SPECIAL ISSUE

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## Lessons from recent financial crises

On September 30 through October 2, 1999, the Federal Reserve Bank of Chicago and the Bank for International Settlements (BIS) cosponsored a conference on Lessons from Recent Financial Crises at the Federal Reserve Bank.[1] This was the third annual conference dedicated to international policy issues, following previous conferences cosponsored with the World Bank and the International Monetary Fund (IMF), respectively. Participants in the conference represented more than 25 countries.

In his opening remarks, President Michael Moskow, Federal Reserve Bank of Chicago, stressed the importance of fundamentals in protecting against financial turmoil. He likened a country's economy and infrastructure to the human immune system. When the immune system is strong, it is less susceptible to disease; however, in a weakened state, even minor concerns can pose a serious threat. During the conference, many argued that recent financial crises seemed to have been characterized by either a weakened system embodying weak institutional frameworks or a system overtaxed by massive international capital flows.

The conference began its comprehensive review of financial crisis with a discussion of the origins of financial crisis. In contrast to earlier conferences, which placed the blame on fixed exchange rate regimes, crony capitalism, and high short-term debt, this conference also focused on additional elements, such as the volatility of international capital flows, floating exchange rates, and weak institutions. Ricardo Hausmann, Inter-American Development Bank, and Masayuki Matsushima, Bank of Japan, cited the Latin American and Asian experience to cast doubt on the viability of floating exchange rate regimes. They argued that recent crises have shown that even under a floating exchange regime, a country with strong economic fundamentals can suffer adverse effects. While such a system protects against rampant speculative attack on the national currency, a floating exchange rate regime leaves an economy vulnerable to financial contagion.

Matsushima said that the democratization of capital flows, characterized by the financial and technological shift that has allowed organizations and individuals to move huge amounts of capital quickly and cheaply all over the world, was at the source of the Asian crisis. Financial contagion was transmitted from one country to another as a result of large foreign capital flows. These capital flows, which can be subject to herd behavior, left emerging economies vulnerable. The potential impact of these capital flows is leading many economists to look beyond stringent macroeconomic policy prescriptions, to strategies that foster international coordination of capital flows.

Mark Medish, U.S. Department of the Treasury, argued that the answers to resolving financial crisis lie in the basics of market enterprise. He said that a basic framework of economics, accounting, and law is required for economic growth and recovery to take root, noting that "Corruption and lawlessness are the quiet killers." Market reformers like those in Poland have been more successful with respect to economic growth than those in countries like Ukraine, which have been resistant to change. However, other examples raised questions about the value of such reform for developing countries. Countries such as Egypt, India, and China, where gradualists have prevailed, have avoided financial crisis. While economics 101 extols the benefits of the market, the recent experiences of reformers in countries in financial crisis have forced many to question the wisdom of Adam Smith. Medish addressed these seeming inconsistencies by proposing that the benefits of reform must be measured over time. Isolationism and protectionism may temporarily insulate countries from crisis, but they do so at a high cost, as these countries cannot benefit from the long-term gains that foreign capital and globalization have to offer.

### Review of policy responses to crisis

Invariably after a period of crisis, the policy responses to the crisis come under evaluation. The IMF tended to recommend restrictive monetary policies to stem currency devaluation in the early stages of the Asian financial crisis. The rise in interest rates, all other things equal, would make the domestic currency more attractive to investors, thereby causing exchange rate appreciation. However, critics of restrictive monetary policy argue that high interest rates are catastrophic for a country recovering from financial crisis. Michael Mussa, IMF, defended the Fund's recommendations, arguing that raising interest rates was required to reverse the massive capital flight from countries in crisis and to stabilize the exchange rate. Mussa illustrated the success of restrictive policy in Mexico, Brazil, Italy, and Singapore. Interest rates were raised until confidence could be regained, and then the interest rates could be lowered.

However, public perceptions weigh heavily on the consequences of macroeconomic policy. Investors doubted the credibility of many East Asian countries' monetary policy, questioning the resolve of policymakers to tighten interest rates. Another contributing factor was the probability of default within the economy. Joseph Stigiltz, World Bank, argued that high interest rates increased the likelihood that businesses and institutions would fail, thereby worsening the situation. Firms were crushed either by the rise in interest rates or by the recessionary pressure that followed. As a result, these economies experienced plunging exchange rates and deep recessions. Edwin Truman, U.S. Department of the Treasury, noted that instead of raising interest rates, many called for expansionary fiscal policy to stabilize the economy. While such a strategy may have been justified after the fact, in the midst of a crisis, it was difficult to be certain that any new policy was the correct solution.

The interest rate dilemma underscores the difficulty involved in developing policy responses to financial crises. Policy prescriptions must withstand the uncertainty of political, economic, and social forces. Truman noted, "There is no one-size-fits-all strategy." Certain policies can succeed or fail depending on any number of different factors. As a result, if we judge the effectiveness of policies solely on the basis of outcomes, we risk worsening crises in the future by adopting inappropriate strategies or ignoring valuable ones. Effective policy responses require continual assessment and experience.

**Long-Term Capital Management**

The recent controversy surrounding Long-Term Capital Management (LTCM) illustrates the tenuous balance between the moral hazard associated with protecting individuals from the consequences of their decisions and the financial stability gained from preventing massive capital flight. William McDonough, Federal Reserve Bank of New York, discussed the LTCM affair and explained the involvement of the Federal Reserve Bank of New York. LTCM was a large hedge fund with \$120 billion of balance-sheet exposure and \$1.3 trillion of notional derivatives exposure. The Russian default left LTCM extremely vulnerable as deteriorating positions in international markets brought the hedge fund near insolvency. According to McDonough, the failure of LTCM would have had serious consequences for the financial system. The Federal Reserve Bank of New York provided the facilities for a meeting of 17 large financial institutions to recapitalize the ailing hedge fund. McDonough characterized the subsequent arrangement as a private sector solution to a private sector problem. No public funds were offered to guarantee the bailout, and no coercion took place. The Bank's intervention was a controversial decision. Critics considered the New York Fed's involvement signaled a willingness to bail out highly knowledgeable private investors, who understood the consequences of their actions. They argued that such an intervention served to erode market discipline. Supporters were persuaded by the threat of systemic risk that LTCM's failure posed to the financial system, and considered the New York Fed's actions justifiable. McDonough attributed the difficulties from LTCM's problems partly to poor judgement among investors "mesmerized by the brilliant minds" at LTCM. Rather than conducting basic due diligence and examining LTCM's exposure, these investors attempted to replicate LTCM's positions. In order to avoid a recurrence, McDonough proposed higher standards of credit risk evaluation, prudential risk supervision, and greater market discipline within the financial system.

**Redesign of capital regulations**

Danièle Nouy, Basel Committee on Banking Supervision, set the stage for the discussion of reform of bank regulatory capital standards by summarizing the proposed Basel Capital Accord revisions. The revisions center on the three pillars of capital adequacy: minimum capital requirements, supervisory review, and market discipline. The revisions are intended to better address credit risk in a bank's portfolio. The minimum capital requirements will depend on the risk assessment of external rating agencies, internal credit models developed by the financial institutions, and in later stages of development, credit risk models. The second pillar recognizes the importance of a supervisory review process in supplementing the safety and soundness offered by capital adequacy. The third pillar, market discipline, emphasizes greater transparency and disclosure in financial institutions to provide better information to financial counterparties. Armed with better information, these counterparties can effectively monitor risk.

Several conference participants criticized the proposed changes as inadequate. Robert Litan, Brookings Institution, said he disliked the risk bucket system, whereby institutions are risk-weighted based on the assessment of external credit rating agencies. Litan argued that the proposed system does not appropriately account for reductions in risk from portfolio diversification. The involvement of external rating agencies also drew criticism. Conference participants, including Litan and Simon Johnson, Massachusetts Institute of Technology, cited the weaknesses of such rating agencies, noting their duopolistic nature and the questionable value of their ratings. Ono Ruding, Citibank, expressed concern that the rating agencies lack an appropriate international perspective, given that both major agencies, Moody's and Standard & Poor's, are Anglo-Saxon based.

Many speakers addressed the procyclicality of the capital adequacy measures of the proposed revisions to the accord. Given that capital adequacy is tied to the risk assessment of the financial institution, such measures tend to be procyclical, spurring economic activity during good times, but exacerbating conditions during difficult times. This occurs as the institution under favorable economic conditions is considered low risk, and, therefore, has a lower capital requirement, allowing the institution to lend more. However, an adverse economic environment could worsen a financial institution's position, warranting a downgrading of its risk assessment and, thereby, increasing its capital requirement. The corresponding increase impairs its ability to lend and, therefore, its ability to weather unfavorable economic conditions.

Lawrence Meyer, Federal Reserve Board of Governors, stressed that the lessons for improving supervision and regulation to reduce financial crisis are simple. Emerging economies should avoid the path of many Asian countries, where financial supervision and regulation was extremely lax and there was excessive reliance upon short-term debt, particularly denominated in foreign currencies. Meyer also encouraged allowing the entry of foreign banks to strengthen the banking system. Their presence would provide access to additional human and financial capital from abroad, increasing financial expertise and diversification within the banking system. He argued against a cookie-cutter approach to supervision and regulation, saying that "Similar institutions should be supervised and regulated similarly, and different institutions, differently." He urged increased reliance on market discipline as an enhancement to current supervision. Meyer also addressed the procyclicality of market discipline. He acknowledged the potential for a tradeoff between such measures amplifying economic conditions and the benefits to curbing risky behavior. However, market discipline promotes a sound and stable banking system, which in the long term serves to reduce the amplitude of economic cycles. Final judgement on such measures must be deferred, until their countervailing effects can be properly evaluated with experience.

**Market discipline versus moral hazard**

The use of market discipline to reduce the occurrence and severity of financial crisis was a recurring theme at the conference. One measure designed to foster market discipline that was widely discussed was requiring financial institutions to issue subordinated debt. Subordinated debt holders have a junior claim on assets in the case of bankruptcy or bank failure. As such, they have strong incentives to monitor their financial institutions against risky or inappropriate behavior. Peter Garber, Deutsche Bank, and Litan proposed that mandatory subordinated debt held at arm's length for large financial institutions would strengthen market discipline. An issue of contention was who would hold the subordinated debt. The effectiveness of subordinated debt as a measure to encourage market discipline depends on the monitoring. Jean-Charles Rochet, Toulouse University, argued that peer monitoring could increase the likelihood of systemic risk. A small shock to one bank could have severe consequences for the entire banking system. Such risk possibly limits the feasibility of peer monitoring in practice. In addition, Garber was concerned about the potential manipulation of subordinated debt by financial institutions, which could limit its effectiveness to reduce moral hazard. Rather than relying on subordinated debt to encourage market discipline, Fredric Mishkin, Columbia University, proposed restricting deposit insurance as a means of reducing moral hazard. He proposed a number of strategies to limit the safety net, including allowing market forces to operate and avoiding having governments bail out failing banks. While such restrictions on the safety net would serve to reduce moral hazard, Mishkin acknowledged the political difficulties involved in allowing "too-big-to-fail" institutions to fail.

**Role of supervision and regulation**

Changing trends within the banking system coupled with the increased frequency of financial crises have caused many to question the adequacy of bank supervisory and regulatory agencies. Anna Schwartz, National Bureau of Economic Research, placed much of the blame for recent banking crises in emerging countries squarely on the shoulders of regulators. She cited their inability to notice the exceedingly rapid growth of credit or the high risk associated with lending and the deterioration of underwriting. Thomas Hoenig, Federal Reserve Bank of Kansas City, cited the trend of market liberalization as necessitating change for the supervisory and regulatory function. While markets bring greater efficiency to the banking system, this can come at the cost of financial stability. Previously, the supervisory and regulatory function depended on restrictive banking activity to ensure safety and soundness in the financial system. This form of supervision and regulation is no longer appropriate due to the complexity, speed, and technological dependence of the system. Current trends require a move away from restricting activity to risk-focused supervision and market discipline.

Panelists Huw Evans, UK Financial Services Authority, Brian Gray, Australian Prudential Regulation Authority, and Alejandro Reynoso Del Valle, Banco de Mexico, argued that supervision and regulation must focus on leadership and implementation, not on theoretical plans. Supervisory agencies that develop regulations to ensure safety and soundness in the banking system must account for regulatory compliance by financial institutions. Well-crafted regulations can be avoided or ignored if supervisors cannot or do not effectively monitor their institutions. In order to close the gap between supervision and the practical assessment of compliance, panelists suggested improving training for supervisors and enhancing incentives.

**Future of international organizations**

Following the abandonment of the Bretton Woods fixed exchange rate regime, the financial system has transformed into one of rapid fluidity, which has provided the energy for tremendous growth in the global economy but has also introduced more volatility. In order to counter volatility and contagion, the international community has relied on mutual cooperation and coordination through organizations such as the IMF, World Bank, and the BIS and informal institutional participation in bodies such as the Basel Committee on Banking Supervision. Participants assessed

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.*

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the role of these organizations at the last session of the conference.

Many panelists proposed that the current framework is inadequate given the growing complexity of the international financial system. National sovereignty impedes country adherence to international norms and standards. According to John Eatwell, Queen's College, Cambridge, the current framework has reached the limits of its effectiveness. In order to sustain the international financial system, Eatwell argued for a world financial authority that would create and maintain a comprehensive regulatory framework for all financial services. While such an organization is unlikely to be politically feasible, the discussion showcased the importance of coordination across national borders to foster financial stability.

Andre Icard, BIS, proposed an alternative to the establishment of a world financial authority or a reassessment of such international organizations as the IMF. The Financial Stability Forum (FSF), created in March 1999, is a coordinating body that takes advantage of existing organizations, predominantly from industrial Group of Seven (G-7) countries, to craft a regulatory framework for the international financial system. During his keynote address, Andrew Crockett, BIS, also endorsed the FSF as an opportunity to coordinate the efforts of G-7 agencies. Crockett stated the need for greater consistency in the decisions of international organizations. The FSF also represents an opportunity to mitigate the aggregation effects that can exacerbate financial crisis. Individual actions within countries that are harmless taken separately, together can yield catastrophic results. Increased cooperation across sectors among accountants, lawyers, and regulators should serve to ensure that the financial architecture remains sound.

The panelists also directed their attention to reassessing the role of international organizations in the current framework. Some economists argued for a curtailment of responsibility of such organizations. While institutions such as the IMF and World Bank fill the void between the public and private sectors in international lending, Morris Goldstein, Institute for International Economics, argued that the responsibilities for banking currency and debt crises in emerging economies should be shared with private creditors. The current system places the burden on taxpayers and creates moral hazard. Private creditors should not be able to charge high interest rates to pay for the risks involved, get bailed out if things go bad, and then receive guarantees for lending in the future. Greater involvement from private creditors would justify smaller rescue packages from the IMF. Current IMF strategies focus on reactive lending programs, which are enacted once a country falls into crisis. Goldstein and Schwartz, among others, stressed preventative measures rather than damage control. In order to encourage better crisis resolution and risk management, Goldstein proposed better incentives. He argued that IMF lending rates should be tied to a country's compliance with IMF recommendations and management of economic fundamentals.

While there may be no absolute defense against crisis, the lessons drawn from recent financial crises suggest general strategies toward their reduction: greater coordination between international organizations, prudential supervision and regulation enhanced by market discipline, and promotion of sound economic policies and stable institutions. The changing environment within the international financial system requires responsive change within financial institutions, international organizations, and countries if future crises are to be avoided.

—Surya Sen
*Associate economist*

[1]A proceedings volume will be published in spring 2000. For further information, contact the Public Affairs Department, P.O. Box 834, Chicago, Illinois 60690-0834, or telephone 312-322-5111.

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Public Information Center
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