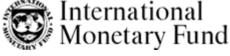
What's New Site Map Site Index Contact Us Glossarv







A quarterly magazine of the IMF

Share This

December 1998, Volume 35, Number 4

# **Financial Crises in Emerging Markets**

Donald J. Mathieson, Anthony Richards, and Sunil Sharma

Since 1982, emerging markets have been rocked by three major financial crises. How can they manage the risks associated with greater integration into the international financial system?

Since the Thai baht first came under attack in July 1997, currencies

and asset prices have plunged throughout Asia, as capital has fled from countries once favored by investors. The Asian crisis, like the Latin American debt crisis of the 1980s and the Mexican crisis of 1994–95, has had a broad and devastating impact, not only on the economies of the affected countries but also on other developing countries believed to be "similarly situated." An examination of the similarities between the crises, as well as of their differences, sheds light on the Asian countries' sudden fall from favor and suggests actions that may enable them to weather such storms in the future.

## **Similarities**

In the months or years leading up to each of the crises, capital inflows to emerging markets surged (see chart). Able to get financing in the international markets on increasingly favorable terms, a number of developing countries built up massive sovereign and private debt denominated in foreign currencies—much of it unhedged.

Between the first oil crisis of 1973 and the outbreak of the debt crisis in 1982, net private capital flows to emerging markets amounted to \$165 billion, or about 1 percent of emerging markets' GDP over that period. For most of the 1970s, borrowers in emerging markets were able to get syndicated international loans at low—and even negative —real interest rates; these loans were denominated in U.S. dollars and priced at spreads over LIBOR (the London interbank offered rate). Although the debts were hedged to some degree by holdings of U.S. dollar-denominated reserves, fewer hedging instruments were available in the 1970s than today, leaving borrowers with large exposures to interest rate and exchange rate movements.

Developing countries regained their access to international financial markets in the early 1990s. From 1990 to 1997, yield spreads on

Search Finance & Development

Search Advanced Search

About F&D

Subscribe

**Back Issues** 

Write Us

**Copyright Information** 

Use the free Adobe Acrobat Reader to view a pdf file of this article

> Free Email **Notification**

Receive emails when we post new items of interest to you.

Subscribe or Modify your profile Brady bonds fell from an average of 1,100 basis points over U.S. treasury bonds with comparable maturities to 350 points. Between 1991 and 1996, the average maturity on new Eurobond issues grew from 4.4 years to 8 years. Net private capital flows to emerging market countries soared to \$1.04 trillion during 1990–96 (about 3 percent of their total GDP).

Despite the explosive growth of global derivative products in the 1990s, unhedged currency and interest rate exposures also played a central role in the Mexican and Asian crises. Indeed, in some instances, governments and private entities increased their exchange rate exposures just before the crises. In 1994, the Mexican government shifted from issuing peso-denominated debt (mainly Cetes) to issuing short-term debt securities (Tesobonos) with debtservice payments indexed to the U.S. dollar. The foreign exchange exposure of nonfinancial corporations also played a key role in the Asian crisis. Domestic interest rates in countries with a fixed or pegged exchange rate were higher than foreign interest rates; as a result, many firms financed their operations through security issues and loans in foreign currency. They neglected to hedge these often large exposures because domestic derivatives markets were undeveloped and purchasing offshore hedging products would have raised the cost of borrowing abroad; moreover, their governments had made a credible commitment to an exchange rate peg or a preannounced crawl.

Another common feature in all three crises was the weak state of the financial systems and regulatory regimes of the affected countries. Both the controlled financial systems of the 1970s and the liberalized ones of the 1990s had serious structural weaknesses. In the 1970s, many emerging markets maintained tight constraints on external financial transactions, directed credit allocation by domestic institutions, and set ceilings on loan and deposit interest rates. Because bank operations tended to be limited to approved or priority activities, there was little opportunity for diversification, and a large share of banks' loan portfolios consisted of nonperforming loans. Moreover, banking controls stifled the development of prudential supervisory systems.

In 1994–95, concerns about the health of Mexico's banking system undermined the defense of the Mexican peso. From mid-1990 to mid-1992, 18 Mexican banks that had been nationalized in 1982 were privatized. As interest rates were freed, credit controls and lending restrictions removed, and compulsory liquidity ratios abolished, bank credit expanded rapidly. By 1993, however, credit expansion had slowed considerably because of concerns about the quality of banks' loan portfolios. After the peso was allowed to float, its value dropped sharply and interest rates rose, contributing to a further deterioration of bank portfolios.

Although the Asian countries affected by the crisis of 1997–98 had begun to make improvements in prudential supervision and regulation in the first half of the 1990s, imprudent lending continued, in part because of remaining inadequacies and the limited experience of

financial institutions in pricing and managing risk. Private corporations underestimated the risk of domestic and foreign borrowing and became highly leveraged. The weaknesses in banks' balance sheets became apparent in 1996-97, when rising interest rates, depreciating currencies, collapsing real estate and equity prices, and the precarious situation of many corporations led to a sharp deterioration in asset quality, provoking some full-fledged banking crises.

All three crises took investors by surprise. Bank lending increased in 1981 to every country later obliged to restructure its debt, and bond and loan interest rate spreads were stable in the first half of 1982. Similarly, Mexico's decision in December 1994 to float the peso was unexpected, despite periods of

## Surges and composition of private capital flows before crises Surges Billion dollars (left scale) Percent of GDP (right scale) 80 60 6 4 -20 60 6 40 20 -20 80 40 4 2 20 0 -20 Composition Billion dollars Debt crisis 1 55 45 35 25 15 Other Foreign direct investment 5 -5 Portfolio investment -15 55 45 35 Portfolio investment 25 Foreign direct 15 5 -5 -15 94 55 45 Foreign direct investment 35 25 15 5 -5 -15 Source: International Monetary Fund, World Economic Outlook database Aggregate flows to Argentina, Bolivia, Brazil, Chile, Colombia, Côte d'Ivoire, Ecuador, Mexico, Morocco, Nigeria, Peru, the Philippines, Uruguay, and Venezuela. <sup>2</sup> Aggregate flows to Indonesia, Korea, Malaysia, the Philippines, and Thailand.

turbulence for domestic interest rates, stock prices, and the pesodollar exchange rate in the preceding 11 months. Most investors were also surprised by the scope and intensity of the Asian crisis, in part because of the affected countries' strong record of growth and stability and their cautious fiscal policies. Yield spreads on bonds and syndicated loans declined for most Asian economies between 1995 and 1997, and no sovereign credit rating was downgraded in 1996 or the first half of 1997. In the months leading up to the outbreak of the crisis, Eurobond spreads for Indonesia, Malaysia, the Philippines, and Thailand fluctuated in relatively narrow ranges. Spreads did not spike until the depth of the Korean predicament became known and speculators attacked the Hong Kong dollar in October.

Spillover effects were extensive in all three crises. In 1982, Mexico's debt-servicing difficulties soon spread to other countries in Latin America as well as to countries in Asia and Africa, as international bankers withdrew credits even from countries that had not demanded a rescheduling. Many countries encountered liquidity problems; some decided to suspend payments and renegotiate their credits. The subsequent Mexican crisis of 1994–95 triggered turbulence in the foreign exchange and equity markets of the larger Latin American countries, and Asian currencies and securities markets plummeted in January 1995, amid uncertainty about Mexico's ability to service its debt and the international community's willingness to provide a support package. Similarly, the floating of the Thai baht in July 1997 led to a reassessment of prospects for other Asian countries.

Contagion was made more virulent by weak banking systems. Banking crises broke out in nine heavily indebted Latin American countries in 1982, when public and private enterprises had difficulty servicing their debt. In 1994 and early 1995, the volume of past-due loans held by Mexican banks increased sharply, and bank deposits fell by 16 percent (more than \$7.5 billion) in Argentina. Following the depreciation of Thailand's baht in July 1997, pressure was put on other Asian countries viewed by investors as having similar fundamentals, including overvalued currencies and banking systems facing potential problems with nonperforming loans. A vicious circle ensued. Believing that weak financial systems would make it impossible for certain countries to sustain high interest rates, speculators pummeled their currencies. As the currencies plunged, the financial positions of both nonfinancial corporations and banks deteriorated, and the proportion of nonperforming bank loans increased, arousing concern about the soundness of the banking systems and further undermining investor confidence.

Debt restructuring has been a key element in the resolution of all three crises. In the 1980s, the focus was on restructuring sovereign foreign currency obligations (in many cases, governments had either assumed or guaranteed the domestic banks' foreign currency debt). Debt reschedulings, along with falling international interest rates, ultimately helped to reduce the "debt overhang" that was discouraging investment in debtor countries. Although Mexico fully serviced its official domestic and foreign-currency-denominated obligations during the 1994–95 crisis, there was extensive restructuring of the nonfinancial sector's domestic bank loans as well as its external bank and Eurobond obligations. In Asia, the restructuring process is still in its initial stages.

### Differences

It is difficult to argue, strictly on the basis of macroeconomic factors, that the Asian economies in 1996 were poised for the kind of turmoil they have experienced. Although there were signs (rapidly growing domestic credit, real exchange rate overvaluation, declining stock markets, and a growing volume of bank claims on the private sector) that policy corrections might be needed, they did not presage the depth of the crisis that would eventually engulf the region. Moreover, the macroeconomic situation of the Asian countries in 1996 was, by and large, better than Mexico's in 1994—and economic fundamentals were stronger in Mexico in 1994 than they had been in the highly indebted Latin American countries in 1981.

The global economic environment in which the crises unfolded was also different. On the eve of the debt crisis of the 1980s, the industrial countries were headed for a recession: GDP growth had slowed dramatically, from an average rate of 4 percent in 1978 to about 1 percent in 1981, dampening world trade. Developing countries that were not oil exporters experienced a decline in export growth and a deterioration of their terms of trade. At the same time, their debt-service payments rose sharply when the industrial countries raised interest rates in the late 1970s in an effort to check inflationary pressures.

In general, the world economy has been more favorable for emerging markets in the 1990s. Inflation and nominal interest rates in the mature markets have been low and falling. The declines in asset yields in mature markets have made emerging markets more attractive to investors and risk premiums have decreased in many asset markets, either because investors have developed a greater tolerance for risk or because they believe risks are diminishing. World trade expanded more than 6 percent a year during 1990–96. However, an increase in U.S. interest rates led to a more pessimistic assessment of Mexico's prospects in 1994, and the upswing in the value of the U.S. dollar before the Asian crisis undermined the competitiveness of Asian countries whose currencies were pegged to the U.S. dollar.

As private capital flows surged during the 1990s, the relative importance of official capital flows to emerging markets declined sharply, from 49.5 percent of total capital flows in 1970–81 to 9.5 percent in 1990–96. There was also a dramatic change in the composition of private flows—the share of foreign direct investment and portfolio flows increased relative to bank lending.

Another difference between the crises has been in their effect on development strategies. Before the debt crisis of the 1980s, many countries had pursued an import-substitution strategy behind high tariff walls, supporting the strategy with policies that set low (relative to inflation) interest rate ceilings on bank loans and deposits and directed bank loans to priority sectors. Extensive capital controls were in place. External borrowing was typically undertaken by the public sector to help finance budget deficits. Such repressive systems discouraged exports both directly (through taxes or limits on credit

availability) and indirectly (to the extent that exporters had to use expensive domestically produced goods). The 1980s provided ample evidence of the shortcomings of the closed-economy, import-substitution model, and, by the beginning of the 1990s, many emerging market economies had embraced a more outward orientation that included liberalization of external trade and financial transactions, fiscal conservatism, structural reforms designed to increase the flexibility of domestic goods and factor markets, and an expanded role for the private sector.

Neither the Mexican crisis of 1994–95 nor the Asian crisis has as yet produced a comparable change in development strategies. Indeed, after the Mexican crisis, many Latin American countries strengthened their commitment to maintaining an open economy—one reason Mexico was able to regain its access to global financial markets in less than a year. The Asian crisis has led, however, to a reexamination of the Asian model of development; highlighted the importance of a resilient, transparent, and well-regulated financial system as a prerequisite for full capital account liberalization; and demonstrated that developing countries need better institutions to protect the vulnerable segments of society and forge a durable consensus for global integration.

### Lessons of the Asian crisis

Although policymakers in emerging markets can take certain steps such as reducing expectations of bailouts and improving transparency in government decision making and the operation of the banking and corporate sectors—to help investors make informed choices, volatile capital flows are not peculiar to emerging markets, and it is unrealistic to think that they will ever be completely eliminated. It is therefore necessary to put in place institutions and policies to manage and reduce the risks associated with them. Although strong macroeconomic fundamentals are necessary, they are not sufficient for averting all crises: a resilient financial sector is required for coping with abrupt changes in asset prices and capital flows. Countries need effective regulatory and supervisory controls, so that financial institutions have the ability and incentives to price and manage the risks associated with capital flows. Market discipline making it costly for managers and owners to neglect the health of their institutions—is also necessary. However, transparency, which is critical to market discipline, is increasingly difficult to achieve in a world where off-balance-sheet exposures are becoming larger and where the mechanisms for collecting data are not up to the task of tracking new types of exposures.

The financial sector cannot be strengthened overnight; policymakers therefore need to open up their financial systems in an orderly fashion. They may need to consider imposing temporary restrictions on certain types of inflows—for example, prudential controls that increase the cost of external debt (particularly short-term debt). Although such controls may lose their effectiveness over time, they do slow inflows and thus buy time for rectifying structural weaknesses. Prudential regulations limiting the volume of inflows

that can be intermediated through the banking system may also be appropriate.

The Asian crisis has made clear that a weak banking system combined with an open capital account is an accident waiting to happen. Reliance on cross-border interbank funding, which can be quickly withdrawn, is the Achilles' heel of the international financial system. It may be possible to prevent excessive reliance on such funding by basing capital requirements for banks on their liabilities as well as on their assets, or by imposing reserve requirements on interbank liabilities. Changing the weights given to different types of risk may also be a way to raise capital requirements.

In addition to reinforcing lessons learned from the two earlier crises, the Asian crisis has highlighted some new issues. First, there may be a need to coordinate financial regulation and exchange rate policy so that countries attempting to peg their exchange rates also strengthen prudential and reporting requirements for financial institutions and corporations. Second, because it will take time to improve the supervisory and regulatory capacity of many emerging markets, nontraditional supervisory measures may warrant consideration—for example, limiting the safety net to a narrower group of deposit-taking institutions, allowing greater international involvement in the banking system, and restricting foreign borrowing by banks and nonbanks. Third, because some borrowers will inevitably fail, it is necessary to have efficient bankruptcy procedures to ensure rapid resolution of situations that could otherwise trigger a crisis.

This article is based on Chapter 3 of International Monetary Fund, 1998, International Capital Markets: Developments, Prospects, and Key Policy Issues (Washington).

**Donald J. Mathieson** is Chief of the Emerging Markets Studies Division of the IMF's Research Department.

**Anthony Richards** is an Economist in the Emerging Markets Studies Division of the IMF's Research Department.

**Sunil Sharma**, a Senior Economist in the IMF Institute, was with the Emerging Markets Studies Division of the IMF's Research Department when this article was written.