

Managing Financial Crises in Emerging Markets¹

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September 1997

The reflection and analysis that followed the Mexican crisis of 1994-5 is a revealing study in policy reform. Group of Seven governments launched the process at their summit in Halifax in June 1995, where they urged the International Monetary Fund to adopt a more hands-on strategy for managing financial crises in emerging markets. The Group of Ten established a working group under the chairmanship of Jean Jacques Rey and entered into negotiations with other high-income countries to augment the General Arrangements to Borrow (GAB). The IMF discussed new procedures for managing financial crises at Interim Committee meetings in October 1995 and April 1996.

Out of this process has now emerged some measured recommendations and a few concrete steps. The IMF has established an emergency-financing mechanism to speed the disbursement of funds (and inaugurated it this last July by extending the Philippines an emergency loan). To endow the Fund with the requisite resources, the G-10 have reached agreement with other countries to augment the GAB (supplementing it with a second facility of equal size, the so-called New Arrangements to Borrow, or NAB). The Rey Committee has recommended rewriting loan contracts to clarify the representation of investors, permit a qualified majority vote to restructure lending terms, and

¹Prepared for the Federal Reserve Bank of Kansas City's annual economics conference, Jackson Hole, Wyoming, August 28-30, 1997.

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require the sharing of debt service payments.³ It has urged the Fund to consider providing credit before a country has cleared away its arrears. The first recommendation is intended to facilitate the orderly restructuring of defaulted debts. The second is meant to provide countries working capital to support their banking systems and economies while the restructuring process is still underway. Less controversially, the report also recommends strengthening IMF surveillance, improving data dissemination, and tightening the conditionality attached to IMF loans.

In crafting its recommendations, the Rey Committee had to steer a cautious course between the ambitious proposals of academics and the markets' opposition to all reform.⁴ It will be no surprise that its conclusions were not entirely satisfying to either set of critics.⁵ While we too will argue that the Rey Report is not without flaws, its recommendations are prudent, and the process of which it is part has already enhanced, to a modest extent, the capacity of the international community to manage crises in emerging markets.

But what has not been adequately recognized is that the institutional response to the Mexican crisis has had the effect of placing responsibility for managing "future Mexicos" squarely on the shoulders of the IMF. The Rey Report may trumpet the need for "market-led" reform, but in the absence of concerted action on the part of G-10 countries of a sort that is difficult to

³Group of Ten, "The Resolution of Sovereign Liquidity Crises," abridged version reprinted in Peter Kenen (ed.), "From Halifax to Lyons: What has Been Done About Crisis Management?" Essay in International Finance no. 200, International Finance Section Department of Economics, Princeton University (October 1996).

⁴See Jeffrey Sachs, "Do We Need an International Lender of Last Resort?" unpublished manuscript, Harvard University 1994; Barry Eichengreen and Richard Portes, Crisis? What Crisis? Orderly Workouts for Sovereign Debtors, London: Centre for Economic Policy Research (1995); Institute for International Finance, Resolving Sovereign Financial Crises, Washington, D.C.: IIF (September 1996).

⁵See Marcus Miller and Lei Zhang, "A Bankruptcy Procedure for Sovereign States," unpublished manuscript, University of Warwick, and Institute of International Finance, Resolving Sovereign Financial Crises, Washington, D.C.: Institute of International Finance (September 1996).

imagine, most of the market-led reforms which it envisages are unlikely to come to pass. The main changes from 1994-5 will be in the amount of finance that the IMF can provide to developing countries and the circumstances, speed and conditions subject to which it will be made available. Management of future crises, even more than crises past, will rest with the IMF.

1. Why Crises Occur

Crises occur because governments pursue policies that leave their economies dangerously exposed to the loss of investor confidence. This statement may be trite, but its obviousness does not diminish its importance. In the case of Mexico, the government pursued an investment and growth strategy that was excessively dependent on foreign debt. As subsequent events would demonstrate, nothing could be more disruptive to that strategy than a sudden interruption to the inflow of foreign funds. The Mexican authorities therefore offered international investors a variety of inducements, such as promising to relieve them of exchange risk by committing never to devalue. They issued domestic securities (the now-notorious *tesobonos*) whose return was indexed to the dollar, making it especially painful to renege on their no-devaluation pledge (since raising the exchange rate would increase the domestic-resource cost of servicing the debt). They dismissed as unwarranted warnings that the peso had been rendered overvalued by years of inflation and disregarded domestic opposition to their economic program prompted by macroeconomic stagnation and growing income inequality.

When investor sentiment turned for the worse, it precipitated a crisis because of how it played into weaknesses in the structure of domestic and international financial markets, weaknesses which in some cases had been put in place by the Mexican authorities themselves in the interest of sustaining the inflow of foreign funds. Specifically, the Mexican crisis revealed four

pressure points in the market for securitized sovereign debt.⁶ First, investors holding liquid securities, when confronted with uncertainty, have overwhelming incentive to scramble for the door. Like small savers who see their neighbors lining up outside a bank and join the queue to withdraw their deposits before the bank's cash reserves are exhausted, investors in government bonds have an incentive to liquidate their holdings when others do likewise and they fear that the government's limited foreign exchange reserves will be exhausted. This is what happened in 1994 when holders of Mexican *cetes* and *tesobonos* bolted for the door.⁷

Second, the magnitude of capital flows can leave a government facing a debt run, like a bank facing a run by its depositors, no choice but to suspend payments, regardless of the damage to its credit worthiness.⁸ On the eve of the crisis, the Mexican government was responsible for more than \$18 billion of dollar-denominated and dollar-indexed liabilities, roughly triple its foreign exchange reserves. Once investors began to liquidate their holdings, the authorities were at their mercy.⁹

⁶In this section we draw on Barry Eichengreen and Richard Portes, "Managing the Next Mexico," in Peter Kenen (ed.), "From Halifax to Lyons: What has Been Done About Crisis Management," Essays in International Finance no. 200, International Finance Section, Department of Economics, Princeton University (October 1996).

⁷The problem is analogous to that of self-fulfilling bank runs in the domestic setting. See Douglas Diamond and Phillip Dybvig, "Bank Runs, Liquidity and Deposit Insurance," Journal of Political Economy 91 (1983), pp.401-419. A recent theoretical in the context of developing-country debt is Enrica Detragiache, "Rational Liquidity Crises in the Sovereign Debt Market: In Search of a Theory," Staff Papers 43 (1996), pp.545-470. Its applicability to the Mexican episode is argued by Guillermo Calvo, "Capital Flows and Macroeconomic Management: Tequila Lessons," unpublished manuscript, University of Maryland, 1996.

⁸In principle, a government in this position could restore investor confidence by raising interest rates. But in practice, higher interest rates may so weaken the public finances and the domestic economy as to be insupportable.

⁹ These features of securitized lending give rise to a problem of multiple equilibrium, a "good equilibrium" in which investors willingly hold the government's liabilities and the government happily services them, and a "bad equilibrium" in which panicked investors bolt for the door and the government is forced to suspend debt service payments. Detragiache shows that the "bad equilibrium" is easily avoided by communication and coordination among lenders when a few large banks undertake it, but that it may be impossible to prevent a

Third, it is difficult to restructure bonded debts -- to convert and extend their terms of payment. Bondholders are unsure how much the government is able to pay. Governments are unsure how much bondholders are willing to accept. Both have an incentive to manipulate information to win bargaining points. And as if this were not enough, superimposed on this uncertainty are conflicts between different classes of creditors. Altering the core terms of a bond covenant requires the unanimous consent of the bondholders. Individual investors will be tempted to refuse any offer of less than a hundred cents on the dollar in the hope of being bought out at full value by the government or other creditors. Small creditors seeking a favorable deal can therefore hold up settlement for an extended period.

Fourth, in this climate of uncertainty, potential providers of additional liquidity will hold back. Lenders will hesitate to provide new money for fear that it will be garnished by old creditors. The government and the country will be starved of finance even for productive domestic investments.

These problems existed already in previous decades, when commercial banks were the conduits for capital transfer. Then, too, negotiations were complicated by imperfect information and brinkmanship. Large banks were held hostage by their smaller counterparts who rejected all settlement offers until they were bought out at full value. Potential providers of new money held back so long as unpaid creditors stood ready to garnish all resources on which the government laid its hands.

But these difficulties are more serious now that securitized instruments have gained ground on bank loans. There were never more than 750 banks involved in sovereign debt reschedulings, and bank advisory committees rarely had more than 15 members. Large banks could maintain discipline by excluding

shift to the "bad equilibrium" when there exist too many bondholders for information sharing and concerted action.

renegades from future loan syndicates and otherwise threatening their position in the banking community. Pressure to go along was applied by a U.S. government which feared that the debt crisis could threaten the stability of the American banking system.

Still, these efforts to secure a quick resolution were only modestly successful. And problems of collective action and strategic behavior are many times greater today. Now there exist thousands of small bondholders whose consent is required to restructure the core terms of loan contracts. The existence of a secondary market in bonds makes it difficult to identify the owner, much less apply peer pressure.¹⁰ The incentive for investors to provide new money is further diminished by the fact that individual creditors are small relative to the market. It is revealing that the IMF attempted to coordinate the provision of private financing for countries in arrears early on in the debt crisis of the 1980s but recognized in 1995 that any similar effort would be futile.¹¹

2. Crisis Management in Mexico

Because the Mexican crisis differed in form from its predecessors, it posed an unprecedented challenge for international management. The collapse of the peso and of the Mexico Government's dollar-linked securities was immediate and complete. The crash threatened the stability of the Mexican

¹⁰One study of 102 corporate junk bond issuers in financial distress in the 1980s and 1980s found that only 34 companies successfully completed voluntary bond exchanges. P. Asquith, R. Gertner and G. Scharfstein, "Anatomy of Financial Distress: An Examination of Junk-Bond Issuers," NBER Working Paper no. 3942 (December 1991).

¹¹This further reduces the likelihood that a sovereign borrower could successfully complete a voluntary bond exchange, since voluntary exchanges often go together with new investments which signal that the firm can expect to be more profitable in the future. Given the absence of large stakeholders in markets for securitized sovereign debt, mobilizing new investment to signal this change in conditions may be particularly difficult. See Marco A. Pinon-Farah, "Private Bond Restructurings: Lessons for the Case of Sovereign Debtors," IMF Working Paper no. 96/00 (February 1996).

banking system (which held many of these same securities in its investment portfolio) and placed at risk those segments of the Mexican economy which depended on the banks for working capital. The fact that bonds and stocks rather than bank loans were the vehicles for foreign investment and now served as channels for capital flight was not something with which policymakers had first-hand experience; for a precedent they had to recall the 1930s. Repercussions as far afield as Argentina and Thailand suggested that the Mexican crisis could drag down the entire enterprise of lending to emerging markets. It thus placed at risk the cause of economic reform and liberalization not just in Mexico but throughout the developing world.

The procedures that had been used to deal with earlier crises were not up to this challenge. Countries which experienced debt-servicing difficulties in the 1980s had hardly gotten off unscathed, but they had had more time to react. Fifteen years before there did not exist fully-developed secondary markets on which money-center banks could dispose of their loans if they wished to exit. Rather than banks in the developing world, it was those money-center banks, saddled with nonperforming loans, whose stability was at risk. Debtors could take their time initiating rescheduling negotiations with the bank steering committee. The IMF could hold up disbursing an adjustment loan until a critical mass of commercial banks had agreed on new financing and debt restructuring.

In 1994, in contrast, there were no lead banks to meet with Mexican officials. When the finance minister presented his economic program to a meeting of mutual fund and hedge fund managers at the Federal Reserve Bank of New York on December 21st, he addressed only a subset of investors. A Mexican government seeking to reschedule would have found it difficult to even identify its creditors. When investors began dumping their *cetes* and *tesobonos*, it had to allow interest rates on those securities to rise. Those higher interest rates were an immediate blow to the economy. With investors

fearing the worst, the scramble out of Mexican financial markets accelerated.

For the IMF to delay in releasing assistance until the markets had provided new finance and agreed to a restructuring would have been a guarantee of no official finance at all. Following its standard procedures would have meant that its loan would have been authorized after the financial meltdown, not before. The only way to avert that meltdown was preemptive action. The IMF and the Clinton Administration therefore took exceptional steps to assemble a \$50 billion rescue package to allow the Mexican government to maintain debt service until it could retire the outstanding stock of *tesobonos*.

Following a severe recession, the Mexican economy recovered briskly, led by surging exports. Still, the Mexican operation was not universally regarded as a success. Members of the U.S. Congress criticized it for allowing Wall Street to cash out at full value. Economists criticized it for encouraging moral hazard on the part of investors who, having been spared the pain, would be encouraged to lend again without due allowance for the risks. European governments complained that they had not been duly consulted when the package was assembled and that their reservations had not been acknowledged. The realization that the Mexican rescue could not be repeated was a motivation for the formation of the G-10 working group to study new procedures for managing future crises.

3. The G-10 Report and its Critics

The Rey Committee has now tabled proposals for managing future Mexicos. It recommends modifying loan contracts to include collective representation clauses designating a trustee to speak for creditors. This is designed to facilitate negotiations in the event of debt-servicing problems. It recommends the adoption of qualified-majority voting provisions to prevent a minority from blocking a restructuring until it is bought out by other creditors or the

debtor government.¹² It recommends sharing clauses specifying that any additional payments obtained by a creditor would have to be shared with the entire class, diminishing the incentive for free riders to hold up a settlement.

The report encourages the IMF to consider lending before a government has reached an agreement with its creditors to clear away its arrears. As Mexico's experience illustrates, countries experiencing a crisis may require financial support to prevent the collapse of their banking systems and their economies. Lending into arrears is designed to meet this need for working capital.

The Rey Report was accepted by the ministers and central bank governors of the G-10 countries at the Lyons Summit in June 1996. Negotiations have since been concluded to create the New Arrangements to Borrow, providing the Fund with additional liquidity to lend to countries in Mexico's position, although it remains for all the participating countries to ratify the agreement. For the remaining recommendations of the committee to be implemented, the Executive Directors of the IMF would have to endorse the policy of lending into arrears, and the markets would have to adapt debt instruments to incorporate collective representation, majority voting, and sharing clauses.

Some representatives of the markets complain that these innovations tilt the playing field too far toward the debtors.¹³ Making it easier for a government to negotiate with its creditors, requiring less than unanimous consent for a restructuring, and encouraging the IMF to lend into arrears will limit the pain if a country suspends payments. This will tempt governments to

¹²The trust deed of a bond issue typically requires the consent of all bondholders, not only of those present and voting at a meeting, to restructure dates and terms of payment and to modify other core provisions of the contract. Minor changes can however be voted by those present at a meeting, so long as a designated quorum is present.

¹³See Institute for International Finance, Revolving Sovereign Financial Crises.

suspend payments and demoralize the markets. By undermining the sanctity of loan contracts, it will increase the cost of borrowing.

But this is hardly favoritism toward the debtors in comparison with Mexico's \$50 billion bailout. The Rey Report and subsequent statements make clear that assistance on this scale is unlikely to be forthcoming in the future. Countries finding themselves in Mexico's position will thus have a harder row to hoe. Absent large-scale foreign assistance, they will have no choice but to suspend payments and incur the costs. The contractual provisions recommended in the Rey Report will facilitate negotiations, but they will not eliminate the need for them. The subjects of future crises are unlikely to regain capital market access as quickly as Mexico. And once access is restored, they will be forced to pay penalty interest rates. IMF lending into arrears can avert the meltdown of the domestic banking system and the collapse of the economy, but it will not eliminate the need for adjustment. This scenario is hardly a tilt toward the debtors if the alternative is foreign assistance on the scale received by Mexico.

To be sure, the recommendations of the Rey Committee represent a tilt toward the debtors if the baseline is one where restructuring is made as messy as possible and the IMF refuses to lend until the creditors have extracted the last drop of blood. Lenders argue that this draconian scenario is in the interest of the borrowers since by limiting their incentive to walk away from their debts it minimizes the cost of borrowing. But this loses sight of the fact that upholding the sanctity of debt contracts is not the only goal of financial arrangements. There will be times when countries will be better off if they can wipe the slate clean and start over. Governments may incur an interest rate penalty for that privilege, but they will be willing to pay the price for the option.¹⁴

¹⁴Sovereign debt, in other words, is structured as a contingent claim because there may be circumstances under which countries feel compelled to suspend payments to ensure their own survival. See Herschel Grossman and John van

The lenders will be better off as well if they avoid an extended interlude in which no interest is paid. While the precedent of domestic bankruptcy legislation has been too glibly invoked in discussions of orderly workouts for sovereign debtors (since the corporate and sovereign settings are fundamentally different), the analogy nonetheless helps to illuminate the issues.¹⁵ Neither a corporation nor its creditors would be better off if Chapter 11 provisions were revoked and debtor's prison was reinstated -- that is, if bankruptcy was made as painful and messy as possible. A corporation's creditors can be better off as a result of bankruptcy proceedings that write down the value of their claims but allow a potentially profitable enterprise to get up and running again. Similarly, a country's creditors can be left better off by a debt restructuring which allows the government to stabilize the financial system, nudge the economy out of recession, and resume service on its remaining debts, especially if the alternative is an extended period of deadlock, default, and illiquidity. However impractical an international bankruptcy court, it is still desirable to strike a balance between provisions

Huyck, "Sovereign Debt as a Contingent Claim: Excusable Default, Repudiation and Reputation," American Economic Review 78 (1988), pp.1088-1097.

¹⁵This is why countries have corporate bankruptcy procedures. That having been said, we do not think that proposals for an international bankruptcy procedure (e.g. Sachs, 1994; Miller and Zhang 1997) are feasible or desirable, for several reasons. For one, national practices differ dramatically. In addition, moral hazard would be severe; there is no international analog to throwing out the management of the bankrupt company and seizing its assets. Thus, we do not agree with Miller and Zhang on the feasibility and desirability of modifying Article 8.2.b of the IMF Articles of Agreement to permit the Fund to sanction debt standstills. See Barry Eichengreen and Richard Portes, Crisis? What Crisis? Orderly Workouts for Sovereign Debtors, London, Centre for Economic Policy Research, 1995. At the same time we note that the Rey Report's recommendation that the IMF consider lending into arrears may constitute a prudent step in this direction and partially redress existing imbalances between debtors and creditors. But the devil is in the details; moral hazard is a justifiable concern, and much will depend on how such a procedure is implemented and structured. In our view, lending into arrears might be justifiable only when a country's policies are in accordance with IMF conditionality and it is making a good-faith effort to negotiate with its creditors.

to enforce and restructure loan contracts.¹⁶

4. Representing the Creditors

The Rey Report proposes to facilitate debt restructuring by modifying loan contracts to incorporate a "collective representation clause" designating the creditors' representative and making provision for a bondholders meeting, and to provide sharing and qualified majority voting clauses to discourage free riding by creditors. While some international bond issues already recognize the authority of a fiscal agent to call meetings and issue notices, that entity does not have the power to represent the creditors in negotiations. Many sovereign bond agreements, including Brady Bonds, do not even provide for a meeting of the bondholders.¹⁷ Incorporating collective representation clauses into debt instruments would remove these obstacles to negotiation.

Having called a meeting, the bondholders would still have to designate their representative. While large securities houses with substantial holdings are obvious candidates, smaller investors might question their motives, and the latter might worry that their presence on the committee would leave them susceptible to political pressure if the crisis threatened their government's foreign policy goals.¹⁸ One can imagine disagreement about the composition of the representative committee causing confusion and delay and even the formation of competing committees, as in the U.S. in the 1930s.¹⁹

¹⁶This point is modelled systematically by Miller and Zhang, "Bankruptcy Procedure."

¹⁷See Rory Macmillan, "Towards a Sovereign Debt Work-Out System," Northwestern Journal of International Law and Business 16 (1995), pp.57-106.

¹⁸Institute for International Finance, "Resolving Sovereign Financial Crises," p.40.

¹⁹History has shown that, in the absence of official intervention, a confusing proliferation of committees can spring up. Fly-by-night operators have an incentive to offer representation to investors in the hope of earning a commission in return for negotiating a settlement. This was the state of affairs

The obvious response, now as then, is the formation of a standing committee comprised of representatives of the large securities houses, mutual funds and small investors. In negotiations with a particular country, these permanent members could be augmented by spokesmen for particular bondholders. Thus, the committee would be flexibly constituted, though it would possess a core of permanent members. The permanent members would have an incentive to negotiate a deal fair to each class of creditors, since they would have an ongoing relationship with the investment community.

A survey of investment professionals conducted by G-10 central banks suggests that institutional investors are reluctant to form a standing committee for fear that this will make it too easy for countries to renegotiate their debts. This objection is peculiar, given the importance market spokesmen place in other contexts on the need for accurate and timely information. The role of a bondholders committee is to assemble information on investors' demands and the government's offer, to transmit this information between the parties, and to help identify a mutually-acceptable settlement.

Some investors argue the opposite, that a standing committee is unnecessary because bondholders can organize themselves. The Institute of International Finance points to Aeromexico, Mexico's largest airline, which recently restructured its bonded debt.²⁰ The company asked investors holding \$100 million in Eurobonds maturing in June 1995 to exchange these obligations for new five year notes.²¹ Over 95 per cent of debt holders accepted the

until the Corporation of Foreign Bondholders was recognized as the representative of British bondholders in the 1890s and the Foreign Bondholders Protective Council received the endorsement of the U.S. State Department in the 1930s. See Barry Eichengreen and Richard Portes, "After the Deluge: Default, Negotiation and Readjustment During the Interwar Years," in Barry Eichengreen and Peter Lindert (ed.), The International Debt Crisis in Historical Perspective, Cambridge, MIT Press (1989), pp.18-47.

²⁰Institute of International Finance, Resolving Crises, p.46.

²¹To encourage its creditors to accept this offer, the company indicated that the final payment on existing obligations would not be provided unless 95 per cent of bondholders agreed to the restructuring plan, and that if this did not take

offer in less than a month without the agency of a bondholders committee.

The Aeromexico case is unusual, however, in a number of respects. The exchange offer involved no writedown of principal; bondholders were not asked to take a loss. And an international bank consortium offered to inject new capital into the company in return for control if bondholders accepted the plan, something for which there would be no counterpart in the case of a government that had issued large amounts of securitized debt.²²

An IMF analysis has similarly suggested that experience with bond financing in Central America and Africa in the 1980s shows that bondholders can communicate and coordinate without a standing committee.²³ Bonds were restructured in Costa Rica, Guatemala, Nigeria and Panama without the involvement of a bondholders committee. The debtor countries made unilateral offers to the bondholders, who indicated their approval by exchanging instruments carrying new terms for the old debt instruments. 90 to 100 per cent of bondholders accepted the government's initial offer.

But none of these restructurings involved any debt reduction. Some settlements included early redemption options for creditors who wanted out, and the debtors made up-front cash payments of interest arrears. It is not clear that 90 to 100 per cent participation could be so easily secured when settlement terms are less generous. And even under these relatively favorable circumstances, restructuring took six months to a year (preceded, in the cases of Nigeria and Panama, by extended periods during which no negotiations took place).

Some observers may anticipate that defaulted debts will be bought up by "vultures" who will then negotiate directly with the government. They may

place it would seek bankruptcy protection.

²²Pinon-Farah, "Private Restructurings," p.9.

²³Juan Jose Fernandez-Ansola and Thomas Laursen, "Historical Experience with Bond Financing to Developing Countries," IMF Working Paper no. 95/27 (March 1995).

have in mind the Dart Family, which bought up \$1.38 billion of Brazilian debt and engaged in extensive negotiation and litigation with the Brazilian Government in 1994-96. But the process of consolidating holdings in the hands of a small number of investment professionals will not be completed in a matter of days. In the absence of a representative committee authorized to speak for the bondholders, negotiations will remain messy.

None of the popular objections to creating a standing committee thus holds much water. Still, one must acknowledge the skepticism of the investment community and admit that the formation of such a committee is unlikely absent strong intervention by creditor-country governments. And the latter are reluctant to do anything likely to antagonize the markets.

5. Obstacles to Contractual Innovation

According to the G-10 report, new provisions are to be introduced into debt instruments through a "market-led process." Governments are to trumpet the virtues of new clauses but to otherwise take no action. They are to hope that the markets will see the light.

But if changes in contracts were so easily adopted, the markets would have done so already. That they have not suggests that there exist significant obstacles to market-driven reform. For one, different countries, because of different national traditions, provide for the organization and representation of bondholders in different ways. And even if financiers and governments could settle on a single set of contractual reforms, the organizational costs of implementing them would still have to be overcome. Consider the ban on majority voting to restructure the core terms of loan agreements: even if everyone would be better off under a majority-voting scheme, changing the current regulatory structure is costly, and no one debtor or creditor will be inclined to shoulder those costs because the probability is so slight of having to invoke the provision on a particular bond issue. This lends a

strong element of inertia to existing contractual arrangements.²⁴

Then there is the "pre-nuptial agreement" problem. If only some sovereign borrowers include qualified-majority-voting clauses in their loan agreements, creditors may suspect that those debtors regard it as likely that they will have to restructure in the not-too-distant future. The qualified-majority-voting clause will be regarded as a negative signal.

The G-10 report, perhaps out of a desire to look "market friendly," says little about this dilemma. At one point it acknowledges the first-mover problem and suggests that official support for contractual innovation should be provided "as appropriate" but fails to elaborate. The IMF could urge the adoption of majority-representation and sharing clauses by all its members and hope that those in relatively strong financial positions will be prepared to go first, but whether the latter would do so is unclear. The U.S. Trust Indenture Act and its analog in other countries could be modified to allow the fiscal agent or trustee to take a more active role in representing the bondholders. But here too it is questionable whether the U.S. Congress would be prepared to tamper with securities laws in the interest of ameliorating problems in emerging markets. While in principle contractual innovation provides a market-based solution to the free-rider problems that complicate the process of restructuring, in practice there are formidable obstacles to implementation. Until those obstacles are removed, other approaches to crisis resolution will have to take up the slack.

6. IMF Lending

The Halifax communique urged the IMF to develop a mechanism affording faster access to Fund credit and larger disbursements in crisis situations. In Mexico's case, the need to secure the agreement of the Executive Board was

²⁴See Mark J. Roe, "Chaos and Evolution in Law and Economics," Harvard Law Review 109 (1996), pp.641-668.

a source of serious problems. A number of European governments abstained on the vote for the Mexican loan on the grounds that the program had been pushed through without adequate time for discussion and analysis.

The IMF has now created an emergency-financing mechanism (EFM) through which monies can be disbursed after fast-track consultations. Normally the Fund takes several months to review a country's economic situation and agree on policy conditionality. Once agreement has been reached between the government and IMF management, the Executive Board must vote to disburse the loan. It must first be convinced that the policy conditions and scale of assistance are appropriate. The EFM is designed to compress the period for reviewing loan documents, brief the Executive Directors before negotiations are complete and, by enlarging the role of the Executive Directors in negotiations, reduce the need for frequent contacts with national capitals.

For the EFM to work, the IMF will have to be quick on its feet. It will have to identify cases where fast-moving events require activation of the EFM and construct a consensus among the executive directors. Imagine that Fund staff and management reach an agreement with the debtor's government on the parameters of its adjustment program in a week or two. Staff would then need a period of days to prepare the necessary the necessary documents, the executive directors perhaps a week to consider them and consult with their governments. The hope, then, is that funds could be disbursed in as little as three weeks.²⁵

While officials can now move fast, the markets can move faster still. Confronted with a severe crisis, governments may nevertheless be forced to suspend service before the IMF has reached a decision. In the past, the Fund has typically refused to lend once payments have been suspended and a country falls into arrears. A key recommendation of the Rey Report is for the Fund to

²⁵Funds could be disbursed even faster if the IMF already had a mission in the country, as was the case with the Philippines this past July.

lend into arrears if a country has adopted an adequate adjustment program and is making a good-faith effort to negotiate with its creditors. Lending into arrears would meet the debtor's need for working capital and signal investors that a sustainable adjustment package is in place. This recommendation thus responds to suggestions that the IMF be more forthright in signalling whether the country had any option available to it other than suspending debt servicing payments. It is a way for the Fund to indicate that a country's default was forced upon it by circumstances largely beyond its control.²⁶

Some spokesmen for the markets object that faster disbursement, larger loans and lending into arrears, by softening the consequences of default, will tempt governments into reckless financial policies. They observe that the Fund has traditionally refused to lend into arrears for precisely this reason.²⁷ It made exceptions in the 1980s in response to a protracted and generalized debt crisis when it was asked to contribute to the pool of money used to retire bank debts and replace them with new debt-forgiveness instruments, Brady Bonds.²⁸ But now that the global debt crisis has passed, proponents of this skeptical view argue, the Fund should revert to its previous policy. Capital markets have recovered, and there exist many routes of access to foreign finance: bond issues, equity issues, bank loans, direct foreign investment. It is hardly plausible that a syndicate of rapacious bondholders could deny a country all recourse to borrowing until they had extracted their last pound of flesh.

In our view, this image of a confederation of creditors colluding to

²⁶This is what is known in the theoretical literature as excusable default, where default that takes place in response to events not in the country's control and does not result in an increase in the interest rates at which the government can borrow subsequently. See Grossman and von Huyck, "Sovereign Debt."

²⁷Institute of International Finance, Resolving Crises, p.18.

²⁸This decision to lend into arrears, it is said, was critical to the process of finally resolving the lingering defaults of the 1980s. Goldstein, "Avoiding," pp.61-62.

deny the country access to capital markets until it pays its debts in full is misleading. Rather, the problem is that all investors have the same incentive to get out of the country in the event of a crisis; no one has an incentive to buck the trend. Imagine that there had been no rescue operation and that Mexico had been forced to suspend payments on its *cetes* and *tesobonos*. Investors would have dumped other Mexican securities, forcing the government to impose exchange and capital controls to prevent the collapse of the financial system and plunging the economy into a more severe recession than actually occurred. How many foreign investors would have been attracted to Mexican equities under these circumstances or have seen the country as an attractive destination for direct foreign investment? Obtaining the funds needed to prevent a complete economic and financial meltdown would have surely required IMF lending into arrears.

Given the markets' fears, it seems unlikely that the creditor countries who command the majority of IMF quotas and voting power would agree to a standing order permitting the Fund to lend into arrears. To be sure, this was not the Rey Committee's recommendation: it merely suggested that the Fund consider the option. The likely outcome is that the recommendation of the Rey Report, combined with the precedent of the Fund's contribution to the Brady Plan restructurings, will lead the Executive Directors to give serious consideration to this option in the event of future Mexico-style crises.

To finance IMF support for emerging markets, G-10 governments negotiated with other high-income countries supplementation of the GAB. The result is a two-tier arrangement in which the GAB is supplemented by a new borrowing arrangement, the NAB, financed by the G-10 and other relatively high-income countries. The GAB can be activated without resort to the NAB, although recourse would be to the NAB first in most cases involving non-G10 countries.

The GAB was established in 1962 in response to concerns about the adequacy of official liquidity in the face of growing short-term capital movements. It makes credit lines available to the Fund to finance exchange

transactions designed to "forestall or cope with an impairment of the international monetary system." The criteria for drawing on behalf of nonparticipants are stricter: drawings must be in connection with an IMF-supported adjustment program, and the need to supplement IMF resources must be in connection with an "exceptional situation associated with balance of payments problems of members of a character or aggregate size that could threaten the stability of the international monetary system."

This makes the GAB a less-than-ideal instrument for financing Mexico-style loans. It has not been used since 1978, when the United States borrowed to stem the dollar's fall. Access, as already noted, is limited to countries whose difficulties threaten the international monetary and financial system. William Cline perhaps puts it too strongly when he concludes that the GAB "now has twice as much money not to lend."²⁹ Thailand, after all, is a prospective contributor to the NAB, as are several other rapidly-industrializing countries, making them subject only to the relatively weak conditions governing access by member countries. But if Cline is correct that 80 per cent of the countries providing NAB credit lines would not support the case for systemic effects in future Mexicos, then financing large-scale IMF operations in emerging markets may require alternative sources of finance.

7. Crisis Prevention and its Limits

One lesson of the Mexican crisis on which everyone agrees is that an ounce of prevention is worth a pound of cure. The Halifax Communique therefore urged the IMF to intensify its surveillance of national policies and to promote more effective information dissemination.³⁰

²⁹William R. Cline, "Crisis Management in Emerging Capital Markets," in Peter Kenen (ed.), "From Halifax to Lyons: What Has Been Done About Crisis Management?" Essays in International Finance no. 200, International Finance Section, Department of Economics, Princeton University (1996), p.2.

³⁰Halifax Summit, "Communique," 15-17 June 1995.

The IMF Articles of Agreement saw a need for annual consultations with member countries. While this might have sufficed to avert the development of unsustainable trade deficits in the postwar world of capital controls, adverse trends can develop more quickly now that international financial markets are open. This creates a need for more intensive monitoring of developments affecting the capital account of the balance of payments. Of course, banks, mutual-fund companies and brokerage firms also employ analysts whose task it is to monitor the economic prospects of developing-country borrowers. These individuals are rewarded handsomely if they accurately forecast a debtor's economic position and anticipate the implications for its credit worthiness. Why should the IMF do better? For the Fund to have more success it must be able to obtain information that is not readily available to the investment community. Alternatively, it may enjoy greater detachment from the waves of optimism and pessimism that sometimes infect the market. While it can be argued that the Fund has a comparative advantage on both grounds -- it may be especially well placed to obtain information from countries in which it is engaged in a repeated game over the disbursement of financial assistance, and its analysts do not have the same incentive to "ride the herd" or "hide in the herd" as portfolio managers -- neither argument should be oversold.³¹

If the problem is a lack of publicly-available information, the solution is better data dissemination. Halifax summitiers therefore urged the IMF to encourage the prompt publication of economic and financial statistics and to more regularly identify countries that fail to comply. The Fund now publishes, with the consent of the country concerned, staff reports prepared as background to the annual consultations under Article IV. Its Executive Board has agreed to the publication of press information notices based on its discussion of Article IV consultations (again subject to the consent of the

³¹Andrea Devenow and Ivo Welch, "Rational Herding in Financial Economics," European Economic Review 40 (1996), pp.603-615.

country concerned). It has agreed to a Data Dissemination Standard to be met by all its members, and a more demanding Special Data Dissemination Standard for countries that actually or prospectively borrow on international capital markets. It has established an electronic bulletin board to point investors to the availability of these statistics and to identify countries that meet the standard.³² Better-informed investors, it is hoped, will draw back before lending gets out of hand, and the discipline they apply will prevent problems of financial unsustainability from developing in the first place.

These innovations are positive, but they should not lull us into thinking that crises have been relegated to history's dustbin. They will be of little help where the problem is not fundamentally one of inadequate information. In the Mexican case, information on the money supply and off-budget spending by the development banks may have been released only with considerable delay. But investors were broadly aware of economic trends and their implications for international competitiveness.³³ Investors knew that the Mexican economy had been stagnant for several years and that inflation outstripped productivity growth. They simply disagreed about how to interpret this evidence; prior to December, the majority did not believe that these problems warranted a devaluation, and they continued to hold these beliefs until they suddenly learned that the Mexican Government's interpretation was different. Traders bet on an outcome that was only one of several possibilities, and, as events transpired, the majority got it wrong.³⁴

³²As of the beginning of the summer, 42 countries had subscribed to the Special Data Dissemination Standard (or SDDS), providing comprehensive information about their data under the SDDS Dissemination Standards Bulletin Board on the Internet, while six countries have also established electronic hyperlinks from the Data Dissemination Bulletin Board to actual country data maintain on their own web sites.

³³They were warned by, among others, Rudiger Dornbusch and Alejandro Werner, "Mexico: Stabilization, Reform and Growth," Brookings Papers on Economic Activity 1 (1993), pp.253-316.

³⁴We return to this theme in Section 8 on Thailand, below.

To the extent that the problem is one of information about national governments' priorities and intentions, this cannot be solved by posting statistics on the Internet. The IMF may not be able to ascertain the quality of the data to which it directs investors in the short period during which it is timely. Indeed, Fund will not publish those statistics itself except retrospectively because, some analysts have argued, this might be taken as implicitly endorsing their quality.³⁵ Revoking a country's status as complying with the Special Data Dissemination standard will require first inquiring into the circumstances, a process which will itself take time. Presumably, the Fund will remove countries from the list of those meeting the standard only after a series of graduated measures have failed to elicit an adequate response. The implication is that investors who trade on the basis of a country's special-standard status cannot be certain that this information is absolutely up to date.³⁶

It must be emphasized that even if information about current economic and financial developments was perfect, crises would still occur. The future will bring surprises -- political assassinations, natural disasters, unexpected election results -- and those surprises may leave a country unable to service its debts. In a sense, periodic financial difficulties are a sign that the international capital market is functioning well. If no firm ever went bankrupt, the capital market would be failing at its job. Sometimes profitable investment opportunities become unprofitable because of unanticipated events. At that point, the company in question has to declare

³⁵See United States General Accounting Office, International Financial Crises: Efforts to Anticipate, Avoid and Resolve Sovereign Crises, Report to the Chairman, Committee on Banking and Financial Services, House of Representatives (Washington, D.C.: GPO, June 1997).

³⁶Morris Goldstein, "Avoiding Future Mexicos: A Post-Halifax Scorecard on Crisis Prevention and Management," in Peter Kenen (ed.), "From Halifax to Lyons: What Has Been Done About Crisis Management?" Essays in International Finance no. 200, International Finance Section, Department of Economics, Princeton University (October 1996), p.58.

bankruptcy, and its operations are liquidated or reorganized. That is how an efficient capital market works. If there were no bankruptcies, we would infer that lenders were so risk averse as to be missing profitable investment opportunities.

The same is true of countries. Governments possess investment projects which should repay foreign investors on average for the cost of their funds and bearing risk. Sometimes those investments fail, and governments find themselves in a position analogous to that of bankrupt firms. This is normal, indeed healthy, when it occurs in response to unanticipated events. It is precisely why one should think that the Mexican crisis was not one of a kind. So while providing more information to the markets is desirable, it will not eliminate the need for procedures to pick up the pieces when things go wrong.

It is in support of those procedures that the case for investing in data gathering and assessment is strongest. Post-Mexico developments increase the likelihood that the IMF will be called on to take the lead in managing future crises. Opposition to a U.S.-led rescue will be intense, and the capacity of the Fund to assume a leadership role has been enhanced by the establishment of the EFM and the NAB. But the IMF, like a national lender of last resort, will not lend unconditionally. If it is to provide liquidity in the event of a fast-breaking crisis, like a national central bank faced with a domestic banking crisis it will require access to information for assessing the financial condition of its counterparties. It will need that information if it is to gauge how much finance is appropriate. It will need it to form an opinion of the appropriate restructuring measures. It will need it to estimate the likelihood of being paid back. In other words, it is realistic to anticipate that the IMF will spearhead future rescue operations only if it first obtains the information required by any lender of last resort. This is the strongest argument for perfecting that information-gathering mechanism.

8. A Coda on the Asian Crises of 1997

Since the conference draft of this paper was written, another set of crises, this time in Asia, has occurred. In this section we ask how the perspective developed above appears in light of these events.

Tolstoy's comment in *Anna Karinina*, that every unhappy family is unhappy in its own way, applies not just to families but to financial crises. Thailand's crisis differed from Mexico's. Thailand had a high private savings rate, Mexico a low one. Thailand had been growing rapidly in the period leading up to the crisis, while Mexico had hardly been growing at all. The problem in Mexico centered on the government's reliance on short-term, foreign-currency-indexed debt. In Thailand the crux of the problem was the weakness of the banking system, which created uncertainties for foreign investors (who saw banking problems as putting a damper on the real estate and stock markets and worried whether they would be able to retrieve their money from insolvent financial institutions), for the government (for which bank insolvencies implied fiscal liabilities), and for the economy (for which bank insolvencies meant disintermediation, asset-price deflation, and slower growth). To be sure, Thailand had external debt, and Mexico had insolvent banks, but the relative importance of the two problems was quite different in the two cases.

Notwithstanding these differences, there are also impressive parallels between the two crises. In neither case were the traditional causes of balance-of-payments crises, namely excessively expansive monetary and fiscal policies, obviously at

the root of the problem. Mexico's budget was broadly balanced, although there were deficits hidden in the accounts of the development banks. Most estimates put the country's consolidated budget deficit for 1994 at no more than 2 per cent of GDP. Although the central bank was reluctant to raise interest rates in response to reserve losses in the last three quarters of 1994, inflation and monetary growth were moderate by Mexican standards. There was no significant acceleration in either relative to the preceding years of financial stability. In particular, the growth of M1 slowed from 18 per cent in 1993 to 6 per cent in 1994. And even those who insist that excessive growth in domestic credit was part of the problem would admit that it was only part.

In Thailand, the government budget was in surplus in the period leading up to the crisis. Thai inflation exceeded inflation in the countries to which the currency was pegged, leading to some real appreciation, but this inflation differential was slight. In the five years ending with 1996, inflation never once reached 6 per cent on an annual average basis. Consistent with this, the monetary aggregates rose at the rate of 15 per year, not obviously excessive for an economy growing at 9 per cent. Problems of competitiveness resulted from the heavy weight of the U.S. dollar in the Thai authorities' basket peg and the appreciation of the dollar relative to the yen and the European currencies in 1996-7. But the point is that the domestic economic policy variables to which the IMF customarily

directs its attention, namely money growth and the budget deficits, were at best subsidiary concerns in Thailand as in Mexico 2 1/2 years before.

The most striking parallel between the two cases was the current account, which was in deficit to the tune of 8 per cent of GDP. In both cases this reflected an excess of private investment over private savings (in turn reflecting the fact that the government budget was close to balance) and reliance on foreign financing to fill the gap. Together, these two experiences clearly put paid to the notion that current account deficits are not a problem when they reflect private-sector decisions rather than public-sector behavior. They force one to ask why the markets did not draw back sooner and more smoothly before events got out of hand.

Rather than hanging one's argument on investor myopia, one can point to two factors common to Mexico and Thailand that encouraged persistent large-scale capital inflows: the exchange rate peg and the belief that banks could not be allowed to fail. These two implicit commitments provided investors an irresistible incentive to indulge in the relatively high interest rates offered by Thai financial institutions.

A final parallel between the Mexico and Thailand is that both cast doubt on the notion that crises necessarily erupt in response to wholly unanticipated events (since if the events that precipitated them were anticipated, the crises would have broken

out earlier). To be sure, in both cases the unexpected occurred: in Mexico the Colosio assassination, in Thailand various political battles within the government and between the government and the opposition. But in neither instance were investors wholly unaware of mounting problems. In the case of Mexico they had been warned by expert commentators many months before the crisis. The curtailment of capital inflows fully six months before the crisis and the Bank of Mexico's consequent need to support the exchange rate through the expenditure of reserves are evidence that not everyone naively believed that all was copacetic. In the case of Thailand, the baht experienced three episodes of speculative pressure in the second half of 1996 and in January-February 1997, and short-term capital inflows fell off over the course of 1996. Total capital imports declined from \$22 billion in 1995 to \$17 billion in 1996. Moody's downgraded Thailand's short-term debt rating in September. In both cases, then, there was plenty of unease six months to a year before the eruption of the full-fledged crisis. But opinion was divided, and so long as that remained so the government could hold out.

The other striking fact about Thailand is that the authorities pursued most of the policies recommended by expert commentators for a government confronted with large-scale capital flows. It tightened monetary policy. It maintained a tight fiscal policy; the 1996/7 budget targeted a surplus of 0.5 per cent of GDP, and in February the Cabinet proposed further cuts in

government outlays of 0.8 per cent of GDP and in public enterprise expenditures (on infrastructure) of 1.2 per cent of GDP. To limit the impact of capital inflows on domestic liquidity, it sterilized their effects by auctioning Bank of Thailand bonds. It raised reserve requirements on nonresident baht accounts and on short-term foreign borrowing by the banks. It imposed constraints on the banks' credit/deposit ratios. It excluded foreign-currency-denominated loans to non-foreign-exchange producing sectors from the definition of banks' eligible assets. It operated on every front on which the experts recommended a government inundated by capital inflows should mount a defense.

Thus, Thailand's experience reveals the difficulty in small economies of shaping policy to manage large capital inflows. Tightening monetary and fiscal policy was painful in a period when economic growth was decelerating. For a variety of well-known political reasons, large expenditure reductions are difficult to effect in short periods. While higher interest rates may damp down domestic demand and inflation, they will only attract additional foreign funds. Sterilization operations increase the budgetary burden on the government, which acquires low-yielding foreign assets in return for issuing higher-yielding domestic debt. Raising reserve requirements on the banks increases costs for the latter. For all these reasons, it may not have been feasible to call for additional adjustment.

In addition, of course, Thailand made two critical mistakes. First, it clung to a policy of pegging its exchange rate within a narrow band. Pegging encouraged capital inflows, foreign investors not being deterred by exchange risk. Thailand like Mexico reveals the well-known tendency for government officials, once committed to a currency peg, to regard devaluation as an admission of failure and to cling to the peg for too long.

The second problem lay in the management of the financial system. Until the autumn of 1996, offshore banks (Bangkok International Banking Facilities) were allowed to borrow funds abroad and on-lend them to Thai residents without limit. The government allowed the banks to maintain lax disclosure requirements and asset classification procedures (permitting them to disguise the actual extent of their property loans). In contrast to the advanced industrial economies, in Thailand the banks were not obliged to disclose their nonperforming loans, encouraging management to delay in provisioning for loan losses. The government allowed the banks to purchase finance companies, which are less regulated and more sensitive to interest-rate changes.

If this was not enough, the banking crisis interacted with the flaws in exchange rate management. Massive capital inflows encouraged by the apparent absence of exchange risk were one factor leading to the deterioration in asset quality. Banks flush with funds scrambled to place them. The volume of loanable funds

outstripped the capacity of competent loan officers to administer them.

And when capital markets finally turned around, devaluation threatened to provoke the meltdown of the banking system. Thai banks, mistakenly thinking that the exchange rate was locked, had failed to hedge their foreign-currency exposure. Thai borrowers, mistakenly thinking the same, had failed to hedge their foreign-currency-denominated loans. Hence, devaluation threatened to push first borrowers and then lenders into insolvency. As the government came under pressure to aid distressed banks and firms, currency traders anticipating domestic credit creation again pushed the baht down. This further increased distress among unhedged banks and firms, auguring more political pressure, more credit creation and more currency depreciation, again worsening the condition of the banks. This positive feedback was a source of multiple equilibria like that described in Section 1, above. The international rescue package was intended to prevent a complete meltdown of Thailand's banking system and a complete collapse of its currency. It was designed to prevent Thailand from shifting to an even worse equilibrium in which the costs of adjustment were greater than necessary.³⁷

If this diagnosis is correct, then it suggests the following implications for policy. First, the international policy

³⁷And to limit the contagious spread of the crisis to other emerging markets.

community should push harder for the adoption of more flexible exchange-rate arrangements. Countries with exceptional histories of high inflation like Argentina may still have defensible justifications for pegging their currencies. But such pegs should be understood as transitional. More generally, countries should be encouraged to introduce greater exchange-rate flexibility sooner rather than later.

This means that policymakers need to think harder about the circumstances under which abandoning exchange-rate targets for inflation targets is feasible. If the impediment to inflation targeting is that the relevant price index is so unstable as to imply the need for an erratic monetary policy or so subject to revision as to lack credibility, then the IMF should assist in the construction of an index of core inflation that removes the short-term noise. If an inflation target would lack credibility because reliable information on inflation is not released on a timely basis, then the Fund needs to ask what steps are needed to accelerate publication of the relevant data.

Countries that continue operating exchange-rate bands as transitional arrangements need to adapt their domestic financial arrangements accordingly. They need to impose relatively strict reserve, capital and asset-distribution requirements on their banks (limiting the shares of bank assets concentrated in the property sector, the industrial sector, and the securities markets), the stringency of which increase with the rigidity of

the exchange-rate commitment.

In the wake of the Mexican crisis, IMF procedures for providing financial assistance were streamlined under the provisions creating the Emergency Financing Mechanism (EFM). Here the lessons of 1997 are (i) that the EFM can operate fast, especially if the Fund already has a mission in the field, but (ii) quick assistance still naturally requires reaching an agreement with the affected government, and for political reasons this may take more time than the markets require to precipitate a crisis. The EFM can speed the process of responding to crises, but it will not head them off.

Thailand has subscribed to the IMF's Special Data Dissemination Standard from the start. But the SDDS concentrates on variables of traditional concern to the Fund, notably indicators of monetary and fiscal policies and of the state of the external accounts. It includes a category headed "Financial Sector" and a subcategory entitled "Analytical Accounts of the Banking Sector" whose components should include domestic credit by the private sector, external position of the banks, and so forth. But Thailand provided very little information on the financial position of banks and finance companies -- on variables conveying information about profitability, asset quality, loan loss provisioning, and risk-weighted capital.

Recent experience suggests that such gaps may severely weaken market discipline. But more fundamentally, it suggests

that not too much can be expected of information dissemination and market discipline, particularly where banks are concerned. Banks have an incentive to disguise the extent of their loan losses to head off depositor runs. Regulators inevitably encounter difficulties in obtaining that information. There is no avoiding the fact that such information will be made available with delays that limit the effectiveness of market discipline.

A final lesson of Thailand for the IMF is that the Fund must make clear that its assistance will be conditioned on the government's willingness to implement bank restructuring programs that limit moral hazard. This means that large depositors and bank shareholders must share the costs of restructuring and recapitalizing insolvent institutions.

The discussion of orderly-workout procedures was motivated by a Mexican crisis that involved a run on sovereign debt. In the case of Thailand there was no immediate danger of default on the public debt. Total external debt is estimated to have been little more than 50 per cent of GDP. Debt service as a percent of exports of goods and services was less than 15 per cent. The government was in a position to raise taxes or cut spending still further if this was necessary to support debt-service payments. The danger of falling into arrears was remote, and there was no occasion to invoke any of these proposals. Default on sovereign debt is and should be costly in terms of reputation and market access; even in a hypothetical world in which the Executive

Directors made lending into arrears standard Fund practice, it would not have been in Thailand's self-interest to interrupt debt service.

Does this mean that Thailand's crisis has proven the irrelevance of orderly-workout procedures? Probably not: some future Thailand experiencing similar difficulties due to the combustible mix of weak banks, a rigid exchange rate, and a surge of capital inflows could also be saddled with a large public debt. A wave of bank insolvencies which implied disintermediation and hence lower levels of output might weaken the fiscal accounts sufficiently that investors began to question the government's ability to maintain debt service. Exports might fall off, with devastating implications for the government's ability to service foreign-currency-denominated and foreign-currency-indexed loans. The possibility of default cannot be ruled out, in which case there would be a role for orderly workout procedures.

9. Concluding Thoughts

Borrowing countries can and should take steps on their own to limit their vulnerability to crises.³⁸ They should proceed cautiously when contemplating growth and development strategies that assume continuous inflows of foreign capital, for events beyond their control can interrupt such inflows at any time. To minimize the danger of funding crises, they should limit

³⁸As other papers at this conference were presumably commissioned to emphasize. In addition, see Jeffrey D. Sachs, "Alternative Approaches to Financial Crises in Emerging Markets," HIID Development Discussion Paper no. 568 (January 1997); Guillermo Calvo, "Capital Flows and Macroeconomic Management: Tequila Lessons," unpublished manuscript, University of Maryland (October, 1996).

their issues of short-term debt. They should strengthen their banks by adopting strict reserve, capital and liquidity requirements, since banks, which are illiquid and operate in an environment of asymmetric information, tend to be the financial system's point of maximum vulnerability.³⁹ They should preserve their lender-of-last-resort capacity, whether by avoiding rigid exchange rate pegs or establishing off-shore commercial credit lines.⁴⁰ They should avoid extended periods of real overvaluation, encourage domestic saving, and promote public investment.

But it would be panglossian to conclude that such measures will avert all financial crises. Shocks occur, making effective contingency planning essential. For it to be undertaken, the international policy community must resist the notion that the Mexican crisis was unique, that crises in developing countries have no systemic repercussions, and that the markets are capable of efficiently clearing away the detritus of defaulted debts.

Debtors and creditors cannot and should not be insulated from all negative consequences of their actions. To lend without contemplating adverse outcomes is to lend without regard to risk, which would undermine the resource-allocation function that is the *raison detre* for capital markets. Rescue packages that permit creditors to cash out at full value are undesirable; they are a source of moral hazard that undermines the efficiency of the market. If countries for their part do not incur a cost when defaulting on sovereign loans, they for their part will feel free to pursue risky financial strategies and walk away from their debts. This means that what was avoided in Mexico will happen in the future. And in turn this implies the need to develop mechanisms for picking up the pieces when things go wrong.

³⁹As emphasized by another G-10 working party under the chairmanship of Mario Draghi: Group of Ten, "Financial Stability in Emerging Market Economies," Group of Ten (April 1997). See also Morris Goldstein, The Case for an International Banking Standard, Washington, D.C.: Institute for International Economics (March 1997).

⁴⁰As has Argentina.

One objection to this conclusion (viz. Cline 1996) is that with the growth of equity investments in emerging markets the danger of a Mexico-style crisis will pass. Mexico's problem was that debtors issued short-dated, foreign-currency-indexed bonds that promised redemption at face value. If some future country which has instead imported portfolio capital in the form of equity investment suffers similar problems, the markets will adjust by allowing the prices of the relevant securities to fall. Nothing, in other words, will stand in the way of contracts being honored. Those who worry about bonded debt, in this view, are fighting the last war.

While the volume of foreign investment in emerging-market equities has exploded in recent years, bonds still account for a very much larger share of the total flow of foreign capital to emerging markets.⁴¹ Historically, bank lending precedes the emergence of markets in bonded debt, which precedes the development of active equity markets, both domestically and internationally. This sequence reflects the greater information requirements of securities markets, and especially equity markets. Domestically, equity markets have not crowded out bond markets; bonded debt has a comparative advantage in solving certain agency problems and allowing external finance in the presence of informational asymmetries. There is no reason to think that the outcome should be different in international markets.

The IMF and the advanced industrial countries have taken a few steps toward the creation of an improved mechanism for crisis management, the Fund by intensifying its surveillance of emerging-market borrowers, by promoting the rapid assembly and dissemination of economic and financial statistics, and by establishing an emergency-financing mechanism for use in times of crisis, the G-10 by recommending the adoption of new clauses in debt contracts, by suggesting that the IMF lend into arrears, and by doubling GAB credit lines.

⁴¹See International Monetary Fund, International Capital Markets: Developments, Prospects and Key Policy Issues (Washington, D.C.: IMF, October 1997).

But representation, sharing and qualified-majority voting clauses will be added to debt instruments slowly if at all without action by G-10 governments. Providing for a trustee and a bondholders meeting will do little to facilitate negotiations in the absence of a standing bondholders committee. And there is little sign that G-10 governments are willing to buck the markets and push through reforms about which the latter are skeptical.

Hence, the principal legacy of the process of policy analysis and reform set on foot by the Mexican crisis is the IMF's emergency-financing mechanism and the intensified information-reporting procedures that are preconditions for more rapid and extensive IMF lending. Managing future crises will be regarded as the IMF's responsibility, as illustrated in the summer of 1997 both by Fund support for the Philippines and by Japan's reluctance to aid Thailand in the absence of an IMF program. If this interpretation is correct, then the ball is squarely back in the IMF's court.