

Chicago Fed Letter

Global financial crises: Implications for banking and regulation

On May 6–7, 1999, the Federal Reserve Bank of Chicago held its thirty-fifth annual Conference on Bank Structure and Competition. Since the early 1960s the conference has served as a forum for academics, regulators, and industry participants to debate current issues affecting the financial services industry. This year's conference continued that tradition.

The theme of the conference was "Global Financial Crises: Their Implications for the Financial Sector." Emphasis at the conference was placed on the appropriate means to resolve problems when they occur, and how to avoid them in the future. What appears to have started as a simple currency devaluation in Thailand in July 1997 has seemingly led to a general upheaval in financial markets throughout the world. Suddenly, global capital market integration, which had been credited with enhancing economic growth through the 1990s, was being criticized as the major cause of the crises that have affected well-managed banks and poorly managed banks alike. Thus, the unprecedented global financial crises that followed the collapse of Thai baht raise numerous public policy questions which must be addressed to avoid repeating past problems. What caused the recent crises? What role did financial intermediaries play? Was moral hazard and/or poor regulation an important factor? Are most of the problems behind us? Are current international regulatory arrangements adequate to address these problems? Is a new regulatory architecture needed? Do financial markets no longer "work" in the sense that the crises are simply unpredictable and unavoidable? What is the appropriate public policy response?

To address these and related questions, the conference held a special theme session which included Carter Golembe, president, CHG Consulting, Inc.; John Heimann, chairman, Financial Stability Institute; Allan H. Meltzer, professor of political economy, Carnegie Mellon University; Ernest T. Patrikis, senior vice president and general counsel, American International Group, Inc.; and Andrew Sheng Len Tong, chairman, Hong Kong Securities and Futures Commission. There was also a keynote address by Federal Reserve Chairman Alan Greenspan, and a luncheon presentation by Joseph E. Stiglitz, chief economist of the World Bank, during which they shared their views on these topics. Finally, there was an additional session organized to discuss regulatory reform during which some of the panel members discussed alternative means to prevent future crises.

In his keynote address, Alan Greenspan observed that conditions seem to be improving in the Asian countries most affected by the recent financial crises. Further, productivity increases in the U.S. have served as a buffer against those crises having a major impact on the domestic economy. These comments underscored the necessity to find ways to better manage and to avoid these problems in the future. In his luncheon presentation, Mr. Stiglitz emphasized that the social cost of financial crises can be enormous. Even after financial markets begin to recover, unemployment rates tend to remain high for extended periods of time. There also seems to be a greater impact on less developed countries than other countries.

The origin of the crises

What caused these crises which started in Thailand, engulfed Malaysia,

Indonesia and South Korea, and then proceeded to affect Russia, Brazil, and Argentina, and some would say now seems to be influencing financial activities in Europe? In the theme panel discussion, Andrew Sheng argued that the Asian crisis was the result of a classic asset bubble—overleverage and a boom-bust mentality by investors. John Heimann echoed this impression. Mr. Heimann argued that the bubble was the result of herd behavior by investors. He felt that those investors who rushed into Eastern Asia at the beginning of the decade "with scant regard for risk, bolted in 1997 with scant regard for economic fundamentals." Mr. Sheng argued that the major difference between this and previous crises was the sheer magnitude of the problem. For example, in 1996 the total bank debt in East Asia was some \$2.8 trillion, or 130% of gross domestic product; nearly double that from a decade before. By 1996, leverage for the median firm had reached 620% in South Korea, 340% in Thailand, and averaged 150% to 200% across other East Asian countries. This activity was financed with capital inflows from other countries, which quickly flowed away beginning in 1997.

What fueled the bubble? Mr. Stiglitz stressed the importance of excessive levels of short-term debt in predicting the potential for, and severity of, financial crises. "In fact, the ability of this variable by itself to predict the crises of 1997 is remarkable." Mr. Sheng, however, attributed part of the problem to the new financial industry landscape. The role of commercial banks has declined over time while that of the securities industry has increased. With very limited regulation, and significant leverage, this nonbank sector of the industry wields more influence on financial flows than it did in the past. The combination of

improved technical capabilities and aggressive hedging activities by asset management funds played a significant role in helping fuel the bubble in East Asia. Bankers added to this process according to Mr. Heimann. Bankers relied upon the myth that emerging markets could continue to grow at historically high rates. Competitive pressures further encouraged this herd mentality of pursuing increased revenues without considering of the quality of those revenues.

An irresistible force

Then is it a foregone conclusion that the boom-bust cycle, market “over-shooting,” and the mentality which led to these crises are simply the “nature of the beast” and make future crises inevitable? Not necessarily. Forces should be in place which would decrease the potential for such crises and decrease their impact when they do occur. As Mr. Heimann stated, “Strong financial systems act as stabilizers when the domestic economy is battered. But weak systems become magnifiers, making a bad situation worse.” Allan Meltzer argued that the magnitude of the crises was made larger by the combination of “weak banking systems, heavily dependent on short-term foreign loans denominated in foreign currencies, and pegged exchange rates.” In many cases these weak systems were the result of country-specific policies including the incursion of politics into the financial decisionmaking process, inadequate supervision, opaque and/or misleading accounting statements, and an inadequate legal infrastructure to determine property rights and to validate contracts. As Mr. Meltzer stated, “Russia does not have the rule of law, private property, a solvent banking system, transparent accounting, or most other requirements for a functioning market system.” When financial problems developed, “the prudent action for a lender was to get his assets out, salvage what could be saved, and hold hard currency.”

At the center of these financial crises were institutions whose liabilities were perceived as having an implicit

government guarantee, but were essentially unregulated and thus subjected to severe moral hazard problems. Anticipation of protection from losses provides incentives for institutions to engage in excessively risky investments. According to Charles Calomiris, professor of finance and economics at Columbia University, “the International Monetary Fund’s willingness to assist in bailing out international banks and failed domestic banks—first in Mexico and later in Asia—has played a tangible role in encouraging excessive risk-taking.” It has long been known that financial intermediaries who have access to implicit or explicit government liability guarantees pose a serious problem of moral hazard. The U.S. savings and loan debacle is the classic example. Due to the moral hazard problem, governments generally reserve the right to monitor, place asset restrictions, and impose capital requirements on their financial institutions.

Unfortunately, it was argued by Mr. Calomiris, this monitoring function was not performed effectively in many Asian countries. Since many creditors perceived that their funds were protected by implicit or explicit government guarantees, creditors (both foreign financial institutions and domestic lenders) did not monitor the firms in which they invested, nor impose discipline on the use of their funds. If regulatory restrictions or covenants are not imposed, then institutions will undertake excessively risky investments. The provision of implicit or explicit government liability guarantees not only encourages excessively risky investment, but also distorts capital flows and market prices. According to Mr. Meltzer “it encourages the short-term capital flows that the International Monetary Fund protects at the expense of other types of investments.” Mr. Calomiris noted that “anticipations of protection from losses not only prompt intentional risk-taking, they also undermine the information content of market prices as a signal of risk, thereby making more likely that investors will unwittingly misallocate capital.” For example, rating agencies such as Standard & Poor’s and Moody’s provide an ongoing assessment of credit

risk in emerging markets. Only many weeks after the crisis had begun did these rating agencies downgrade long-term sovereign debt of Asia countries, a point also echoed by Mr. Stiglitz.

Theoretically, capital requirements can be used to control moral hazard. However, Mr. Sheng argued that the 8% minimum capital requirement imposed by Basle was extremely inadequate given the level of risk assumed in these countries. In fact, for many Asian economies the bank capital ratios were almost impossible to interpret because there was a general absence of clear loan-classification standards, asset valuation, and provisioning rules.

Mr. Heimann, Mr. Patrikis, and Mr. Sheng were particularly vocal in their criticism of risk management systems and highlighted them as a cause of the crises. Investors were generally seen as being overly exuberant and being too willing to invest in small and illiquid markets. Borrowers underestimated the risk of running large maturity and exchange rate mismatches. Regulators and policy setters failed to understand the inconsistencies in their monetary and exchange rate policies. Finally, rating agencies and international banks failed to understand the interrelated capital flows and banking relationships. Mr. Heimann saw the risk management issues as being particularly problematic in less developed countries and suggested that policy changes were necessary to alter the incentives faced by banks in these countries and perhaps tighten the constraints under which they must operate.

Are new capital standards needed?

Both Mr. Patrikis and Mr. Stiglitz discussed the potential role of current capital adequacy standards in exacerbating the crises. The standards fail to account for certain correlations, including those between market and credit risk, and as a result may distort the capital allocation process. For example, because short-term loans are typically thought to have less credit risk, the Basle capital rules weight cross border claims on banks based

outside the OECD countries at 20% if the claims have a residual maturity of less than one year, and at 100% if they have a residual maturity exceeding a year. This encouraged short-term lending by banks in developed countries. Borrowers, seeing the lower rates, borrowed more short term. The effect was an accumulation of large debt repayments in any given year. Mr. Patrikis gave an example in which he argued that the Basle risk weights indicated that it was safer to lend to a Korean bank than it was to lend to one of the major Korean industrial conglomerates. A loan to the Korean conglomerate would incur a 100% weight capital charge while the loan to the bank would be at 20%. If a bank director was asked why they extended so much credit to Korean banks, they could argue it was because official position was that the loans were much less risky. "We did what our supervisor said." These and other shortcomings of the Basle standards have been recognized and are currently under review.

A discouraging element of the discussion was the realization that most of the inadequacies discussed here were well recognized. Market participants knew that the reliability of market information was poor, that supervisory systems in many cases were essentially nonexistent, and that there was little in the way of transparency or disclosure. As Mr. Heimann emphasized, "Market participants knew the vulnerabilities, but ignored them." One could argue that we have not learned very much from the past. Perhaps it takes a crisis of this magnitude to spur politicians and central bankers to put appropriate measures in place for crisis management and prevention. According to Mr. Meltzer, "one lesson to be drawn from this experience is the need to improve the safety and soundness of banking systems."

Is there a need for an improved regulatory architecture?

What are those improvements? What form, if any, should regulatory reform take? There were a wide range of views on this issue. At one end of the spectrum, Mr. Heimann argued that there

was no need for a new regulatory architecture. Rather, we need to "better enforce the basic nuts and bolts of financial supervision." What is needed is a strong, independent supervisory system augmented with internationally accepted accounting standards which accurately portray the condition of financial institutions, improved transparency and disclosure, and improved communication of information between regulators across borders. He emphasized the role of the newly created Financial Stability Institute which has a general mandate to improve the quality of supervision in developing countries.

Others wanted more structured change. For example, Mr. Calomiris and Mr. Meltzer recommended that International Monetary Fund lending be restricted to crisis lending for countries that have sound banking systems. According to Mr. Meltzer, the criteria for soundness would include the requirements "1) that private lenders, mainly financial institutions, must accept the risk that a bank will fail by holding uninsured claims, and 2) foreign banks should be permitted to compete in local markets to reduce risk by diversification." If firms engage in risky activities, then uninsured creditors will require compensation in the form of a higher return on their funds for bearing the increased risk. As a result, the willingness of firms to invest in risky projects will be held in check by the concern of creditors for the safety of their funds, and this can foster a sound banking system. Mr. Calomiris agreed, stating that "market discipline would be a lever for other reforms, particularly in disclosure, accounting, commercial law, and bankruptcy law. Without market discipline, and the incentives it provides to produce and use information, disclosure requirements will not make a difference. With market discipline, a strong constituency for additional improvements in accounting and commercial law will be created."

Mr. Golembe would like to focus the public policy debate in the U.S. on the appropriate regulatory structure

for banks and other financial institutions. He stressed that sweeping, almost revolutionary, changes taking place in the financial services industry are forcing countries to reform their existing regulatory structure. According to Mr. Golembe, the most prominent of these reform efforts "has been the creation in Britain of the new Financial Services Authority, which has been given responsibility for the authorization, supervision, and regulation of effectively all forms of financial services activity in the UK, including banks." Mr. Golembe argued that "the increased interest in finding better ways to deal with international crises is likely to force a resolution of an urgent issue in the United States: reform of the regulatory structure, including determination of the appropriate role, if any, for the Federal Reserve System in the supervision and regulation of banks."

Finally, it is generally argued among economists that, by far, the major cause of financial crisis is an unstable economy. This results in deteriorating asset quality, asset price bubbles, and wide swings in asset prices and exchange rates which can lead to systemwide problems. Thus, it is not surprising that the effectiveness of monetary policy was raised as an issue. Mr. Meltzer examined the spread between the interest rates on commercial paper and Treasury

Michael H. Moskow, *President*; William C. Hunter, *Senior Vice President and Director of Research*; Douglas Evanoff, *Vice President, financial studies*; Charles Evans, *Vice President, macroeconomic policy research*; Daniel Sullivan, *Vice President, microeconomic policy research*; William Testa, *Vice President, regional programs and economics editor*; Helen O'D. Koshy, *Editor*.

Chicago Fed Letter is published monthly by the Research Department of the Federal Reserve Bank of Chicago. The views expressed are the authors' and are not necessarily those of the Federal Reserve Bank of Chicago or the Federal Reserve System. Articles may be reprinted if the source is credited and the Research Department is provided with copies of the reprints.

Chicago Fed Letter is available without charge from the Public Information Center, Federal Reserve Bank of Chicago, P.O. Box 834, Chicago, Illinois 60690-0834, tel. 312-322-5111 or fax 312-322-5515. *Chicago Fed Letter* and other Bank publications are available on the World Wide Web at <http://www.frbchi.org>.

ISSN 0895-0164

bills (paper-bill) to determine how the world's money markets reacted to these financial crises and how the U.S. monetary policy reactions compared to those in other periods of financial stress. "Widening spreads between commercial paper and Treasury bill rates is typical in periods of uncertainty and market stress," he said. He showed that, following the Russian default in mid-August and the collapse of Long-Term Capital Management in October of last year, the U.S. experienced a much larger increase in the paper-bill spread than Germany, Japan, and the UK. One possible explanation for these differences is that the U.S. received a large capital inflow from those seeking safety in U.S. government securities which put downward pressure on interest rates in those markets. "Commercial paper rates did not rise. They just declined much less than Treasury bill rates," said Mr. Meltzer.

To determine the relative importance of the 1997-98 crisis, Mr. Meltzer compared the behavior of the paper-bill spread during this period with that during three other periods of financial stress: the commercial paper crisis in 1970 (following the default by Penn Central Railroad, a large commercial paper issuer); the 1973-74 oil crisis; and the October 1987 stock market crash. During each of these disturbances the paper-bill spread rose primarily because rates moved in opposite directions. However, the most recent disturbance showed both the commercial paper rate and the Treasury bill rate falling at different rates of change. Mr. Meltzer argued that there was much less flight from commercial paper during the most recent crisis than in the earlier periods, and capital inflows and increases in bank reserves pushed down all short-term rates, especially Treasury bill rates. "The

Federal Reserve was correct to respond promptly to the increased demand for liquidity," he said.

Now that the global financial crisis atmosphere of 1997-98 has passed, analysts and policymakers can take inventory of the events surrounding these problems. The 1999 Bank Structure Conference provided an opportunity for scholars and practitioners to begin to put the recent crises into perspective, suggesting the appropriate responses to prevent such crises in the future. Planning for the 2000 conference, scheduled for May 3-5, is currently underway.

—Elijah Brewer III
Assistant vice president

—Douglas D. Evanoff
*Senior financial economist
and vice president*

PRESORTED
FIRST-CLASS MAIL
ZIP + 4 BARCODED
U.S. POSTAGE PAID
CHICAGO, ILLINOIS
PERMIT NO. 1942

FEDERAL RESERVE BANK OF CHICAGO
Public Information Center
P.O. Box 834
Chicago, Illinois 60690-0834
(312) 322-5111
Return service requested

Chicago Fed Letter