

FINANCIAL CRISES IN EMERGING MARKETS: INCENTIVES AND THE IMF



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Executive Summary

Perverse economic incentives are key, important forces contributing to the increasing number and severity of financial crises in today's emerging market economies. A pernicious combination of factors works to create these incentives. Specifically, these factors include overly generous public safety nets (e.g., implicit or explicit public, uncircumscribed deposit insurance), risk-enhancing structural change in the financial system, and inadequate levels of owner-contributed equity capital. This combination contributed to produce the severe financial crisis in the U.S. thrift and banking industries in the 1980s.

This same combination is present in even more virulent form in many of today's emerging market economies. Recent IMF lending and prospects for additional IMF lending not only reinforce these risk-promoting incentives in emerging economies, but also foster additional risky lending by international financial institutions.

Recognizing these circumstances underscores a number of important policy implications and suggestions for policy action to minimize these adverse incentives.

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INTRODUCTION AND SUMMARY

This paper argues that perverse economic incentives are an important factor contributing to recent financial crises increasingly plaguing many of today's emerging market economies. These incentives, in turn, are spawned by a pernicious combination of conditions, which all too often frequent these developing economies. In particular, the combination of overly generous public safety nets (e.g., implicit or explicit public, uncircumscribed deposit insurance), risk-enhancing structural change in the financial system, and inadequate levels of owner-contributed bank capital often promote excessive risk taking. These conditions contributed to producing the severe financial crisis in the U.S. thrift and banking industries in the 1980s and are increasingly present in an even more virulent form in today's emerging economies.

Recent IMF lending and prospects for future lending not only reinforce existing risk-promoting incentives in emerging economies but also create incentives for additional risky lending by international financial institutions.

These arguments highlight a number of interesting implications and suggest important policy recommendations to limit such adverse incentives.

THE U.S. EXPERIENCE

In the 1980s, the U.S. financial sector experienced changes that allowed more risk taking in the face of expanded public deposit insurance. As the financial sectors' equity capital diminished, this combination ultimately resulted in financial crises involving both banks and savings and loan associations (S&Ls). More specifically, U.S. financial markets changed in a number of ways. The elimination of most interest-rate ceilings and limited product deregulation, together with the subsequent erosion of geographic restrictions, enabled lenders to seek higher returns in new, unfamiliar, and higher-risk ventures. These risk-enhancing changes, together with generous, expanded public deposit insurance guarantees and diminished capital bases, created the (perverse) risk-taking incentive structure cited above.¹ Deregulation per se is not a

¹ Lenders could reap the rewards of successful high-risk ventures and be assured depositors would be backstopped with taxpayer-supported funds in case such ventures failed. These perverse incentives are worsened when banks suffer losses and their capital base shrinks. Such banks then have little to lose by gambling.

problem.² It is only when risk-enhancing changes are combined with overly generous public deposit insurance (or other public guarantees), and depleted capital, that the perverse incentive structure becomes especially relevant.³ Most analysts now agree that this pernicious combination was largely responsible for severe U.S. financial problems experienced in the 1980s and early 1990s.⁴

EMERGING MARKETS EXPERIENCE

These same forces are largely responsible for the pervasive and unprecedented increase in both the frequency and severity of financial crises in the world's emerging economies.⁵ Conditions promoting perverse (risk-taking) incentives, however, are even more potent in modern emerging economies than in developed economies for a number of important reasons. Financial market risk-enhancing structural change in emerging economies, for example, is especially pronounced because it not only embodies the types of financial market change occurring in developed economies, but also takes on additional forms as well. Conventional structural change, such as the liberalization of interest rate ceilings, lowered reserve requirements, and lessened product restrictions, is quite common. But liberalization of capital controls and moves to privatize heretofore government-controlled financial structures make such structural change even more important in modern emerging economies than in developed economies. All of these changes have taken place in an environment with low levels of owner-

² As Charles Calomiris has eloquently stated, financial deregulation and liberalization are not inherently destabilizing. "Partial bank liberalization - where profits are private and losses are public - is the threat to stability. Privatization of both profits and losses produces very stable banking systems." Charles W. Calomiris, "The IMF as Imprudent Lender of Last Resort," May 20, 1998, p.6. For an excellent overview of this problem, see also Charles W. Calomiris, Testimony before the Joint Economic Committee, Hearing on the International Monetary Fund and International Policy, February 24, 1998; and Charles W. Calomiris, The Post Modern Bank Safety Net, American Enterprise Institute Press, Washington, D.C., 1997.

³ Deposit insurance is not necessarily a problem if it is narrowly circumscribed and (properly) limited. Otherwise, it can promote significant moral hazard.

⁴ Caprio and Klingebiel (1996) indicate that while "fewer banks failed in the 1980s than during the Depression ... depositor losses per dollar of deposits were higher." Gerald Caprio, Jr. and Daniela Klingebiel, "Bank Insolvency: Bad Luck, Bad Policy, or Bad Banking: Annual World Bank Conference on Development Economics," 1996, p. 82. Barth and Litan document that the savings and loan resolution costs in recent years exceeded the losses borne by all uninsured depositors in the 1920s and early 1930s. See James Barth and Robert Litan, "Preventing Bank Crises: Lessons From Bank Failures in the United States," paper presented at conference co-sponsored by the Federal Reserve Bank of Chicago and the Economic Development Institute of the World Bank, Chicago, June 11-13, 1997, p. 3.

⁵ Documentation of this significant worsening of financial crises can be found, for example, in Carl-Johan Lindgren, Gillian Garcia, and Mathew I. Saal, Bank Soundness and Macroeconomic Policy, IMF, 1996, p. 20; and Morris Goldstein and Phillip Turner, "Banking Crises in Emerging Economies: Origins and Policy Options," B.I.S. Economic Papers no. 46, October 1996, p.5. Caprio and Klingebiel (1996) conclude that financial crises are "more costly in the developing world - losses tend to be larger relative to income than in the industrial world." Gerald Caprio and Daniela Klingebiel, "Bank Insolvencies: Cross Country Experience," World Bank Policy Research Paper 1620, July 1996, p. 10.

contributed equity capital due in part to previous state ownership and restrictions on both domestic and foreign ownership of financial institutions.⁶

Combining this pervasive structural change with the widespread adoption of generous government-sponsored risk subsidies or public safety nets (such as explicit or implicit uncircumscribed deposit insurance), often without an adequate supervisory framework, provides all the ingredients for a substantial increase in perverse incentives promoting both excessive risk-taking and crisis-prone financial systems.⁷

Further exacerbating this situation is the fact that emerging economies' banking sectors are usually larger as a share of financial intermediation simply because their bond and equity markets are relatively underdeveloped. This absence of developed equity markets also works to foist more risk on bank-based intermediation. Factors causing banking crises in these countries, therefore, likely will create broader financial havoc than would otherwise be the case. And because emerging economies tend to be smaller, more open, relative to larger economies such as the U.S., the potential impact of perverse incentives on mobile, international capital and foreign exchange rates in these economies can be significant.⁸

THE ROLE OF THE IMF

IMF bailouts work to solidify and fortify these perverse incentive structures in a number of ways. Since the IMF lends to countries promoting risk-taking incentives, IMF lending often supports and encourages the proliferation of these incentives. This is especially the case when, as currently, IMF lending works to help insolvent rather than illiquid banks. Moreover, by effectively creating another (international) layer of government guarantees, IMF lending serves to foster additional risk taking, particularly by large international financial institutions. IMF bailouts, after all, importantly shield these institutions from the high risk of lending to emerging economies with vulnerable banking systems. What emerging-market economies are left with, therefore, is a highly vulnerable, risk-subsidized financial system particularly exposed to foreign exchange risk. In short, IMF lending promotes both risk-taking incentive structures and foreign exchange mismatches in emerging economies.

⁶See James R. Barth, R. Dan Brumbaugh, Jr., Lalita Ramesh, and Glenn Yago, "The Role of Governments and Markets in International Banking Crises: The Case of East Asia," paper presented at Sixth Conference on Pacific Basin Business, Economics, and Finance, Hong Kong, May 28-29, 1998, pp. 25-28.

⁷Alexander Kyei documents that most IMF member countries surveyed began to establish deposit protection schemes in the 1980s. See Alexander Kyei, "Deposit Protection Arrangements – A Survey," IMF Working Paper, WP/95/134. See footnote 3 (above) for references documenting the worsening incidence of financial crises in emerging economies. Papers by Demirguc-Kunt and Detragiache show that (1) the presence of deposit insurance in emerging economies tends to increase the probability and severity of systemic banking problems, and (2) banking crises are more likely to occur in liberalized financial systems of emerging economies. See Asli Demirguc-Kunt and Enrica Detragiache, "The Determinants of Banking Crises: Evidence From Industrial and Developing Countries," World Bank Policy Research Paper No. 1828, September 1997, and Asli Demirguc-Kunt and Enrica Detragiache, "Financial Liberalization and Financial Fragility," unpublished, March 1998.

⁸In this case, perverse incentives can work to encourage an additional form of excessive risk taking, involving betting on the foreign exchange rate.

It is now well known that the IMF (perhaps inadvertently) promotes such perverse incentives.⁹ This recognition is illustrated, for example, by recent statements of Federal Reserve Chairman Alan Greenspan, Bundesbank President Hans Tietmeyer, as well as members of the G-10, and others. Greenspan recently asserted, for example, that:

...an important contributor to past (financial) crises has been moral hazard...interest rate and currency risk-taking, excess leverage, weak financial systems, and interbank funding have all been encouraged by the existence of a safety net. The expectation that national monetary authorities or international financial institutions will come to the rescue of failing financial systems and unsound investments clearly has engendered a significant element of excessive risk-taking.¹⁰

Similarly, Tietmeyer recognized the IMF's moral hazard problem:

The IMF should reevaluate its policies and should question itself on how far its policy generates moral hazard. The IMF should consider whether it is better to tackle problems with large sums of bailout money or whether it might be better to involve private sector creditors at an earlier stage.¹¹

The seriousness of the IMF's moral hazard problem also has been recognized in the recommendations of the G-10 countries' 1996 report as well as in other recent studies.¹²

IMPLICATIONS

Since a root cause of recent international financial problems is perverse incentives created by a combination of overly generous public safety nets, risk-enhancing changes in financial structures, and depleted capital bases, a number of important policy implications merit attention:

⁹ Most analysts recognize that IMF monies inevitably find their way to assist politically influential entities. As these entities come to expect this assistance, their risk-taking behavior is altered, resulting in moral hazard. The IMF also provides political cover for affected governments to impose taxes on innocent parties (i.e., the middle class) in order to finance repayment of IMF loans. By enabling the initial risk-takers to importantly circumvent the costs of their miscalculations, this IMF cover helps to further solidify moral hazard.

¹⁰ Alan Greenspan's remarks before the 34th Annual Conference on Bank Structure and Competition of the Federal Reserve Bank of Chicago, May 7, 1998, p. 3. (parenthesis and emphasis added).

¹¹ Hans Tietmeyer, as quoted in *The Financial Times*, March 23, 1998.

¹² See Group of Ten (G-10), 1996, *The Resolution of Sovereign Liquidity Crises: A Report to the Ministers and Governors*, Basle and Washington, D.C., Bank for International Monetary Fund, May. See also Morris Goldstein's recent study which argues that finding a way to reduce moral hazard created by such international lending should top the agenda. Morris Goldstein, The Asian Financial Crisis: Causes, Cures, and Systemic Implications, Institute for International Economics, Washington, DC, June 1998; p. 46.

- Financial change fostering risk taking in the presence of both generous public safety nets and low levels of owner-contributed equity capital is a reliable leading indicator of financial crises.¹³
- Banking crises are a symptom and leading indicator of additional problems in the financial sector. Empirical studies of emerging economies show that banking crises are leading indicators for currency or balance-of-payments crises rather than the reverse.¹⁴ Recent studies also find that variables heretofore considered “fundamental,” such as fiscal and current account deficits, seem not to be associated with crises.¹⁵
- Studies have shown that international capital mobility is not necessarily a principal cause of recent financial crises.¹⁶ Rather, sharp changes in capital flows are often symptoms or reflections of perverse underlying incentive structures facing financial institutions. Accordingly, policy recommendations to prevent financial crises by slowing capital mobility through taxing financial transactions, for example, may be inappropriate.
- Similarly, foreign exchange speculators are not the cause of recent financial crises. Rather, speculators recognize underlying unhealthy incentives, banking problems, and unsustainable financial conditions and take advantage of them.¹⁷
- Exchange rate systems of one sort or another do not necessarily cause financial (banking, currency, or balance-of-payments) crises. Rather, sharp foreign exchange rate movements often reflect underlying perverse risk incentive structures (as described above). Stable exchange rate systems require stable underlying risk-taking incentive structures. Thus, successful exchange rate or international monetary reform must be preceded by (or at least accompanied by) reform of public safety net systems so as to minimize perverse incentives for risk taking.

¹³ See references in footnote 7 for empirical evidence supporting this argument.

¹⁴ See Graciela Kaminsky and Carmen Reinhart, “The Twin Crises: The Causes of Banking and Balance-of-Payments Problems,” *International Finance Discussion Papers* 1996-544 (March 1996), for evidence supporting this argument. See also Roberto Chang and Andres Velasco, “Financial Fragility and the Exchange Rate Regime,” NBER Working Paper No. 6469, March 1998; and Jeffery Sachs, Aaron Tornell, and Andreas Velasco, “Financial Crises in Emerging Markets: The Lessons from 1995,” NBER Working Paper No. 5576, May 1996, for additional evidence supporting this argument.

¹⁵ See, for example, Michael P. Dooley, “A Model of Crises in Emerging Markets,” NBER Working Paper No. 6300, December 1997, pp. 6, 7 and references cited therein. It is “on budget” fiscal deficits that seem unrelated. If contingent liabilities (including expected bailout costs) were properly factored in and accounted for, measured fiscal deficits would likely be significantly larger.

¹⁶ See Graciela Kaminsky, Saul Lizondo, and Carmen Reinhart, “Leading Indicators of Currency Crises,” IMF Working Paper WP/97/79, July 1997, p. 13; Frederic Mishkin, “International Capital Movements, Financial Volatility and Financial Stability,” NBER Working Paper No. 6390, January 1998, p. 28.

¹⁷ A recent study found no empirical evidence to support the notion that hedge funds were responsible for the Asian currency crisis of 1997. See Stephen Brown, William Goetzmann, and James Park, “Hedge Funds and the Asian Currency Crises of 1997,” NBER Working Paper No. 6427, February 1998.

- The proper ordering of economic liberalization or the sequencing of financial reform is important in many emerging economies. Structural reform of the financial system, for example, should only be undertaken once an efficient, competent supervisory/regulatory framework is in place to contain moral hazard. Similarly, the domestic financial system should be strengthened prior to capital account liberalization.¹⁸

POLICY RECOMMENDATIONS

There are alternative ways to limit the above-cited ingredients creating perverse incentives for risk taking. One approach is to improve supervision of the banking system while maintaining public safety nets. Such enhanced supervision is often favored by the domestic and international regulatory bureaucracies because it increases their budgets and influence. To some extent, this approach is embodied in some forms of IMF conditionality. An unavoidable problem is that such an approach takes years to properly implement and would likely create a permanent, bureaucratic supervisory structure.

Another way to limit these perverse incentives is to restrict or circumscribe the public safety net (or public deposit insurance) in the face of a structurally changed financial system. Over the years there have been a number of such recommendations involving, for example, proposals for co-insurance, narrow banking, subordinated debt, risk-priced deposit insurance, and mechanisms for rapid closure and resolution of insolvent banks (to minimize regulatory forbearance). The IMF has not actively promoted this alternative. Like improved supervision, such proposals would take a substantial amount of time to implement.

Another institution promoting these perverse incentives, of course, is the IMF. Accordingly, restricting additional funding to the IMF would be one way to curtail expectations of future IMF financial assistance in financial crises and hence to limit these perverse incentives. Minimizing additional, redundant layers of moral-hazard-producing public subsidization of risk is an appropriate response to this problem. Clearly, limiting additional IMF funding and additional permanent expansions of the IMF is a viable policy option. But constructive IMF reform proposals that can work to modify these perverse incentives should also be considered. Proposals to minimize IMF interest rate subsidies, for example, can work to constrain risk-promoting incentives. And provisions to promote IMF transparency can help to foster better information and, therefore, objective analysis of IMF performance and risk-subsidizing activities. These features are central to the IMF Transparency and Efficiency Act of 1998 (HR 3331).

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¹⁸ See, for example, Ronald I. McKinnon and Huw Pill, "Overborrowing: A Decomposition of Credit and Currency Risks," unpublished paper, November 1997, p. 25.