduction bonds (\$535 million), and new money (\$89 million) combined with debt conversion notes (\$447 million). The repayment terms were: 30-year bullet maturity and 6.75 percent fixed interest for the interest reduction bonds, 16-year maturity including 7 years' grace with LIBOR + 7/8 percent interest for the conversion notes, and 15-year maturity including 7 years' grace with LIBOR + 1 percent interest for the new money notes.

#### Venezuela, República Bolivariana de

#### Bank debt restructurings

- Feb. 1986: Multiyear rescheduling agreement of \$21 billion of maturities due in January 1983-December 1989.
- Nov. 1987: Reduction of spread and extension of maturities on the 1986 agreement; new long-term money (\$100 million).
- Sept. 1988: Interest spread reduced on February 1986 agreement, affecting \$20.3 billion in debt.
- Dec. 1988: Exchange of debt for bonds outside the framework of the main negotiations.
- Brady deal
- Dec. 1990: Agreement featured buybacks in the form of 91-day collateralized short-term notes (\$1,411 million), exchange for bonds at 30 percent discount (\$1,810 million), exchange at par for reduced fixed-rate interest bonds (\$7,457 million), exchange for bonds at par with temporary step-down interest rates (\$3,027 million), and new money combined with debt conversion bonds (\$6,022 million).

#### Vietnam

Brady deal Dec. 1997:

1997: Agreement restructuring \$310.9 million of principal and \$486.2 million of past-due interest. For restructured principal, \$20.4 million was repurchased at 44 cents per U.S. dollar, \$51.6 million was exchanged for discount bonds (50 percent discount); and \$238.9 million was exchanged for par fixed interest bonds. Both bonds had 30-year maturity, but the discount bond was repayable in a bullet payment on year 30 while the par bond had a step-up amortization schedule beginning on year 15. Also, 50 percent of the face value due of the par bond was due at maturity. The discount bond was subject to an interest rate of LIBOR plus 13/16 while the par bond was subject to step-up interest rates rising from 3 percent in years 1 and 2 to 5.5 percent in years 21–30. One hundred percent of the discount bonds and 50 percent of the par bonds, and the discount bonds and 60 percent of the sequence by U.S. Treasury zero-coupon bonds, and the discount bonds had a 6-month rolling interest guarantee. Regarding past-due interest, \$15 million was paid at closing, \$294.8 million was exchanged for non-collateralized bonds with an 18-year maturity including 7 years' grace and step-up interest rates, \$21.8 million was repurchased at 44 cents per dollar, and \$154.6 million was written off.

#### Yemen, Republic of

#### Bank debt restructurings

June 2001: Buyback of \$362 million of principal and \$245 million of associated interest under the IDA DRF. The buyback price was set at 2.94 cents per dollar of the principal amount. The IDA and the governments of the Netherlands, Norway, and Switzerland provided funding for the operation.

#### Yugoslavia, Federated Republic of

Bank debt restructurings

Oct. 1983: Rescheduling of \$1.3 billion of maturities, including a 1-year rollover of short-term bonds, due in January 1983–December 1983; new long-term money (\$600 million); maintenance of short-term credit lines (\$800 million).

- May 1984: Rescheduling of \$1.3 billion of maturities due in January 1984–March 1985.
- Dec. 1985: Multiyear rescheduling agreement of \$4 billion of maturities in January 1985-December 1988.

Sept. 1988: Rescheduling of \$7 billion of maturities due in January 1988-December 1989.

#### Zaire

Bank debt restructurings

April 1980: Rescheduling of \$402 million of debt outstanding as of the end of 1979, including arrears.

Jan. 1983: Deferment of principal due in January 1983-December 1983 (\$58 million), rescheduled under the April 1980 agreement.

June 1984: Deferment of principal due in January 1984-April 1985 (\$64 million), rescheduled under the April 1980 agreement.

May 1985: Deferment of principal due in May 1985-April 1986 (S61 million), rescheduled under the April 1980 agreement.

May 1986: Deferment of principal due in May 1986–April 1987 (\$65 million), rescheduled under the April 1980 agreement.

May 1987: Deferment of principal due in May 1987–April 1988 (\$61 million), rescheduled under the April 1980 agreement.

June 1989: Deferment of principal data in his 1007 (1911) 1000 (001 minibil), reschedated and the right 1000 dge

#### Zambia

Bank debt restructurings

Dec. 1984: Rescheduling of \$74 million of maturities, including arrears as of February 28, 1983.

#### Notes

1. We monitor debt flows in two forms. Most meaningful are net flows. These data are hard to trace on a timely basis, however. It is more straightforward to monitor gross market-based actions—publicly announced and completed bond issues and bank loans. These flows are just one influence on net debt flows. The other three debt repayments, new borrowing not publicly announced, and changes in all short-term debt—cannot be assumed to be static, so it is not possible to map directly from gross market-based flows to net debt. Gross market-based flows are, however, a very helpful indicator of debt-market trends.

2. The pie charts understate the shift from the peak of flows in mid 1997, as the first chart shows the pattern of investors in December 1998, which was well into the retrenchment phase for many of the high-risk investors, especially hedge funds.

3. This improvement may have been due to the development of mechanisms for the orderly restructuring of debts, such as standing bondholders' committees (World Bank 2000a). Also, the speed-up of communications (particularly the laying of the transatlantic cable) may have facilitated negotiations.

4. Walter Wriston wrote this in 1982 (*New York Times,* September 14; quoted in Kaletsky 1985).

5. An active secondary market in developing country loans grew rapidly in the 1980s, reaching an annual volume of \$50 billion in 1988. Initially the market was driven by interbank swaps designed to consolidate portfolios and manage risk. The market took off in 1985, however, when Chile and Mexico introduced systematic debt conversion programs (World Bank 1990).

6. In the absence of effective capital controls, the entire monetary base constitutes a claim against the government that might be converted into foreign currency. In practice, governments in crisis can impose capital controls (although these are not 100 percent effective), and presumably the availability of official support would help discourage capital outflows, which limits the likely claim on official resources.

7. Some commentators have also asserted that rescue packages encourage governments to borrow excessively, in anticipation of a bailout. It is doubtful that governments would invite a crisis, however, that almost uniformly culminates in a change of government and loss of power.

8. Roubini (2002) notes that the restructuring of developing countries' bank debt during the 1980s faced considerable difficulties due to the hundreds of banks involved, their different interests (for example, large banks with extensive relationships with debtor countries versus small banks), and the differences in the legal instruments involved. Nevertheless, developing countries' creditors are a much more diverse set today than 20 years ago.

9. Eichengreen (2002) points out that the potential for collective action clauses to be used to invoke bondholders meetings may have facilitated agreement in the Pakistan and Ukraine debt restructurings, even where they were not used.

10. Of course, the International Monetary Fund (IMF) is not the first to consider a legal process for sovereign

bankruptcy. Adam Smith mentioned it, and there were extensive discussions of the legal aspects of sovereign debt crises in the first half of the 20th century. More recently, interest in sovereign bankruptcy rose from the late 1970s and gathered steam in the 1990s (Rogoff and Zettelmeyer 2002 provide an extensive discussion).

11. The basic framework is described in Krueger 2002 and IMF 2002.

12. See World Bank 2000b for a discussion of the distributional consequences of financial crises.

13. See, for example, www.attac.org and www. jubilee2000uk.org.

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