

ECONOMIC RESEARCH AND DATA  
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What Caused East Asia's Financial Crisis?

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**Pacific Basin Notes.** *This series appears on an occasional basis. It is prepared under the auspices of the [Center for Pacific Basin Monetary and Economic Studies](#) within the FRBSF's Economic Research Department.*

The collapse of the Thai baht in July 1997 was followed by an unprecedented financial crisis in East Asia, from which these economies are still struggling to recover. A great deal of effort has been devoted to trying to understand its causes. One view is that there was nothing inherently wrong with East Asian economies, which have historically performed very well. These economies experienced a surge in capital inflows to finance productive investments that made them vulnerable to a financial panic. That panic--and inadequate policy responses--triggered a region-wide financial crisis and the economic disruption that followed (Sachs and Radelet 1998).

An alternative view is that weaknesses in Asian financial systems were at the root of the crisis. These weaknesses were caused largely by the lack of incentives for effective risk management created by implicit or explicit government guarantees against failure (Moreno, Pasadilla, and Remolona 1998 and others cited below). The weaknesses of the financial sector were masked by rapid growth and accentuated by large capital inflows, which were partly encouraged by pegged exchange rates.

While the two views are not mutually exclusive, their policy implications vary greatly. If a panic unrelated to fundamentals fully explains Asia's financial crisis, reforms in the economic structure or in financial sector policy are not essential in planning Asia's recovery. If, however, weaknesses in the financial sector were important contributors to the crisis, reforms are indeed essential. To shed further light on this question, this *Economic Letter* briefly reviews Asia's recent financial crisis and the two alternative views of its cause.

**Boom and bust in Asia**

Operating in an environment of fiscal and monetary restraint, most of East Asia enjoyed high savings and investment rates, robust growth, and moderate inflation for several decades. Starting in the second half of the 1980s, rapid growth was accompanied by sharp increases in asset values, notably stock and land prices, and in some cases by rapid increases in short-term borrowing from abroad.

After the mid-1990s a series of external shocks (the devaluation of the Chinese renminbi and the Japanese yen and the sharp decline in semiconductor prices) adversely affected export revenues and contributed to slowing economic activity and declining asset prices in a number of Asian economies. In Thailand, these events were accompanied by pressures in the foreign exchange market and the collapse of the Thai baht in July 1997.

The events in Thailand prompted investors to reassess and test the robustness of currency pegs and financial systems in the region. The result was a wave of currency depreciations and stock market declines, first affecting Southeast Asia, then spreading to the rest of the region. In the year after collapse of the baht peg, the value of the most affected East Asian currencies fell 35-83% against the U.S. dollar (measured in dollars per unit of the Asian currency), and the most serious stock declines were as great as 40-60%.

Disruptions in bank and borrower balance sheets have led to widespread bankruptcies and an interruption in credit flows in the most severely affected economies. As a result, short-term economic activity has slowed or contracted severely in the most affected economies.

**Interpreting the crisis**

The economic shocks affecting East Asia were not followed by a normal cyclical downturn, but what some describe as "runs" on financial systems and currencies. Some argue that these runs reflected a classic financial panic that did not reflect poor economic policies or institutional arrangements. As is well known, even well-managed banks or financial intermediaries are vulnerable to panics, because they traditionally engage in *liquidity transformation*. That is, banks accept deposits with short maturities (say, three months) to finance loans with longer maturities (say, a year or longer). Maturity transformation is beneficial because it can make more funds available to productive long-term investors than they would otherwise receive. Under normal conditions, banks have them managing their portfolios to meet expected withdrawals. However, if all investors decided to withdraw their funds from a given bank at the same time, as in the

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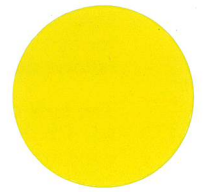
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depositors decided to withdraw their funds from a bank during a panic, the bank would not have enough liquid assets to meet its obligations, threatening the viability of an otherwise solvent financial institution.

As pointed out by Radelet and Sachs (1998), East Asian financial institutions had incurred a significant amount of external liquid liabilities that were not entirely backed by liquid assets, making them vulnerable to panics. As a result of this maturity transformation, some otherwise solvent financial institutions may indeed have been rendered insolvent because they were unable to deal with the sudden interruption in the international flow of funds.

However, it is apparent that this is not the entire story, as the impact of the crisis varied significantly across economies. In particular, as investors tested currency pegs and financial systems in the region, those economies with the most vulnerable financial sectors (Indonesia, South Korea, and Thailand) have experienced the most severe crises. In contrast, economies with more robust and well-capitalized financial institutions (such as Singapore) have not experienced similar disruptions, in spite of slowing economic activity and declining asset values. Indeed the collapse of the Thai baht in July 1997 and of the Korean won in the last quarter of 1997 were preceded by signs of significant weaknesses in the domestic financial sector, notably an inability by domestic borrowers to service their debts. In Indonesia, it became apparent after the crisis that domestic lenders could not monitor adequately the financial condition of their borrowers, a situation that worsened the severity of the crisis. This suggests that understanding what factors contributed to weaknesses in the financial sectors of the most affected economies may help make them less vulnerable to financial crises in the future.

### Lack of incentives for risk management

Two characteristics common in countries that have experienced financial crises were present in a number of East Asian economies. First, *financial intermediaries were not always free to use business criteria in allocating credit*. In some cases, well-connected borrowers could not be refused credit; in others, poorly managed firms could obtain loans to meet some government policy objective. Hindsight reveals that the cumulative effect of this type of credit allocation can produce massive losses.

Second, *financial intermediaries or their owners were not expected to bear the full costs of failure*, reducing the incentive to manage risk effectively. In particular, financial intermediaries were protected by implicit or explicit government guarantees against losses, because governments could not bear the costs of large shocks to the payments system (McKinnon and Pill 1997) or because the intermediaries were owned by "Ministers' nephews" (Krugman 1998). Krugman points out that such guarantees can trigger asset price inflation, reduce economic welfare, and ultimately make the financial system vulnerable to collapse.

The importance of implicit government guarantees in the most affected economies is highlighted by the generous support given to financial institutions experiencing difficulties. For example, in South Korea, the very high overall debt ratios of corporate conglomerates (400% or higher) suggest that these borrowers were ultimately counting on government support in case of adverse outcomes. This was confirmed by events in 1997, when the government encouraged banks to extend emergency loans to some troubled conglomerates which were having difficulties servicing their debts and supplied special loans to weak banks. These responses further weakened the financial position of lenders and contributed to the uncertainty that triggered the financial crisis towards the end of 1997.

### Why a crisis now?

Since weaknesses in East Asian financial systems had existed for decades and were not unique to the region, why did Asia not experience crises of this magnitude before? Two explanations are likely. First, rapid growth disguised the extent of risky lending. For many years, such growth allowed financial policies that shielded firms that incurred losses from the adverse effects of their decisions. However, such policies would make economies highly vulnerable during periods of uncertainty. Second, innovations in information and transactions technologies have linked these countries more closely to world financial markets in the 1990s, thus increasing their vulnerability to changes in market sentiment.

Closer integration with world financial markets adds dimensions of vulnerability that are not present in a closed economy. In a closed economy, bad loans caused by risky lending may not lead to a run because depositors know that the government can supply enough liquidity to financial institutions to prevent any losses to depositors. In an open economy, that same injection of liquidity can destabilize the exchange rate. As a result, during periods of uncertainty, runs or speculative attacks on a currency can be avoided only if the holders of domestic assets are assured that the government can meet the demand for foreign currency. Those East Asian economies where foreign exchange reserves were large relative to their short-term borrowing (Philippines, Malaysia, and Taiwan) were in a better position to provide such assurances than those economies where such reserves were relatively low (South Korea, Indonesia, and Thailand). (Singapore and Hong Kong are excluded from this comparison because their role as offshore financial centers clouds interpretation of the data.)

Financial sector vulnerability was accentuated by a tendency not to hedge foreign currency borrowing in countries with pegged exchange rates. Market participants may have interpreted currency pegs as implicit government guarantees against the risk of currency volatility (Dooley 1997), backed by foreign reserves that would be made available through central bank currency intervention. While the absence of hedging significantly lowered the cost of funds (in the short run) for those firms with access to foreign credit, the consequent mispricing of foreign credit contributed to excessive capital inflows and the vulnerability of borrowers with heavy exposure to foreign currency loans.

The lack of hedging also added to the instability in Asian financial markets once the crisis hit. The high cost of abandoning currency pegs induced policymakers to adopt harsh contractionary measures (involving skyrocketing interest rates) to defend the exchange

rate, even when the pegs were unsustainable in the face of adverse market sentiment. The efforts of market participants to cover previously unhedged foreign currency exposure after the onset of the crisis further weakened Asian currencies. After the pegs collapsed, borrowers who had not hedged their foreign currency borrowing had difficulty servicing their debts and, in some cases, went bankrupt, thus worsening the crisis.

### **Conclusion**

A review of East Asia's experience suggests that while a classic panic may have played a role, financial sector weaknesses were a major contributor to the recent financial crisis. Such weaknesses appear to reflect the inability of lenders to use business criteria in allocating credit and implicit or explicit government guarantees against risk. This implies that it would be prudent to accompany efforts to spur recovery in East Asia by reforms designed to strengthen the financial system.

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