# Moderating Fluctuations in Capital Flows to Emerging Market Economies

What challenges and constraints face proposals to moderate and cope with volatility in international capital flows, and how can international public intervention and regulation help to forestall and mitigate future crises?

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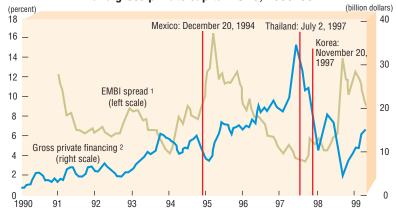


HE EMERGING market crises of the 1990s—in particular, the Asian crisis—have generated a perception of deep inadequacies in the international financial system and an intense debate on global financial reform, particularly regarding capital flows to emerging markets. It is now widely accepted that these crises resulted from both domestic policy failures—exacerbated in some cases by adverse external and political shocks—and weaknesses in the international financial system.

Policy failures included traditional macroeconomic imbalances, such as overvalued currencies and current account or fiscal deficits, particularly in Latin America and Russia. In addition, microeconomic weaknesses-themselves a result of inadequate regulation, poor risk management, and implicit or explicit government guarantees played an important role, taking center stage in the Asian crisis. These weaknesses manifested themselves in the increasing vulnerability of corporations and financial institutions to higher interest rates or a depreciated exchange rate, or both, on top of signs of insolvency in the corporate and banking sectors even before the crisis. For instance, the rate of nonperforming loans was more than 15 percent in Indonesia, Korea, Malaysia, and Thailand. In Korea, 8 of the 30 largest conglomerates were either actually or effectively bankrupt by mid-1997 (Corsetti, Pesenti, and Roubini, 1998).

It is difficult, however, to explain the crises of the 1990s solely in terms of weak domestic fundamentals and adverse shocks. The Asian crisis was preceded by a rising tide of finance at declining emerging market spreads right up to the devaluation of the Thai baht (see chart), notwithstanding public discussion before the crisis of many of the funda-

# Developing countries: Emerging market bond index spread and gross private capital flows, 1990–99



Sources: International Monetary Fund, Research Department, Developing Countries Bonds, Equities, and Loans database, and Bloomberg Financial Services, L.P.

<sup>1</sup> J.P. Morgan Emerging Market Bond Index (EMBI) portfolio's spread over the theoretical U.S. zero-coupon curve that equates the total present value of sovereign-risk cash flows to zero. mental deficiencies now widely diagnosed as having contributed to recent crises. Moreover, the virulence of the capital outflow once the crisis erupted is impossible to attribute to any single set of "bad news" and had the typical features of a financial run: investors fled because, given that other investors were fleeing, this was a rational way of limiting losses. Finally, the crisis spread quickly, including to countries and regions that were distant in terms of geography and trade linkages. This phenomenon, which became known as "contagion," affected even countries with strong fundamentals and that had little in common with the countries in which the crisis originally erupted.

In line with this analysis, two kinds of reform proposals can be distinguished. The first includes improvements in domestic policies and increased transparency. This would both reduce the fundamental weaknesses that make countries vulnerable to financial crises and make it less likely that existing weaknesses could build up unnoticed for substantial periods. The second includes measures to address systemic risks and contain crises more directly, such as improving international institutions, rules for debt workouts, and the regulation of certain types of international capital flows.

# Domestic reform, supervision, and standards

There is wide agreement that emerging markets could reduce their vulnerability to crises and encourage high-quality growth by strengthening financial regulation, improving the legal framework governing relations between creditors and debtors, enhancing data dissemination, doing away with implicit and explicit guarantees, and-in some casesstrengthening macroeconomic policies and public debt management. The burden of strengthening transparency and financial supervision, however, does not rest solely on emerging markets. The eagerness of creditor institutions to participate in the overlending and excessive inflows typically observed in the run-up to a crisis could, in part, be related to institutional and regulatory shortcomings in lender countries. There is scope for improved risk management of lending institutions and for ensuring that the exposures of highly leveraged institutions, such as hedge funds, are correctly understood by their creditors.

Given that these issues are generally domestic policy matters, how can the international community help, apart from providing technical assistance, in encouraging domestic transparency and regulatory reform? In general, the answer is "by setting standards." This includes international standards on accounting and auditing, the capital adequacy of banks, principles of bank and securities regulation, bankruptcy laws, and reporting of data by national governments.

These initiatives could go a long way toward limiting the kinds of financial sector vulnerabilities that often precede crises. Successful and complete implementation across the broad range of emerging market economies (and many advanced economies as well), however, appears likely to be a prolonged and demanding task and is unlikely-in the absence of additional measures that address systemic vulnerabilities-to reduce the risk of financial crises to an entirely satisfactory level. Consequently, systemic measures are required to mitigate and contain crises that do occur.

# Key trade-offs in systemic reform

Most participants in the current debate on the international financial architecture would agree that systemic reform should have three key objectives: first, fostering efficiency and growth by allowing an international allocation of capital to where it can generate the highest risk-adjusted returns; second, reducing the risk of international financial crises occurring; and third, mitigating the impact and equitably sharing the burden of international crises that do occur. Because of problems of asymmetric information among borrowers and lenders and other distortions that prevent any financial system from operating with absolute efficiency, however, simultaneous pursuit of these objectives creates fundamental tensions. In practice, under any feasible reforms, measures that too aggressively pursue one of these three objectives will hinder efforts to achieve at least one of the other two.

First and most important, policies that tend to maintain a relatively closed capital account presumably provide significant protection against international financial crises, as illustrated by the fact that a number of emerging market countries that retained tight controls on capital flows appear to have been less affected by the recent crises than countries whose capital markets were more open. Maintaining such controls over a prolonged period, however, substantially impairs a country's ability to take advantage of the efficiency gains from broader participation in the global financial system. For most emerging market economies, greater openness to international capital flows is perceived to bring important net benefits even if it involves some unavoidable risks. Because more and more countries are liberalizing their capital market regimes, this trade-off needs to be ameliorated by intensified efforts to contain the risks and damage of financial crises.

A related trade-off applies to most proposals to limit the probability and severity of financial crises by influencing the buildup of conditions that may lead to such crises. Credit flows, particularly short-term credit flows denominated in foreign currency, increase the likelihood of financial crises and of national defaults-especially in comparison with flows of foreign direct investment or of portfolio equity investment. Accordingly, measures to shift the composition of international capital flows—such as Chilean-type controls on short-term credit inflows-or prudential rules that discourage short-term lending by banks to emerging market countries appear relevant to diminishing the risk of crises. However, use of Chilean-type controls, which are analytically similar to a tax on short-term credit inflows, confronts the underlying tension between the provision of public goods and the distortionary costs of taxation. Taxing short-term inflows, by lengthening the maturity structure of a country's



international finance, could provide a public good by reducing the risk of liquidity crises and possible national defaults. Efforts to avoid such taxes, however, affect the amount and distribution of capital flows and other financial activities in ways that do not necessarily promote the public welfare. Used judiciously, this instrument may discourage a form of capital inflow that poses particular risks, but its relevance and usefulness will clearly depend on each country's circumstances.

Trade-offs also affect various proposals to avoid massive intervention in the event of a crisis, and help to resolve it, by providing for private sector "bail-ins" (private creditors would be required, under certain conditions specified in advance, to retain or expand their exposures to a country). Some are concerned that such mechanisms would raise the cost of borrowing for many emerging market countries. This would not necessarily be a bad thing, however, provided that the increased cost was commensurate with the risk of international borrowing. Of more concern is what happened when this type of mechanism was applied to commercial bank credits during the debt crisis of the 1980s. It helped to avert disorderly defaults, but it also cut off the affected countries' access to voluntary private capital flows for an extended period and drove sovereign financing (lending to governments) out of banks and into the international bond market, where such forced restructurings are more difficult to arrange. With a wide array of creditors typically holding a variety of different claims against diversified groups of debtors (versus syndicates of banks holding claims against the country's government in the debt crisis of the 1980s), ameliorating this trade-off will prove difficult. Improved workout procedures (for settlement of long-overdue loans) may, however, reduce the extent of the problem.

A further problem with proposals for bailing in the private sector is that they could generate an adverse trade-off between mitigating the risks of crises (by discouraging excessive borrowing) and containing crises when they do occur. Specifically, application of such mechanisms on a regular basis may increase incentives for creditors to flee a country at the first signs of trouble.

### Moral hazard and international assistance

Although most measures designed to make the international financial system more resilient ex ante and improve the resolution of crises ex post involve costs and trade-offs, this does not mean that they are not useful. On the contrary, many of them—in particular, efforts to involve the private sector more in forestalling and resolving crises and to contain surges in short-term capital inflows-should be pursued further. It does imply, however, that achieving a reasonable compromise

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among the objectives of efficiency, crisis prevention, and crisis mitigation will not eliminate the risk of financial crises and that international financial assistance will remain an important element in their resolution. In this context, a prominent concern in recent debates is that the expectation of such assistance creates moral hazard—incentives that invite reckless behavior and bad policies-for investors or host countries, or both. Without wishing to diminish the relevance of international moral hazard in some instances—particularly in explaining the amount and persistence of capital flows to Russia before August

1998—we believe there is a need to clarify several aspects of this debate.

First, the fact that the promise of international financial assistance raises the amounts of capital inflows to emerging economies is not necessarily a sign of moral hazard. To the extent that international support operations reduce either the total economic losses sustained in a crisis (taking account of any costs arising from providing such assistance) or the likelihood of a liquidity crisis, the true economic risk associated with international capital flows is reduced. The socially optimal response to this reduced risk will, in general, involve increased capital flows and may involve riskier lending than would occur in the absence of international support.

Second, the channels through which international financial assistance may create moral hazard are more complex than is usually acknowledged. In particular, international moral hazard cannot, in general, be understood as a simple transposition to the international context of moral hazard distortions in individual countries. Moral hazard created by domestic policies, notably through implicit or explicit government guarantees of private debt and inadequate regulation of financial institutions, results from the expectation that in case of a bad outcome, the costs of excessively risky behavior by borrowers and lenders will ultimately be borne by a third party—namely, domestic taxpayers. In contrast, the subsidy element in international support packages tends to be small, because loans and interest to international official lenders are almost always repaid. Consequently, direct generation of moral hazard because of expectations that the international community will absorb losses that are caused by others is not a substantial problem.

International financial assistance might, however, contribute to moral hazard indirectly by magnifying the shifting of losses between borrowers and lenders in ways that encourage imprudent risk taking. For example, the anticipation of international financial assistance might allow domestic firms or governments to borrow more abroad than they would have done otherwise, raising the ultimate cost of a bailout for domestic taxpayers. Thus, international financial support may contribute to moral hazard by magnifying domestic policy failures.

Consequently, it is all the more important for the international community to promote sound financial supervision and policies in emerging market countries. To do so, the international community, through the conditionality associated with its financial support, can and does insist that recipient countries reform their national policies to lessen the amount of moral hazard they may create. Moreover, in addition to specific financial support packages, the international community is mounting a much broader effort to promote national reforms to lessen moral hazard by increasing transparency, improving domestic regulation, and reducing implicit financial guarantees.

The international community can also maintain the principle—clearly established in the handling of the 1980s debt crisis and more recent episodes—that its support is neither unlimited nor universally available to avert national defaults. This may require involving private international lenders to a greater extent in the resolution of crises than has been the case in the past. In extreme cases, a country may have to be allowed to default, and there should be no international guarantee that this will be prevented. However, the best course of action cannot be to adopt a uniform policy of providing no support in every situation where moral hazard may be indirectly created. Often, as in Mexico in 1995, the consequence of denying international support would be to risk imposing very large additional and immediate losses on the innocent victims of a financial crisis in order to force comparatively moderate losses on those guilty of irresponsible lending and borrowing.

### **Conclusion**

In conclusion, two points merit special emphasis. First, the

degree to which the burdens of crisis resolution are shared between the private and official sectors should not follow a narrowly defined formula. Indeed, past approaches by the international community to providing support to countries facing financial crises have varied widely, from reliance on large-scale official liquidity support (Mexico in 1995) to a coordinated rollover and restructuring of commercial bank claims (debt crisis of the 1980s), with the Asian crisis (for example, Korea in 1997-98) representing a mixed approach. Second, international official support will, and should, remain an important element in crisis resolution in the foreseeable future. If they are unchecked, financial crises can have very large costs for not only the countries threatened by or experiencing national default but also a wide range of other countries that experience financial contagion. In contrast, the costs of international official support are generally modest, since such support usually takes the form of interest-bearing loans with a high probability of repayment, rather than grants or soft loans.

As for the indirect creation of moral hazard by international financial support, this must be mitigated both by the conditionality associated with international financial support packages and by broader international efforts to promote improved national policies. Moreover, examples that demonstrate the limited and conditional character of international financial support and reveal the costly consequences of national default teach painful but valuable lessons that help contain moral hazard. F&D

### Reference:

Giancarlo Corsetti, Paolo Pesenti, and Nouriel Roubini, 1998, "What Caused the Asian Currency and Financial Crisis? Part II: The Policy Debate," http://www.stern.nyu.edu/~nroubini/asia/asiacri2.pdf.



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