III

Emerging Markets: The Contraction in External Financing and Its Impact on Financial Systems

The turmoil that began as the "Asian crisis" in 1997 spread far more widely in 1998 as the pattern of rolling crises continued. After the substantial turmoil experienced in late 1997, the outlook for emerging markets appeared to improve in early 1998 and suggested that the crisis might perhaps be contained in Asia. However, pressures reemerged and were reflected in a slowing of gross capital flows, a rise in bond yield spreads, and a fall in equity prices. The situation worsened following the devaluation and unilateral domestic debt restructuring in Russia. Fears that similar defaults could occur in other emerging markets resulted in a full-blown emerging market crisis, exacerbated by the turmoil in the mature markets around the near-failure of LTCM. In Latin America, pressures on the Brazilian real intensified and culminated in the devaluation in January 1999. However, the devaluation did not have major or long-lived effects on other emerging markets, reflecting the deleveraging that had occurred in late 1998 and the growing expectation that an exchange rate adjustment would eventually be necessary in Brazil.

There was a recovery in emerging markets in the first half of 1999 following the Brazilian devaluation. By mid-1999, the pressures on emerging markets appeared to have lessened somewhat, and market access for the higher-rated emerging market borrowers had improved from the anemic levels of the second half of 1998. Nonetheless, yield spreads remain high, international markets remain closed for many corporates, and the weakness of expectations regarding U.S. interest rate increases in May illustrates the sensitivity of emerging market asset prices to developments in the mature markets. Further, trading volumes in emerging market bonds and foreign exchange are now much lower than prior to the crisis, as leverage has been cut back and many investors have retreated from the market, leaving both a smaller pool of "dedicated" emerging market investors and fewer "crossover" investors. There have also been cutbacks in the number of market makers, and price volatility and bid-ask spreads have increased relative to their levels prior to the Asian crisis.

The crises seen in Asia, Russia, and Brazil were part—both of causes and symptoms—of a reassessment of risk in emerging markets. The large capital inflows into emerging markets in the 1990s were predicated on, and helped to strengthen, the perception that emerging markets represented a near-mainstream asset class that was suitable for many investors. By early 1997, this perception had resulted in yield spreads on emerging market bonds that were unreasonably low. As weaknesses in emerging markets were revealed, yield spreads increased, and net flows to emerging markets slowed and then reversed. To some extent, this reassessment of risk in emerging markets is appropriate. It remains to be seen, however, how much yield spreads will fall from current levels and how much flows will pick up from their current low rate.

The spillover effects associated with the recent emerging market crises are larger and more complex than those seen in earlier periods of turmoil. In part, this contagion was the result of common external shocks, wake-up calls about common domestic weaknesses, and macroeconomic linkages. But financial linkages have proven stronger and more complex than in earlier periods, and they have increased the rapidity with which shocks are reflected in asset prices. Moreover, the portfolio decisions of market makers and large global players, including those that operate with a high degree of leverage, have often played a key role in determining short-term movements in asset prices. By contrast, the role of traditional "fundamentals" in short-term price movements sometimes appears quite modest. As an example, while the falls in asset prices in the turmoil of August and September of 1998 certainly reflected a reassessment of credit and other risks, this initial impact was magnified substantially by the subsequent drying up of market liquidity.

The continued turmoil in emerging markets has resulted in some noteworthy changes in investor and issuer behavior. As investors' appetites for emerging market assets have fallen, they have shown a clear preference for assets with reduced credit risk and enhanced liquidity. As a result, the proportion of emerging market bonds sold without credit ratings was far lower in early 1999 than it had been in 1997. Further, the average credit quality of new rated bonds is now substantially higher, as more issuers have sought to enhance the credit quality of their bonds through asset backing and as investors have shown a preference for sovereign over private sector issuers. In this context, Japan's New Miyazawa Initiative, which provides guarantees for bonds issued by Asian emerging markets, will be helpful in facilitating market access. The difficult market conditions of the last year have also encouraged innovation in issuance policy. Emerging market borrowers have looked for new ways to make their issues attractive, by attaching warrants and other "sweeteners" and enhancing the liquidity of their issues by reopening existing issues and issuing securities with stepdown coupons that will later become fungible with existing issues. In addition, the reluctance of banks to weigh down their balance sheets with low-yielding syndicated loans means the terms and conditions in this sector are becoming more like those in the bond market.

The losses experienced on emerging market assets in 1998 were reflected in a further sharp contraction in private market financing for emerging markets. Balance of payments data suggest that private net capital inflows fell in 1998 to levels not seen since 1990, while gross private market financing flows fell back to the levels of 1994–95. Most types of inflows fell, although foreign direct investment remained fairly stable. International banks continued their withdrawal of funds from emerging markets, imposing severe strains on domestic banking systems.

The turbulence in global markets imposed severe pressures on most systemically important emerging market banking systems, but most systems outside Asia weathered the

¹ See also IMF (1999a) for a further discussion of financial contagion.

consequences of capital outflows reasonably well. Many Asian and Latin American banks experienced substantial cuts in international interbank credit lines and losses in international repo lines, but their deposit bases proved resilient to the turbulence in the second half of 1998—in many cases aided by extensive government guarantees. In most countries, banks magnified the transmission of the external liquidity squeeze to local capital markets and the real economy, as they scrambled to restore the liquidity of their balance sheets, shifting funds away from the corporate sector and into government securities. In addition to the losses on their securities portfolios, banks were hit by increased delinquencies in their loan portfolios owing to a deteriorated operating environment. While most banks in emerging Asia remained focused on restructuring their bad loans and restoring their capital bases, the largest banking systems in Latin America have shown an enhanced ability to withstand the external liquidity squeeze. The healthiest banking systems in emerging Europe have continued to attract sizable capital flows and to expand credit to a fledging corporate sector, as competition grows and foreign banks contribute to a more stable and efficient financial environment.

Despite the resilience of most emerging market banking systems to the recent bouts of market turbulence, some risks remain. The lack of progress in corporate debt restructuring in Asia represents one of the key risks to the strengthening of banks' balance sheets in the region, and may require additional rounds of bank recapitalization. In Latin America, the pronounced slowdown in economic activity has not yet been fully reflected in banks' balance sheets. Moreover, the banks' conservative behavior toward lending—combined with the corporate sector's loss of access to international capital markets—has continued to squeeze the small and medium-sized enterprises, which have all but lost access to private credit, particularly in Argentina and Mexico. Smaller and weaker banks in some countries are facing the double strain of a deteriorated environment and competition from foreign banks, and are likely to have to exit the market. While the authorities have so far managed the failures of weaker banks with no adverse effects upon the rest of the systems, market participants view the likely acceleration of the consolidation process in a weak economic environment as a source of concern. In Poland and Hungary, the rapid growth in foreign currency loans to generally unhedged corporates is a potential risk, but this is counterbalanced by the stability offered by high foreign ownership and the ongoing improvements in supervision and regulation prior to EU accession. In Turkey, analysts remain concerned about banks' foreign currency mismatches, the concentration of intragroup lending and guarantees, and the health of some weak institutions.

Financial Market Developments

Evolution of the Crisis Through 1998 and Early 1999

In the early part of 1998, it appeared that the emerging markets were beginning to recover from the Asian crisis, and from the October 1997 turmoil in Hong Kong SAR and other equity markets. A modest recovery in Asia—where Korea and Thailand saw increases

of over 60 percent in U.S. dollar terms in equity prices in the first quarter²—suggested that the crisis might perhaps be stopped from spreading beyond Asia. This rally reflected the improving outlook in Korea, which—after substantial downgrades in late 1997—was upgraded by two of the major rating agencies in February 1998 as the external debt restructuring and IMF-supported program bolstered confidence. Indonesia was a notable exception to the improving outlook, with the rupiah remaining extremely weak against a background of economic policy weaknesses and continuing civil unrest that eventually saw the resignation of President Suharto in May.

The nascent recovery came to a halt in May and the outlook began to worsen through the middle of the year. While the worsening situation in Russia was an element of the deterioration in sentiment, there was a more general reevaluation by investors of risks in the global economy, especially in Asia. The worsening outlook reflected larger-than-projected output declines in a number of Asian emerging markets and continuing weakness in Japan, which contributed to a depreciation of the yen and to pressure on other Asian currencies. More generally, weakness in oil and other commodity prices was seen as having an adverse impact on the balance of payments positions of a number of emerging market countries, with South Africa hit especially hard. The result was both a sharp across-the-board increase in yield spreads and increased pressure on some of the more vulnerable emerging markets, especially Russia. In the emerging markets, this reassessment pushed bond yield spreads (as measured by the J.P. Morgan EMBI index³) from about 450 basis points in late April to about 780 basis points in early August (Figures 3.1 and 3.2).

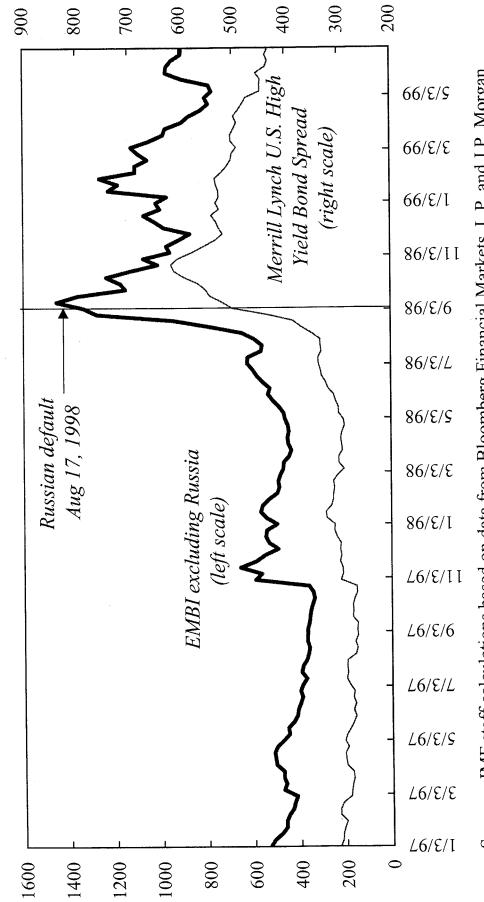
The combination of the debt restructuring, devaluation, and moratorium on private principal repayments announced by Russia on August 17 came as a major shock to emerging market investors (see Box 3.1). Investors were particularly surprised by the decision to restructure domestic debt—on terms that were viewed as extremely harsh. But market participants were also surprised that such measures could be introduced in a country that had previously been viewed as likely to receive continuing support from the major industrial countries and international financial institutions notwithstanding its weak fundamentals. The Russian measures appeared to make it more likely that other countries might also adopt similar policy actions and led to a major reassessment of risk in other emerging markets.

_

² All references to equity price developments in emerging markets in this chapter refer, unless otherwise noted, to the percentage return in the International Finance Corporation's investable indices in U.S. dollar terms.

³ In light of the substantial difference in levels of yields in Russia and elsewhere, and the impact of this difference on indices of bond yields, all references to the J.P. Morgan EMBI yield spread are to the index excluding Russia.

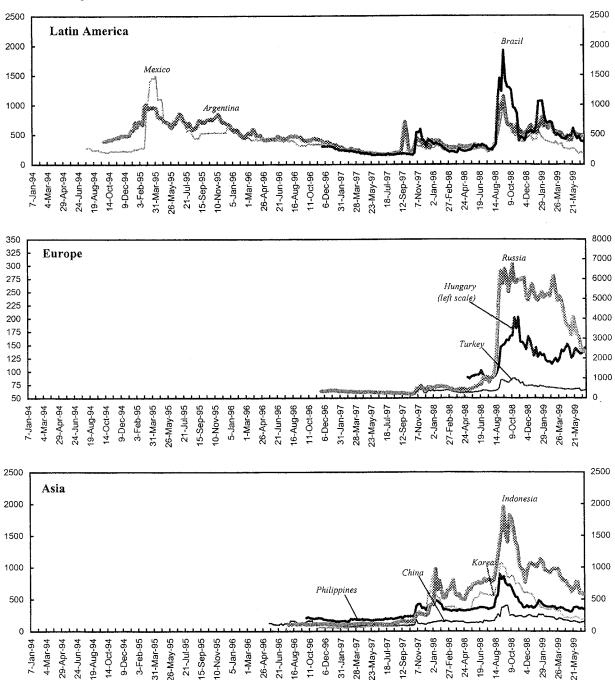
Figure 3.1. Yield Spreads on Emerging Market and U.S. High Yield Bonds 1/ (In basis points, weekly average)



Sources: IMF staff calculations based on data from Bloomberg Financial Markets, L.P. and J.P. Morgan. 1/ EMBI excludes Russia from the start of 1998.

Figure 3.2. Secondary Market Yield Spreads on U.S. Dollar-Denominated Eurobonds by Selected Emerging Markets 1/

(In basis points)



Source: Bloomberg Financial Markets, L.P.

1/ Latin America: Republic of Argentina bond due 12/3, United Mexican States bond due 9/2, and Republic of Brazil bond due 11/1.

Europe: National Bank of Hungary bond due 4/3, Republic of Turkey bond due 5/2, and Ministry of Finance of Russia bond due 11/1.

Asia: People's Republic of China bond due 11/3, Republic of Indonesia bond due 8/6, Republic of Philippines bond due 10/16, and Korea Development Bank bond due 11/3.

Box 3.1. Russia: The Feeding Frenzy

The actions announced by the Russian government on August 17, 1998, came as a major surprise to the financial markets, even though Russia had been downgraded by one rating agency (Moody's) in March 1998 and then by all three major agencies in May or early June, and despite the fact that yields on Russian securities clearly reflected a substantial default risk. In explaining their large positions in Russian assets, market participants have typically noted that they relied on the proposition that Russia was too important a country for the major industrial countries and the international financial institutions to allow it to collapse. In this sense, moral hazard clearly played a role in the buildup of claims on Russia in a way that cannot realistically be said for any of the other crisis countries. But in addition to (or in combination with) this moral hazard, there is also clear evidence that Russia represents a case where many investors bought securities that they did not fully understand, and where they did so in the face of developments that should have raised concerns.

Between March 1998 and July 1998, there was an enormous buildup in the outstanding stock of sovereign Russian eurobonds. This buildup, which added to the large positions of nonresidents in GKOs and OFZs (ruble-denominated domestic government securities) and other Russian instruments, reflected five separate bond issues: one in March, one in April, two in June, and one in July as part of the GKO exchange. As a result, the stock of eurobonds rose from \$4.6 billion to \$15.9 billion in just five months. What is notable is that these bond sales and massive growth in nonresidents' holdings of Russian assets occurred in the face of downgrades in Russia's credit rating and in sharp increases in yields that indicated a substantial probability of default (see also Annex V, on the review of ratings during the crises). For example, before the first issue of 1998 in March, the yield spread on the benchmark June 2007 bond stood at about 490 basis points. By late June, when the outstanding stock of eurobonds had risen from \$4.6 billion to \$9.4 billion, the yield spread had increased to about 750 points, and Russia was rated four notches below investment grade by Moody's and Standard and Poor's. By late-July, after the issuance of a further \$6.4 billion of bonds in the debt exchange (or \$4.8 billion at market value, since the bonds were issued with submarket coupons) the yield spread had risen to around 900 points. By August 14, just before the announcement of the devaluation and debt moratorium, the yield spread had risen to about 1,800 basis points and Russia was rated by the two leading agencies as five or six notches below investment grade.

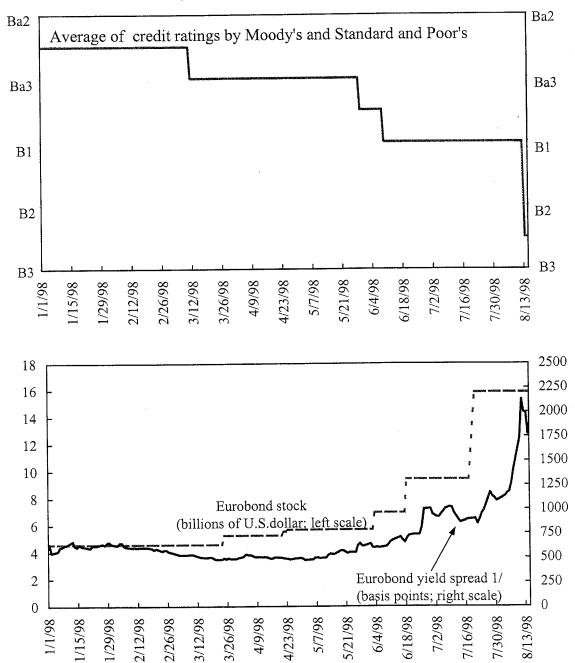
For many investors, the sharp rise in yields was viewed more as a buying opportunity than as an indicator of possible default. Each of the first four eurobond issues in 1999 was substantially oversubscribed, and in the case of the GKO exchange it has been argued that the reason why a larger proportion of eligible GKOs was not exchanged was that GKO holders expected that they would make large capital gains as GKO yields fell when others tendered their holdings and reduced the outstanding stock. Market participants talk of "feeding frenzies" at the time of new Russian issues, and of demand from a wide range of investors with little knowledge of Russia. Indeed, one eurobond issue—the April issue of Lit 750 million (\$420 million) in 5year bonds—was targeted at Italian retail investors seeking the high yields that had been previously available on Italian debt. And in the case of the London Club debt, the number of holders of the restructured notes (IANs) and loans (PRINS) had grown from about 400 "traditional" creditors (mostly banks) at the time of the original agreement to several thousand, many of which had little understanding of the legal nature of the instruments they held. The widely dispersed holdings of these instruments and the lack of understanding of the inherent risks was reflected in difficulties in contacting and seeking agreement among creditors in the negotiations over the London Club debt in late 1998 and early 1999. Similarly, some investors in MinFins (domestically issued dollar-denominated debt) appear to have lacked a full understanding of their legal status, including the jurisdiction in which they were issued.

A range of other Russia-linked securities were also offered in the first half of 1998 by other issuers. These included euro-ruble issues (notes with principal and interest payments payable in dollars, but based on the value of the ruble) from several supranational institutions (the IFC, European Bank for Reconstruction and Development (EBRD), and Inter-American Development Bank (IADB)) that were sold to yield-seeking investors (and which were swapped to provide low cost dollar financing to their issuers). There were also ruble-

linked notes such as a May 1998 issue by an Italian investment bank of Lit 750 billion of 10-year bonds that yielded an above-market coupon of 6.4 percent, but with a clause that the coupon would go to zero in the event of a Russian default: the clause was triggered in August 1998, and holders were left with a zero-coupon bond worth about only 60 percent of face value. More generally, there was a whole range of structured notes with payments linked, sometimes with leverage, to the payment flows on GKOs and other Russian securities. The large falls in prices of these securities, the disappearance of a market in many cases, and the legal uncertainty over some instruments contributed to the deterioration in sentiment for other emerging market assets following the Russian default.

Figure for Box 3.1

Russia: Credit Ratings, Eurobond Stock, and Eurobond Spreads



Sources: Bloomberg Financial Markets L.P; Capital Data; and IMF Staff calculations. 1/ Russian Federation bond due June 2007.

The impact of the policy changes on Russian asset prices was dramatic. Within 10 days the exchange rate had depreciated from Rub 6.2 per dollar through the new lower band of Rub 9.5 per dollar, and by December it traded through Rub 20 per dollar: as of end-June 1999, the rate stood at about Rub 24 per dollar. The price of the benchmark 2007 eurobond fell to as low as 17 cents on the dollar in early October, implying a yield spread of about 5,000 basis points. The prices of debt instruments that were viewed as less senior—the domestically issued "MinFin" bonds, and the restructured London Club "IAN" notes and "PRIN" loans—were hit even harder as their repayment came even more into question. And the Russian equity market, the world's strongest in the first three quarters of 1997, fell in October 1998 to a level (in dollar terms) about 95 percent below its October 1997 peak.

The fall in the prices of Russian assets had major effects on the balance sheets of investors and market makers in Russian assets. Several small or medium-sized hedge funds encountered financial problems and were unable to meet margin calls. Some institutions incurred losses when Russian banks were unable to deliver on forward contracts on the ruble, or when Western banks refused to deliver, claiming that the policy actions of the Russian government constituted a form of *force majeure*. As losses on holdings of Russian securities were revealed and market volatility increased, many leveraged investors began to face much higher margin calls from their creditor banks. Further, risk management systems in many investment banks require higher asset price volatility to be supported by higher capital charges against trading activity or reductions in trading positions in assets whose perceived riskiness has increased. In many cases, the decision was to decrease trading positions. This combination of external and internal margin calls contributed to contagion, a sell-off in a broad range of emerging market securities, and a sharp spike in yield spreads.

The combination of reduced liquidity in emerging markets and concern that other countries might follow Russia's lead resulted in major losses in all emerging market assets as spreads blew out. In addition, the imposition of capital controls by Malaysia on September 1 raised new concerns about the transfer risk associated with emerging market securities issued by even fairly highly rated countries. The yield spread on the J.P. Morgan EMBI index rose from 587 points at end-July to as high as 1,610 points on September 10. Across a wide range of emerging markets, yield spreads reached levels not seen previously in this decade (although—due to its heavy weighting of Latin American countries—the EMBI spread remained just below its peak in the Mexican crisis). Countries that were hit the hardest—including Bulgaria, Ecuador, and Venezuela—included some that were viewed as being most

⁴ The losses of the larger hedge funds tended to be relatively small. In the case of LTCM, the firm's losses were not primarily in Russia or other emerging markets. Only 16 percent of the total loss in August (44 percent of net assets) was on emerging market assets, with just under 10 percent of the loss on Russian instruments.

⁵ Malaysia was downgraded by all three ratings agencies in the wake of the capital controls, but it retained its investment grade rating with the two largest agencies.

susceptible to pressures similar to those that had faced Russia. However, other countries also saw massive yield increases: for example, Korea and Mexico both experienced a doubling in yield spreads to about 1,000 basis points. Pressures on the emerging markets of central Europe tended to be fairly modest, reflecting the substantial economic differences relative to Russia. Emerging market equity prices also tumbled, resulting in a 28 percent fall in the all-country IFC index, the largest monthly fall on record (Figure 3.3). Latin American stock markets were hardest hit—most notably, Brazil and Venezuela—with Asian markets falling by less.

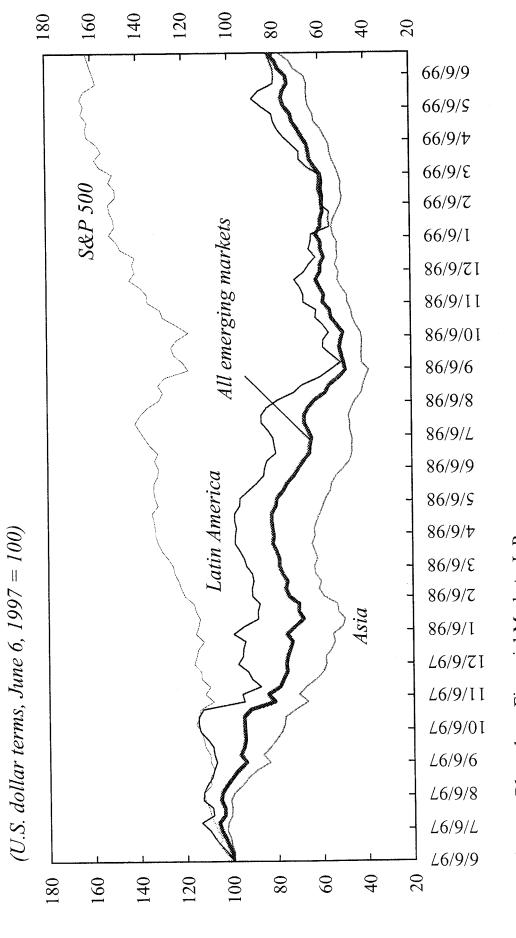
In the wake of Russia's problems, market participants turned their attention to other emerging markets with large financing needs and/or fixed or managed exchange rates that were perceived as being vulnerable, most notably Brazil. While the Brazilian banking sector was clearly far stronger than the Russian one, and Brazil had a long history of full domestic debt service including in difficult conditions, the large amount of Brazilian short-term domestic debt raised issues that were similar in some respects to the Russian case. One aspect of concern in Brazil was the effect on fiscal sustainability of having so much of the domestic debt carrying yields that were indexed to the overnight interest rate or to the exchange rate. There was also substantial speculative pressure on the Hong Kong dollar, which had been subject to periodic pressure for almost a year, and on the Argentine peso (Figure 3.4). In the case of Hong Kong SAR, the vulnerability stemmed from its being—with China—one of the last large Asian economies to have a fixed exchange rate. As is discussed in Chapter V, one of the authorities' responses to this period of pressure and to the so-called "double play" on the equity and money markets was their nonstandard intervention in the domestic equity and derivatives markets. With the assistance of a rally in stock markets outside of Asia and the deleveraging that followed the Russian crisis and the LTCM episode, the Hong Kong market rose and the authorities' intervention proved successful. The speculative pressures on Hong Kong were, however, associated with pressures on a number of other currencies in the wider region. These pressures on the South African rand and Australian, Canadian, and New Zealand dollars are discussed in Box 3.2.

The post–Russia contagion in emerging markets eased somewhat from around September 11, following statements by the IMF and some of its major shareholders that they stood ready to extend support to Brazil or to other Latin American countries that were implementing strong economic programs. Stock markets recovered somewhat, and yield spreads fell, although international markets remained essentially closed to new issuance by emerging market borrowers. The recovery was interrupted, however, by the turmoil in mature markets in early October and the near-failure of LTCM. Nonetheless, the spike in emerging market bond yields was less extreme than after Russia's unilateral debt restructuring. Subsequently, pledges of support for emerging market countries from the international community at the IMF/World Bank Annual Meetings and the reelection of Brazilian President Cardoso eased pressures. On October 20, an agreement between the IMF

_

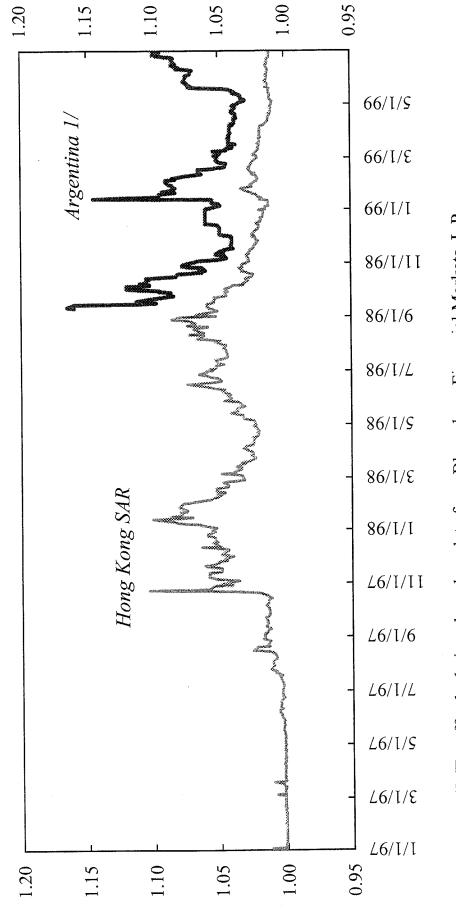
⁶ See IMF (1998b) for further details of the debt maturity profiles of Brazil and Russia.

Figure 3.3. Total Return Equity Indices: IFC Global and S&P 500



Source: Bloomberg Financial Markets, L.P.

Figure 3.4. Forward Exchange Rates for the Hong Kong Dollar and Argentine Peso (12-month forward exchange rate divided by spot rate)



Source: IMF staff calculations based on data from Bloomberg Financial Markets, L.P. 1/ Data for Argentina are not available prior to September 1998.

Box 3.2. The Activity of HLIs in Pacific Rim Currencies in 1998

The speculative pressures experienced in Hong Kong SAR in 1998 (see also Chapter V) were also felt in other countries that saw substantial speculative activity by hedge funds and other leveraged players. Other currencies experiencing large hedge fund trading at various stages in 1998 included the Australian dollar, the New Zealand dollar, and the South African rand, in addition—as is discussed in Chapter II—to the Japanese yen.

Short hedge fund positions were built up in the period leading up to mid-1998 against currencies that were seen as "surrogates" for the less liquid Asian emerging currencies. In addition to views on commodity prices and on the vulnerability of some countries, positions against some of the targeted countries reflected the desire to take short positions against certain Asian emerging markets. However, reflecting the thinness of the foreign exchange markets in most of emerging Asia in the wake of the Asian crisis, it was impossible to put in place large short positions on these currencies. Leveraged investors therefore put positions on the more liquid currencies in the region, including the Australian dollar, the Hong Kong dollar, the New Zealand dollar, and the Singapore dollar, with the absence of any capital controls facilitating the establishment of short positions on the first three currencies. Hedge funds were also seen at times taking short positions against the Canadian dollar and the South African rand.

Discussions with market participants suggest that speculative positions in some of these currencies in mid-1998 were quite large and highly concentrated, with unconfirmed estimates suggesting that total positions of more than 5 percent of annual GDP may have occurred against some countries. Of course, given the relative magnitudes of foreign exchange trading and GDP, even a position this large in terms of GDP may represent less than one day's average total (i.e., spot, forward, and swap) turnover in the foreign exchange market. In terms of client business (i.e., excluding interbank dealing), the positions would seem substantially larger, and may represent several days of normal turnover. In this light, the total speculative positions put in place in some of these markets might well have been quite large relative to the size of the markets.

When the Japanese yen jumped on October 7 on the reversal of the yen carry trade, hedge funds and other large players were seen covering short positions in several currencies including the Australian dollar, New Zealand dollar, and South African rand. These currencies saw rapid appreciations of 4–5 percent, while the Canadian and Singapore dollars each appreciated by about 2 percent. As occurred in some other markets, these players found that positions that were built up gradually to avoid moving prices could not be unwound quickly without causing large price movements. Indeed, one-week price movements of 16, 10, and 7 percent were seen in the Japanese, New Zealand, and Australian currencies, respectively. These represent the largest one-week moves in these currencies in the current floating rate era (since 1971 for Japan, 1983 for Australia, and 1985 for New Zealand). In hindsight, the players involved do not appear to have given sufficient consideration to the consequences if all those with similar positions tried to quickly unwind them. It is notable that the markets that saw the largest movements due to hedge funds and other similar players in this period were not necessarily the smallest and least liquid, but included the third (Japanese) and eighth (Australian) most-traded currencies in the world.

Concerns about market integrity have been raised in connection with the activity of hedge funds in some of these countries. It has been suggested that hedge funds lack the longer-term relationships that banks have with these markets and are more likely to engage in destabilizing trading and practices. It has been suggested that, in several cases, hedge funds were seen to be trading in ways that were designed to destabilize markets and to be spreading information about their positions designed to scare other investors into following their lead. It is clear that several hedge funds took similar positions around the same time, although it is unlikely that the question of whether or not there was explicit collusion will ever be satisfactorily resolved (see Chapter V).

_

¹ A comparison with final client turnover may be more relevant, since this may give a better indication of a market's ability to digest a given position without a large price impact.

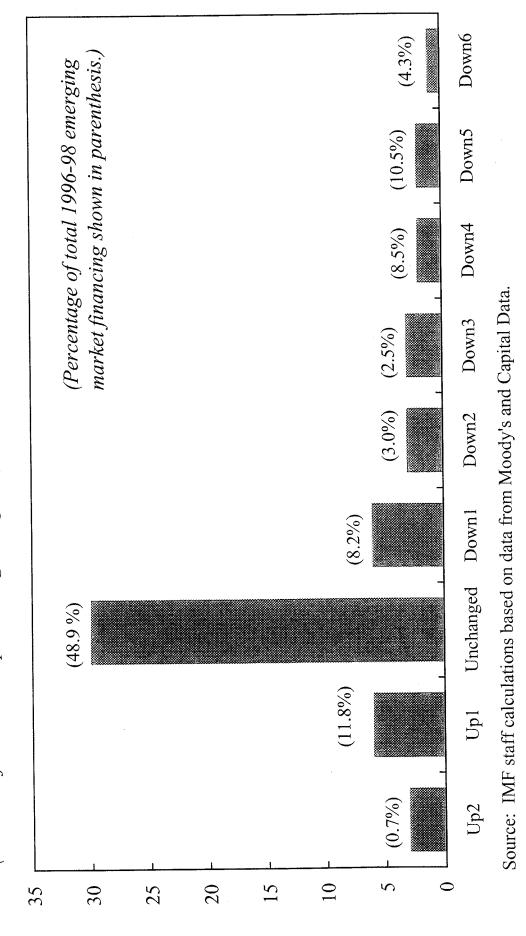
and Brazil on the target fiscal deficit was announced, and on November 13 an agreement was announced on a support package of up to \$41 billion from the international community. These indications of financial support for Brazil and the accompanying policy measures helped significantly in easing the pressures on emerging markets.

The enormous pressure on emerging markets in August and September of 1998 resulted from the combination of a contraction in liquidity and a reassessment of credit risk. The trigger for the crisis was, of course, the Russian devaluation and debt moratorium, with its implications for a potential wider reduction in emerging market creditworthiness. However, the factor that transformed the shock into a major crisis was a generalized pullback in market making and risk taking in emerging markets. Box 3.3 presents some evidence on the reduction in liquidity in emerging bond markets. More generally, the movements in emerging market yield spreads over the last couple of years appear to be far larger than can explained by any reasonable estimates of the change in average credit quality of emerging markets (Figure 5.5). For example, the majority of countries with long-term foreign currency debt ratings as of May 1997 had experienced no net change in their credit rating as of May 1999 (Figure 3.5). Further, one- or two-notch rating changes over this period were divided equally between upgrades and downgrades. There were of course a number of larger downgrades of three-six notches in magnitude—Indonesia, Korea, Malaysia, Moldova, Romania, Russia, Thailand, and Venezuela—with no corresponding large upgrades. Further, the countries experiencing large downgrades accounted for a substantial proportion—about 26 percent—of total private market financing in 1996–98. As a result, the average credit quality of rated emerging markets (using total financing as weights) declined by about 11/4 notches between May 1997 and May 1999, from a strong Baa3 to Ba1.

Emerging markets recovered substantially during the fourth quarter of 1998, amid easings of official interest rates in most industrial countries and agreement on a program between the IMF and Brazil. For the quarter as a whole, emerging market equity prices (as measured by the International Finance Corporation (IFC) all-country index) rose 18 percent in U.S. dollar terms, with Asian equities rising 42 percent and Latin America gaining 8 percent. Within Asia, the largest increases were seen in Korea and Indonesia, where equity prices rose by about 125 percent in the quarter. As market sentiment improved, market access for higher-rated emerging market borrowers began to improve, although, as described below, innovative structures were required to attract investor interest. Further, emerging markets remained very sensitive to developments in mature markets, and the first large bond issues did not occur until November 18, the day after the U.S. Federal Reserve cut its target for the federal funds rate to 4.75 percent, the third cut in two months, and less than a week after the announcement of agreement in principle over a large international financing package for Brazil. Amid this positive news, emerging markets were little affected by the deteriorating situation for several of China's international trust and investment corporations (ITICs), which

⁷ See Chapter V for further information on the credit rating industry, including the limitations on the use of ratings as measures of absolute (rather than relative) creditworthiness.

Figure 3.5. Emerging Markets Sovereign Ratings Changes, May 1997-May 1999 (Number of countries experiencing changes, by number of notches)



Box 3.3. The Decline in Liquidity in Emerging Market Bonds and Foreign Exchange

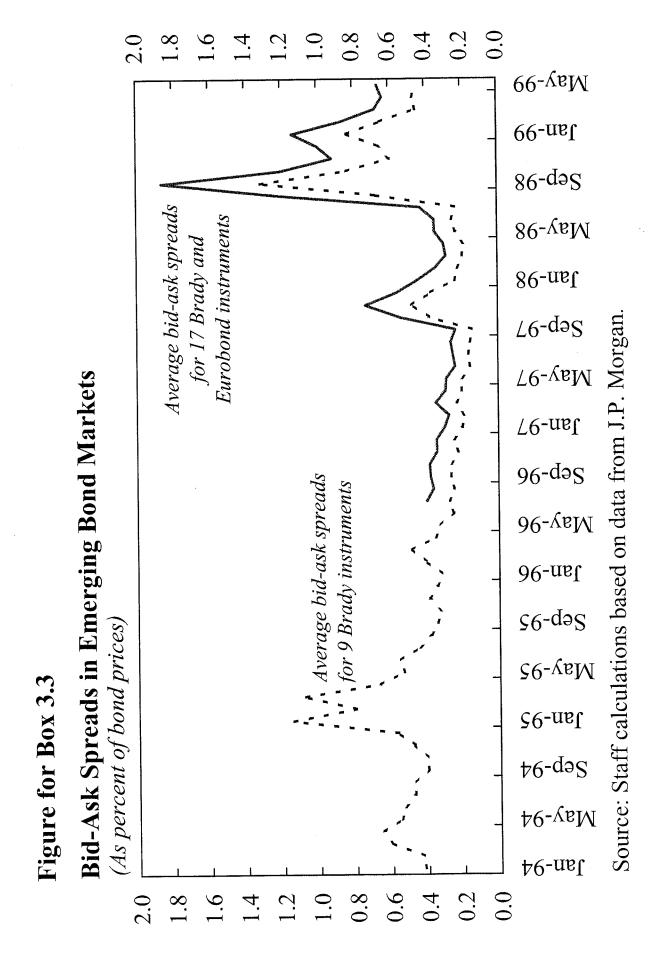
In the wake of the Russian unilateral debt restructuring and the near-failure of LTCM, there has been a sharp cutback in the willingness of market participants to take positions in emerging market assets. Many hedge funds and proprietary trading desks have either chosen to reduce their activity in emerging markets or have been forced to do so by the reduction of credit lines. In addition, "crossover" players (investors who specialize in investment grade instruments from mature markets, but who are also able to hold positions in emerging market securities) also have a sharply reduced appetite for emerging market assets. Several investment banks have closed down their emerging market trading desks, while most of the others that continue to operate have reduced the capital devoted to this activity and therefore now take smaller positions in emerging market assets.

This trend is confirmed by data showing a sharp fall in trading turnover. Data from a survey by the Emerging Markets Trading Association suggest a sharp fall in trading in the third and fourth quarters of 1998, with the turnover of responding firms in the first quarter of 1999 down around 66 percent from its peak level in the fourth quarter of 1997. While a part of this decline is due to falls in the prices of emerging market instruments (and perhaps also to changes in survey coverage), it is clear that there has been a sharp pullback in trading and market-making in emerging market instruments. Market participants report an even larger fall in the repo market for emerging market securities, repos having been used to finance the purchases of many investors. Market participants reported gains in turnover in the second quarter in both bond trading and repo activity, but volumes remained far below earlier peaks.

The reduction in liquidity and the greater day-to-day price volatility has shown up in larger bid-ask spreads in emerging market instruments. Data for bid-ask spreads for emerging market bonds (measured as the monthly average of the daily median spread for some benchmark bonds) are shown in the figure. The data suggest that bid-ask spreads in emerging markets were at their lowest in September 1997, around the time that price volatility in emerging market bonds, and yield spreads on emerging market bonds and U.S. high-yield debt also touched their lows. Bid-ask spreads peaked in September 1998 in the post–Russian turmoil at levels eight or nine times their levels a year earlier. While they have since declined—with a hiccup around the Brazilian devaluation—bid-ask spreads in mid 1999 remained about three times higher than the levels of September 1997.

The decline in liquidity has also shown up in a smaller number of firms that are active in the primary issuance of emerging market securities. As a result of the reduced competition and the higher price volatility in emerging market assets, fees paid by issuers have increased.

There has been a substantial reduction recently in liquidity in some sectors of the foreign exchange market. There has been a sharp decline in the volume of trading in Asian and European emerging market currencies, with the withdrawal of many market makers. In central Europe, the nondeliverable forward market—which exists mainly for position taking—has been especially hard hit, with a much smaller contraction in onshore spot markets. However, in the case of the crisis-affected countries, liquidity has recovered somewhat from the thin levels in the midst of the crisis. For example, in May 1999 bid-ask spreads in Thailand, Indonesia, and Brazil had fallen by between 60 and 90 percent from their levels during the respective crises. Nonetheless, spreads remain much higher than the levels that prevailed under the previous managed exchange rate regimes.



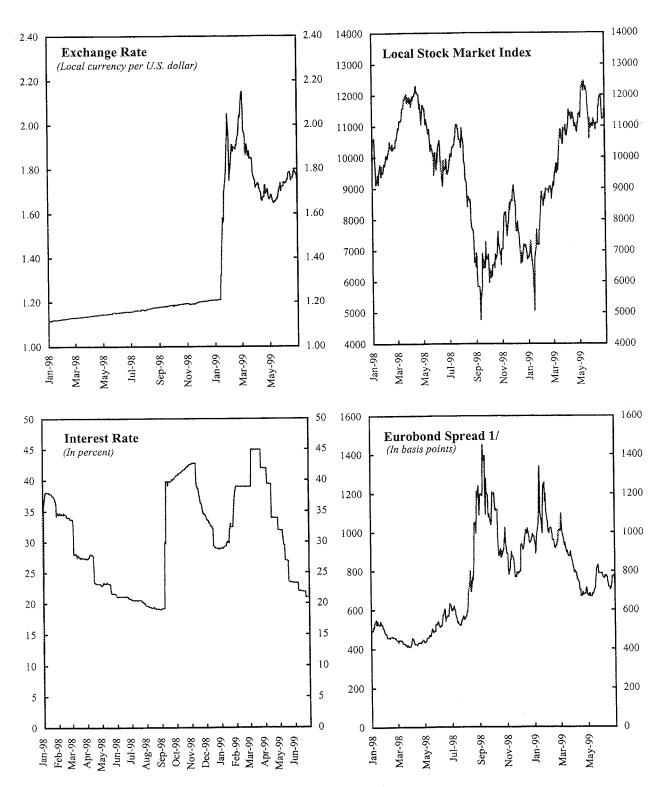
first became apparent following the October 6 announcement by the People's Bank of China that it was closing Guangdong ITIC (see Box 3.4). Indeed, these problems did not prevent a \$1 billion sovereign bond issue by China in December.

A further shock to emerging markets occurred early in 1999 with the devaluation—and subsequent float—of the Brazilian real. While international support for Brazil had been helpful in safeguarding emerging markets from further shocks in late 1998 when markets were in an extremely fragile state, sentiment concerning Brazil remained weak going into 1999. Against a background of delays in the passage of fiscal reforms, the trigger that led to the renewal of pressures on the real was the news on January 6 that Brazil's second-largest state (Minas Gerais) was declaring a moratorium on its debt payments to the federal government. Pressures built up rapidly, and following several days of large capital outflows, the exchange rate band was adjusted on January 13 to allow a devaluation from R\$1.21 to R\$1.32 per dollar. However, pressures continued, and on January 15 the free float of the real was announced. The exchange rate depreciated steadily, reaching a low of R\$2.15 per dollar at the start of March, a depreciation of 43 percent from its previous fixed rate. Subsequently, however, the real has appreciated, and traded at end-June at about R\$1.75 per dollar (Figure 3.6).

A surprising feature of the market reaction to the Brazilian devaluation was the limited negative impact on Brazilian assets and the limited spillovers elsewhere in the region. For example, Brazilian stock prices (in domestic currency terms) fell 31 percent between January 6 and January 14, before surging on the float of the real on January 15, and by January 20, the stock market had more than recovered its losses in domestic currency terms. And, after initially falling about 23 percent (its yield spread increasing by 440 basis points), the price of the benchmark Brazilian euro bond had fully recovered its losses by mid-February. Spillovers into Latin American markets were moderate, except in the case of Argentina. While other major Latin American stock markets generally fell only by about 10 percent, the stock market in Argentina (which has relatively strong trade links with Brazil) fell 23 percent, and did not regain its pre–Brazilian crisis level until early April. Spillovers in bond markets were also relatively modest, and the spike in emerging market yields was much smaller than had been seen after the Russian crisis (Figure 3.2). However, a notable exception was Argentina, where yields as of end-June still had not returned to their previous levels: this may partly reflect the substantial bond issuance over this period. The effects of Brazil on emerging markets outside the region were also fairly muted.

The pattern of limited and short-lived effects on asset prices both in Brazil and in other emerging market countries suggests that the eventual collapse of the Brazilian band regime—if not its timing—had been well anticipated by markets and that positions had already been adjusted, thus limiting the contagion following the event. Indeed, data for exposures of mature market banks indicate that credit exposures to Brazil were trimmed substantially in the second half of 1998, and the earnings figures announced by domestic Brazilian banks in the first quarter of 1999 would suggest that some of these had actually

Figure 3.6. Brazil: Financial Market Indicators



Sources: Bloomberg Financial Markets L.P.; and IMF staff estimates. 1/Republic of Brazil bond due May 2027.

Box 3.4. The Collapse of GITIC

Concerns over the financial condition of China's international trust and investment corporations (ITICs) came to a head in October 1998 with the closure of Guangdong ITIC (GITIC) by the People's Bank of China for failing to meet its debt obligations. GITIC, which was declared bankrupt in January 1999, had total liabilities of around \$4.7 billion, about half of which had not been registered. Press reports in April 1999 indicated that creditors could expect to receive back only around 17 percent of the face value of their claims. About \$3.9 billion of liabilities were external, and the authorities have announced that the claims of external creditors will be treated in a similar fashion to domestic creditors. Foreign creditors have complained, however, about the lack of transparency and of creditor consultation in the liquidation process.

Over 200 ITICs were established over the last two decades by central and regional governments. These companies played an important role in terms of raising funds (mainly in foreign markets in the case of about 20 large ITICs), making loans and investments (including in property development), and conducting securities operations. Their growth occurred with limited supervision and under substantial pressure for policy-related lending from their owners. The resulting weaknesses in governance have been exacerbated by the weak health of the state enterprise sector.

The closure of GITIC has provided a clear indication that creditors of ITICs may not be able to rely on government support. The precise degree of support for ITICs from their owners had long been uncertain, although many provincial governments provided letters of support for foreign loans but not explicit guarantees. For their part, the national authorities had issued several statements in recent years warning investors that unauthorized external borrowings would not be guaranteed by the central government. In the case of GITIC, it was owned by the Guangdong provincial government and had in the past received capital support from its owner. This support—in addition to its location in a prosperous region that benefited from its proximity to Hong Kong SAR—was one factor behind GITIC still having an investment-grade credit rating by one agency (BBB-from Standard & Poor's) at the time of its closure. However, the other major agency (Moody's) had downgraded GITIC and some other ITICs to sub-investment-grade two months prior to its closure, citing their deteriorating financial health and the weakened ability of their provincial owners to provide support.

The closure and bankruptcy of GITIC has prompted a reduction in foreign banks' exposure to China and an increasing differentiation between sovereign and non-sovereign entities. Several other ITICs have encountered liquidity pressures in recent months, including Guangzhou ITIC, which is seeking to restructure its debts to banks in the face of attempts to force the company into bankruptcy. Total ITIC external debt (including GITIC) is estimated by the authorities at \$12 billion—but analysts estimate it could reach over \$20 billion with the inclusion of unregistered external claims and guarantees. Only one major ITIC (the central government—controlled China ITIC) retains an investment-grade rating.

Looking ahead, it is expected that there will be substantial consolidation of the ITIC sector. The People's Bank of China has announced that the number of ITICs will be substantially reduced through mergers and restructuring, and a reduction in the scope of their operations. Further, ITICs have been required since late 1998 to separate their securities and trust operations, in an attempt to increase the transparency of their operations.

managed to put large short domestic currency positions in place. Further, the deleveraging that had occurred in the second half of 1998 reduced the amount of speculative capital that could propagate the Brazilian shock into other markets. In addition, the Brazilian banking system was viewed as being relatively strong and to have been hedged with regard to exchange rate changes, providing confidence in its ability to withstand a devaluation.

However, the muted reaction to the Brazilian devaluation was helped also by the benign international markets situation in which it occurred. For example, U.S. equity prices had risen nearly 30 percent over the preceding three-month period, and global interest rates were low. Furthermore, one rating agency had placed Korea under review for possible upgrade in December 1998, while the other two major agencies actually upgraded Korea less than two weeks after the Brazilian devaluation. Malaysia and Thailand were also upgraded around this period.

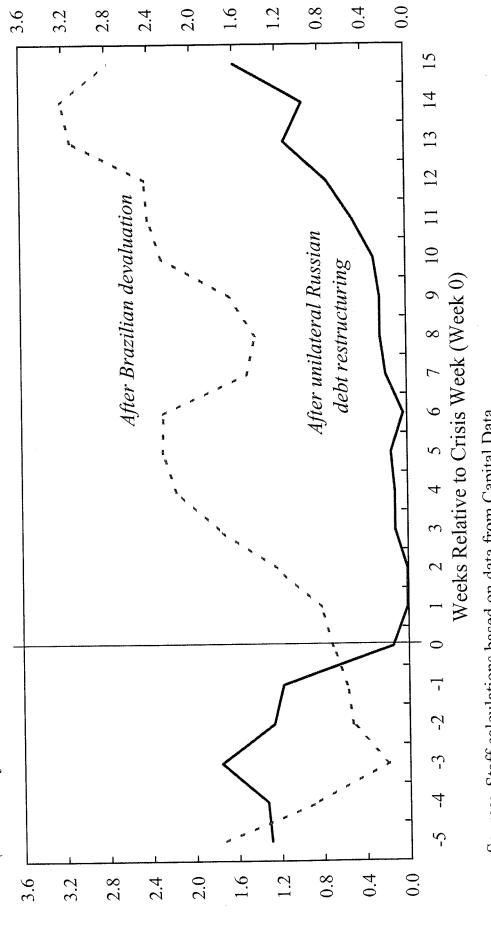
As a result of the overall favorable global environment, strengthening oil prices, and improving macroeconomic conditions in a number of key emerging markets, markets rallied in February—April, and the issuance drought following the Brazilian shock was relatively brief (Figure 3.7). In the first six months of 1999, emerging equity markets (as measured by the IFC Investable Index) rose by 37 percent, with the Asian index rising 52 percent and the Latin American index rising 31 percent. Korea, Indonesia, and Russia showed some of the largest rises, each rising by more than 60 percent. Emerging market bonds also rallied modestly, with the J.P. Morgan EMBI yield spread (excluding Russia) falling from 1,020 basis points to 915 basis points. This recovery reflected the improving fundamentals in many countries—especially in Asia, where several countries have had ratings upgrades—and a perception that the markdown on emerging market assets in the wake of the Russian crisis had been larger than was justified in the wake of the relatively modest reduction in the creditworthiness of most emerging markets.

The recovery in emerging markets has also been supported by favorable developments in Brazil (Figure 3.6). Market participants responded favorably to the nomination and confirmation of Arminio Fraga as Governor of the central bank. The announcement of a strengthened IMF-supported arrangement in March also helped sentiment, as did favorable macroeconomic developments, including resilient output data and a smaller-than-expected impact on inflation. While official interest rates were initially increased only slowly, the overnight interest rate was increased to about 45 percent in early March, helping to stabilize the real. As market participants gained confidence in monetary policy, the real strengthened substantially, allowing overnight interest rates to be eased to about 21 percent by late June. At end-June, equity prices in dollar terms were about

⁸ International banks active in the nondeliverable forward market (NDF) also made large profits by arbitraging between onshore and implied NDF yields. See Box 3.5 for a brief description of the NDF market.

Figure 3.7. Emerging Market Bond Market Issuance Around Crises 1/





Source: Staff calculations based on data from Capital Data.

^{1/} Data prior to Russian default exclude the July 1998 Russian debt exchange.

Box 3.5. The Nondeliverable Forward Market

A notable feature in emerging market foreign exchange markets in recent years has been the prominence of nondeliverable forward (NDF) markets for certain currencies. NDF contracts are similar to outright currency forward contracts in that they fix the future price of a currency between two counterparties. However, unlike traditional forward contracts which involve the simultaneous exchange, at a predetermined date in the future, of the agreed amounts in the two currencies, delivery on NDF contracts is always in the same currency (usually the U.S. dollar) and in a typical exchange involves settling the difference between the implied exchange rate on the contract and the prevailing spot rate on the maturity date of the contract. NDF contracts are similar to currency futures contracts except that they are traded over-the-counter and not on organized exchanges, and the payoff on an NDF contract can be replicated exactly using an outright forward contract.

The structure of the NDF contract is designed for two counterparties to take positions on the future value of a currency without requiring delivery of that currency, usually done to avoid capital and exchange controls that prevent delivery of the domestic currency in fulfillment of a typical forward contract. NDF markets are therefore typically offshore. As a result, whereas the forward rate on a typical forward contract reflects the interest rate differential between the onshore domestic interest rate and the dollar interest rate, the implied forward rate on an NDF contract reflects the interest rate differential between the offshore interest rate and the dollar interest rate. Arbitraging the onshore and offshore interest rate differential, which can deviate substantially, is a profitable market-making activity, but can typically only be done by international banks with local affiliates. However, arbitrage is often not perfect, and hence wide differentials between onshore and implied offshore NDF yields are seen, particularly in times of market volatility.

¹ In the case of the Philippines, an onshore NDF market has existed where settlement is in pesos. Indeed, similar markets with settlement in domestic currency existed in many industrial countries in the 1970s and 1980s prior to the removal of exchange controls.

20 percent above their pre devaluation levels and about 65 percent above their lows during the crisis. Benchmark bond yields had also fallen significantly. As a result of these favorable trends, Brazil was able to return to the eurobond market in April, raising \$2 billion in cash and a further \$1 billion in a conversion of Brady securities into conventional eurobonds. However, at a yield spread of 675 basis points on five-year bonds, the cost of funds was far higher than an earlier five-year issue in May 1996 that had carried a spread of only 265 basis points.

Bond markets appear to have been largely unaffected by developments in early 1999 with regard to the possible restructuring of some sovereign eurobonds (Box 3.6). Although market participants expressed concern about the Paris Club's decision to ask Pakistan to reschedule its private sector obligations—including eurobonds and floating rate notes—in a comparable manner to the restructuring of debt owed to official creditors, the impact on the debt of other emerging markets appears to have been limited to a few other lower-rated credits. The possibility of restructuring was seen to be relevant only for a few other countries—including Ukraine and Romania—with substantial principal repayments due in 1999. Nonetheless, in conjunction with the turbulence of the second half of 1998, indications in early 1999 that payments on sovereign eurobonds might not always be met on schedule have helped to ensure that "investors have become newly acquainted with the notion of credit risk for countries as well as companies and banks" (Moody's, 1999).

The rally in emerging markets slowed in May amid indications that the U.S. Federal Reserve might raise official interest rates in response to an increase in inflationary pressures. Emerging market bond and equity markets both peaked around May 10 and then drifted down over the rest of the month. While some country-specific factors—such as the political uncertainty in Russia after the removal of the Primakov government—were at work, the decline in emerging market asset prices mostly reflected developments in the mature markets, including expectations of higher short-term interest rates in the United States, increases in bond yields or credit yield spreads in some countries, and some weakness in commodity prices. Argentina was one of the most affected countries, with market participants concerned about the impact of higher interest rates on an already weak economy, due to the loss of competitiveness from the Brazilian devaluation. Nonetheless, the pressure on the peso (as measured by the 12-month forward exchange rate) was substantially less than around the Russian and Brazilian crises. Further, as mature equity markets recovered in June, pressures on emerging markets eased, and there were no major movements in emerging market asset prices when the U.S. Federal Reserve announced a 0.25 percent increase in its target for the federal funds rate on June 30.

⁹ In the case of Romania, repayments were eventually made on schedule in May and June on two international bonds. In the case of Ukraine, creditors agreed in late June to extend the

two international bonds. In the case of Ukraine, creditors agreed in late June to extend the grace period on a structured rate maturing in early June, to enable further negotiations on a possible restructuring.

Box 3.6. Issues Involving the Possible Restructuring of Eurobonds

There has recently been substantial discussion about the possibility that countries with debt servicing problems may need to restructure sovereign eurobonds and that countries issuing new eurobonds might change the legal structure of bond contracts to provide for facilitated restructuring if that should prove necessary in the future. This discussion follows the decision by the Paris Club to ask Pakistan to reschedule its private sector obligations—including eurobonds and floating rate notes—in a comparable manner to the restructuring of debt owed to official creditors.

Although some market participants have complained that seeking rescheduling of eurobonds is a change in the "rules of the game," most have accepted that the move was probably inevitable in extreme cases given the recent substantial increases in the issuance of government bonds by emerging market countries, especially by countries rated below investment grade. For example, in the case of Pakistan, the majority of eurobonds were issued at ratings of B2 or below, while in the case of Ukraine—where restructurings have already occurred—some of the instruments were issued even before the country had received a (B2) rating.

It is clear that there is a tradeoff for countries that approach creditors for a restructuring between immediate cash-flow benefits and possibly reduced subsequent access to capital markets. As a result, there is widespread agreement in both the official and private sectors that any restructuring of eurobonds should be done on a case-by-case basis and that debtors and creditors should work collaboratively to resolve problems on a voluntary basis, for example, via exchange offers.

Looking forward, it may be useful to have more flexible bond contracts that facilitate restructurings should they become necessary. Currently, most outstanding eurobonds are "American-style" bonds, which do not include contractual provisions allowing qualified majorities to modify the terms of a bond and to impose these modifications on minority holders. Further, in the event of default the bonds provide few contractual limitations on the ability of individual bondholders to initiate and benefit from legal action on their claims. Given that ownership of eurobonds is generally spread widely, restructuring under these terms may be difficult and could lead to litigation, loss of value, and perhaps even loss of access for other borrowers. This could be exacerbated if "vulture funds"—investors that are skilled in extracting payments from troubled borrowers—were to increase their presence in emerging markets.

In light of the potential problems with existing bonds, there have been several suggestions over the last few years that future eurobond issues adopt "British-style" legal terms.³ Bonds issued under these terms contain "collective action clauses" that allow for:

- collective representation—clauses that provide procedures for bondholders to organize and designate a representative to negotiate on their behalf with the debtor;
- qualified majority voting—clauses that enable changes to be made in the terms of a bond contract without
 the unanimous consent of bondholders, and thus prevent a small number of dissident bondholders from
 blocking an agreement beneficial to the majority; and

¹ See, for example, IMF (1999b); Institute of International Finance (1999); Emerging Markets Traders Association (1999); and Standard & Poor's (1999).

² See Petas and Rahman (1999), pp. 61–62 for information on the governing law for outstanding bonds.

³ See, for example, the Rey Report (G-10), 1996; and IMF (1999b).

sharing among bondholders—clauses requiring bondholders to share the proceeds of litigation against a
debtor with all other creditors, thus reducing the incentive for individual creditors to take independent legal
action against the debtor.

Discussions with market participants indicate a fairly limited knowledge of the legal structure of bonds that they purchase.⁴ Nonetheless, some market participants argue that facilitating restructuring will make it more likely to occur, and that this will outweigh any possible benefit to bondholders from a higher recovery rate in the event of restructuring. However, there seems to be no evidence in current market prices to suggest that British-style bonds carry higher yields than U.S.-style bonds.⁵ Thus, it seems unlikely that a shift to British-style bonds per se will result in market access being curtailed or yield spreads being increased substantially. If market access were indeed to worsen, it is more likely that this would be a more general result of the problems of some sovereign borrowers having resulted in a greater focus on credit risk by market participants.

After some initial negative reaction to official suggestions for changes to bond contracts in new issues, market participants appear to be more open to such changes. The initial reaction may have in part reflected concerns that all bonds—rather than just new issues—would be subject to such changes. The proposed clauses are seen by many as potentially helpful in facilitating restructuring and in preserving value that could be lost in the event of the holdout by a small number of creditors. Nonetheless, some market participants remain wary of such instruments, and some emerging market countries may be reluctant to be at the vanguard of a concerted shift to British-style issuance, so it will be important for the larger mature market countries to lead this shift.

⁴ See also the results of a survey of bond market participants in G-10 (1996), p. 31. The survey indicates that bond market participants were not generally aware of the typical size of the majority required to agree to a rescheduling of eurobonds in cases (British-style bonds) where the document allowed this. The survey also notes that there were certain types of market participants that were indifferent to the legal structure of bond issues, saying they were not long-term holders of such securities and expected to sell securities well before renegotiation became an issue.

⁵ See also Petas and Rahman (1999, pp. 69–70) who show that the market prices of different bonds issued under U.S. and British law by three sovereigns (Kazakhstan, the Philippines, and Turkey) suggest—if anything—a higher valuation for British-style bonds.

At the end of June, yield spreads on all major emerging countries had fallen to levels substantially below their peaks after the crises in Russia and Brazil. But there were substantial differences across countries. Yield spreads on some of the mid-rated countries—for example, Argentina, Brazil, and Turkey—remained above their pre—Russian crisis levels, due either to domestic developments or because the Russian crisis has highlighted their vulnerability to global shocks. And even in some of the more highly rated countries—for example, Hungary and China—yield spreads have not really fallen back to their pre—Russian crisis levels, due in the latter case to new weaknesses revealed in the problems of the ITICs. Spreads on most other countries in Asia have fallen back below their pre—Russian crisis levels, although they remain well above the pre—Asian crisis levels. Finally, spreads for one country—Mexico—have fallen back nearly to the levels prior to the entire emerging market crisis, largely reflecting the stability imparted by its proximity and links to the United States and the buffering role of its flexible exchange rate.

Looking ahead, one aspect of concern arising out of the losses of the last two years is the damage that has been done to earlier perceptions that emerging markets had become a mainstream asset class. In the middle of the decade, emerging market bonds and equities had begun to establish themselves as a legitimate asset class for many investors, with high expected returns and favorable portfolio characteristics (such as low correlations with mature market returns). Many investors that came into emerging markets have fled the market and may not return quickly. The emerging market investor base is now reduced, with a smaller pool of "dedicated" money and fewer "crossover" investors (those specializing in mature market investments but able also to invest in emerging markets). Further, the experience of the last two years may have made the remaining crossover investors more opportunistic in their willingness to hold emerging market assets. As a result, emerging markets will remain unusually susceptible to ongoing shocks. Global shocks such as larger-than-expected increases in U.S. interest rates, falls in mature market equity prices, renewed weakness in commodity prices, or set-backs in Japan would undoubtedly have a negative impact on emerging markets. Indications of Y2K problems in emerging market economies or in the trading of emerging market instruments could also affect the outlook, as could indications that reduced access of Latin American corporates to international markets is leading to greater-than-expected difficulties in servicing external debt.

Private Capital Flows to Emerging Markets and Developments in the Bond, Equity, and Syndicated Loan Markets

Net Private Capital Flows to Emerging Markets

Balance of payments data show a further sharp fall in net private capital flows to emerging markets in 1998, to the lowest level this decade. While data for 1998 are still preliminary for many countries, current estimates suggest that total net private capital flows in 1998 were about \$60 billion, a level about 55 percent below the 1997 figure and about 70 percent below the peak level of 1996 (Table 3.1). The sharpness of the recent fall is illustrated by the fact that private flows in 1998 are estimated at levels not seen since 1990 (in dollar terms) or 1989 (as a ratio to emerging market GDP). Further, the level of capital markets activity seen in the first half of 1999 suggests that any pick up this year will be fairly modest.

The financing pressures that in 1997 had mainly affected the crisis-affected Asian countries spread more widely in 1998. Regions that appeared to benefit in 1997 from a diversion of flows from Asia saw reduced flows in 1998. Net private outflows from the five crisis-affected countries increased relative to 1997, with net outflows of \$46 billion, a massive 7 percent of GDP. In addition, financing pressures worsened for the rest of Asia, with net private outflows from these countries estimated at \$9 billion in 1998, versus net inflows of \$23 billion in 1997. In the Western Hemisphere region, net inflows continued in 1998, but fell relative to 1997 for both Brazil and other countries. Not surprisingly, there were substantial net private outflows from Russia in 1998, but there was only a modest fall in net inflows to the other emerging markets in Europe. Net private flows to Africa fell, while net flows to the Middle East are estimated to have risen substantially as foreign asset positions have been drawn down amid the weakness in oil prices. Overall, net private flows to countries outside Asia remained—despite their decline in 1998—above their 1996 level, suggesting that the impact on private flows to emerging markets outside Asia had been fairly modest. In light of the savage reversal—more than \$150 billion—in private financing to Asian countries between 1996 and 1998, it would not be surprising if the data for 1999 show a cutback in private financing to emerging markets outside Asia.

Data for the exposures of mature market country banks suggest that the outflows from Asia began to ease during 1998, although they worsened through 1998 for Brazil, Russia, and other countries in Eastern Europe. While the BIS data for consolidated banking exposures (Table 3.2) are on a different basis than balance of payments data (gross versus net, and banks versus all private sector entities), they are suggestive of certain trends. First, cutbacks of bank financing to Asian countries were much smaller in the second half than in the first half of 1998, suggesting that Asia was less affected by the Russian turmoil and that net outflows from this region might be easing. Second, there was a sharp swing in Brazilian exposures during 1998, with a buildup of about 10 percent in the first half, and then

Table 3.1. Net Private Capital Flows to Emerging Markets, 1990-98 (In billions of U.S. dollars)

	1990	1991	1992	1993	1994	1995	1996	1997	1998
Emerging markets									
Total net private capital inflows ¹	47.7	123.8	119.3	181.9	152.8	193.3	212.1	149.2	64.3
Net foreign direct investment	18.4	31.3	35.5	56.8	82.6	96.7	115.0	140.0	131.0
Net portfolio investment	17.4	36.9	51.1	113.6	105.6	41.2	80.8	66.8	36.7
Bank loans and other	11.9	55.6	32.7	11.5	-35.5	55.4	16.3	-57.6	-103.5
Africa								. 9	
Total net private capital inflows	4.4	8.9	6.9	8.7	4.8	6.8	7.6	16.3	10.3
Net foreign direct investment	1.2	2.0	1.7	1.9	3.4	4.2	5.5	7.6	6.8
Net portfolio investment	-1.5	-1.5	-0.6	1.0	0.8	1.5	-0.2	2.9	3.5
Bank loans and other	4.7	8.4	5.8	5.8	0.7	1.2	2.3	5.8	0.0
Asia									
Total net private capital inflows	19.6	34.1	17.9	57.3	66.4	95.1	100.5	3.2	-55.1
Net foreign direct investment	9.3	14.4	14.8	33.0	45.3	49.8	55.1	62.6	50.0
Net portfolio investment	-2.7	1.4	7.8	21.0	9.4	10.9	12.6	0.9	-15.4
Bank loans and other	13.0	18.4	-4.7	3.3	11.7	34.4	32.8	-60.3	-89.7
Five affected Asian countries ²									
Total net private capital inflows	24.2	26.8	26.6	31.9	33.2	62.5	62.4	-19.7	-46.2
Net foreign direct investment	6.0	6.1	6.3	6.7	6.5	8.7	9.5	12.1	4.9
Net portfolio investment	0.3	3.4	5.3	16.5	8.3	17.0	20.0	12.6	-6.5
Bank loans and other	17.9	17.3	15.0	8.7	18.4	36.9	32.9	-44.5	-44.5
Europe									
Total net private capital inflows	0.0	-16.3	7.6	26.0	16.1	48.1	25.2	35.3	17.5
Net foreign direct investment	0.5	3.2	5.1	6.7	6.0	13.9	13.4	16.6	18.2
Net portfolio investment	0.5	0.4	2.3	12.4	22.5	18.9	24.8	20.5	4.8
Bank loans and other	-1.1	-19.9	0.3	7.0	-12.3	15.2	-13.0	-1.8	- 5.4
Russia									
Total net private capital inflows	-5.0	-10.2	0.7	5.9	2.1	15.1	-2.6	1.0	-14.7
Net foreign direct investment	-0.7	0.0	0.7	0.9	0.5	1.7	1.7	3.6	1.2
Net portfolio investment	0.0	0.0	0.0	5.0	16.5	14.4	21.9	17.2	4.5
Bank loans and other	-4.3	-10.2	0.0	0.0	-14.9	-1.1	-26.3	-19.8	-20.4
Middle East									
Total net private capital inflows	10.0	73.0	30.9	27.3	17.9	5.0	-3.1	7.1	22.6
Net foreign direct investment	0.6	0.3	0.1	3.2	3.1	2.8	1.7	2.5	2.2
Net portfolio investment	3.5	21.9	11.3	18.1	12.1	8.3	3.7	2.8	10.8
Bank loans and other	5.8	50.8	19.6	5.9	2.6	-6.1	-8.5	1.8	9.6
Western Hemisphere									
Total net private capital inflows	13.7	24.1	55.9	62.6	47.5	38.3	82.0	87.3	69.0
Net foreign direct investment	6.7	11.3	13.9	12.0	24.9	26.0	39.3	50.6	54.0
Net portfolio investment	17.5	14.7	30.3	61.1	60.8	1.7	40.0	39.7	33.0
Bank loans and other	-10.5	-2.0	11.7	-10.6	-38.2	10.6	2.7	-3.1	-18.1
Brazil									
Total net private capital inflows	8.1	3.1	14.1	12.0	10.0	33.1	35.2	20.5	17.1
Net foreign direct investment	0.3	0.1	1.9	0.8	2.0	2.8	10.0	15.5	25.0
Net portfolio investment	0.5	3.8	14.5	12.3	51.1	11.7	21.4	10.5	17.5
Bank loans and other	7.3	-0.8	-2.3	-1.2	-43.2	18.6	3.8	-5.5	-25.4

Table 3.1 (concluded). Net Private Capital Flows to Emerging Markets, 1990-98 (In billions of U.S. dollars)

	1990	1991	1992	1993	1994	1995	1996	1997	1998
Memorandum items:									
Change in reserve assets									
Emerging markets	66.1	75.1	31.5	83.9	90.9	123.1	101.1	59.2	58.3
Africa	4.6	3.7	-2.8	1.6	4.6	1.9	5.5	3.8	-1.5
Asia	47.4	45.9	6.9	43.0	78.3	47.7	61.4	23.5	63.3
Affected countries	6.9	8.4	15.0	18.3	10.7	14.0	14.5	-35.9	47.1
Europe	2.4	1.5	3.7	14.5	9.8	41.0	2.9	6.6	4.0
Russia	0.0	0.0	0.0	5.8	-1.9	10.4	-3.1	1.6	-5.1
Middle East	-2.9	6.0	0.7	4.6	2.5	7.7	5.1	11.8	2.4
Western Hemisphere	14.7	18.0	23.0	20.2	-4.3	24.8	26.2	13.5	-9.9
Brazil	-0.1	0.6	14.5	8.1	6.5	12.6	8.6	-7.5	-8.2
Current account									
Emerging markets	-27.2	-79.0	-69.7	-107.2	-69.7	-96.0	-92.5	-91.8	-53.6
Africa	-9.0	-7.4	-10.4	-11.0	-11.8	-16.4	-5.7	-6.1	-18.1
Asia	1.7	4.5	3.6	-13.3	-3.8	-36.3	-37.5	5.6	101.7
Affected countries	-16.0	-25.2	-16.1	-13.5	-23.2	-40.5	-53.4	-27.0	69.7
Europe	-22.2	5.0	-2.9	-12.7	7.6	-3.6	-19.1	-32.6	-22.7
Russia	-4.5	4.1	-1.2	2.6	8.7	5.2	4.3	-5.7	0.8
Middle East	3.4	-64.2	-25.5	-2 4.6	-10.8	-3.9	8.7	6.4	-25.0
Western Hemisphere	-1.0	-16.9	-34.5	-45.7	-50.9	-35.9	-39.0	-65.1	-89.5
Brazil	-3.8	-1.4	6.1	-0.6	-1.7	-18.0	-23.1	-33.3	-34.9
Total net private capital flows as percent of recipient	countries'	GDP							
Emerging markets	0.8	2.0	2.5	3.5	2.7	3.0	3.0	2.0	0.9
Africa	1.2	2.3	1.8	2.4	1.4	1.7	1.8	3.8	2.5
Asia	1.2	1.9	0.9	2.5	2.7	3.3	3.1	0.1	-1.8
Affected countries	4.5	4.4	4.0	4.4	4.0	6.3	5.8	-2.0	-7.1
Europe	0.0	-0.7	1.4	3.9	2.2	5.0	2.3	3.1	1.7
Russia	-0.5	-1.3	0.8	3.2	0.8	4.3	-0.6	0.2	-5.2
Middle East	2.0	15.8	6.0	5.5	3.5	0.9	-0.5	1.1	3.5
Western Hemisphere	1.2	2.0	4.4	4.4	3.0	2.3	4.5	4.3	3.4
Brazil	1.8	0.8	3.6	2.7	1.8	4.7	4.5	2.6	2.2
As percent of emerging markets' GDP									
Direct investment	0.3	0.5	0.6	1.0	1.4	1.6	2.0	2.4	2.2
Portfolio investment	0.3	0.6	0.9	1.9	1.8	0.7	1.4	1.1	0.6
Bank loans and other	0.2	0.9	0.6	0.2	-0.6	0.9	0.3	-1.0	-1.8
Total official capital flows	26.6	36.5	22.3	20.1	1.8	26.0	-0.9	24.4	41.1
Total official capital flows (percent of emerging	0.5	0.6	0.5	0.4	0.0	0.4	0.0	0.3	0.6
Total official capital flows (percent of G-7 GDP)	0.3	0.8	0.7	1.1	0.9	1.0	1.1	0.8	0.3

Sources: International Monetary Fund, International Financial Statistics; and World Economic Outlook.

 $^{^1}_2$ Net foreign direct investment plus net portfolio investment plus net other investment. Indonesia, Korea, Malaysia, the Philippines, and Thailand.

Table 3.2. Changes in Bank Exposures to Emerging Markets (In billions of U.S. dollars)

	1997	7	1998		
	1st half	2nd half	1st half	2nd half	
Asia	33.8	-7.8	-57.6	-28.0	
Indonesia, Korea, Malaysia, and Thailand	18.4	-20.3	-46.9	-21.2	
Africa	4.7	-0.8	-0.5	-2.9	
Middle East	6.1	2.1	3.6	5.4	
Europe	11.8	8.4	11.5	-17.0	
Russia	7.8	4.1	3.4	-19.2	
Western Hemisphere	20.8	21.3	12.5	- 7.6	
Brazil	3.9	3.8	7.7	-11.7	

Source: Bank for International Settlements, *Consolidated International Banking Statistics*, May 31, 1999, and November 30, 1998.

a cutback of nearly 15 percent in the second half. This presents further evidence that investors were able to adjust their portfolios in advance of the January 1999 devaluation. By contrast, there was a modest increase in bank exposures to other Latin American countries, with virtually no slowdown in the second half amid the Russian crisis. Exposures to Russia rose modestly in the first half, consistent with the buildup in debt noted in Box 3.1, but then fell sharply in the second half, mainly due to write-downs. By contrast, other European emerging market countries saw a modest growth in exposures in the second half, although much reduced relative to the 16 percent growth seen in the first half.

The major component in the fall in net private capital inflows was a further sharp withdrawal in bank financing of emerging markets. Most bank financing of emerging markets is captured in the "bank loans and other investment" component of the balance of payments. This component—which includes syndicated bank lending, trade financing, and some other smaller items—became more sharply negative in 1998, with most of the net outflows from Asia. This movement would appear consistent with the fall in syndicated bank lending noted below, and also with the data from the BIS on total bank exposures. By contrast, net portfolio inflows—which include bond and equity holdings by bank and nonbank investors—remained positive in 1998, although they fell relative to the previous year and remained far below their peak levels of 1993–94.

Foreign direct investment in emerging markets fell in 1998—the first fall seen this decade—although it remained fairly healthy. This component has been the largest component of net private capital flows in the second half of the 1990s. The entire fall in 1998 can be accounted for by falls in Asia and Russia, with direct investment remaining at healthy levels in other regions. Notwithstanding the longer-term horizon of this type of investment, it is perhaps surprising that this component of inflows has remained so robust in light of cutbacks in the other types of investment. Given this, and in view of the longer lead times in this type of inflow, some further falls in direct investment cannot be ruled out.

The fall in aggregate net private capital inflows to emerging markets in 1998 was accompanied by some substantial shifts in current account positions. In the case of the five crisis-affected countries in Asia, there was a massive swing into surplus on the current account, which enabled these countries to reverse the large fall in reserves that had been seen in 1997 and increase reserve levels substantially in 1998 in the face of the fall in external financing. By contrast, other emerging markets saw an increase in their aggregate current account deficit, which together with a fall in external financing resulted in a sharp fall in the rate of reserve accumulation.

¹⁰ However, as noted in last year's report (IMF, 1998a), it is possible that investors attempt to hedge risks associated with their holdings of direct investment: these would show up as negative items in the other financing categories.

Gross Private Capital Flows to Emerging Markets

Data for gross new issuance in international capital markets—that is, the sum of all bonds, equities, and loans—also show a sharp fall in 1998, but suggest a stabilization in 1999. These data indicate that gross financing fell nearly 50 percent from the 1997 level (Table 3.3). At this level, gross issuance had fallen back to the levels of 1994–95 in dollar terms and back to the level of 1993 in terms of ratio to emerging market GDP. Data for the first six months of 1999 indicate that gross financing was running at an annual rate broadly similar to 1998 as a whole, suggesting that gross private market financing to emerging markets may stabilize in 1999.

Developments in the Bond Market

Issuance of bonds and other fixed-income instruments—now the major source of private market financing (i.e., excluding foreign direct investment) for emerging markets—fell substantially in 1998 and showed only a modest recovery in the first half of 1999. Issuance by emerging market borrowers fell 43 percent in 1998 relative to 1997, despite substantial growth in the global bond market, with the result that the share of emerging markets in global issuance fell from 17 percent to only 8 percent. After peaking at \$49 billion in the third quarter of 1997, emerging market issuance fell to a low of only \$10 billion in the fourth quarter of 1998 in the wake of the Russian crisis. In the first six months of 1999, issuance was proceeding at a quarterly rate of about \$23 billion, suggesting that volumes in 1999 would be somewhat higher than the levels of 1998. There was a massive decline in

¹¹ The fall in emerging markets issuance in 1998 occurred in an environment where issuance by mature market borrowers has held up fairly well, with mature markets issuance in 1998 actually showing a 22 percent increase from 1997. Thus, the share of emerging markets in total issuance declined substantially, from 22.5 percent in 1997 to only 11 percent in 1998.

¹² The differences between the balance of payments data and the gross financing data reflect both conceptual differences and—presumably mainly in the balance of payments data—measurement error. Balance of payments data—taken in this case from the IMF's *World Economic Outlook* database—potentially offer the most complete coverage of total capital flows, but are subject to errors and omissions (and also to substantial revision). By contrast, gross issuance data include all gross capital inflows that occur in the context of formal international offerings or facilities, but exclude bank lending that is not syndicated and investments that do not occur through international public offerings: thus, substantial amounts of trade financing, foreign direct investment, and investment in domestic government debt are excluded from these data. In addition, such data are for gross new issuance, and therefore exclude purchases in the secondary market and do not reflect repayments or take account of the maturity of the financing (e.g., a 2-year note issuance facility that is renewed five times will show up in the data five times, while an economically equivalent 10-year bond issue will show up only once).

Table 3.3. Gross Private Market Financing to Emerging Markets, by Region, Financing Type, and Borrower Type ¹

							1997				1998			1999	
	1994	1995	1996	1997	1998	٥!	82	හි	₽	Ιζ	62	63	 42 	ĺδ	\Q2
						(In	billions of L	(In billions of U.S. dollars)						-	
All concentrations are and after	1360	1570	7107	386 1	140 5	643	1 20	0.70	005	30 5	00%	305	720	33.6	7.
Acia	20.0	0.761	1195	1.007	24.1	30.5	39.7	36.7	20.00	7.7	14.1	5.5	27.0	32.0	14.7
Western Hemisphere	04.0	36.7	116.7	5.721	74.1	16.7	7.00	30.7	14.1	21.7	21.5	10.5	0.01	13.6	12.7
Western Hennispieae Middle East	10.8	200.	6.6	16.0	9.2	· ·	4.1	2.2	7.9	1.7	13	4.8	2.0	3.4	4.0
Africa	3.3	9.3	5.6	14.8	4 4	1.0	1.8	8.4	3.6	2.1	1.0	0.1	1.2	1.0	1.8
Europe	11.2	16.8	21.3	37.5	36.1	4.1	13.7	7.9	11.7	7.5	12.7	6.6	6.1	3.1	7.7
Bonds	61.3	63.7	111.3	138.2	78.2	29.7	46.3	48.7	13.5	25.4	28.4	14.1	10.3	21.2	24.2
Equities	18.0	11.2	16.4	24.8	6.6	3.2	8.2	6.3	7.1	3.1	3.7	0.2	2.8	2.4	5.8
Loans	26.7	82.9	20.7	123.2	60.4	23.3	32.7	29.9	37.3	11.0	18.7	16.2	14.6	9.2	11.8
Sovereign	18.2	25.4	41.8	48.2	48.7	11.4	17.0	14.1	5.6	17.2	14.7	8.6	7.0	13.0	15.6
Public	38.2	48.2	53.8	73.2	31.9	11.3	22.3	22.9	16.6	4.9	11.5	9.4	6.1	5.6	5.7
Private	79.5	84.2	122.8	164.8	0.89	33.5	47.8	47.8	35.7	17.4	24.6	11.3	14.6	14.2	20.4
						(Per	(Percent of total)	(1)							
Asia	62.2	55.0	54.3	44.6	22.9	57.9	43.8	42.7	35.6	17.9	27.6	18.1	27.0	35.5	34.8
Western Hemisphere	19.3	22.9	28.9	31.6	43.5	29.8	33.7	35.5	24.3	54.9	42.9	33.3	39.5	41.5	32.9
Middle East	7.9	5.5	4.5	9.6	6.2	3.2	4.8	5.6	13.5	3.0	2.6	15.6	7.2	10.5	9.6
Africa	2.4	5.9	2.5	5.2	3.0	1.8	2.0	6.6	6.3	5.3	2.0	0.5	4.2	2.9	4.3
Europe	8.2	10.6	6.7	13.1	24.3	7.3	15.7	9.3	20.2	19.0	24.9	32.5	22.0	9.6	18.5
Bonds	45.0	40.4	51.0	48.3	52.7	52.8	53.1	57.4	23.4	64.3	55.9	46.2	37.2	64.7	57.9
Equities	13.3	7.1	7.5	8.7	6.7	5.7	9.4	7.4	12.3	8.0	7.4	8.0	10.0	7.4	13.8
Loans	41.7	52.6	41.5	43.0	40.7	41.5	37.5	35.2	64.3	27.8	36.8	53.0	52.8	27.9	28.3
Sovereign	13.4	16.1	19.1	16.8	32.8	20.3	19.6	16.6	9.7	43.6	29.0	32.0	25.2	39.7	37.4
Public	28.1	30.6	24.6	25.6	21.5	20.1	25.6	27.0	28.7	12.3	22.6	30.9	22.0	17.0	13.7
Private	58.5	53.3	56.2	57.6	45.8	59.6	54.8	56.4	61.6	44.1	48.4	37.1	52.8	43.3	48.9

Sources: Capital Data; and IMF staff calculations.

¹ Data for 1999:Q2 are preliminary.

Asian issuance in 1998 (down 78 percent), with only three large issues through the whole year—a \$4 billion sovereign issue from Korea in April, a \$1 billion corporate issue from Singapore in March, and a \$1 billion sovereign issue from China in December. Issuance also fell sharply in Africa (down 85 percent) due to a fall in issuance by South Africa, the only country to have substantially tapped the international bond market in recent years. Issuance was less affected in the Western Hemisphere (down 30 percent) and the Middle East (down 23 percent), and actually rose substantially in Europe (up 50 percent), reflecting growth for Hungary, the Slovak Republic, and—prior to the problems in the third quarter—Russia and Ukraine. The recovery in the first six months of 1999 was fairly broadly based, with many countries seeing increases, Russia and Ukraine being two notable exceptions.

A striking recent development in the international bond market has been the reduction in access for private sector entities from the emerging markets. While borrowing by sovereigns was virtually unchanged between 1997 and 1998, borrowing by public enterprises and private sector issuers fell sharply, by 68 and 61 percent, respectively. In the first six months of 1999, this trend continued for private sector entities, which saw a further small fall in their share of total borrowing; public enterprises appeared, however, to be regaining access in early 1999 on the back of the recovery in sovereign access. In part, this reflects an increasing preference on the part of investors to lend only to the more highly rated borrowers, especially to sovereigns; see Box 3.7 for a discussion on the extent to which markets are becoming more discriminating.

The decline of private sector access to international markets also reflects the economic health of borrowers. In Asia, the high leverage of many companies precludes the issuance of new debt. In Latin America, companies on average have lower debt burdens but most have found it difficult to get access to debt markets at reasonable interest rates. In general, corporate borrowers have responded to their reduced access to international markets by returning to their domestic markets, mainly the domestic banking systems, where they are displacing smaller, less creditworthy, companies (see below). However, the lack of market access for medium-sized Latin American corporates is beginning to show in cash flow and debt servicing problems. A growing number of companies are missing interest or principal payments on external debt as a result of the worsening in business conditions following the Russian and Brazilian shocks and the loss of access to capital markets for working capital or refinancing purposes. The number of defaults on external debt is expected to increase as 1999 progresses.

Perceptions of higher risk and the reduced appetite for investing in emerging market bonds have caused a worsening in the terms and conditions of market access. After rising modestly in 1997, average yield spreads for emerging market borrowers rose substantially in 1998 and remained high in the first six months of 1999. For sovereign borrowers, the average yield spread in early 1999 was just under 500 basis points for unenhanced U.S. dollar—denominated bonds, up from 270 basis points in 1996. At the same time, the average maturity of issues has fallen, from a peak of 12.4 years in 1997 to about nine years in both 1998 and in early 1999.

Box 3.7. Is the Bond Market Becoming More Discriminating?

The yield spread compression of 1997 and the subsequent turmoil in emerging markets has raised issues about the ability of investors to appropriately assess and price risk. The large issuance in Russian or ruble-linked securities in 1998 also raises similar issues.

As more countries gained access to the international markets in the 1990s, the average credit ratings of countries with credit market access fell. As shown in Figure 5.5, the emerging markets that obtained credit rating through the 1990s obtained progressively lower credit ratings. Given that countries typically obtain credit ratings with the purpose of raising funds in the international bond markets, this implies that investors in emerging markets were becoming more tolerant of credit risk as the decade progressed.

Indeed, data on the credit ratings of bonds issued in the first half of 1997 suggest that investors either paid little attention to credit risk or that they were comfortable with the high level of credit risk that they were incurring. About 19 percent of all issues in the first half of 1997 appear not to have been rated or to have come from issuers without credit ratings. A further 53 percent of bonds (or issuers) were rated as noninvestment grade (Ba1 or below), with 2 percent actually rated within the "default" grades (Caa1–Caa3). Only 26 percent of bonds (or issuers) were rated as investment grade.

By early 1999, those investors that remained as buyers of emerging market securities appeared to be paying substantially more attention to credit risk. In the first five months of 1999, the proportion of unrated bonds had fallen sharply from 1997, from 19 percent to 4 percent, and there were no default grade issues. Further, the proportion of investment grade issues had risen from 26 percent to 40 percent. It is noteworthy that this occurred in an environment where the average credit rating of emerging market borrowers had actually declined. The changes would appear to indicate a massive reduction in investor demand for unrated bond issues, a significant decline in investor demand for subinvestment grade issues, and efforts by issuers to enhance the credit ratings of their debt, including via asset backing and official guarantees (including under Japan's New Miyazawa Initiative). As noted elsewhere, the increased attention to credit risk is also reflected in a substantial increase in the proportion of bond issuance from sovereign borrowers, largely at the expense of private-sector ones.

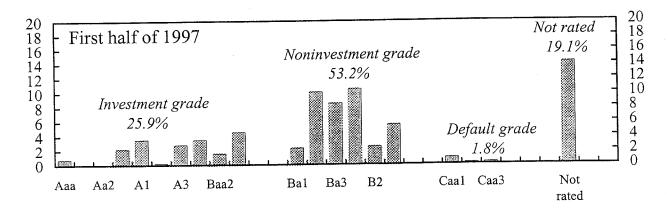
Whether or not their assessment of risk is correct, there appears to be increasing evidence to suggest that investors are forming their own judgments about risk and not simply relying on the credit rating agencies. For example, within the same week in early May, investors bought similarly rated (Baa2/BBB) new issues from Hungary and Qatar at sharply different yields spreads over U.S. treasury notes: 135 and 395 basis points, respectively. Similarly, in early June, benchmark long-term eurobonds from Mexico and Argentina with the same rating (BB) from two of the major three agencies (and a one notch difference—Ba2 versus Ba3—from the third) were trading at yields spreads that were about 230 basis points different. It remains to be seen whether these differences in investor risk assessment prove well founded.

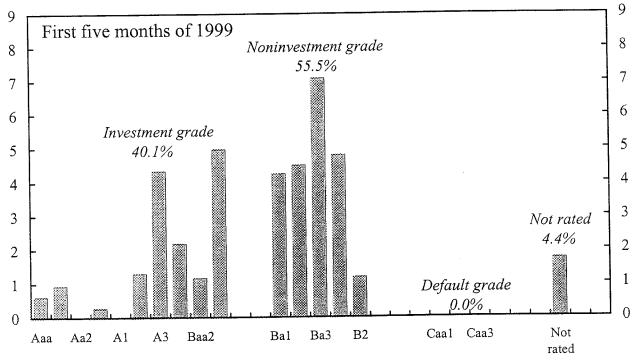
¹ The credit ratings for each issue were derived from the Bondware database produced by Capital Data, and from ratings data from Moody's and Standard & Poor's. The rating assigned to each bond was the original Moody's rating for that issue as shown in Bondware. If no rating was shown, the Standard and Poor's rating in Bondware was used (and converted to the Moody's scale). If neither of these were available, the long-term foreign currency credit rating for the issuer was used, with these data taken either from Bondware or the rating agencies. It is possible that a proportion—but probably a fairly small one—of these bonds actually had credit ratings, but that these are simply not shown in the Bondware database. For the most part, the bonds are small issues that are predominantly from private sector issuers. In some cases, the issuers were not rated but appear to have been affiliates of rated companies.

Figure for Box 3.7

Ratings of Emerging Market Bond Issues

(In billions of U.S. dollars)





Source: Staff calculations based on data from Capital Data.

A constant theme in the difficult bond market conditions has been the need for issuers to be innovative in the design of their securities to retain market access at a reasonable price. One trend that has been seen frequently is the reopening of earlier issues: for example, Turkey on three occasions in April and May reopened the five-year sovereign bond it had first issued in February 1999, increasing the outstanding volume from €500 million to €1 billion. Such reissues are attractive because the preexistence of the security minimizes pricing risk for investors and because they boost issue size and liquidity for potential inclusion into benchmark bond indices. Another trend has been the issuance in whatever currency and sector will reduce borrowing cost. For example, Argentina (one of the largest issuers in 1998 and 1999) made sovereign issues in eight different currencies in 1998 and 1999, frequently targeting issues at a particular small class of investors. The use of bonds with stepdown coupons has also been common. ¹³ Such issues may be attractive for two reasons. First, market participants suggest that the high initial coupons can be attractive to (short-sighted) yield-seeking investors. In addition, the stepdown can be used to issue bonds at close to par and yet enable fungibility with other (lower coupon) bonds at some point in the future, thus enhancing the future liquidity of the bond. For example, two sovereign Argentine issues of euro-denominated bonds in February and March of 1999 carry coupons of 15 and 14 percent until February 2001, after which the coupons fall to 8 percent to become fungible with preexisting deutsche mark, Dutch guilder, and French franc issues from February 1998, and resulting then in a single €1.8 billion issue maturing February 2008. Finally, there has also been substantial use of asset-backed securities to reduce the cost of debt. For example, in December 1998 Telefónica del Perú used telephone receivables from international carriers to enable it to issue bonds rated as investment grade securities, despite the lack of an investment rating for the sovereign. However, asset backing has proven only partially effective in reducing the cost of borrowing in difficult conditions. For example, in March 1999 PDVSA, the Venezuelan oil company, had to pay an average spread of over 400 basis points on a \$1.2 billion multi-tranche deal that was backed by oil receivables and carried a strong A3 credit rating: in part because of the worsening in market conditions, the tranches carried spreads three or four times the level of a similar, slightly higher-rated (A2) deal in May 1998.

Other innovations have involved giving some form of "sweetener" to investors, which may be costly to the issuer in the future. Several recent bond issues have carried put options, which enable the investor to shorten the stated maturity of the security. Other bonds have carried warrants that enable the bond purchaser to buy other debt securities at predetermined times and prices, which at that point may represent an above-market cost of funds for the issuer. One suggested rationale for warrants is that their complexity may offer a way for issuers to raise new funds without driving down the price of existing "plain-vanilla" debt: the

¹³ Bonds with stepdown coupons have coupon payments that "step down" from a high initial level to lower subsequent levels, usually according to a fixed schedule.

evidence suggests, however, that warrants do not offer a way around the usual arithmetic that an increased supply of debt will put upward pressure on yields. Finally, there have been several issues with coupons that reset frequently and will provide issuers with cheaper funding if emerging market yields fall, but more expensive funding if conditions worsen. As opposed to the Argentine issues described in last year's *International Capital Markets* report (IMF, 1998a) with coupons that reset based on some form of auction, issues in July 1998 by Colombia and Pemex (the large Mexican oil company) involved coupons that reset monthly or quarterly, based on yields on sovereign eurobonds.

Developments in the Syndicated Loan Market

One of the more noteworthy recent trends in emerging markets has been the sharp and ongoing decline in the amount of internationally syndicated bank lending. In 1998, syndicated loans to emerging markets halved relative to 1997. Further, in the first six months of 1999, bank lending was proceeding at a monthly rate about 30 percent lower again than the level of 1998. As a result, in the first six months of 1999, syndicated loans accounted for only 28 percent of private market financing for emerging markets, down from 41 percent in 1998 and 43 percent in 1997. The tightening of the market has also been reflected in the terms and conditions of market access, with average maturities falling in 1998 relative to 1997 and average yield spreads for sovereign, public sector, and private sector borrowers widening in 1998.

Historically, the loan market has provided something of a "safety-valve" function, remaining open at times when the bond market was essentially closed to emerging market borrowers. This was the case in September 1998 in the wake of the Russian unilateral debt restructuring, when the loan market continued to provide substantial financing to emerging borrowers, albeit largely to highly rated ones: the three largest borrowers in that month, accounting for about 64 percent of the total value of all loans, were all publicly owned—a Chinese electric utility and two Saudi Arabian petrochemical companies. Similarly, the share of bank loans increased substantially in 1995 following the Mexican crisis, and in the fourth quarter of 1997 amid the turmoil in global equity markets and the problems in Asia.

However, in the wake of the Brazilian devaluation, the bond market reopened quickly while activity in the loan market has remained fairly low. For example, in the months of January and February, entities from only two Latin American countries (Mexico and Colombia) were able to raise money in the international loan market. Subsequent lending has been limited mostly to relatively highly rated issuers, at shorter maturities and higher spreads than in the past. Furthermore, some of this recent lending has actually involved the refinancing of earlier loans that were intended to be bridge loans until conditions in the bond market improved. For example, an April 1999 \$700 million one-year syndicated loan to Brazil's largest electricity distributor was actually a refinancing of an earlier one-year \$875 million loan, which was rolled over subject to a cash repayment of 20 percent of the original loan and an increase in the interest rate from LIBOR plus 350 basis points to LIBOR plus 925 basis points. In addition, lenders included a provision in the new loan whereby the interest rate will rise if the spread on Brazil's 2008 eurobond widens substantially.

The turbulence in emerging markets and some recent developments in international banking may be leading to an acceleration of the long-run shift toward greater use of bond and equity financing in emerging markets. Between 1983–89 and 1990–98, the share of bonds in total financing rose from 27 percent to 46 percent, while the share of equities rose from 1 percent to 8 percent, with the share of loans falling from 72 percent to only 45 percent. This trend reflects the general trend toward securitized rather than bankintermediated financing, the recently growing importance of new nonbank investors in emerging markets, and the limited secondary market trading of bank loans. More recently, however, it appears that a shift in the nature of the loan market is occurring and that banks in mature markets have sharply reduced their willingness to hold emerging market loans. This reflects both a general cutting of emerging market credit lines after the losses of recent years and—as discussed in Chapter II—a sharp cutback in international lending by Japanese banks. In addition, some of the mergers between banks active in emerging markets have reportedly resulted in new aggregate credit lines that are less than the sum of the previous individual credit lines. Further, banks are looking more closely at the capital requirements for all their lines of business and the returns on those lines. As a result, there has been a substantial pullback in syndicated lending in the mature markets and a much larger fall in emerging markets lending.

As a result of these trends, banks are cutting back the volume of loan syndication, increasing the cost at which loans are being provided to emerging market borrowers, taking steps to reduce pricing risk, and attempting to sell loans to nonbanks. A major shift in 1998 was that flexible pricing replaced the previous practice whereby banks would underwrite loans by setting a pricing level at the start of the period—frequently several months—during which the loan was negotiated. Syndication fees have typically increased, and spreads have risen very substantially so that pricing on loans has now approached the levels of the bond market, after years of loans sometimes serving as a loss leader for banks to secure other business. Banks are also working to create a secondary market in emerging market loans, initially mainly in larger Latin American loans. These trends will all make the syndicated loan market more similar to the bond market and will make syndicated loans a more attractive asset class for nonbank investors. An example of the likely future direction of the market can be seen in an innovative syndicated loan that was finalized in March 1999. The transaction, a \$650 million multi-tranche loan to a large Mexican company, carried spreads that were initially set at 600–700 points over LIBOR but will be repriced quarterly based on the spread on Mexico's 2008 eurobond. It was reported that there was substantial institutional investor interest in the instruments, which closely resemble floating rate notes.

In addition to the decline in syndicated loans, banks have also cut back on loan facilities. The value of new loan facilities fell 58 percent between 1997 and 1998, and in the first six months of 1999 was running at an annual rate about half of the level of 1998. In the case of sovereign borrowers, the drawdown by Mexico in late 1998 on a loan facility appears to have reduced banks' appetite for the type of contingent liability represented by such facilities. In this light, as is discussed in Box 3.8, there may be limitations on the extent to

Box 3.8. Private Contingent Credit Lines

Private contingent credit lines are one of the tools that have been suggested to involve the private sector in forestalling and resolving financial crises. While sovereign borrowers have at times put in place loan facilities that enable them to draw at their discretion on preestablished credit lines with groups of banks, contingent credit lines could allow for drawdown only under specific circumstances, including following exogenous shocks such as contagion from other countries. As noted in IMF (1999a), such credit lines could (1) provide efficient insurance against adverse (exogenous) developments; (2) allow private financing to supplement official financing in times of crises; and (3) possibly forestall crises through the confidence-enhancing role of standby financing.

Three sovereign borrowers that have put loan facilities in place in recent years include Argentina, Indonesia, and Mexico.

- Argentina contracted with a group of 13 banks in December 1996 for a facility in the amount of \$6.1 billion. The agreement committed the participating banks to lend (via a repurchase agreement on Argentine government securities) for a minimum of two years, to allow the government to lend—within the currency board framework—to domestic banks in the event of banking sector problems. The credit line has been rolled over and remained active (and untapped) as of mid-1999, albeit with increased commitment fees (which have risen from around 30 to about 60 basis points) and some changes in the participating banks.
- Indonesia established a series of credit lines (each of \$500 million) over 1994–97 with large groups of banks. These lines were all nearly fully drawn down amid the crisis of late 1997 and early 1998.
- Mexico established a \$2.5 billion contingent line of credit in November 1997, with the interest rate rising both through the drawdown period and in the event of credit downgrades. The facility was drawn on in late September 1998 over the objections of the participating banks, who argued that the drawdown in a nonemergency situation was opportunistic and—although it was clearly allowed by the agreement—against the spirit of the agreement. In March 1999, Mexico signed an agreement to roll over the loan into a combination of 5-year floating rate notes and 2-year commercial paper, conditional upon a partial cash repayment.

The decisions by Mexico and Indonesia to draw on their credit lines in 1998 appear to have changed banks' perceptions about the attractiveness of loan facilities to sovereign borrowers. In particular, credit lines will typically be drawn on at times when countries are unable to get equivalently priced financing from other sources, owing either to a general aversion to emerging market risk or to a decline in the individual sovereign's creditworthiness. That is, such facilities increase bank exposures to borrowers precisely at times when they are seeking to reduce them.

Indeed, once a credit line is in place, banks have an incentive to dynamically hedge their contingent exposures, suggesting that loan facilities may not offer much effective new financing. In the case of Mexico, some participating banks have indicated that they offset their expected increased exposures prior to drawdown, by cutting back other credits to the extent possible and by taking short positions on Mexican credit. This offsetting of increased risk exposures to meet internal overall country risk limits implies that any contingent financing arrangement between emerging market borrowers and private banks will not necessarily provide any net additional resources. This would be especially true if the banks in question had participated mainly for relationship reasons (such as the desire to manage future capital market issues).

¹ See IMF (1999b) for further discussion of other possible roles for private sector involvement.

There are several obstacles to be overcome if private banks are to play an effective role as providers of liquidity insurance through contingent credit lines. First, to increase the attractiveness of such facilities to banks, contingent credit line agreements will need to be very specific about the conditions under which drawdown can occur and the pricing of the loan under different states in which drawdown can occur. Banks will presumably be reluctant to provide financing in circumstances where an individual country's creditworthiness has deteriorated, so there may be a role for linking drawdowns to indicators of macroeconomic performance. However, this raises issues as to the credibility of domestic macroeconomic statistics, suggesting a possible role for external verification. Second, it will be necessary to mitigate the tendency of banks to try to hedge their exposures as drawing becomes more likely. In the Argentine case, one of the purposes of the use of collateralization with domestic bonds was to minimize cutting into banks' regular country limits in the event that the sovereign drew on the credit line. It remains, however, to be seen to what extent banks would view such collateral as mitigating their loan exposure to an emerging market country. Subject to this uncertainty, special purpose credit lines that contain some form of collateralization—that is, like the (untested) Argentine facility—may provide a first model for other contingent credit lines.

² Some loan facilities are already linked to credit ratings, either in terms of pricing or availability.

which banks are willing to provide credit lines to sovereign borrowers to serve as contingent financing when normal market access is disrupted.

Developments in the Equity Market

International equity issuance by emerging market companies has also been hard hit by the emerging markets crises. Amid equity price weakness that saw a return of –22 percent on the all-country IFC Investable index in 1998, the amount of equity raised in 1998 was about 60 percent lower than in 1997. Following a peak at \$8.2 billion in the second quarter of 1997, equity issuance declined sharply in early 1998 and virtually dried up in the third quarter, when only \$239 million was raised. The market was entirely closed in August, September and did not reopen until October 31, with a small issue from a Singaporean company. Volumes recovered somewhat in the fourth quarter, amid a strengthening in equity prices, and were running at an annual rate of about \$15 billion in the first six months of 1999, suggesting that there might be some improvement this year over the 1998 level of \$10 billion. The limited sale of new equity that occurred in 1998–99 is mostly accounted for by a few large issues, typically from blue-chip companies or as part of privatizations. A notable recent large sale was the May 1999 \$2.5 billion sale of shares in Korea Telecom, with the new American Depository Receipts (ADRs) being the third-most actively traded stocks on the New York Stock Exchange on the day of their issuance.

New international issuance in 1998 fell most dramatically in the Western Hemisphere countries but remained relatively robust in Europe. International issuance from the Western Hemisphere countries fell from \$5.1 billion in 1997 to only \$164 million in 1998. This decline is consistent with the larger equity price declines seen in the region: the IFC Latin American index showed a return of -36 percent in 1998. There was zero international issuance from Argentina, Brazil, and Mexico in 1998, although domestic new issues continued in these countries, as did privatization through negotiated sales. Despite the much smaller fall in prices in Asia—the IFC index showed a –1 percent return in 1998—Asian issuance also fell sharply in 1998. Indeed, much of the limited issuance was accounted for by two large issues (\$835 million and \$1.1 billion in March and April, respectively) by Thai banks as part of their recapitalization: excluding Thailand where issuance rose enormously, issuance from the rest of Asia fell by 83 percent. The fall in European issuance was smaller than in most other regions, but almost all issuance occurred in the first half of 1998 prior to the Russian crisis, the exception being a large initial public offering for Poland's national telephone company in November.

As in the bond market, the combination of losses and high volatility in returns in the equity market has damaged perceptions of emerging market equity as an asset class. After strong return performance at the start of the decade, emerging market equities have substantially underperformed mature market equities since 1994. In addition, the volatility of emerging market equity returns has also jumped recently (Figure 3.8). For example, data for 16 emerging market countries would suggest that weekly return volatility has been about 70 percent higher over July 1997–June 1999 than over January 1992–June 1997. The declining attractiveness of emerging equity markets has been reflected in outflows from U.S.-

3.5

3.0

5.0

4.5

1.5

0.5

1.0

0.0

66/٤/7 66/٤/1 86/8/01 Figure 3.8. Volatility of Weekly Returns in Emerging Equity Markets 1/ 86/E/L 86/٤/4 86/E/I L6/E/01 L6/E/L L6/E/7 L6/E/I 96/٤/01 96/٤/L 96/٤/7 96/٤/Ι 56/8/01 56/E/L \$6/8/7 56/E/I 76/E/0I 76/E/L 76/E/t 76/E/I £6/£/0I (Percent per week) £6/£/L £6/£/\$ £6/E/I 76/8/01 76/8// 76/8/7 0.0 0.5 1.0 2.0 1.5 3.0 2.5 5.0 4.5 4.0

Source: IMF staff calculations based on data from International Finance Corporation (IFC) 1/ Average of 16 national markets, rolling 13-week standard deviation.

and foreign-managed mutual funds investing in emerging markets (Figure 3.9). While Asian funds have seen outflows for several years, Latin American and other funds also saw outflows all through 1998. More recent data suggest that these outflows may now have ended, but it is clear that there has been a substantial setback to perceptions in the mid-1990s that emerging market assets were a near-mainstream asset class suitable for a wide range of investors.

Developments in Emerging Market Banking Systems

The tightening of global credit conditions in the aftermath of the Russian crisis imposed severe pressures in most systemically important emerging market banking systems—with the exception perhaps of central European banks (Table 3.4). ¹⁴ International banks continued the withdrawal of funds from Asia that had started with the region's currency crises of 1997. While the pullback from Asia slowed down after the Russian unilateral debt restructuring, creditors began to focus on Latin America's heavy external financing needs and the region's banks experienced substantial cuts in international interbank credit lines and in the availability of international repo lines. Although Brazilian banks were most affected by the retrenchment from Latin America, banks in Argentina and Mexico also suffered external liquidity pressures as well as a flight to quality that concentrated external flows in the largest—mostly foreign-owned banks.

The behavior of domestic depositors contributed to the stability of domestic banking systems and the capital outflows were reflected mostly in a decline in the share of foreign liabilities in total liabilities of the banks (Table 3.4). This stands in sharp contrast to events in Asia in the second half of 1997, when external liquidity pressures were compounded by domestic depositor runs (see IMF, 1998a). The resilience of the depositor base this time around reflected a number of factors. In many Latin American countries, the extent of reforms and the commitment to improvements in prudential supervision and regulation has served to enhance the soundness and transparency of banking systems, supporting depositor confidence even in a volatile operating environment. In some countries, such as Turkey, Mexico, and most of the Asian crisis countries, extensive government guarantees contributed to the stability of deposits, while in others—such as China—the lack of alternative saving vehicles has also been an important factor keeping the deposits in the banking system.

Most emerging market banking systems outside Asia weathered the consequences of capital outflows reasonably well, but the banks' behavior magnified the transmission of the external liquidity squeeze to local capital markets and the real economy, as they scrambled to restore the liquidity of their balance sheets. Many banks achieved their balance sheet adjustment through a slowdown in lending (reflected in a fall in loan-deposit ratios, see Table 3.4) and a shift toward government securities. As a result, domestic credit conditions

¹⁴ Annex III details the performance of individual banking systems.

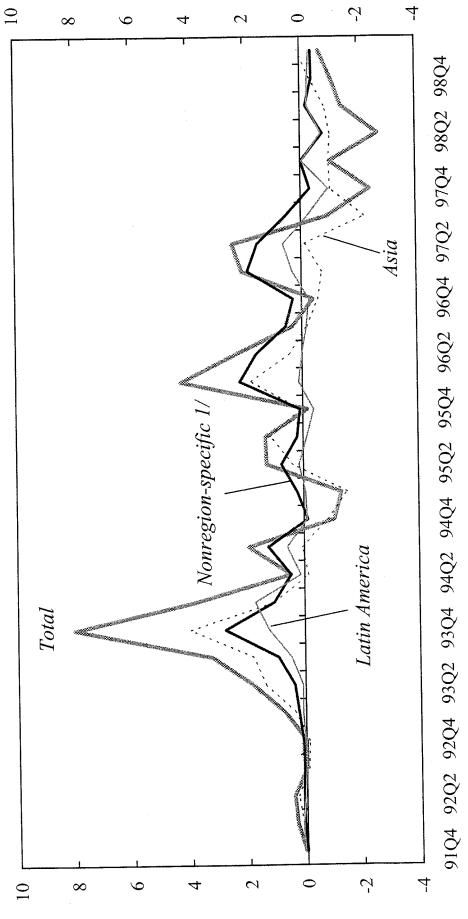
Table 3.4. Selected Emerging Markets: Banking System External and Domestic Liquidity Conditions

	Cross-Border Claims of BIS Banks on Domestic Banking Sector (In billions of U.S. dollars)			Foreign Liabilities in Total Liabilities (In percent)			Loan/Deposit Ratios (In percent)		
	End-96	End-97	End-98	1996	1997	1998	1996	1997	1998
Asia									
China	22.8	26.8	21.5	12.3	11.3	9.4	101.9	101.4	106.3
Hong Kong SAR	135.3	126.4	64.8	66.4	64.9	55.7	95.7	105.6	88.9
Indonesia	11.8	11.5	5.2	8.7	15.0	14.3	115.8	119.6	96.5
Korea	65.9	55.6	34.5	13.0	13.4	9.7	147.8	156.4	130.3
Malaysia	6.5	9.6	5.7	5.7	7.4	5.7	89.3	92.7	91.4
Singapore	156.9	155.5	93.3	36.4	42.2	31.9	125.2	127.2	102.8
Thailand	25.9	17.5	8.8	23.3	27.4	16.2	137.5	143.3	:120.2
Total	424.9	402.9	233.8	11.4	14.9	12.9	129.1	134.0	108.0
Latin America									
Argentina	8.8	12.3	10.7	18.5	20.1	18.7	108.2	98.4	97.4
Brazil	21.0	26.9	21.3	14.4	13.8	16.2	108.9	97.1	107.9
Chile	3.7	3.6	3.8	11.3	5.9	5.6	144.2	145.1	143.4
Colombia	4.0	4.9	4.0	10.5	11.9	10.0	121.1	114.0	114.2
Mexico	11.7	13.4	10.1	5.7	5.0	4.2	66.6	71.6	71.3
Venezuela	0.8	1.7	0.9	2.0	1.1	0.9	53.0	72.6	71.7
Total	50.0	62.8	50.8	9.7	8.7	7.6	118.6	115.4	114.6
Central Europe									
Czech Republic	6.0	6.2	7.2	16.6	17.4	16.5	89.6	104.0	99.9
Hungary	6.3	6.2	9.0	14.9	n.a.	n.a.	61.6	n.a.	n.a.
Poland	2.2	3.2	5.2	4.6	6.9	6.8	51.0	55.3	56.8
Total ¹	8.1	9.4	12.5	15.4	16.3	15.3	85.6	98.1	93.3
Turkey	7.4	10.0	12.9	21.7	25.9	27.0	120.4	141.5	117.8

Sources: Bank for International Settlements, Consolidated International Banking Statistics, May 31, 1999; International Monetary Fund, International Financial Statistics; and monetary authorities.

¹ Central Europe's regional totals for foreign liabilities and loan/deposit ratios exclude Hungary.

Figure 3.9. Emerging Market Equity Mutual Funds: Estimated Net Flows 1/ (In billions of U.S. dollars)



Source: Lipper Analytical Services, Inc.

1/ Refers to non-specific funds dedicated to emerging markets.

tightened considerably, especially for small corporates. Even in central European banks, which were not substantially affected by the external liquidity squeeze, loan-deposit ratios fell as the monetary authorities tightened policies to withstand foreign exchange market pressures.

The modest recovery of capital inflows in the first half of 1999 and the adjustment in Asian trade flows were the main causes of the turnaround in domestic financial markets, but the recovery of the domestic credit cycle has been elusive. In Latin America, the top corporates, which had for some time been directly accessing international capital markets, had to resort to domestic banks for funding, crowding out smaller enterprises. The pronounced slowdown in economic activity across the region has not yet been reflected in banks' balance sheets, but analysts believe that most of the large banks have enough capital to absorb the likely deterioration in asset quality. Most banks in emerging Asia remained focused on restructuring their bad loans, and uncertainties about the creditworthiness of the (unrestructured) corporate sector kept lending subdued. Korea and Malaysia's more proactive approaches to financial restructuring have produced macroeconomic results faster than Thailand's less interventionist approach, but much more needs to be done and foreign participation in the recapitalization process remains scant. Moreover, the lack of progress in corporate restructuring across the region remains one of the key risks to the strengthening of banks' balance sheets in the region.

Most emerging market banking systems, especially in Asia, are strengthening their regulatory and supervisory frameworks, and many are in the process of phasing out full deposit insurance schemes. Following the imposition of extensive guarantees in the wake of financial crises, many emerging market banking systems are considering or have even announced effective time-tables to limit the coverage of these guarantees. Large losses in Latin American banks' securities portfolios led to some degree of regulatory forbearance in the immediate aftermath of the Russian crisis, but regulators moved subsequently to enhance regulation on the classification and valuation of securities, as well as on capital requirements for market risk. Emerging markets in central Europe have strengthened their regulatory frameworks, but significant challenges remain as they face the prospect of full capital account liberalization and contemplate joining the EU. In particular, capital adequacy requirements need to be broadened to include market risks and off-balance-sheet exposures that are growing in most countries.

¹⁵ See Box A3.3 in Annex III for a discussion of issues on deposit insurance for emerging markets.

¹⁶ See IMF (1998a) for the importance of securities in emerging markets banks and innovations in market risk regulation.

Asian Banking Systems

In Asia, efforts to restructure and recapitalize banks have continued, but as is typically the case, extensions of credit have been much slower to recover than financial markets and capital flows. Different countries have followed diverse approaches to financial sector restructuring, but results have been slower than expected. Despite the recovery in financial markets and economic activity in most of the crisis countries, the turnaround in the credit cycle has yet to happen, and asset quality is only now starting to bottom out. The recovery in real estate values has not yet begun (with the exception perhaps of Hong Kong residential prices; see Figure 3.10) and some analysts believe that the recovery in equity values has been liquidity driven, as the lack of effective corporate restructuring does not support strong forecasts of earnings growth.

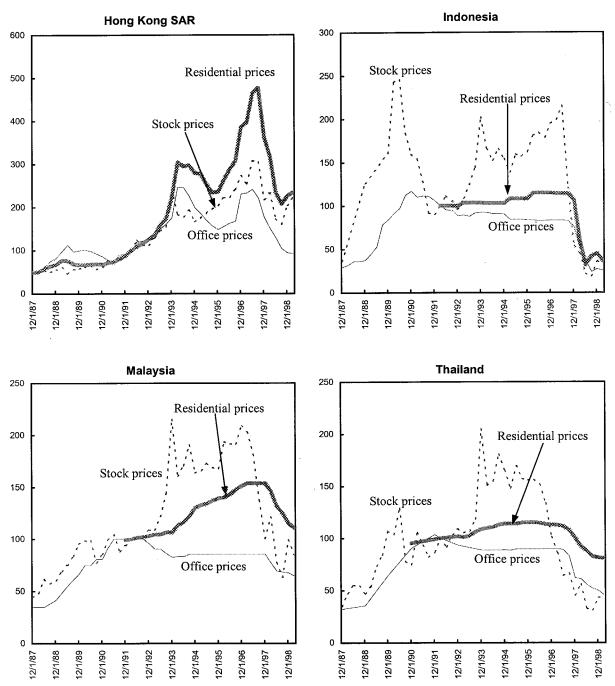
Korea and Malaysia have followed more proactive approaches to financial restructuring seem to be producing balance sheet results faster than in Thailand, has followed a more gradual and less interventionist approach. The former countries forced banks to either reserve and write off nonperforming loans or to sell them to asset management companies, and there has been substantial progress in strengthening banks' balance sheets and a number of successful mergers and acquisitions.¹⁷ Both countries also have fairly effective bankruptcy and foreclosure laws, but concerns remain about the extent and depth of their achievements in corporate restructuring—especially among Korean *chaebol*. ¹⁸ Despite this progress. analysts are concerned that this strategy may lead to future problems and further rounds of recapitalization. In particular, nonperforming loan purchases in Korea have been done with few conditions on the banks to maximize recovery values, which means the banks have limited incentives to improve their lending practices. Thailand has also made some progress in bank restructuring, ¹⁹ but its decision to let the banks deal with the nonperforming loans themselves, combined with an only gradual tightening of provisioning requirements and delays in the strengthening of the legal framework, has led to a significant deterioration in asset quality. In particular, this has allowed even healthy borrowers to avoid repaying loans, leading to the accumulation of so-called "strategic" nonperforming loans. However, recent amendments to the bankruptcy and foreclosure legislation, combined with a more proactive

¹⁷ The number of commercial banks in Korea has fallen from 27 at end-December 1997 to 17 at end-May 1999. The Korea Asset Management Corporation has bought more than half the banks' nonperforming loans, while Danaharta (the Malaysian asset management company) had bought 32 percent of the banks' nonperforming loans by end-June 1999.

¹⁸ As of December 1998, the debt-equity ratio of the top 30 *chaebol* had declined to 380 percent, from 519 percent in 1997. However, rating agencies have suggested that substantive deleveraging and restructuring has not yet occurred and that the banks will likely bear a disproportionate share of the debt-reduction burden (see Box A3.1, Annex III).

¹⁹ Thailand has made substantial progress cleaning up the finance companies, and assets sales are well advanced.

Figure 3.10. Real Estate and Stock Prices - Selected Asian Countries 1/ (Indices, March 1992 = 100)



Sources: International Finance Corporation; and Jones Lang LaSalle.

1/ Real estate and stock prices in local currencies, except for Indonesia, where prices are in US dollars.

role in corporate restructuring, are likely to start delivering more effective results in the second half of 1999. Indonesia has closed several banks, but widespread insolvencies and low loan recoveries are hampering progress in financial restructuring.

Bank recapitalization has required a substantial amount of government resources as foreign participation has been limited. In Indonesia, the restructuring process has resulted in government ownership of more than 80 percent of the banking system's assets; and the implied costs—currently estimated at more than 50 percent of GDP—could continue to escalate unless a forceful loan collection strategy is implemented. In Korea, the government now owns more than 90 percent of the equity of the second- and third-largest banks, and while foreign ownership in other top-tier banks has increased, strategic foreign investments in nationalized banks have suffered some setbacks. In Thailand, several private banks raised capital using hybrid financial instruments in an attempt to avoid government recapitalization and the loss of control. In April, the country's fourth-largest bank completed a landmark \$1.8 billion capital-raising deal whereby the government matched the share purchases of private institutional investors to become the largest shareholder in the bank.

China has begun to set up individual asset management companies to tackle the bad loan problems of each of the four state banks. The establishment of these companies has reflected the determination of the Chinese government to resolve asset quality problems. To promote the operation of asset management companies, consideration has already been given to improving the legislation and market infrastructure. However, analysts have raised doubts about whether the country has the financial infrastructure to allow the companies to be effective, and they foresee problems in the valuation and pricing of the assets. While the bankruptcy of Guangdong ITIC has led foreign banks to cut exposures to mainland borrowers, domestic deposits have continued to grow. Meanwhile, Hong Kong SAR banks have continued to handle the deflationary pressures well and their exposures to the mainland's ITICs appear to be manageable. Banks in Singapore are preparing to face increased competition after the authorities' gradual move to liberalize the banking sector.

Latin American Banking Systems

The largest banking systems in Latin America have shown an enhanced ability to withstand the external liquidity squeeze; and while depositor confidence was maintained in the midst of financial market turbulence, many banks suffered losses on their securities portfolios. The reassessment of international banks' exposure to emerging markets strongly affected the Brazilian banks, but the external liquidity pressures subsided somewhat after the arrangement of an IMF-led financial package in mid-November 1998 and its revision in mid-March 1999. Banks in Argentina and Mexico suffered from cuts in international interbank credit (and repo) lines, but contrary to the experience during the Tequila crisis, deposits

²⁰ The hybrid capital instruments combine noncumulative preferred shares with subordinated debt (see Box A3.2, Annex III).

continued to grow. The reductions in international interbank exposures and subsequent pressures in currency and securities markets led to losses in the banks' securities portfolios, which were absorbed through a reduction in earnings and the equity accounts—and, in the case of Mexico, through further regulatory forbearance and central bank support.

The decline in asset quality as a result of a deteriorated operating environment has not yet been fully reflected in banks' balance sheets and is leading to further banking system consolidation. The persistence of high real interest rates and of the recession has reversed the recent recovery in asset quality across the region, but analysts believe that most large banks have adequate capital bases to withstand the increases in delinquency rates. The combination of large foreign ownership and the authorities' strong commitment to improvements in prudential regulation and supervision has strengthened considerably Latin American banking systems in the period since the Tequila crisis. However, the number of banks in many systems remains large and further consolidation is warranted. Smaller and weaker banks in Argentina, Brazil, and Venezuela are facing the double strain of a deteriorated operating environment and the competitive pressures from foreign banks, and are likely to have to exit the market. So far, the authorities in these countries have shown an increased ability to resolve the failures of weaker banks with no adverse effects upon the systems as a whole.

Central European Banking Systems

After 10 years of transition in the region, restructuring and privatization have strengthened banking systems in Hungary and Poland to a greater extent than in the Czech Republic. These three banking systems continued to receive sizable foreign capital inflows, in part owing to stable relationships with western European banks and the prospects of EU accession. However, exposures to Russia uncovered the fragility of the largely state-owned Czech banks and, after two years of negative profits in the banking industry, the authorities are moving forward with the bank privatization process. ²² Capital inflows supported strong loan growth in Hungary and Poland, especially in foreign currency loans to (generally unhedged) borrowers. Competition has led to declining profits and a search for higher yields through lending to the small and medium-sized corporate and consumer segments, but analysts believe that improved financial fundamentals and large foreign ownership would enable banks in both countries to withstand a cyclical downturn. Losses in

²¹ The largest Mexican banks are an exception, but the recent approval of the Savings Protection Institute (IPAB) Law allows banking reform to move forward by providing a clearer institutional framework to address bank problems and lifting foreign ownership constraints.

²² Following the sale of one of the four large state-owned banks in early 1998, the government sold the fourth-largest in early June 1999 and announced a timetable for the privatization of the other two—to be completed in 1999.

brokerage subsidiaries of foreign-owned banks in Hungary led to funding support from head offices in the wake of capital outflows during the Russian crisis, providing an example of the resilience afforded by this ownership structure. All of these countries have strengthened their regulatory and supervisory frameworks following the signature of EU Association Agreements, but significant challenges remain as they face the prospect of full capital account liberalization and contemplate joining the EU. In particular, capital adequacy requirements need to be broadened to include market risks and off-balance-sheet exposures that are growing in most countries. Also, the convergence to EU deposit insurance levels is likely to require an increase in the coverage of the country's deposit insurance systems.

The Turkish banking system faced increased funding and credit risks during 1998, owing to reduced access to external funding by the lower-tier banks, higher domestic interest rates, and an economic downturn. However, the strength of a core group of well-managed top-tier banks, the treasury's readiness to accept high interest rates, and the stability of the depositor base allowed the banking system to weather the global crisis relatively well to date. The top-tier banks have maintained access to international capital markets and have continued to absorb a large share of the lira-denominated government debt. The high real interest rates have raised questions about the dynamics of the government's debt but this has so far not been a key concern with the domestic investor base.²³ The large currency mismatch of Turkish banks remains a source of concern, despite the tighter regulations to bring the open positions to 30 percent of equity. As the economy slowed down, asset quality deteriorated somewhat, with the biggest credit risk being the concentration of intragroup lending and guarantees that are not readily apparent in the analysis of banks' accounts. Market analysts see the approval of a new banking law that calls for the establishment of an independent bank supervisory body as a crucial step toward reforming the Turkish banking system.

-

²³ See Annex III for further details.

References

- Emerging Markets Traders Association, 1999, "Paris Club Asks Pakistan to Reschedule Eurobonds" (New York: EMTA).
- G-10, 1996, The Resolution of Sovereign Liquidity Crises: A Report to the Ministers and Governors (Basel).
- Institute of International Finance, 1999, *Involving the Private Sector in the Resolution of Financial Crises in Emerging Markets* (Washington).
- International Monetary Fund, 1998a, *International Capital Markets: Developments, Prospects, and Key Policy Issues*, World Economic and Financial Surveys (Washington, September).
- ———, 1998b, World Economic Outlook and International Capital Markets: Interim Assessment, World Economic and Financial Surveys (Washington, December).
- ———, 1999a, World Economic Outlook, May 1999: A Survey by the Staff of the International Monetary Fund, World Economic and Financial Surveys (Washington).
- ———, 1999b, "Involving the Private Sector in Forestalling and Resolving Financial Crises" (Washington: April).
- Moody's Investor Services, 1999, "Pakistan's Paris Club Agreement Implies New Official Strategy Regarding Seniority of Sovereign Eurobonds," Special Comment (New York).
- Petas, Peter, and Rashique Rahman, 1999, "Sovereign Bonds—Legal Aspects that Affect Default and Recovery," *Global Emerging Markets*, Deutsche Bank, Vol. 2, No. 3, pp. 59–78.
- Standard & Poor's, 1999, "Paris Club Agreement Raises Probability of Default on Sovereign Bonds," *Standard & Poor's CreditWeek*, February 17, pp. 14–21.