GLENN PIERCE

LAST YEAR'S DRAMATIC ASIAN EXCHANGE RATE COLLAPSES have intensified efforts to understand and control the forces behind such crises. Until recently economists blamed currency crises on distorted domestic macroeconomic conditions. But the Asian crises grew out of quite different economic subsoil—namely, microeconomic weaknesses in domestic banking systems

THE ASIAN FINANCIAL CRISIS

WHAT HAPPENED AND WHAT WE CAN LEARN FROM IT

By Barry Bosworth

and unprecedented exposure to exchange rate risk by those who borrowed in foreign markets.

Currency crises are not uncommon. Barry Eichengreen, Andrew Rose, and Charles Wyplosz identified 78 such crises in advanced countries during 1959–93, while Jeffrey Frankel and Rose found 117 crises in 105 developing countries between 1971 and 1992. Most were minor, especially by the standard of recent events in Asia, and many were actually good news in that output grew rapidly in the year after the crisis. The Asian crisis, like the 1995 currency crisis in Mexico, has been far more costly. The two differ from earlier crises in at least two other ways: they reflect problems of liquidity rather than solvency, and they involve severe distortions in the domestic financial system. Both show how the combination of open capital markets, with their potential for large cross-border capital flows, and the liberalization of previously repressed financial institutions creates a potent brew for a currency crisis.

SOLVENCY VERSUS LIQUIDITY

In the wake of World War II, the world economy grew through expanded trade in goods and services. Capital transactions between national markets were strictly controlled and limited to direct investment and a little bank lending, generally to governments. Exchange rate crises involved a simple flow disequilibrium. A country's spending would gradually exceed its income, a current account deficit would result, and at some point lenders would doubt the sustainability of its borrowing. The country was living beyond its means in ways that raised basic questions of solvency—the ability to pay its bills.

The International Monetary Fund became adept at dealing with these flow-driven currency crises. It provided short-term loans to cover current account deficits and helped countries restore balance, usually through devaluing the currency and realigning fiscal and monetary policies to scale back domestic demand. Financing costs were small, and the adjustment often translated into growth in real output and employment.

The Asian crisis, however, unfolded in a world of increasing capital mobility. In the early 1970s, the United States dropped its controls on capital movements, and most other industrial countries followed suit within a decade. Today developing countries are under increasing pressure to allow the free flow of financial capital across their borders. Investors are seeking to allocate a stock of wealth globally among national assets that are increasingly substitutable with one another. When news or the pressure of events causes investors to reallocate their assets, the resulting short-term demands on a country's foreign exchange reserves far exceed anything envisioned in the old regime of limited capital mobility. The problem is not just the reversibility of past foreign capital inflows, but the potential for capital flight as domestic wealth holders and foreign short-term creditors suddenly seek to convert their assets to foreign currencies. The issue is not solvency but liquidity—indeed, Asia's crisis resembled an old-fashioned bank run.

Before 1995, the largest IMF stand-by credit arrangement was a $4 billion agreement with the United Kingdom in 1977. The 1995 agreement with Mexico was far larger—IMF funds of $17.7 billion were just one part of a $52 billion multilateral package. Last year's three Asian agreements—with South Korea, Indonesia, and Thailand—have drawn $35 billion from the IMF and some $60 billion from other sources. The unprecedented shortfalls in foreign exchange reserves meant that the rescues had to be scaled in terms of the stock of private assets that might be moved, not annual flows.

Once a country has been hit by a currency crisis, any decent economist can find fault with its domestic economic policies. But any errors in Asian economic policy pale beside the magnitude of the currency collapse. The Asian countries all had relatively strong fiscal positions, low inflation, and high growth rates. Several had surprisingly large current account deficits, but such deficits are usually regarded as tolerable if the funds flow through to capital formation (as in Asia) rather than consumption (as in Mexico). Nor were real exchange rates seriously overvalued on a trade-weighted basis. In most cases, the current account deficits were "caused" by a surge of foreign capital inflows rather than by excessive domestic spending drawing in capital. Overall indebtedness was moderate relative to both GDP and exports; and concerns over basic solvency seemed to play no major role in the crisis.

The fundamental issue in Asia was liquidity, not solvency. Asia's problem was twofold: its debt was concentrated in short-term liabilities and its reserve assets were low. In Korea, for example, foreign indebtedness was relatively moderate, but large portions of the private debt were short-term loans. At the beginning of 1997, Korea's reserves were less than half its short-term liabilities, and a large portion of apparent reserves was committed to other purposes.

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THE ROLE OF FINANCE

The emerging Asian economies have favored banks over security markets for financial intermediation. Little or no public debt exists to be traded, and businesses rely on bank loans rather than bond or equity issues for new capital.

The disruption of Asian currency markets was not preceded by widespread bank runs, but the economies hurt most by the crisis had long histories of problems with their banking systems and were in the midst of financial reform and liberalization as part of the move to full capital mobility. But liberalization also creates opportunities for excessive risk taking by inexperienced bankers supervised by inexperienced regulators. Even in the absence of crisis, a weak banking system is likely to limit the central bank's ability to raise interest rates to defend the currency. And Asian interest rate increases were surprisingly modest compared with earlier crises in other countries: central bankers put up only a limited battle before allowing their currencies to depreciate.

But the crises cannot be blamed on weak Asian banks. Many other countries with equally weak systems had no crisis. And the long-standing flaws in Asia's banking systems had not impeded development of its economies. In fact, Asia's system of financial intermediation was seen as one cause of its rapid economic growth.

Generating a crisis as dramatic as Asia's requires combining weaknesses in the domestic financial system with an effort to open it to international capital. In recent years, financial capital has been pouring into Asia. Foreign direct investment was heavily allocated to China, but much of the inflow elsewhere was in portfolio capital and bank loans. Before 1990, flows of portfolio capital were trivial, but by 1996 they exceeded $30 billion a year, with half going to Korea. Outstanding bank loans to Asia increased from $110 billion at the end of 1990 to $367 billion at the end of 1996. When total loans peaked at $390 billion in mid-1997, two-thirds had a maturity of a year or less.

LESSONS FROM THE PAST

Asian countries are not the first to liberalize their financial systems and link them to world markets. Many others have tried it and failed—an experience that offers several lessons. First, pursuing capital mobility before establishing a sound domestic financial system is dangerous. That is particularly true if domestic interest rates far exceed those in global markets, tempting domestic banks to borrow abroad and lend at home without the requisite skills and markets to manage currency risks. It is even more true if government commitments to fixed exchange rates lead participants to underestimate the currency risks.

Second, financial liberalization often outpaces improvements in the domestic regulatory system. Financial liberalization requires a profound change in the behavior of both banks and regulators. In a repressed market, government often uses banks as a tool of industrial policy. After liberalization, it must develop a supervisory function directed more toward discouraging excessive risk taking and rent-seeking behavior. In the short run, financial liberalization often has the perverse effect of raising domestic interest rates, and liberalization and increased competition push some firms and institutions toward bankruptcy. Without strong regulatory supervision, troubled banks will raise deposit rates and borrow to bet on one last roll of the dice. The deposit rate competition, in turn, draws in otherwise healthy banks. Once a bank is seriously impaired by its customers' losses, it compounds the problem by rolling old bad loans over into new loans to hide its own insolvency. Matters are even worse in countries that allow interlocking ownership of banks and business enterprises.

Third, regulators cannot be the only line of defense. Stronger accounting and public reporting requirements, together with standards for internal governance, are also essential to promote effective risk evaluation and management control by private individuals and markets.

Currency crises tied to banking failures typically have severe economywide effects. During the Latin American debt crisis of the early 1980s, Argentina's real exchange rate fell 50 percent and output declined 10 percent. In Chile the real exchange rate fell by a fourth, and output shrank by 15 percent. When Chile assumed private foreign debts and recapitalized the banking system, it raised public debt by about 30 percent of GDP.

In Mexico in 1994, the problems were not confined to the banking system. The government had financed much of its public debt with short-term marketable securities. When domestic financial markets were opened to foreign investors, asset prices surged: inflation-adjusted equity market prices rose more than fivefold between 1988 and the end of 1993. Like the Asian economies, Mexico was caught with an imbalance of reserves relative to short-term foreign liabilities, and the resulting currency crisis and high domestic interest rates created severe domestic banking failures. A $29 billion inflow of portfolio capital in 1993 reversed to a $10 billion outflow in 1995. Output fell 6 percent in

1995, but growth recovered to average 6 percent a year in 1996–97. To date, Mexico has spent about 15 percent of its GDP recapitalizing the banking system.

RESPONSE TO THE ASIAN CRISIS

Just as a healthy bank needs an immediate source of liquidity to meet depositor demands for currency in a bank run, the immediate challenge for Asia, as for Mexico, was getting the resources to prevent a liquidity problem from turning into a solvency concern. But, though the response in Mexico eased the problem, the response in Asia exacerbated it.

Countries can respond to a currency crisis by a combination of raising domestic interest rates, selling foreign currency reserves, and devaluing the currency. Having seriously miscalculated their reserve needs relative to their short-term liabilities, the Asian economies seemed unwilling to raise interest rates for fear of wreaking havoc on a highly debt-leveraged financial system. Because of the stage of their liberalization programs, they also lacked the liquid short-term debt markets toward which stabilizing speculative inflows could have been directed. With most foreign liabilities denominated in foreign currencies, devaluation greatly increased the debt burden and raised concerns about solvency where none had existed.

The distinction between liquidity and solvency is particularly important for the IMF. In past debt crises, IMF involvement provided a seal of approval for debtor programs, assuring that creditors would be repaid. Periodic withdrawals under a stand-by credit agreement ensured continued compliance with IMF conditions. But in a liquidity crisis, when the aim is to eliminate the rationale for a run on a currency, staged conditionality can be self-defeating.

In Mexico, the IMF, the United States, and others provided the short-term financing required for a liquidity crisis. Needed funds were made available quickly and without significant conditions. As a result, Mexico required only $30 billion of the $52 billion package to stem the outflow during the first part of 1995. By mid-year it had begun repaying the U.S. loan, which was paid off completely early last year. The IMF loan will largely be repaid by 2000.

In Asia, IMF financing was stretched out over several years and strongly conditioned on structural reforms. Lacking the funds to address the liquidity concerns, the Asian economies had to let exchange rates fall to restore a balance of supply and demand for their currencies—and thus turned a liquidity crisis into a solvency problem.

The most immediate impact of a financial crisis is a sharp fall in domestic demand. Yet the IMF insisted that Asia's governments tighten fiscal policy and raise interest rates to attract foreign finance, thus worsening the shock to domestic demand. A crisis limited to one country, as in Mexico, might have been amenable to increased exports and reduced imports to promote recovery; but a regionwide crisis makes such a solution next to impossible. Asia must rely more heavily on expanding domestic demand.

The Asian currency crisis will have its most severe demand-reducing effects on the banking system. But much of the banks' foreign borrowing was relent at home in dollars, and some of the foreign currency borrowing was undertaken by nonfinancial enterprises. Thus, sharply higher debt costs are not restricted to the banking system, and the problems of nonperforming loans and getting new loans are worsening.

Devising policies to ease the crisis in loan markets is tricky. Enterprises will be hard pressed to manage the higher interest rates on their existing debt, and insolvent enterprises must be liquidated or merged quickly. But the measure of insolvency depends greatly on the presumed future value of the exchange rate and interest rates. If rates move back toward pre-crisis levels, some now-insolvent firms will be viable. It is reasonable to provide some form of bridge financing for them, while adhering to a firm policy of liquidation for the deeply insolvent.

Any restructuring program must also restore both solvency and profitability to the banking system—a most difficult and costly task of recovery. Not only must governments integrate short-term programs of fiscal support and recapitalization, they must also restructure and reform the financial system. Prudential standards must be tightened and greater provisioning made for impaired loans, but both will increase the apparent capital shortfall. The central bank will also come under strong pressures to expand liquidity through loans and reduced reserve requirements at a time when it is hard to distinguish between solvent and insolvent banks. Costly as it is, however, a comprehensive plan to resolve the banking problems must be put into place quickly. Otherwise, private agents simply wait for more favorable terms from the government.

HASTE MAKES WASTE

The crises in Asia highlight the dangers in the current expansion of the international financial system. Allowing financial capital to flow freely across national borders exposes countries to the inevitable risks of runs against their currencies, just as individual banks are threatened with runs domestically. Yet the international community does not appear willing to provide the funds to support an effective global lender of last resort. Developing countries will have to manage the risks of capital market opening knowing that they will be forced to rely primarily on their own resources in the event of a crisis.

Emerging markets should still aim for integration with the global financial system, but they must give themselves time to build the infrastructure to support that goal. They should give a high priority to financial system reform, while also actively discouraging short-term capital inflows and carefully monitoring the foreign currency exposure of domestic economic agents. Full capital mobility is the last stage in a complex process of financial liberalization and growth. ■