CHAPTER V

PRIVATE SECTOR INVOLVEMENT IN CRISIS PREVENTION AND RESOLUTION: MARKET VIEWS AND RECENT EXPERIENCE

A prominent feature of the international financial landscape in recent years has been the occurrence of several financial crises—Mexico in 1994–95, Asia in 1997, Russia in 1998, and Brazil in 1998–99. In contrast to regular modulations in the volume of capital flows in response to changes in underlying economic fundamentals, a distinguishing characteristic of these crises was that markets became quickly and completely one-way. Private investors wanted, and attempted, to withdraw from these countries at the same time, with the dynamic very much resembling that of a run by depositors on a bank. Once sentiment soured, the dynamic became self-fulfilling in that once a critical mass of investors rushed to withdraw their claims, it became rational for everyone else to do the same.

The "rules of the game" for international lending and investment, especially as they apply to sovereign borrowers, have always been, and remain, quite different from those that apply within domestic boundaries. Two particularly noteworthy differences are the absence of a clearly established international lender-of-last-resort to sovereigns and the absence of a bankruptcy court for sovereigns. By contrast, in the domestic context, in most countries the central bank stands ready to step in at short notice to support a domestic bank facing liquidity problems, significantly mitigating the risk of a crisis. Similarly, there are well-defined bankruptcy procedures for corporates in many countries that provide discipline on both creditors and debtors, allowing for an orderly workout while preserving the value of an enterprise. The recent emerging market crises provided a sobering reminder that the absence of clear rules of the game in the international context combined with sharp swings in international investor sentiment leaves the international financial system vulnerable to a variety of inefficiencies and costs:

- A massive withdrawal of capital typically imposes a severe liquidity squeeze on the debtor country, which can result in tremendous overreaction of asset prices and subsequently substantial output losses.
- The losses can also be substantial for creditors. Moreover, they could be arbitrarily distributed between creditor groups. In a context of limited resources, the early exit of some investors will necessarily be at the expense of those remaining.
- Coordination process problems between creditors, or between creditors and debtors, can prevent markets from quickly and efficiently resolving payments problems
- The event risk such as defaults associated with crises in emerging markets, once viewed and priced in as recurrent and disorderly by investors, will raise the cost of financing for emerging market entities.
- As the crisis in Russia demonstrated, there can be a widespread spillover that can disrupt or even threaten the stability of the international financial system.

Clearly, it is in the interest of both the private and public sectors to have an international financial system that minimizes the above inefficiencies and the damage from instability. It is in the context of these market or systemic failures that the official community's efforts at crisis prevention and resolution need to be viewed. One way of doing this is to adopt measures that reduce the frequency with which crises occur, and this has been a key objective of the official community. These measures cannot be foolproof, however, and crises will occur. Indeed, crises provide one mechanism for discipline in financial markets. More controversial have been the efforts to develop measures for, and the experience with, the resolution of crises. International liquidity support for countries facing external financing difficulties—often mischaracterized as "bailouts"—are one potential solution.[1] However, as is well understood, such support can give rise to concerns about moral hazard—both for the debtor and the creditor. Moreover, as a practical matter, the extent of public resources is clearly limited. Some of the lessons for the international financial system from orderly domestic restructurings are that a well-functioning system imposes discipline on both debtors and creditors, and that it of necessity involves the private sector.

Private sector involvement (PSI) in the resolution of crises has been a contentious issue and there has been much rhetoric. It is important to note that PSI in crisis resolution is not new. It has always been an inherent component, but the extent to which this has been the case has been a function of the nature of capital flows. Foreign investors who made direct or portfolio equity investments in the crisis countries clearly suffered capital losses as the prices of these assets fell with market conditions. By the market's reduction in the value of their claims in the crisis countries, these investors were, therefore, clearly "involved" in the resolution if they liquidated their positions. As a general matter, the shrinkage of the value of these investments reduced pressures, decreasing the amount that could flow out and though these large asset price movements imposed substantial costs, these investments did not generate the potential for disorderly payments problems.

The most contentious area has been debt flows. For some of these claims, such as the large-scale withdrawal of bank loans from Asia, which took place at face value, there was no shrinking in the value of contractual claims in response to the deterioration in market conditions. For bond claims, while their secondary market value also fell with the deterioration in general market conditions, the fact that the value of these claims is fixed contractually in nominal terms meant that maturing debt also resulted in withdrawals at face value. Both types of debt claims have, therefore, been a key source of potentially disorderly outcomes—by severely tightening liquidity and/or by forcing a default. As a result, crisis resolution efforts have focused on the bank loan and bond markets, areas that have been the most contentious given that non- or incomplete payment violates the debtor's legal contractual obligation to the creditor.

In the absence of clear rules of the game, the market's interpretation of the precedents set by the experiences with crisis prevention and resolution, and PSI in particular, have fundamental and far-reaching implications in shaping the functioning of the international financial system and the terms and nature of international financing to emerging markets. This chapter provides a systematic review of recent experiences with, and market views on, PSI in crisis prevention and crisis resolution. The purpose of the chapter is not only to present these views, but also to assess their substance and relevance. It is important to realize that the private sector's views are not those of a disinterested party. A private sector creditor that may lose money due to a policy or action of the official community will tend to react negatively. However, the objective of the official community is not to avoid all losses to private creditors—or to debtors who may have borrowed imprudently—but rather to seek to ensure the relatively efficient functioning of the international financial system. In pursuing this objective, the official community needs to be aware of, and take account of, how the private sector will interpret and react to its policies and actions.

The market views presented are based on a series of informal discussions with commercial and investment banks, institutional investors, hedge

[1]In the domestic context, public support often comes in forms that impose large costs on taxpayers and effectively bail out debtors and creditors at the taxpayers' expense. International support—especially from the IMF—is usually in the form of loans that must be repaid with interest below market rates. The countries that receive such international support and their creditors are not "bailed out" at the expense of taxpayers in the countries that help supply international support.-Whether a domestic or international context is considered, in the end the crisis country's debtors are the ones carrying the repayment burden.

funds, market associations, and legal counsels. Among market participants there is no absolute consensus with respect to PSI in crisis prevention and crisis resolution; rather, this chapter tries to provide the staff's interpretation of the central tendencies of the views of the "market participants." An attempt has also been made throughout the chapter to identify larger disagreements among various private sector groups when prominent. The chapter assesses how the recent PSI experiences relate to these broad market views and the extent to which the objectives of limiting the size of official financing packages, of reducing moral hazard, and of restoring medium-term external viability of the debtor country are seen as having been attained, and how the recent experience is likely to impact the nature of international capital flows.

Following this introduction, the first section reviews market reactions to recent proposals to promote PSI in the prevention of crises, including those focused on how to increase transparency, improve adherence to standards and data dissemination, strengthen debt management, enhance debtor-creditor relationships in normal times as well as in crisis periods, promote the role of collective action clauses in international bonds, implement payments standstills and litigation stays, and utilize market-based capital controls. The second section provides some background on the recent PSI initiatives relating to crisis resolution by briefly discussing the historical experience with the 1980s debt crisis. The third section presents market views on PSI in crisis resolution. The fourth section discusses the recent experience with the major concerted rollovers of interbank loans, that is, Korea, Indonesia, and Brazil. It discusses the extent to which they were voluntary, whether the experience to date suggests that they contributed to PSI in crisis resolution, in what circumstances rollovers are most likely to be useful, and what the likely impact will be on the level and maturity of interbank lending to emerging markets in the future. The fifth section examines the recent experience with external bond restructuring. It discusses the concepts for determining the type and scope of bond restructuring, that is, whether a country is facing a liquidity or solvency problem and whether it has access to international capital markets. It explores the Paris Club's comparability of treatment principle and how it has been interpreted. The chapter concludes with a brief discussion relating the recent experience to market perceptions about likely future cases of private sector involvement.

Private Sector Involvement in Crisis Prevention

Since the Asian crisis, there have been a multitude of initiatives for enhancing involvement of the private sector in crisis prevention. Most notably, work has been done by the IMF, the Financial Stability Forum, the World Bank, the Council on Foreign Relations, and many others. Since many of these initiatives have been discussed and summarized in other IMF documents,[2] this section focuses on analyzing market participants' views.[3]

Increased Transparency, Adherence to Standards, and Data Dissemination

The increased importance attached by market participants to greater transparency in standards of policymaking and improved data dissemination is one of the legacies of the recent crises. Inadequate knowledge about the foreign currency exposure of the banking system (as happened in Korea), or about the level of a central bank's forward foreign exchange position (as happened in Thailand), is widely regarded as

[2]IMF (1999c), provides an extensive treatment on official community initiatives already under way for dealing with crisis prevention.

[3]Table 5.1 provides a comparison of some market views with those of the official community regarding the various official initiatives for PSI in crisis prevention and crisis resolution. The table reflects the view of the author (Chase Manhattan, 2000) on the IMF/official community's position on various issues, and market associations' reactions.

Table 5.1. Private Sector Involvement in Crisis Resolution-Summary of Positions of G-7/IMF, Institute of International Finance, and Emerging Markets Traders Association

Proposal	Cologne Principles/IMF	Institute of International Finance	Emerging Markets Traders Association
I. Areas of Broad Agreement			
Burden sharing	Private creditors should bear consequences of investment decisions. Bonds not necessarily excluded from future restructuring.	Agree.	Agree.
Rules vs. case-by-case	G-7 framework offers guidelines, but flexibility retained for different cases.	Case-by-case essential, taking into account market expectations based on past experience.	Case-by-case approach must be guided by clearer and more consistent principles.
IMF Contingent Credit Line	Increases focus on crisis prevention. Provides extra incentive to promote standards	Potentially important vehicle for assuring private finance. Practical questions need to be addressed.	
Debtor/creditor dialogue	Encourages debtors to establish mechanisms for more systematic dialogue.	Proposes major borrowing countries to adopt proactive strategies of investor relations. Proposes to establish a Private Sector Advisory Council for the IMF.	Plays a facilitating role in consultations between Ecuador and its creditors.
Market-based tools	Facilitates access to the international markets in times of instability. Helps prevent liquidity crisis.	Credit enhancements such as World Bank "policy-based guarantees" are a helpful step that can lend credibility on policy reforms, and can catalyze new private sector flows.	
II. Key Differences in Positions			
Burden sharing	G-7 framework: promote more orderly crisis resolution in helping debtors and creditors find cooperative solutions.	Burden sharing is flawed concept—changes in "ground rules" could upset balance in sovereign workouts. Private lenders have different objectives (shareholder value) than official lenders. Difficult to find evidence of "bailing out"; in medium-term context creditors have provided substantial net financing despite large losses. Few private lenders/investors can pre-commit to fill financing gaps. Involuntary approaches will delay eventual restoration of normal market access. Critical to ensure crisis resolution at voluntary end of spectrum.	Recognizes legitimacy of goal, but believes approach is flawed. Forced reschedulings will discourage capital flows. Market-oriented approach urged. Investors need assurance that emerging markets, and official sector in support of the countries, are completely committed to honoring debts.

Paris Club "comparability of treatment"	Applies to all categories of creditors other than IFIs. No claims should be automatically exempt. Paris Club should take flexible approach, taking into account size and importance of claims.	Rigid application of "comparability of treatment" could damage future market access. Bonds should not automatically be exempt. Market-based solution chosen by the debtor is best. Lack of Paris Club transparency is serious obstacle to achieving comparable treatment in current cases.	Paris Club governments did not participate in debt write-downs concurrently with Brady plan. No source of financing should be automatically exempt from burden sharing, but not all equal.
Standstills	Capital or exchange controls imposed in exceptional cases in conjunction with IMF . support	Litigation not significant obstacle to orderly workouts where authorities are implementing credible adjustment programs. Ability to litigate underpins all cross-border flows of finance. Stays on litigation would impede productive flows of private capital.	
IMF lending into arrears	May be appropriate if debtor seeking cooperative solutions with creditors.	Likely to discourage private financing unless exceptional impediments exist and a broad spectrum of private creditors support such action.	
Brady Bond restructuring (only)	No category of claims inherently senior.	Brady bonds embody past debt reduction. Adverse impact of restructuring Brady bonds in broad emerging market asset class/future Brady-style issues should be given appropriate weight by official lenders.	Misguided because: 1) previous haircut; 2) violates sound principles of work outs absent a comprehensive plan; 3) does not resolve moral hazard; 4) not comparable; 5) misuse of interest collateral; 6) terrible precedent.
Collective action clauses	Encourage as best practice. Consider including in G-10 bonds (at least FX) and as a consideration for access to IMF's CCL or IMF conditionality.	Attempts to make qualified rescheduling clauses mandatory are counterproductive. Potentially fruitful area for public/private sector cooperation.	Initiative must not undermine legal responsibility of debtors. Sharing clauses objectionable-threaten the legal right of creditors to enforce claims. Majority voting of about 90 percent acceptable, but should be voluntary.
Trustees	Encourage wider use.		Add little in sovereign context. Provisions that would infringe on individuals' rights (i.e., de facto sharing clauses not welcome).

Source: Published in Chase Manhattan (2000b). Based on Bank of England (2000) having provided a case for improved transparency and data dissemination. An improved flow of information is viewed as vital if markets are to appropriately assess and price risks and if there is to be effective market discipline that encourages governments to undertake more open, predictable, and responsible macroeconomic and financial policies.

Given this consensus that there is a need to improve data dissemination and standards for policymaking, it is somewhat surprising that the staff's discussions with officials and market participants indicate a "profound" lack of awareness in many markets regarding recent efforts by the official community to improve the quality and quantity of information available to the private sector. This is worrying from two different points of view. First, the lack of awareness may reflect the fact that the data actually provided under these initiatives are not market relevant,[4] or, as some market participants pointed out, their quality is not reliable enough for them to use. Second, there is the concern that, if creditors are not interested in the information that is being developed, there will not be much emphasis placed on observance on the part of borrowers.

Improved Debt Management

Market participants regard improved domestic and external debt management as one of the keys to mitigating the severity and frequency of crises. Past crises have demonstrated that private and official foreign currency–denominated debt can create additional sources of vulnerability. From a debt management perspective for both the sovereign's borrowing and the general borrowing done by its private sector, the key issues are typically seen as avoiding both a bunching in maturities and inclusion of derivatives in bond contracts (such as put options) that exacerbate debt service payments during crises.[5] It is important for the sovereign to ensure prudent debt management by its private sector, especially in a fixed exchange rate regime, to stop private sector debt from exacerbating the country's vulnerability to a crisis. This may imply a lower level of private sector foreign borrowing, but it would strengthen the country's overall ability to withstand external shocks. Otherwise, the sovereign may find itself in a situation where it has to step in and socialize the private sector's foreign borrowings to resolve the crisis. Throughout, a challenge is to convince any emerging market debtor that the up-front cost savings achieved by issuing short-term bonds or bonds with put options always have a cost—one that is harder to quantify—in terms of the additional vulnerability to shocks. If a sovereign not only successfully manages its own debt but also oversees the borrowing of its private sector it is well on its way to improving its ability to withstand future external shocks.

Improving Debtor-Creditor Relations in Normal Times

Improved debtor-creditor dialogue is perhaps the one proposed initiative that gains universal approval by both the official and private sectors. A continuing dialogue with the borrowing country is viewed by many market participants as a way to strengthen trust in the lending relationship and greatly facilitate negotiations in the event of debt-servicing difficulties. The benefit of such a dialogue is seen to be, in part, a removal of the uncertainty premium that emerging market borrowers have to pay when a lack of reliable information leads investors to assume the worst.

The main obstacles to better debtor-creditor dialogue, according to market participants, are the lack of preparedness and public relations skill of some sovereign borrowers, the sensitivity of some country information, the preference of some major individual investors for individual meetings, and the desire of some bondholders to remain anonymous.

[4]Timeliness of the data disseminated may also affect its relevance for market participants.
[5]See IMF (1999a) for an overview of the importance of debt management for crisis prevention.

Debtor-Creditor Relations in Crises: Creditor Committees

There are several ways debtor-creditor relationships can be organized in advance of a crisis. One early suggestion was the setting up of a *standing* creditor committee,[6] which could play an important role in facilitating information sharing across creditors and negotiate on their behalf. However, some market participants dislike standing committees since they want to negotiate on their own behalf; they also fear that the committee may not be representative as the holders of the debt likely shifts when there is secondary market trading, and they have a concern that a standing committee may reduce the cost of default for the sovereign borrower, by making it more orderly, and hence increase the probability of default. Due to these and other private sector concerns, the official community has taken the position that standing creditor committees are "generally not considered practical"[7] and has since sought to lay down some guiding principles in advance for the formation of "ad hoc" creditor committees, which mainly would serve the purpose of coordinating and sharing information across creditor groups. This approach is receiving some support from the private sector through discussions under the auspices of the Council of Foreign Relations. However, such a committee raises the difficult question of how to handle confidential information and whether the various different types of creditors would maintain adequate "Chinese walls" to avoid trading on the basis of confidential information. While some market participants are optimistic that the Chinese wall problem can be overcome, others have pointed out that a better approach would be to recognize that the problem could never be satisfactorily solved and the committee should only deal with simultaneously published information.

Some market participants take the view that the recent bond exchanges in Pakistan, Ukraine, and Russia show that there is no real need for setting up formal creditor committees. In fact, they additionally point to what they regard as the negative experience of Ecuador with its Consultative Group. This group, set up by the sovereign, and including only holders of international bond debt, was widely seen as a nonconstructive point of contact between creditors and the debtor, tending to "radicalize" creditors' positions and potentially serving as a coordinating mechanism against the sovereign. Mostly recently, Ecuador has decided to meet with major holders of its external debt on an individual basis.[8]

Collective Action Clauses

Collective action clauses (CACs) are clauses that can be incorporated into an international bond's legal documentation to facilitate the restructuring of that bond if needed. The clauses commonly referred to as CACs are a majority action clause (allowing a qualified majority of bondholders to bind a minority); a sharing clause (stating that any funds received through, for example, litigation by one bondholder have to be shared with the other bondholders based on their share of the outstanding bond); and a collective representation clause (allowing a trustee, for example, to represent bondholders at bondholders meetings facilitating majority actions). The presence of CACs could facilitate creditor-debtor negotiations following a crisis, since they reduce both the threshold from the 100 percent needed for achieving a restructuring agreement (the majority action clause) and the potential threat of litigation from "holdout" creditors (reducing their incentive to litigate through the sharing clause or implicitly from the inclusion of a trustee). Bonds issued under English law typically include CACs explicitly or implicitly. Since these clauses are not regularly contained in bonds issued under New

[6]Eichengreen (1999).
[7]IMF (1999c).
[8]Bloomberg (2000).

York law,[9] proposals have been made to include such covenants in all sovereign bonds issued internationally going forward, in an effort to facilitate orderly restructuring. (An alternative mechanism to CACs would be the use of exit consents, which have the advantage of also being applicable to bonds issued under New York law; see Buchheit and Gulati, 2000). To support the adoption of CACs by emerging market sovereigns, the United Kingdom has recently incorporated CACs in its own "Euro Treasury Note" program.[10] Canada announced in April that in the future its international bond issues will include CACs.

Market participants have argued that the official sector has exaggerated the importance of CACs. Indeed, bond trustees have indicated that they would not call a bondholders meeting unless they had already reached a prior agreement with the required majority of creditors for approval of a restructuring. Without such a prior approval, creditor meetings are viewed as likely to produce "strange and exotic" outcomes, most of which would be bad for the debtor (for example, the bond holders' meeting could be used to collect enough votes to accelerate the bond). While market commentary on the impact for emerging market borrowers on the wider adoption of CACs in bond contracts is mixed, empirical work[11] suggests collective action provisions tend to reduce the cost of borrowing for the more creditworthy issuers, who benefit from an orderly restructuring process. In contrast, lower-rated borrowers are shown to pay a premium if CACs are included. This suggests that for a lower-rated borrower, creditors would view the adoption of CACs as a signal of additional default risk that would more than offset the advantages the provisions afford by facilitating a more orderly restructuring process. The additional cost paid by lower rated borrowers and the implicit reduction in international debt financing available to them may also avoid the buildup of potentially destabilizing debt flows in the first place. In general, including these provisions in bond documentation going forward is widely regarded as a step in the right direction (see Table 5.1), but their inclusion will do little to help in the restructuring of already outstanding bonds.

Standstills and Stays

Standstills and stays[12] are primarily an issue for crisis resolution, but they clearly have ex ante effects in potentially limiting the number of crises that do occur. The analogy with domestic lender-of-last-resort facilities and bankruptcy procedures has led to the suggestion that in times of crisis a payments standstill should be declared. The issue then arises of whether the standstill should be voluntary or mandatory, how long it should last, and who should initiate it. Within the official community, there have been some arguments made that a sanctioned standstill could be seen as a last-resort measure designed to contain broadly based capital outflows from a country. However, so far no consensus has been reached within the public and private sectors, but some forums, such as the Council on Foreign Relations,[13] have recognized, that in exceptional circumstances, a payments standstill may be desirable and necessary because panic can take hold and official financing resources are limited. Stays on litigation are, in this context, seen as another useful instrument to keep the resulting crisis resolution negotiations orderly.

Market participants are generally against involuntary standstills (see Table 5.1) and argue that stays and standstills would infringe on their

[9]A bond issued under New York law will generally not permit an amendment to its payment terms without the agreement of every bondholder; other terms could be changed. See Buchheit (2000).

[10]See H.M. Treasury (2000).

[11]Eichengreen and Mody (1999). See also Dixon and Wall (2000).

[12]Refers to standstills on external debt service payments and an imposition of a stay on litigation otherwise likely to result from the declaration of a standstill.

[13]Council on Foreign Relations (1999).

fundamental contractual rights to receive payments and they would litigate in the event of a payment default. Furthermore, in their view, the way in which an involuntary standstill is imposed very much affects their reaction to it. It was argued that an involuntary standstill that is imposed while keeping the private sector creditors informed and looks temporary in nature would engender much less of a negative reaction than a blanket decree imposing a standstill for a longer period. Seeing a limited role for voluntary standstills, Corrigan (2000) makes the point that the only successful standstills have been the rolling over of interbank loans. Therefore, he questions whether voluntary standstills would constitute a "viable and generalized approach" to deal with other potential outflows. With regard to forced standstills, Corrigan sees them—especially if sanctioned by the official community—as a "clear and present danger" for the "culture of credit" in the international capital markets.

Nevertheless, involuntary standstills are likely to remain "a fact of life" of cross-border lending, and emerging market borrowers will make use of this instrument if they have to. Indeed, de facto standstills have been a feature of many of the recent debt-service crises (see, for example, Indonesia).

Market-Based Capital Controls

Marked-based capital controls are a potential crisis prevention instrument that has received increased attention following the Asian crisis. They aim to avoid destabilizing capital inflows in the first place. Chile's introduction of market-based capital controls was motivated both by prudential considerations (including limiting the stock of short-term foreign currency obligations) and a desire to moderate the appreciation of the real exchange rate.[14] Views on the effectiveness of the Chilean capital controls in achieving those objectives, and the overall usefulness of market-based capital controls have been mixed.[15]

Background on Private Sector Involvement in Crisis Resolution

PSI has been an integral part of all crisis resolution efforts and is not new. At the time of the resolution of the Latin American debt crisis of the 1980s (see Box 5.1), for example, the official community had many of the same objectives it has today, limiting the size of official packages, reducing moral hazard in the private sector's lending decisions, and restoring the external viability of the country in crisis. Some (for example, see Dooley, 1994) see the lending preceding the debt crisis of the 1980s as raising charges of moral hazard.

By the late 1980s, however, the improved financial positions of major international banks as measured by their developing country loan exposures relative to their capital and the continuing poor economic performance of many emerging markets led to the adoption of the Brady plan, which involved substantial write-downs (measured in net present value (NPV) terms) of developing country syndicated loans. Indeed, the losses experienced by banks on medium-term syndicated lending to developing countries in the 1980s are regarded as a key factor in the decision of banks to shift away from syndicated lending to sovereigns toward shorter-term interbank lending in the 1990s. (Other important factors were the withdrawal of favorable tax treatment in creditor countries and the introduction of the Basel Accord in 1988.) Large official financing packages in the 1990s, starting with Mexico (1994–95) and then in Asia (1997), were also seen by many observers as increasing the private sector's expectation of being rescued should it be confronted by an imminent credit event. This sentiment likely peaked in the run-up to the Russian default in August 1998 as the country was widely viewed

[14]For a more extensive discussion on Chile's experience with capital controls see IMF (1995a) and for a broader discussion of Chile and other cases see Ariyoshi and others (2000).

[15]See, for example, Gallego, Hernández, and Schmidt-Hebbel (1999).

Box 5.1. The 1980s Debt Crisis and Private Sector Involvement

On August 20, 1982, Mexico's Finance Minister announced that Mexico was no longer able to service its external obligations. The announcement created concerns that other developing countries might also be unable to meet their debt-service obligations. At the time, large international and regional banks, especially from the United States (see table), had loan exposures to a relatively concentrated set of developing countries that were large relative to the banks' capital positions. Widespread defaults on these loans would thus pose a threat not only to the stability of the banks themselves but also to the international financial system.

How did this concentrated exposure arise? In reviewing the lessons from the 1980s debt crisis, some observers (notably Dooley, 1994) have stressed the role of moral hazard considerations in influencing intra-creditor dynamics between industrialized country governments and the international banks that extended credit to the developing countries. During the 1970s and early 1980s, it was argued that the authorities in the industrial countries, again especially in the United States, expressed their satisfaction with, and implicit support for, the way in which international banks were recycling petrodollars into investments in developing countries. Banks were seen as willing to undertake this lending, at relatively low interest rate spreads, because of the belief that, if losses on such lending were to occur, they would receive assistance from the official sector. From this perspective, banks had strong incentives to expand their lending to developing countries, even to the point where debt-servicing problems could cause widespread solvency problems for banks (Rhodes, 1989).

Others have seen the 1980s debt crisis as reflecting a much more complex set of macroeconomic and financial factors. While anticipation of support of banks by G-10 authorities in the case of debt-servicing difficulties for developing countries may have influenced the willingness of banks to participate in the recycling process, other macroeconomic, financial, and policy considerations were seen as playing an equally important role. Cline (1984), for example, argued that the large balance of payments deficits and the associated accumulation of large external debts by developing countries reflected the combination of a sharp rise in oil prices, lower negative real interest rates in the 1970s (which encouraged borrowing), unsustainable macroeconomic and financial policies in developing countries, and a combination of high real interest rates and a recession in the industrial countries in the early 1980s.

What form of private sector involvement (PSI) was utilized to help manage this crisis? Following Mexico's announcement, the official community had the twin objectives of containing the threat to the international banking system while at the same time trying to improve the economic position of the debtor countries to prevent a default on their debt-service obligations. Throughout, three basic principles underpinned the handling of the crisis by both the official community and the private sector (see Rhodes, 1989):

Exposure of the Nine Largest U.S. Banks to Non-Oil Developing Countries Relative to Capital
(In percent)

	1977	1978	1979	1980	1981	1982
Total	188	190	206	221	240	235
Brazil	42	42	40	39	41	46
Mexico	33	30	30	38	44	44
Eastern Europe[1]	25	24	24	22	20	14
Other non-oil LDCs[1]	88	94	112	122	135	131

Source: Milivojević (1985).
[1]As defined by the source.

The approach was balanced, in that all parties accepted a need for burden sharing within a concerted effort. It was case-by-case, in recognition of the fact that each of the restructuring countries had its own particular circumstances. And it also had to be flexible, given the many political and economic variables at work internationally and within each restructuring country.

Initially, the heavily indebted developing countries were viewed as facing a liquidity crisis, and forbearance by their private and public creditors combined with new money was seen as a means of meeting this liquidity shortage and thereby facilitating continued debt-service payments to the creditor commercial banks. Although bank exposures increased with the provision of new money, banks were gradually able to build up both provisions against troubled loans and bank capital. In the mid-1980s, banks also continued negotiations with debtor countries to restructure payment profiles (often through multiyear rescheduling agreements) and to achieve some debt reduction through market based mechanisms such as debt-for-equity swaps. The Baker Plan of 1985 continued the strategy of coordinated lending by the official and private sector while at the same time shifting the focus of the debt strategy from short-term balance of payments adjustment toward long-term structural changes. Moreover, by 1987–88, there was also increasing emphasis on the "menu approach" to mobilizing bank lending in order to address the divergent needs and objectives of the various classes of banks. These divergences arose out of differences in regulatory and accounting practices, as well as the conflicting objectives of those banks that wanted to withdraw completely from lending to developing countries and those that had a longer-term interest in remaining active lenders. These divergent interests, as well as the large-scale loan-loss provisions by major banks during 1987, led banks to take a tougher negotiation stance and they expressed much less interest in extending more new money. Moreover, some banks began to avoid further involvement by selling their developing country loans on an increasingly liquid secondary market for distressed loans. By the late 1980s, the combination of continuing weakness in the economic performance of the debtor countries and a strengthening of the financial condition of the creditor banks led to a new approach based on voluntary, market-based debt reduction (the Brady plan of 1989). In return, banks received a "sweetener" in the form of more liquid collateralized bonds, which were regarded as harder to restructure in the future and as capable of being sold to a broader investor base than the existing syndicated loans.

as "too-big- or too-nuclear-to-fail" and would therefore receive the support of the official community no matter what.

Others have seen the crises of the 1980s and 1990s as arising out of a much more complex set of macroeconomic and financial factors and have argued that there needs to be a more nuanced view of the extent and potential sources of moral hazard. It has also been argued that moral hazard in the international financial system can potentially arise from a number of sources including the official safety net that underpins all banking systems and the lending activities of international financial institutions.

The official safety net underpinning the banking system is typically designed to ensure the overall stability of the domestic financial system and to protect the domestic payments system. It is widely recognized that the knowledge that a bank is "too big to fail" can lessen the incentives to impose both market and managerial discipline. Domestic bank bailouts costing the sovereign the equivalent of 10–20 percent of GDP have not been uncommon and clearly have an impact on the expectations for future bailouts by the domestic banks as well as the expectations of international banks providing financing to the domestic banks.

While the moral hazard effects of the official safety net underpinning national banking systems are a constant feature of the global financial system, the potential moral hazard effects of lending by international financial institutions will be influenced by both the scale and timing of such lending. As noted above, such lending is regarded by market participants as having had its most significant effect on creditors' expectations during the run-up to the Russian default in August 1998. Nonetheless, there remains considerable disagreement between those that see lending by international financial institutions as having a "first-order" effect in creating moral hazard and those that view such lending as having a much smaller and episodic effect. Haldane (1999) argues that IMF lending to date has in some instances increased lender moral hazard, arguably by the IMF providing resources to a country in crisis that are used to bail out the private sector. The so-called Meltzer report (International Financial Institution Advisory Commission, 2000) also argues that the expectation of future IMF support packages has helped "fuel the volatile short-term capital flows that have played a key role in recent crises" (see Meltzer, 2000) and that the "importance of moral hazard cannot be overstated." However, empirical evidence of lending from the international financial institutions, and in particular from the IMF, causing lender moral hazard is mixed. Krugman (2000) argues that there "is no shred of evidence, for example, that the investors who poured money into Asia before its recent crisis thought at all about the possibility of future IMF bailouts." Instead, Krugman argues that the main driving factor behind the large flows of credit to Asia was rather motivated by "irrational exuberance." The view that lender moral hazard did not drive the decision of creditors to lend to Asia receives support from Mussa (1999), who argues that many of the arguments behind the view that lending by the international financial institutions contributes to debtor and/or lender moral hazard are "simplistic and fundamentally wrong." The fact that some creditors ex post come out of a crisis unscathed does not necessarily provide evidence that ex ante the lending decision was based on a hope of being bailed out. Furthermore, many observers forget that international support packages to countries in crisis are in the forms of loans and not grants, and that they involve significant conditionality, ensuring that debtor moral hazard is limited.

Whatever the conclusion on the likely significance of moral hazard arising from official international support to countries facing external financing difficulties, the fact is that the scale of such support is limited. When there is a meaningful risk that a country may be insolvent and therefore incapable of timely repayment of emergency official assistance, the official community typically refrains from providing such assistance except on the condition that other claims against the country be rescheduled and written down to an extent that ensures that emergency official assistance can be repaid. These are situations where, like it or not, the creditors of a country (its sovereign, its banking system, or its private sector) will unavoidably be "involved" in the resolution of the country's financial difficulties. More broadly, when a country faces a huge outflux of capital that threatens to swamp that country's own resources plus any plausible level of emergency assistance from the official community, and when efforts to resolve the crisis through policy adjustments, limited official assistance, and a spontaneous restoration of confidence fail, the creditors of that country will also face "involvement" in the resolution of that country's financial difficulties on terms and conditions not contemplated in their credit instruments. In these situations, private sector involvement in crisis resolution is, and always has been, a fact of life.

In designing and implementing policies concerning private sector involvement, the official sector has—and is perceived in private markets to have—several, not necessarily consistent, objectives. One is burden sharing. Because of concerns about moral hazard and for other reasons, the official community wants to keep its emergency support limited. It also wants to ensure that private creditors play—and are seen to play—an appropriate role in resolving crises that their lending has helped to engender. When losses need to be absorbed—especially in situations of insolvency—the official sector wants to ensure that private creditors do not escape by imposing losses they should bear onto others. A second broad objective is limiting the damage done by the crisis, both to the country primarily involved and to the world economy more generally. Sometimes, especially in cases of insolvency, this may mean that creditors should absorb losses (also part of burden sharing). It also means, especially in cases of illiquidity, seeking to restore external viability and market access as rapidly as possible following the resolution of a crisis—something that may not be facilitated by efforts to impose substantial short-term losses on creditors. The third broad objective of the official community—although this may not be fully appreciated in private markets—is to preserve integrity and reasonable efficiency in the functioning of international credit markets. This means that debtors should not be allowed to escape from servicing their obligations when they have the capacity to do so. It also means that creditors who undertake risks should expect to see those risks sometimes materialize into actual losses. Symmetrically, for the official sector, it ought to mean not using private sector involvement as a mechanism for off-budget foreign aid to countries in distress or for pursuing policy objectives unrelated to the integrity and efficiency of the international financial system.

Policies to pursue these different objectives interact and potentially conflict not only in dealing with a specific crisis but also dynamically, as the private sector reacts to the policies of the official sector and the official sector, in turn, adapts its policies. This phenomenon is clearly apparent in evolution of international credit arrangements over the past two decades. Medium-term loans from large syndicates of commercial banks to developing country sovereigns and public sector entities were a dominant form of international capital flow before the debt crisis of the 1980s. An important part of the mechanism that the official sector used to deal with that crisis involved the concerted rollover and subsequent restructuring and write-down (in present value terms) of syndicated bank loans. Bonded debts of the sovereigns of the affected countries generally escaped restructuring on the grounds that the amounts were small and that these instruments (held by widely diversified creditors) were difficult to restructure. The market adapted. Medium-term syndicated bank loans to developing country sovereigns largely disappeared in the 1990s. Banks shifted to interbank loans of much shorter maturity. International borrowing by sovereigns took predominantly the form of bonded debts. The shifts in the form of international credit flows posed new challenges in efforts to resolve the financial crises of the 1990s. Lenders to emerging markets were either thousands of individual bond holders whose actions were difficult to concert, or banks with short-term facilities that could easily "cut and run" in a crisis. As described below, mechanisms for private sector involvement in the crises of the 1990s had to adapt to these new realities.

The fact that the private sector will adapt to the official sector's policies and practices with respect to private sector involvement is not necessarily bad. For example, although they are probably unwelcome to the potential debtors, policies that raise the cost and diminish the availability of international credits to some emerging market borrowers may be desirable if they reflect a more appropriate pricing of risks and serve properly as a deterrent to imprudent borrowing. Alternatively, policies that encourage longer-term securitized borrowing (which is presumably limited by available collateral) may contribute to the avoidance or more efficient resolution of crises because such loans are hard to restructure. Longer-term loans are likely to be less dangerous in a potential crisis than an equivalent volume of short-term loans; and creditors who believe that they have secure collateral should be less prone to panic than those that do not. On the other hand, a country that has already encumbered most of its liquid assets and a good deal of its future export earnings may find itself in a very difficult situation in the event of a financial crisis. The point is that in considering various policies and practices with respect to private sector involvement, it is critical to be aware of how the private sector is likely to adapt to these policies and practices and to the difficulties or opportunities that these reactions will generate.

Market Views on Private Sector Involvement in Crisis Resolution

Not surprisingly, market participants have in general reacted negatively to the official community's initiative to increase PSI in the resolution of crises. Some market participants have questioned the need for any PSI, arguing the initiative and uncertainty surrounding its application have built into emerging market asset prices a premium that is eventually being borne by borrowing countries and is limiting private capital flows, in fact raising the eventual extent of official funding necessary to finance emerging markets' investments. The majority of market participants, however, recognize the need for PSI in crisis resolution. They recognize that international lending—even to sovereigns—does entail risks, which are compensated to creditors ex ante through the risk premiums charged on loans. In an effectively functioning financial system, ex ante risks sometimes materialize into ex post losses for creditors, with larger losses generally accruing to those who take larger risks. Nevertheless, these market participants have expressed several other concerns with the approach taken to date.

- Most market participants remain highly uncertain, if not outright confused, about the official community's approach to achieving its goals. The experiences of Pakistan and Ukraine indicated to many market participants that the official community was increasingly focusing on restoring medium-term external viability rather than on "burden sharing"[16] with the private sector. The interpretation of more recent initiatives in Nigeria have, however, once again raised questions about the relative importance the official community attaches to the two objectives.
- While it is generally recognized that there will not be a detailed rules-based approach to PSI, there is a desire for a "framework" that would limit arbitrariness and provide market participants with some understanding of when PSI will be invoked, what will determine the scale of PSI, and whether PSI will be on a voluntary (i.e., negotiated between the debtor and creditors) or involuntary basis. Market participants argue that the embryonic framework to date (as represented by recent statements by the G-7 and the International Monetary and Financial Committee (IMFC)) amounts to no more than a codification of the past few years' debate, and a summary of current practices. The framework is seen as remaining ad hoc until disagreements within the IMF's membership regarding the "rules of the game" for PSI are resolved. In this context, most expect that "bigger" countries would be treated differently because of their systemic importance unlike smaller countries.
- Regarding the relationship between claims of the official community and those of the private sector, most market participants accept that the claims of the multilaterals should be senior. They are not persuaded of similar treatment for the Paris Club, however, whose members are seen as having often lent based on noncommercial, and sometimes political, considerations. Many market participants, therefore, take the view that "comparability of treatment," for fairness reasons, should, if at all, work in both directions, and the Paris Club's claims should not be treated as senior. Furthermore,

[16]The official community's insistence on burden sharing is frequently viewed by the private sector as reflecting an arbitrary decision by the official community to fill a short-term financing gap with disproportionate private sector resources or forbearance to limit the size of official financing packages. If the objective of crisis resolution is to restore medium-term external viability for a country's balance of payments, the private sector's reaction has generally been more supportive, as such an objective is seen as being in the interest of both the private sector and the official community.

market participants expressed concern that the lack of information regarding how the Paris Club assesses "comparable treatment" introduces additional uncertainties and costs for the emerging market sovereign borrower.

- Many market participants have expressed concerns about the potentially ad hoc treatment of different creditor classes, arguing it is not the role of the official community to establish implicit seniority hierarchies in intra-private sector claims. For example, in the case of Ecuador there was a perception by market participants that holders of eurobonds and dollar-denominated domestic debt were initially about to receive a more favorable treatment than Brady bondholders with the implicit support of the official community.
- Looking ahead, market participants expressed concerns about the implications of the official community's PSI initiative for the structure of capital flows. One implication of the resolution of the 1980s Latin American debt crisis is seen to be the sharp drop-off in syndicated bank lending to sovereigns, encouraging the takeoff of the emerging bond market. The present less favorable treatment of unsecuritized instruments, such as eurobonds, is seen as potentially leading to a greater use of harder to restructure securitized bonds and loans.

Interbank Rollovers

The rollover of interbank lines can be seen as one instrument to mitigate crises primarily by reducing capital outflows. The usefulness of the instrument depends on whether interbank lines, especially their nonrenewal, is an important feature of the balance of payments crisis facing the particular country. Hence, it could be argued that the applicability of this instrument has little to do with whether a country faces a crisis due to solvency or liquidity concerns, and one would reasonably expect to see rollovers used in both cases. The terms of the rollovers would, however, reflect the market's assessment of whether it is asked to roll over its exposure to an insolvent country or an illiquid country. This section will discuss the recent major rollovers of interbank debt in Korea, Indonesia, and Brazil.[17]

A key challenge for the official community is how investors can be convinced to maintain their exposure in times of stress. This is tricky to finesse in a crisis situation where there is an incentive to run preemptively at the first hint of difficulty. An example of the latter occurred in the case of Brazil[18] (see Box 5.2) where international banks aggressively cut the credit lines to their local operations. An important reason was that the local operations had large holdings of Brazilian domestic bonds and would have suffered if the rumored forced restructuring of Brazil's domestic debt had occurred. Hence, international banks with local operations judged that they were significantly more exposed to the domestic restructuring risk than international banks without local operations. To manage their risk from both a coerced rollover of interbank debt à la Korea and a rumored forced restructuring of government domestic debt, the international banks' headquarters encouraged their local operations to reduce their holdings of domestic debt while at the same time the credit lines extended to them by their headquarters were cut. In Indonesia, the fact that a lot of exposures of international banks were toward the corporate sector, which had stopped servicing their foreign currency debt, meant exposure was maintained whether creditors wanted it or not.

Comprehensive Versus Limited Approach

The cases discussed in Box 5.2 suggest that the instruments to address a particular balance of payments crisis need to be tailored to the

[17]Steps were also taken in the case of Thailand to encourage the rollover of a significant part of the short-term foreign currency debt, but a significant proportion of this comprised international banks' (mostly Japanese) lending to their own Thai branches and the experience raises slightly different issues than those treated above. (For a more extensive treatment of the Thai rollover, see Lane and others, 1999.)

[18]See IMF (1999b).

Box 5.2. Major Interbank Rollovers to Date[1]

Korea

In December 1997, following intense pressure on reserves, four to five notch downgrades by the major rating agencies that triggered additional outflows, and the realization that much of Korea's foreign exchange reserve was actually unavailable, Korea was close to facing severe debt-servicing problems. With only $6 billion in reserves, interbank claims amounting to $28 billion to be settled before end-February, and losses of $1 billion a day, Korea faced a daunting challenge. Short-term interbank credit lines, the main source of external credit exposure for Korea, as local banks acted as intermediaries for other domestic debtors, had been subject to cutbacks, which accelerated in November. As the macro situation worsened further, the withdrawal of credit lines rapidly accelerated, causing liquidity to dry up in the Korean interbank market. With interbank rollover ratios falling to near zero, capital flight rampant, the IMF-supported program failing to restore confidence, and the $20 billion sovereign guarantee of the Korean banking system proving ineffective, the international official community was trying to stabilize the situation. However, putting in the limited available official resources would have done little to ameliorate the situation as these resources would have quickly flowed out to pay down maturing interbank lines.

On December 22, 1997, the Federal Reserve Bank of New York called a meeting to convince key U.S. banks that a rollover of their maturing interbank lines was in their own interest as not all of them could exit at the same time. Furthermore, it was highlighted that failure to roll over enough of the credit lines would clearly pose a systemic risk to the world's financial system and that, if agreement was reached, the official financial community would provide additional accelerated resources. Representatives of the U.S. banks agreed on Christmas Eve to maintain their interbank lines at current levels for at least a week, while a longer-term solution could be found. Similar meetings took place in all the major financial centers with Japanese, German, English, French, and other central banks trying to convince their respective commercial banks to agree to a rollover. After fierce negotiations, broad international agreement was reached on January 16, 1998 to roll over creditor bank exposure until March 31, 1998. A key component to enforce the agreement was a debt-monitoring system, set up by IMF and Bank of Korea staff, which helped solve the inherent collective action problem[2] present in any rollover operation.

Rollover ratios quickly recovered in the second half of January 1998, reaching an average of 80 percent for the month. The subsequent two months saw some leakage compared to the January agreement, as some small creditor banks exited and the approval of new credit lines suffered delays. Still, rollover ratios remained in the neighborhood of 90–95 percent, but borrowing rates widened substantially.

In addition to maintaining interbank lines, there were some efforts under way to find mechanisms to maintain trade credit and derivatives exposure. However, rolling over trade credits was deemed counterproductive, as it was likely to delay an export-led recovery, and the maintenance of derivatives exposure was later dropped as OTC derivatives and other potential "black holes" proved to be of less importance than anticipated.

Toward the end of January and beginning of February, signs emerged that the sharp depreciation in the Korean won had led to a rapid turnaround in Korea's trade balance, stabilizing the macro situation and allowing Korea and its pri-

[1]Main sources for this box, if not otherwise mentioned, are IMF (1998b, 1999a, 1999b), plus various press releases, Bloomberg wires, and articles from *International Financing Review, Euroweek,* and *Euromoney.*

[2]To improve the success of the rollover agreements, one country's banks had to be assured that their forbearance by maintaining their credit lines was being matched by other countries' banks as well. The monitoring system allowed for daily reports of renewal and maturities loan-by-loan and bank-by-bank (see IMF, 1999a).

vate creditors to discuss a longer-term solution for roughly $24 billion worth of debt. After several proposals were considered, it was agreed that interbank loans would be restructured into one-, two-, or three-year loans paying LIBOR + 225 basis points, 250 basis points, or 275 basis points, respectively, and that these loans would enjoy a sovereign guarantee while keeping the borrower of record intact. The final agreement also included call options for the debtors, allowing them to prepay the longer maturity debt if they so wished at a predetermined price.

Indonesia

While the sources of the immediate pressure on Korean foreign exchange reserves were few and relatively clear, Indonesia provided a completely different challenge. Starting in November 1997, the source of pressure on foreign exchange reserves stemmed from broadly based bank runs and domestic capital flight, causing Indonesian corporates to default on their foreign currency loans to international banks as the Indonesian rupiah plummeted. Only a fairly small portion of external debt was interbank debt[3] and hence the subsequent rollover exercise focused on maintaining trade lines while a de facto standstill occurred vis-à-vis corporate debtors, leading to a buildup of arrears (forcing international banks' exposure to these corporates to be maintained). Despite substantial differences in country exposures across creditor banks, which were estimated at $23 billion for Japan, $5.6 billion for Germany, $4.8 billion for France, and $4.6 billion for the United States (see BIS, 1998), no clear leadership emerged among the commercial banks as Japanese banks were seen as failing to take a leading role. Moreover, a sovereign guarantee was not forthcoming on corporate debt.

At end-January 1998, the Indonesian authorities declared a "pause" for private sector foreign currency–denominated debt service, while simultaneously guaranteeing the obligations of Indonesian commercial banks. This sanctioned the de facto standstill, but may, as was argued by some observers, have aggravated creditor relations and delayed the formation of any coordinating mechanisms among commercial banks until the "pause" ended. A bank steering committee was eventually set up and agreement on a scheme to handle corporate debt was finally reached in June. While the main challenge was to set up a private sector debt restructuring scheme backed by a preferential government foreign currency guarantee, creditor banks also agreed to maintain their trade and interbank lines. The latter agreements had to be reached before the clearance of all corporate arrears so that the clearing of the arrears did not spark another round of pressure on the currency. A debt-monitoring system, which was put into operation in March 1998, again played an important role in ensuring that the agreed-to international bank exposure to Indonesia was maintained.

Brazil

After managing to steer through the contagion from the Russian default in August 1998, in spite of an attack on its currency, and with the help of the IMF program, Brazil appeared capable of preserving its currency regime. However, throughout September to early November, international banks were actively cutting their exposures toward the country, reaching a cumulative reduction of $5.7 billion in the second half of 1998. After a calmer period following the announcement of the IMF-supported program, new pressures emerged in late December 1998, as the congress failed to pass key reform legislation and investors increasingly questioned the credibility of the exchange regime.

International banks with local operations were especially early and aggressive in cutting their interbank lines[4] in the hope of avoiding both a forced rollover of their local operations' holdings of domestic debt and interbank loans made

[3]Market estimates at the time suggested that 90 percent of Indonesia's $65 billion external debt was owed by 1,000–1,500 companies, the remaining 10 percent reflected short-term interbank debt.

[4]See IMF (1999b).

Box 5.2 *(concluded)*

Claims of Banks in BIS-Reporting Countries on Selected Emerging Market Countries
(In billions of U.S. dollars)[1]

	All BIS-Reporting Countries	Japan	United Kingdom	United States	Euro Area[2]	France	Germany
Korea							
June 1997	103.4	23.7	6.1	10.0	30.3	10.1	10.8
December 1997	94.2	20.3	6.9	9.5	26.8	11.1	9.6
June 1998	72.4	18.9	5.6	7.4	22.5	7.9	8.4
Indonesia							
June 1997	58.7	23.2	4.3	4.6	17.9	4.8	5.6
December 1997	58.4	22.0	4.5	4.9	18.8	4.8	6.2
June 1998	50.3	19.0	4.0	3.2	18.0	4.0	5.9
Brazil							
June 1998	84.6	5.2	5.8	16.8	37.6	7.9	12.8
December 1998	73.3	4.2	6.5	12.7	36.7	6.1	11.3
June 1999	62.3	3.1	4.2	12.8	30.2	5.8	9.5

Sources: BIS; and IMF staff calculations.
[1]On-balance-sheet claims, excluding claims on offshore centers.
[2]Data are for Austria, Belgium, Finland, France, Germany, Ireland, Italy, the Netherlands, and Spain. Data are not reported for Greece and Portugal.

to their subsidiaries. As the foreign exchange market became increasingly one-sided and a discrete devaluation became a near certainty, interbank rollover ratios fell as low as 20 percent.

Following the devaluation on January 12, 1999, rollover ratios recovered to 60–70 percent, as a key macro uncertainty had been resolved. In the weeks leading up to the mid-March voluntary agreement (formalized on March 31 and launched together with the strengthened IMF arrangement) between the international banks and the government to maintain exposures at end-February levels for six months, rollover ratios stabilized at a high level. After agreement was reached, all maturing interbank debt was regularly rolled over. In April, strong indications that the Brazilian economy was on track for recovery in the absence of a systemic banking crisis in the aftermath of the devaluation, and as most local commercial banks posted record first quarter profits, some international banks started to increase their exposures above what was required under the agreement. The overall reduction in international banks' exposure toward Brazil reached $10.6 billion during the first half of 1999,[5] with the total exposure bottoming out at $50.8 billion for the banks domiciled in G-10 countries.

In Brazil, a debt-monitoring system was also put in place to track the rollover ratios of interbank lines and later corporate credit lines. The system played an important surveillance role for the official community throughout the crisis and its resolution.

[5]See BIS (1999b).

specifics of the country as the key channels of capital flight will differ. In Korea, maturing interbank lines were seen by the official community as the core issue that needed to be resolved to enable other crisis resolution mechanisms to work. In Indonesia, on the other hand, interbank lines played a much smaller role and were part of a comprehensive rollover package, including trade lines and corporate credits, since the resolution of one of the three credit sources was dependent on simultaneously achieving a maintenance of exposure for the others. Furthermore, in the case of Indonesia, private creditors were clear in expressing that they would have shown little forbearance if they felt another creditor group with a different or similar type of claim would have used the resources generated by the initial creditor's forbearance to exit. For example, since international banks de facto maintained their exposure to most corporates through mounting arrears especially after the government sanctioned such an approach, they argued that they would not have agreed to the "Frankfurt agreement" if it would have been the case that other creditors did not at least roll over their claims for some time period.

From an analytical perspective, the actual experience in these crises as well as the views of market participants suggest the general conclusion that a crisis resolution package needs to be comprehensive in the forms of debt and capital flight that it covers when there are several important channels of capital outflows. This would be the case for most countries with an open capital account. As the experiences with capital controls show, capital that wants to leave will do so unless very strict and comprehensive controls are put in place. Therefore, in cases where creditor equality concerns are important and a broadly based hemorrhaging of capital occurs, the rollover of interbank lines will have to form an important part of any crisis resolution package together with other instruments to stabilize the crisis situation.

Were the Rollovers Voluntary?

Rollover experiences of interbank and trade credit lines to date suggest that the rollovers international banks engaged in were more or less voluntary depending on the circumstances. Market participants argue that in Korea the official community's approach was perceived as heavy handed in recognition of the fact that a Korean default had the potential of posing a threat to the global financial system. Following Korea, market participants have drawn the lesson that only if a country's crisis is of a nonsystemic nature, monetary authorities of the main creditor banks' home countries will not step in as urgently to encourage a rollover of their international banks' exposures. In this, these authorities face a trade-off between trying to help a country in crisis and ensuring the credit quality of their own banking systems. However, banks involved in the Korean rollover exercise did receive several sweeteners to encourage their agreement. All loans with an original maturity of less than one year, about $24 billion, were given an explicit sovereign guarantee and, hence, what initially was a claim of an international bank on a Korean bank became a claim on the sovereign. This sweetener that in the end, according to most of the banks involved, clinched the deal may not be available for other countries facing a Korean-style crisis for the following reasons:

- Offering a sovereign guarantee may for most countries not be seen as credible as their fiscal situation and outstanding debt may already be under the specter of default. In Korea, an OECD country, the explicit sovereign guarantee provided additional value in that it allowed the international creditor banks to free up capital set aside against the loans, as current Basle rules stipulate that no reserve capital be applied to a loan extended to an OECD sovereign. Market analysts argued at the time that this feature was especially attractive to Japanese banks, which were trying to raise their capital adequacy ratios. However, the drawback of extending a sovereign guarantee included the possible moral hazard implications for the Korean banking system and international banks, which mainly interpreted the guarantee as a form of government bailout of their claims.
- If most of a country's external debt stems from corporate sector borrowing abroad, a sovereign guarantee may not be attractive for a sovereign-in-crisis to extend. Most creditor banks therefore did not expect a guarantee of their corporate Indonesian exposure. However, later in the crisis the obligations of Indonesian banks were guaranteed by the government, at the same time an overall "pause" in corporate debt service was in place as the payment system was freezing up. At that time, neither interbank lines nor overnight credit was available to most Indonesian banks. Before guarantees covering deposits in commercial bank and payments were extended, the central bank had to take an active role in

the normal operations of the payments' system to ensure that economic activity did not stop completely.

A country in crisis may see a mandated rollover of interbank claims as a last resort, as the coercive nature of such an instrument would cause reputational damage going forward. In Brazil, the outflows generated by the cutting of interbank lines were only a relatively small part of total outflows at the time. According to market participants, the defense of the currency by the sovereign aided by the official community resulted in most of the capital outflows. By the time the currency peg was abandoned, it was clear to all that the provisioning of fresh interbank lines and trade credits by international banks would play a crucial part in an export-led recovery. In the market's assessment, it was therefore important for the authorities to ensure that throughout the crisis these banks were not discouraged from supporting the future recovery, by not coercing them to maintain their exposure at the time. In the context of the strengthened IMF program in March 1999, creditor banks participated in a truly voluntary rollover. However, by that time the creditor banks that had wished to exit had already cut their credit lines and rollover rates were basically all the way back to 100 percent as the Brazilian recovery looked increasingly likely to take hold.

Extent of Private Sector Involvement

For the three recent major rollover experiences, the record with regards to their success in securing private sector involvement and restoring external viability is seen by market participants as being mixed.

Korea

In the Korean case, thanks to the rollover, the international banks stayed involved after being convinced it was counterproductive to all run for the exits at the same time. Furthermore, Korea did have the potential of being a good future customer of the international banking community once external viability was restored and forbearance now could potentially lead to more business later. While all Korean commercial banks enjoyed a government guarantee, most international banks tried their best to "trade up" their exposure—that is, while maintaining their overall exposure, they tried to shift to better quality banks. The few Korean banks that satisfied the Basel minimum capital adequacy rules (a requirement under the IMF program) had several banks offering them credit lines at relatively favorable spreads. However, weaker banks, despite the rollover agreement, suffered a liquidity shortage and had to continue to look to the Korean government for liquidity support.

In return for their forbearance until March 31, 1998, international banks received a sovereign guarantee and their loans were rolled into one- to three-year claims and refinanced at rates that were about 150–200 basis points higher than precrisis lending rates. Given the quick export-led recovery of the Korean economy, the banks that did roll over their claims into these loans made good profits. This meant that PSI was to some extent maintained, but at a price in terms of the upgrade in the creditor. In retrospect, it is clear international banks' initial exposures were explicitly upgraded to a sovereign level and international banks did not suffer losses. At the time, however, the terms of refinancing were disputed among private creditors as the quick economic recovery was not obvious in January 1998 and many international banks believed they were rolling over at below-market rates.

Indonesia

Of the three cases discussed in Box 5.2, the Indonesian case was not so much a question of international banks being convinced of the benefits of maintaining their exposures, as this had already been de facto ensured by corporate debtors running arrears with their creditors. Instead, the challenge was to handle a systemwide bankruptcy in the corporate sector and subsequently in the financial sector, due to the collapse of the rupiah. The Indonesian experience of rollovers of interbank and trade lines was seen by markets as having to do with facilitating crisis resolution, while burden-sharing agreements were much less of an issue. Following Indonesia's Paris Club deal in September 1998, due to comparability of treatment, additional private sector assistance to the sovereign itself took place through more traditional means, such as the rescheduling, by extending maturity, of a single $350 million commercial loan (led by Bank of Tokyo-Mitsubishi) at the previously contracted interest rate (see Standard & Poor's, 1999b).

Brazil

In the most recent use of rollovers to facilitate crisis resolution, Brazil asked its creditor banks in March 1999 to maintain their interbank and trade lines at end-February levels. As noted previously, this was a voluntary agreement between Brazil and its major creditor banks. At the time of the agreement, as discussed in Box 5.2, international banks were already rolling over close to 100 percent of their Brazil exposure, and the day after agreement was reached between Brazil and its major creditors, Citigroup announced it would further increase its exposure to Brazil by 18 percent.[19]

From a PSI perspective, the rollover agreement provided by Brazil's creditor banks was seen by market analysts as an insurance, where exposure would be maintained even if there was a turnaround for the worse in investor sentiment. By the end of May, international banks participating in the rollover were reassured by signs that Brazil's economy was turning the corner and the banks' commitment to the rollover would be profitable.

Rollovers in a Portfolio of Exposures

Even if international banks agreed to the rollover of their exposures, some reduced their exposure toward Brazil and did so by shorting Brazilian bonds, such as the C-bond, which at the time was the most liquid bond in the emerging market universe. These transactions highlight one feature of using rollovers as an instrument for PSI and not only for crisis resolution. In countries with a relatively open capital account, international banks that find themselves in a situation where they have to keep exposure higher than they optimally want can often see to it that their overall exposure is reduced. For example, the bank can either short the sovereign's external debt or, if relevant, it can reduce its local lending operations if the exposure maintenance agreement only covers cross-border interbank exposure. Of course, the former would still maintain the overall foreign currency debt exposure of the private sector vis-à-vis the country.[20] However, hedging of the bank's credit exposure increases pressure in the secondary markets where the hedging takes place, potentially exacerbating overall pressures against the country.

Implications of Rollovers

The recent rollover experiences raise two questions in addition to whether they contribute to PSI or not. First, will international banks as a rational response cut lines sooner in anticipation of a forced rollover and bring forward the expected crisis? Second, what will be the likely impact on the levels and maturities of interbank debt for the other emerging market countries?

Bringing the Crisis Forward

Brazil's experience with interbank debt provided the first example of the international banking community's response to the experiences with the coerced rollover in Korea. As the international banks were now very much aware of the possibility of being encouraged to roll over interbank loans, some international banks with local operations acted preemptively and cut their interbank lines to these local operations. The remaining international banks soon followed, as

[19]Bloomberg (1999).

[20]The overall foreign currency debt exposure would be maintained, but it could be shifted from, for example, nonresidents to residents.

rumors of a forced rollover emerged and the Brazilian crisis intensified. Hence, the mere rumor, aggravated by a worsening investor outlook for Brazil, was enough to lead to the cutting of interbank lines, intensifying the pressure on the Brazilian real. International banks that were not able to cut their exposure through interbank lines could manage (reduce) their exposure through the external bond market and/or derivatives markets. Seen from the view of the private sector as a whole, possibly including resident holdings of foreign currency debt, the hedging operation would not lead to a change in overall private sector exposure and hence broad PSI, since a secondary market counterparty, which is buying the claim at a deflated price, would gain the full credit exposure. This is true as long as that counterparty is not acting on behalf of the crisis country's government. Theoretically speaking, the presence of an active derivatives market could make it easier to convince banks to maintain interbank lines, as their credit exposure can be managed through other instruments. However, practically, in a crisis situation, it is likely that counterparties acting on behalf of the government, to avoid exacerbating overall pressures, will be the ones taking the off-setting position in the market, thereby reducing overall PSI.

Most market participants were clear in expressing the Korean experience will not be forgotten and that international banks, as a rational response, will be quicker to cut exposures in future emerging market crises. Some observed that this line of reasoning also gave support to the Brazilian decision not to go for a coercive rollover, as even a hint of such a move would have triggered the additional cutting of interbank lines by international banks and would have exacerbated pressures in the bond and foreign exchange markets.

Impact of Rollovers on the Maturity and Level of Interbank Debt

Concerted rollovers of interbank debt reduce the attractiveness of this sort of debt for the lending banks involved. It may be reasonable to focus on short-term credits rather than long-term credits in the crisis resolution process, since short-term debt is a relatively dangerous source of financing for emerging market borrowers. If these borrowers would make less use of short-term debt it could prevent future crises and therefore be a step forward for the borrower as well as for the global financial system. However, targeting short-term debt may create the reverse result, encouraging creditors to lend at even shorter maturities to ensure they get their money out. Emerging market borrowers needing financing will, while moving toward a crisis situation, increasingly have to finance themselves through shorter maturities and at potentially increasing interest rates. This is counterproductive from an external vulnerability point of view as it could lead to ever-shorter maturities. Indeed, one interpretation of the 1980s debt crisis resolution is that a similar dynamic was at work when bank lending shifted following the resolution of the crisis from mainly medium- and long-term maturities to short-term interbank debt. Even shorter maturities than interbank lines would severely stretch the capability of the official financial community to put together a rescue package before all "footloose" capital has flown out.

International Bond Restructuring

A second instrument for resolving crises has been the restructuring of a country's sovereign bonded external debt (eurobonds and Brady bonds). This has been a fairly recent endeavor, with the first restructuring in the form of a bond exchange being completed by Pakistan at the end of 1999.[21] Subsequent bond exchanges have been announced or implemented for Russia and Ukraine during the first half of 2000 (see Box 5.3), and more are likely to follow.

The restructuring of a country's external debt is a serious step and something most sovereigns

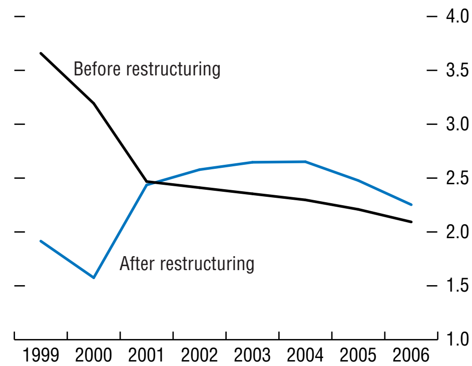
[21]Piecemeal restructurings/exchanges of maturing bonds occurred in Ukraine during September 1998 and during June–August 1999.

Box 5.3. Recent Bond Restructurings

Pakistan

After the Paris Club's decision in January 1999 to extend its "comparability of treatment" principle to eurobonds, Pakistan was tipped by many market participants as the first country likely to default on its sovereign eurobonds. Following an agreement with its London Club creditors in June 1999, Pakistan launched a more-or-less voluntary bond exchange on November 15. The exchange involved swapping three dollar-denominated eurobonds[1] with a total face value of $610 million for a six-year amortizing eurobond, paying a 10 percent coupon and with a face value of $623 million. The bond exchange enjoyed widespread participation, and in the end, 90–99 percent of all bondholders tendered each individual bond. Analysts attributed the relatively successful exchange to a number of factors: the threat of default was credible; the terms offered a sweetener compared to the prevailing market price, making it a "no-brainer" to tender the bonds, according to some market participants, as spreads were likely to narrow after the exchange had closed; the new bond would be more liquid than the old bonds; the new government following the military coup made it possible to restart creditor relations afresh; the comfort letter from the IMF was widely seen as a guarantee that the official community would stay engaged; and a five-notch upgrade by Standard & Poor's from its first-ever D rating for a sovereign to B– was a positive surprise. Pakistan's bond restructuring was also widely seen as easier to complete since the number of bondholders was rather limited, with rumors about state banks buying back the to-be-exchanged bonds in the secondary market preceding the actual exchange offer. The special nature of the investor base was, after the completion of the exchange offer, seen as limiting the usefulness of the Pakistani example for future exchanges.

Pakistan: Debt-Service Profile
(In billions of U.S. dollars)



Sources: Authorities and market estimates.

However, market participants did conclude from the exchange the fact that collective action clauses in the Pakistani U.K.-style to-be-exchanged eurobonds were not invoked, implied that their use was more limited than previously expected and hence would not play as useful a role in future bond restructurings.

In the end the Paris and London Club restructurings and the bond exchange had a favorable impact on the debt-service profile for Pakistan in 1999 and 2000 (see the first figure). However, by 2001 market estimates suggest that debt-service payments will be back to levels before restructuring and will be higher for the remaining life of the exchange bond.

Ukraine

On February 4, 2000, the Ministry of Finance of Ukraine presented an exchange proposal involving four different eurobonds[2] and all the so-called "Gazprom"[3] bonds falling due during

[1]The bonds were a $150 million, 11.5 percent eurobond due December 1999, a $160 million, 6 percent convertible eurobond due February 2002 with a put in February 2000, and a $300 million floating rate note due May 2000.

[2]The outstanding eurobonds were a DEM1,538 million, 16 percent eurobond due February 2001, a €500 million 14.75 percent eurobond due March 2000, a $74 million, 16.75 percent eurobond due October 2000, and a $258 million zero-coupon eurobond due September 2000.

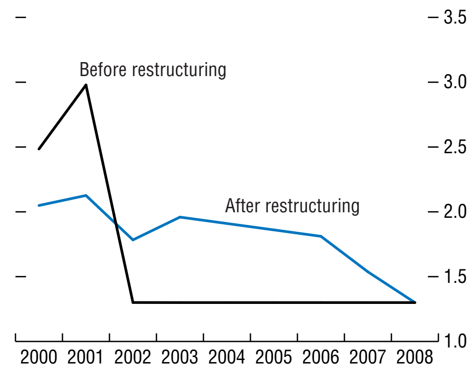
[3]Debt owed by Ukraine to the Russian gas company Gazprom for previous gas deliveries that were not paid.

Box 5.3 *(concluded)*

2000–2001. An additional offer was extended for $735 million of "Gazprom" bonds falling due after 2001. In return for the to-be-exchanged bonds, bondholders were offered at varying exchange coefficients, depending on what type of bond they were holding, either a dollar-denominated seven-year amortizing eurobond with an 11 percent coupon or a euro-denominated seven-year eurobond with a 10 percent coupon. In contrast with the Pakistan bond exchange, some of the Ukrainian eurobonds were widely held by retail investors, accounting for 50–60 percent of bondholders for some eurobonds, presenting new challenges for the lead manager of the exchange. Moreover, the exchange offer included a minimum overall participation threshold of 85 percent for those bonds falling due in 2000 and 2001, making it an imperative for the lead manager to convince as many bondholders to tender as possible. Several market participants at the time felt that the 85 percent tender requirement was set too high and would be impossible to reach. However, by setting up an ingenious fee structure the lead manager found ways to incentivize its co-leads and regional commercial banks to bring their clients' bonds into the exchange, and, by invoking CACs in three of the four eurobonds,[4] the exchange achieved a very high level of participation, in the end exceeding 95 percent of face value.

Market commentary on the exchange highlighted the importance of the no-debt stock write-off as a key reason why retail investors could be brought into the exchange. The exchange offer also included a fairly large $220 million pay-out of accrued interest, which provided most of the sweetener for many bondholders to tender into the exchange. As was the case in Pakistan, the threat of default was seen as credible. However, contrary to Pakistan the collective action clauses (CACs) embedded in three of the four to-be-exchanged bonds were invoked to facilitate the exchange and deal with any potential holdout creditors. However, the usefulness of the CACs in the case of Ukraine was mitigated by the fact that a very high percentage of participation was achieved irrespective of the CACs, and hence market participants did not view the use of the CACs as crucial in making or breaking the exchange offer. In the end, the sovereign may seem to favor CACs, as the exchange bond was issued under U.K. law and includes standard CACs.

Ukraine: Debt-Service Profile
(In billions of U.S. dollars)



Sources: Goldman Sachs and other market estimates.

While market participants consider that Ukraine's external position looks sustainable according to normal debt indicators, such as, for example, debt service to exports, the low level of foreign exchange reserves coupled with a spike in debt service made February's bond exchange unavoidable. Following piecemeal restructurings in 1998 and 1999, the 2000 exchange was a bold attempt to deal more comprehensively with the short maturity of Ukraine's bonded debt. Following the restructurings, and assuming a Houston-term Paris Club deal for Ukraine, the debt-service profile (see second figure) would improve substantially for 2000 and 2001 but by 2002 debt-service will be substantially higher than preceding the exchange. Market analysts believe that the new debt-service profile coupled with substantive net resource transfers by the multilaterals will allow Ukraine to service this debt burden.

[4]The large DEM eurobond does not have collective action clauses.

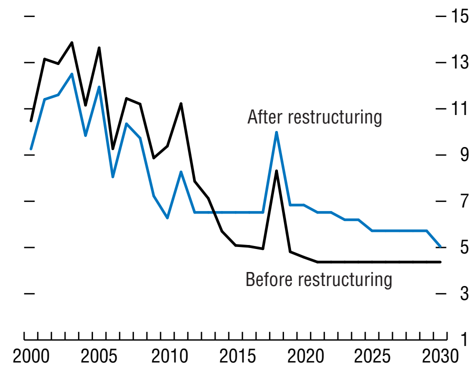
Russia

On February 11, 2000, details were released on the upcoming bond exchange of old London Club debt, the so called Prins and Ians,[5] for new 10-year and 30-year dollar-denominated eurobonds and cash. While PSI concerns did not affect the Russian decision to restructure their London Club debt, the exchange nonetheless provides a useful example of another voluntary exchange, this time of a Brady-like instrument. Also, the amounts involved and the wide variety of bondholders targeted may provide some lessons for future bond exchanges in terms of crisis resolution and PSI.

Most striking about the deal agreed between Russia and its bank steering committee was the 37.5 percent reduction in principal of Prins and the 33 percent reduction in principal of Ians. Creditors received in return a change in obligor status from Vnesheconombank to the Russia Federation. The change in obligor was important as creditors had little legal recourse after the December 1998 default on the Prins and the June 1999 default on the Ians, as Russia explicitly did not guarantee the debt incurred by Vnesheconombank.

[5]Eligible for the restructuring are $22.2 billion in Prins (bonds issued in exchange for old 1997 London Club principal), $6.8 billion in Ians (bonds issued in exchange for interest arrears on 1997 London Club debt), and $2.8 billion in past-due-interest (PDI). Of the PDI 9.5 percent will be paid in cash, while the remainder will be converted into the new 10-year bond. No debt forgiveness is intended for the past-due-interest.

Russia: Debt-Service Profile
(In billions of U.S. dollars)



Source: Market estimates.

After agreeing to the significant debt write-off, private creditors were seen arguing the case for reverse comparability where the Paris Club should, on broad “fairness” considerations (reflecting private creditors’ self-interest), grant a similar debt write-off to Russia as that given by the private sector. To date, the argument remains unsettled. Comparing the debt-service profiles before and after the new London Club restructuring, fairly little has changed in Russia’s debt-service profile (see third figure). The Paris Club is expected to discuss Russia later in the year.

only do as a last resort. To avoid this, a sovereign’s first step would usually be to try to approach creditors for new money (to service debt payments). Creditors may be willing to extend new financing to the debtor for two reasons:

- Creditors believe the sovereign is fundamentally solvent and is only facing a temporary liquidity problem, a debt-service hump, which once overcome would allow it to meet all its obligations. Clearly, the availability of new financing sends a valuable signal that the sovereign retains market access even when facing temporary difficulties. For the official community the signal is diluted, however, by the fact that it is not only the sovereign’s credit fundamentals that will determine whether it has market access or not, as this will also be a function of general market conditions.
- A sovereign may be able to raise new financing only by providing a sweetener—additional value to new creditors by diluting the claims of the old creditors. For example, by making the new creditors more senior (such as through issuing bonds securitized by future export re-

Box 5.4. Determining Market Access: The Case of Romania

Romania provides an interesting example of a country where the decision on whether the country enjoyed market access or not affected the decision by the official community of what kind of PSI to insist upon.

During the early spring of 1999 the Romanian authorities decided, backed by their financial advisors, that rather than restructure their outstanding eurobonds they wanted to repay the $750 million in maturing eurobonds during May and June of 1999 and raise sufficient new financing in the international capital market preceding the adoption of any IMF-supported program. This would ensure that official resources were not replacing private money in replenishing Romania's foreign exchange reserves. The position of the authorities critically depended on the various involved parties' views on the market access of the sovereign. After having failed to attract sufficient investor interest even at very high yields to fill the official community's requirement for private sector financing, Romania requested a waiver from the IMF that was subsequently granted.

Following Romania's experience, it became increasingly clear to most market participants that to date there exists no simple framework to condition IMF programs and the type of PSI considered on whether a country has market access or not. Furthermore, determining market access for a country in advance is difficult and opinions are likely to differ between the IMF, its members, and the market. In the end, market participants judged that Romania lacked a credible threat of default as they thought it was very likely that the international financial institutions, especially following the war in Kosovo, would help the country stay current on its external obligations.

ceivables, for example). Financing of this type, while voluntary, raises several issues. Market participants have argued that if a sovereign can only raise financing through issuing senior debt, all is not well, and it may not be in the official community's interest to support such endeavors. On the other hand, other market participants have argued that as long as these new senior credits affect only other private sector credits, it should be left to the market to decide what is an appropriate response.

While it would be very useful to know which countries have market access and which countries do not, it is very hard to determine in advance the likelihood that a sovereign would be able to access either of the two types of new financing discussed above. An example of the difficulty in determining market access and how it has affected the official community's approach to PSI is discussed in the case of Romania in Box 5.4.

If no new financing is available, and the official community is reluctant to provide financing, the sovereign faces the decision of restructuring its debt. At this point the market will have to determine whether it believes the sovereign faces a liquidity or solvency problem. The answer to that question will crucially affect the terms of the eventual restructuring and what kind of haircut relative to par creditors will accept. For example, will they remain unscathed from an NPV point of view and only participate in a rescheduling, or does the creditor have to provide a significant NPV haircut to ensure the external viability of the crisis country? Most countries fall somewhere along this spectrum, but exactly where is impossible to determine deductively as many other factors affect the debt-servicing capability of a given country. This is one of the main reasons why there is no easy way to establish some hard and consistent rules on how a specific debt restructuring will play out.

Why would existing creditors agree to a restructuring? A simple answer is they believe the alternative—default—and their ability to collect payments in that scenario is worse. This is the reason that most market participants view the recent bond exchanges as "quasi-voluntary," much in the same way the Brady deals were once viewed by the commercial banks. While creditors facing a default have legal recourse and can try to seek the attachment of various foreign assets of the sovereign, it is still very unclear what recovery rates can be expected from such a course of action.

In accepting a restructuring proposal, creditors will have to believe that the sovereign stands a reasonable chance of servicing its new obligations for a reasonable period of time. Therefore, a crucial part of any restructuring deal is the incentive of the sovereign to honor its contracts. Some observers have pointed out that a sovereign will only honor its new contracts if the cost of not doing so exceeds that of staying current on its payments. In their seminal piece, Bulow and Rogoff (1989) argued that creditors have as an important disciplining device, the ability to stop the debtor transacting "freely in the financial and goods markets." While this may have been true in the 1980s when banks were both the extenders of trade credits and medium- to long-term loans, today bondholders would have to rely more on the sovereign's distress, for example, output losses associated with a default (see Dooley, 2000) as encouraging the servicing of old and newly negotiated debt. From this point of view, it would not be in the official community's interest to make defaults and restructurings "too easy" as creditors would rarely agree to actually participate in the restructuring, and many market participants have, therefore, argued that their disciplining device, potential output losses, is a necessary element of the functioning of international capital markets. Indeed, creditors need advance assurances that they can inflict some sort of damage on the debtor if the debtor fails to pay, if they are to extend the loan to begin with. Without these implicit assurances the bond market as it is today would vanish.

Comprehensive Versus Limited Approach

When a sovereign is unable to fully service its external bonded debt, regardless whether this is due to a liquidity or solvency crisis, the authorities will have to decide whether to offer a comprehensive restructuring package or to limit the restructuring to the bonds themselves or some other form of foreign currency debt.[22]

As most eurobonds and Brady bonds have cross-default clauses or cross-acceleration clauses in their covenants, it may be impossible for a sovereign debtor to pick and choose which bondholders are repaid and which ones are not. This has led to the argument that a sovereign debtor should be at least comprehensive within the whole external sovereign bond community as an asset class, since it would rarely be able to default on debt service on a short maturity eurobond while continuing to service a longer-term eurobond, or vice versa, without the bondholders taking actions.[23] Therefore, a cross-default clause ensures a certain amount of "pragmatic equality" between bondholders.

Experience from Ecuador also indicated that holders of Brady bonds would have little sympathy for the rumored preferential treatment of eurobonds and the dollar-denominated domestically issued debt. Market participants also argued at the time that the perceived decision by the Ecuadoran authorities to treat eurobonds as de facto senior reflected the wish to make eurobonds more attractive to Brady bondholders by offering a relatively more senior instrument to them in a future bond exchange. However, a

[22]It is possible that the country would want to default on creditors that either provide no significant future source of financing (for example, Brady bonds held by the original lenders), are easier to control (for example, domestic foreign currency–denominated debt or rolling over interbank lines), or reduce payments to the official community.

[23]One can argue that in this case both types of bondholders would have an incentive to accelerate their claims and sue the debtor. The shorter-term bondholder would accelerate its bond in such a way that it becomes immediately due and payable and try to attach debt-service payments made to the longer-term bondholder. the longer-term bondholder would like to try to avoid scarce assets from being used up by the sovereign debtor to pay back the defaulted-upon shorter-term bondholder, and thereby choose to accelerate and avoid the reduction of the value of the longer-term bondholder's claim.

creditor group at the time (the Ecuador Creditors Advisory Group Inc., ECAG) stated that "we would view a decision to make payments on the eurobonds at present as an unfair distribution of assets among creditors and, as such, strong evidence of bad faith" and the "Eurobonds do not enjoy any contractual provisions of seniority to any of the Brady bonds. Nor, conversely, do the Brady bonds' governing documents provide for their subordination to the Eurobonds." (See Dow Jones 1999.) A subsequent restructuring of short-term dollar-denominated domestic bonds was considered as relatively advantageous, provoking the dissatisfaction of external private creditors who still question the "fairness" of the domestic bond exchange. The restructuring of domestic debt is likely to remain an outstanding issue in any bond exchange involving Ecuador's external bonds.

Ecuador's experience suggests that any future debt restructuring proposal for a sovereign in debt-servicing difficulty is expected by markets to be comprehensive enough in scope to cover at least the total of the foreign currency–denominated debt of a sovereign. Preferential treatment of domestic debt is likely to be interpreted by external private creditors as if the authorities were acting in bad faith. External creditors may welcome the reverse action, but it may be politically impossible for the sovereign to offer domestic debt holders a worse deal than external creditors.

Markets, however, debate the issue of whether a restructuring of external bonded debt needs to be comprehensive across other foreign currency–denominated instruments as well. In discussing interbank rollovers above, the answer depended on what the underlying objective of the restructuring is. If the underlying repayment pressures stem from large upcoming amortizations of bonded debt, it may be possible to limit the restructuring offered to these specific bonds. However, the situation will be complicated by the fact that a restructuring of bonds typically needs to be comprehensive across the asset class, and it is likely that bondholders will call for the restructuring of other forms of long-term debt for equality of treatment reasons. Furthermore, Paris Club comparability of treatment rules may indeed insist on comparability of treatment of all forms of private sector sovereign debt, resulting in a comprehensive restructuring.

Factors Affecting the Restructuring Terms of Bonds

Haircut or Sweetener

In evaluating bond exchanges various investor groups will have different reaction functions. Mark-to-market investors, having borne the full brunt of the fall in the secondary market price of the to-be-exchanged bonds, tend generally to compare the NPV value of the exchange offered (at some discount rate) to the current market price of the to-be-exchanged bonds. In the simplest case, if the NPV of the exchange bond is higher, taking into account the likelihood of the exchange succeeding and the haircut in terms of a potential debt write-off, then the holder of the to-be-exchanged bond has an incentive to tender his bonds in the exchange. This is the way most fund managers would rationally respond. For commercial banks a similar response function is less likely, but a reasonable approximation. The response function of retail investors is much more uncertain as their tender decision may be based less on an NPV comparison than on whether or not they have to participate in a debt write-off.

As Table 5.2 shows, all the recent successful bond exchanges have involved some form of substantial sweetener, in Russia coupled with the upgrade in the obligor, to encourage bondholders to participate in the exchange. The sweetener has in many cases also reduced the incentive for at least mark-to-market bondholders to litigate as capturing the sweetener provided an immediate gain while the outcome from litigation and value recovered is much more uncertain and time-consuming.

Were the Bond Restructurings Voluntary?

The bond exchanges in Ukraine and Pakistan were successful partly due to the fact that these countries were able to convince bondholders

Table 5.2. Estimated Haircuts for Different Emerging Market Bond Restructurings

	Date of Listing	Opening Price	Price One Week Before Announcement[1]	Price One Week After Announcement[2]	Haircut: Face value write-off	Haircut: Relative to listing price	Haircut: Relative to market value
					(In percent)		
Pakistan							
6 percent USD 2002 Eurobond	Feb. 97	100.0	58.3	60.4	0.0	–39.6	3.5[2]
Ukraine							
16 percent DEM 2001 Eurobond	Feb. 98	100.0	55.5	67.0	0.0	–33.0	20.7[3]
Russia							
Prins	Dec. 97	57.8	18.5	24.4	–37.5	–57.7	32.1
Ians	Dec. 97	67.2	21.1	25.0	–33.0	–62.7	18.8
Ecuador							
Brady Par Bond	Feb. 95	27.4	n.a.	n.a.	n.a.	n.a.	n.a.
Brady Discount Bond	Feb. 95	47.0	n.a.	n.a.	n.a.	n.a.	n.a.
Brady PDI Bond	Feb. 95	27.0	n.a.	n.a.	n.a.	n.a.	n.a.
Nigeria							
P-Notes	Jan. 88	n.a.	n.a	n.a.	n.a.	n.a.	n.a.
Brady Par Bond	Jan. 92	38.5	n.a	n.a.	n.a.	n.a.	n.a.

Source: IMF staff calculations.
Notes: Positive haircuts implies a gain for the creditor, while a negative number is a true haircut. N.a. means not available.
[1]Ask price, includes accrued interest in the price as most bonds were in default except for Pakistan where the accrued interest is estimated.
[2]If the change in unaccrued bond prices is studied, that is, the up-front cash sweetener is ignored, the positive haircut is 0.7 percent.
[3]If the change in unaccrued bond prices is studied, that is, the up-front cash sweetener is ignored, the positive haircut is about 5 percent.

that there was no alternative to accepting the exchange except default. This belief was crucial since if the individual bondholder believes an improved exchange offer is available further down the line there will be no reason to tender the bonds.

Seniority of Exchange Bond

The value of improving the seniority for one group of bondholders likely comes at the expense of other creditors (see Box 5.3 and the discussion on Russia). In the case of Russia, in exchange for an upgrade in the seniority of the new London Club eurobonds to Russian Federation obligor status, London Club creditors agreed to an important concession, namely a significant write-down in principal of both Prins and Ians. In granting this significant debt relief, potentially resulting in a 60 percent haircut relative to the listing price (see Table 5.2), the key consideration for creditors was which security would Russia default on first in the event of a future default, the old eurobonds or the London Club eurobonds. It can be argued that the upgrade in obligor in the case of Russia's old London Club debt will create an additional $22 billion in Russian Federation indebtedness and old outstanding Russian eurobonds should react negatively, if they are truly seen as having equal seniority. However, many bondholders still view the new to-be-issued exchange bonds as de facto junior as their When-Issued[24] aliases still trade about 150 basis points wide of the old Russian yield curve. Still, the documentation for the new London Club bonds includes a put mechanism that mimics the right to cross-accelerate, found in old Russian eurobonds, to allay remaining misgivings on this count.

Investor Base and Participation Rate

The composition of the investor base is an important factor in the market's view in determin-

[24]Exchange bonds that are traded before the actual completion of the exchange are often referred to as When-Issued bonds. When-Issued trading occurred in Pakistan, Ukraine, and Russia.

ing the size of the sweetener required to achieve the necessary participation rate for any given voluntary exchange to succeed. For instance, in Ukraine, the fact that there was a large retail base combined with the 85 percent minimum tender requirement made it potentially harder to convince bondholders to enter into the exchange, implying the size of the sweetener needed to be greater (see Table 5.2). Market participants motivate the different sweeteners offered in Pakistan (3.5 percent) compared to Ukraine (21 percent) largely in terms of the two different investor bases. However, there was some leeway in the Ukrainian bond exchange as three of the four bonds were issued under U.K. law and therefore had CACs, which meant that only 75 percent of bondholders were needed to agree to the exchange terms in order to bind in potential holdouts as well.

Paris Club Comparability of Treatment and Private Sector Involvement

Historically, international commercial banks have had extensive experience with the Paris Club and the application of the "comparability of treatment" principle to their private sector claims. However, it was not crucial for holders of international bonds to stay as closely informed of Paris Club actions, and, indeed, secondary market prices of bonds usually reacted positively after the announcements of Paris Club and London Club deals. The Paris Club agreement to restructure Pakistan's external debt in January 1999 is considered by market participants as a watershed in the evolution of the international financial architecture as Pakistan constitutes the first case in which a sovereign was expected to ensure comparable treatment from its bondholders as well.[25] The decision damaged the implicit halo around sovereign bonds, and the "sacrosanct" nature of bonds was further undermined by Ecuador's default in September 1999, initially on its Brady bonds, but subsequently on its eurobonds as well. As bonds constitute the majority of new financing raised by sovereigns with access to the international capital market, market participants have had to reevaluate the likelihood of a country defaulting on its external bonded debt and their likely recovery value. Rather quickly, market participants and sovereign rating agencies have judged countries with a large share of Paris Club debt relative to total external debt to be more likely to be subject to PSI pressures from the official community (see Standard & Poor's, 1999a). As such, market participants now consider it important to look at the sovereign's debt-service track record with the Paris Club, as the terms the Paris Club was seen offering depended on this track record. The latter consideration had previously been mostly ignored among investors buying eurobonds. For example, Ecuador managed to issue $500 million in eurobonds in 1996, while it was already running arrears on its Paris Club debt. Furthermore, Nigeria, following Ecuador's default, is seen by markets as next in line for the official community's PSI initiative considering its estimated $22 billion in accumulated arrears to the Paris Club. The workings of the Paris Club, an institution that had not previously figured prominently in bond investors' portfolio allocation decisions, has now become a key consideration.

Paris Club creditors have always been seen as assigning importance to the principle that all creditors bear a fair burden of the financial support for a debtor country facing difficulties, and that debt-service savings granted by the Paris Club not be diverted to the benefit of other creditors (see Box 5.5). To this end, Paris Club agreements contain a clause under which the debtor agrees to seek terms that are at least comparable to those obtained in the Paris Club

[25]In previous reschedulings, sovereign bondholders had been excluded, on what are now seen as *de minimis* grounds, that is, the value of outstanding claims were considered too small to warrant a rescheduling. This was not deemed the case in Pakistan, where bond payments comprised a sizable share of total debt-servicing obligations during the consolidation period, amounting to about $610 million or roughly 20 percent of these obligations (see Box 5.5 for definition of terms).

Box 5.5. The Workings of the Paris Club[1]

The Paris Club is an informal group of creditor governments, mainly from industrial countries, that convenes to reschedule the bilateral debt of a debtor country experiencing debt-servicing difficulties and pursuing an adjustment program supported by an upper credit tranche arrangement with the IMF. The fact that Paris Club debt relief is conditional on the pursuit of an IMF program underscores creditors' views that the underlying sources of financial distress should be addressed so that they are not merely providing stopgap debt-service relief. However, the fact that some countries have rescheduled their debt a number of times through the Paris Club, however, suggests the constraints imposed by the operating methods of a Paris Club rescheduling combined with the adoption of an IMF program may not be sufficient to restore medium-term viability.

Coverage

Debt eligible for a Paris Club rescheduling or stock reduction includes arrears and medium- and long-term debt falling due during the "consolidation period"—namely, the period spanning the IMF arrangement. Only debt contracted or disbursed before a specified cutoff date is considered "eligible," with the cutoff date being established at the time of the country's first Paris Club rescheduling and rarely being altered thereafter. In contrast, for obligations held by the private sector the cutoff date is not as important and there is no consolidation period. Rather, all London Club claims are usually considered for rescheduling irrespective of maturity.

[1]See Standard & Poor's (1999a), and IMF (1994 and 1995b).

Terms

Debt relief provided by the Paris Club has typically taken the form of flow reschedulings, with the terms governing concessionality depending on the debtor country's income level. The rescheduling terms for both low- and middle-income countries have evolved over time with a lengthening of maturities, a move from flat to graduated repayment schedules, and increased concessionality for low-income countries. Currently, only HIPC (highly indebted poor countries) countries are eligible for "stock-of-debt operations" under so-called Lyon or Cologne terms, although exceptions have been made in the past for the middle-income countries of Egypt and Poland.

Since 1990, debt reschedulings of lower-middle-income countries have typically been governed by so called Houston terms, which provide for the rescheduling of debt-service payments on pre-cutoff date debt on nonconcessional terms, up to 8 years in grace and a maturity of 15 years. However, following the 1992 agreements with Argentina and Brazil, creditors have made increasing use of graduated payment schedules, with up to 15 years maturity and 2–3 years grace. In general, Houston terms embody an implicit NPV reduction as claims are rescheduled at below actual country-specific market rates.

In 1988, the Paris Club started to reschedule the debt of low-income countries on concessional terms, referred to as Toronto terms, which entailed providing relief in net present value (NPV) terms of up to one-third. The extent of concessionality has increased over time, with so-called Naples terms of 1994 providing for maximum NPV reduction of 67 percent and Cologne terms in 1999 increasing the maximum to 90 percent.

rescheduling from other creditors, excluding multilateral institutions.

Typically, Paris Club creditors have not been viewed by market participants as concerned with the precise form debt restructuring takes, but rather the effective relief it provides. Experiences with London Club[26] restructurings, which mostly have involved bank loans, provide

[26]The London Club is an informal group of commercial creditors—in the 1980s and 1990s, mainly commercial banks—that has met since to reschedule sovereign debt.

some indication of how market participants view the way the Paris Club assesses comparability of treatment. With regards to London Club restructurings, a case-by-case approach has been followed where there has been no use of the consolidation period for private sector loans (see Standard & Poors, 1999a). However, with regards to bond exchanges the Paris Club has not specified in detail how it assesses comparable treatment. The Pakistani exchange was therefore viewed by market participants as a first opportunity to gauge what determined whether an exchange was adequately comparable for the Paris Club. For example, it was observed that there seemed to be some flexibility in the Paris Club's application of the treatment, as the maturity extension for the Paris Club was longer than that provided by the private sector through the new exchange bonds. This flexibility was appreciated by most market observers, but uncertainty remains. Generally, some market participants have noted the following four factors as being of relevance to the Paris Club when it determines whether a bond exchange is comparable or not.

- Maturity extension and the use of grace periods. If the interest rate that the Paris Club charges on its loans is the same as that charged by the private sector, a restructuring deal by the private sector could be seen as roughly "similar" if the private sector also gives the same maturity extension and grace period. However, interest rates are not the same, since the private sector charges a higher market rate and the Paris Club creditors usually have a lower interest rate on their loans.
- Relative changes in NPV of the claims restructured. A second consideration to assess comparability of treatment could be to look at the relative changes in NPV before and after the restructuring for the Paris Club and the private sector. This may be difficult to assess[27] as official creditors generally lend at submarket interest rates. The restructuring efforts that are undertaken by the two creditor types can, however, be compared if a common new market discount rate is used.
- Duration. Another way in which a Paris Club deal can be compared with a deal reached with bondholders is to look at the absolute or relative change in duration for a similar maturity extension. Duration provides a measure of average time to maturity of the credit weighted by its cash flow and, as such, it is another measure of the restructuring/rescheduling effort made by creditors. Duration calculations depend critically on the maturity date and amortization profile of the obligation. Since Paris Club claims generally have much longer average maturities than private claims, it is relatively easier for private creditors to achieve a larger percentage change in duration.
- Cross-default clauses. Another reason why comparable treatment is seen by market participants as requiring fairly flexible interpretation is that cross-default clauses on bonded debt will lead to a much larger share of the bondholders' claims being affected by a comparability extension than the eligible official debt, which falls due during the consolidation period.

Still, concerns have been expressed about the lack of a clear definition, or transparent rules of the game, on how the Paris Club assesses comparability of treatment in cases such as Pakistan, and potentially in the future. Market participants argue that this lack of clarity introduces additional uncertainty to the international investor's lending decision, further elevating the cost of financing for borrowing countries. However, many in the official community have argued that higher borrowing costs for sovereigns, limiting the access of some sovereigns to the capital market, may not be inappropriate. The increase in cost would simply reflect the removal of an implicit subsidy given to bondholders (and thereby debtors) when they were not subject to comparability. However, it is recognized by the official sector that at some point that additional cost, and any additional uncer-

[27]See Table 5.2 with a comparable NPV haircut relative to par of 40 percent for one of Pakistan's eurobonds.

tainty or lack of transparency, could be excessive and create distortions in debt flows in its own right.

While market participants claim to have always incorporated the impact of a probable Paris Club restructuring on a country's debt service profile well in advance of the actual Paris Club decision, the market has now to adapt and evaluate the impact and probability of the extension of comparability of treatment to international bonds. Recent price actions in the secondary market for Nigerian Brady bonds (see Box 5.6), and even for Russian MinFins, indicate that the market is adjusting. It has been pointed out by several recent market reports that a Paris Club deal or sometimes an increased probability of an IMF-supported program can in some instances lead to a negative secondary market reaction as the bond's price adjusts due to the increased likelihood of being restructured. The reduction in price, therefore, reflects instrument-specific restructuring concerns rather than an evaluation of the attractiveness of the reform program as such.

Conclusions

As noted at the outset, efforts at crisis prevention and resolution that succeed in reducing potential inefficiencies and instability in the international financial system are in the interest of both the private and the public sector. Unlike in the domestic context, in the international context in the absence of clearly established rules of the game, the approaches adopted toward crisis resolution, and the extent to which they are interpreted by market participants as setting a precedent, have profound implications for the workings of the international financial system and the nature and structure of international capital flows.

Market participants' responses to the array of crisis prevention proposals have been mixed and in many cases colored by a general lack of awareness of official sector initiatives. Efforts to promote improved debt management have received unequivocal support, as have proposals to enhance debtor-creditor dialogue as a means of strengthening trust in the lending relationship in normal times and facilitating negotiations in the event of debt-servicing difficulties. While there has been more understanding from the private sector on proposals to introduce CACs in bond documentation for new bonds, other initiatives have been more controversial. There remains little agreement on the appropriate forum for organizing debtor-creditor relations in times of crisis, and involuntary payments standstills and stays on litigation are viewed as an infringement on creditors' contractual rights. Market participants do not generally see market-based capital controls as long-term solutions to crisis prevention, as they may potentially hinder the development of a country's financial system while potentially exacerbating local asset price volatility.

The experience with concerted interbank rollovers in Korea, Indonesia, and Brazil have been interpreted as suggesting that interbank lines more likely than not will form part of future crisis resolution packages. The expectation by the market that this will be the case will likely lead at least some international banks to cut their lines and run early in the face of an imminent crisis. Some market participants have indeed pointed out that Brazil's decision not to force a rollover of interbank lines reflected the concern that international banks would cut their interbank lines to an even larger extent. Alternatively, the possibility of an imminent crisis could prompt international banks to hedge or offset their exposures in other markets through, for example, short positions on bonds or derivatives. The different experiences of Korea and Brazil demonstrated that the effectiveness of agreed-to rollovers of interbank lines in maintaining international banks' actual overall exposures to a country, rather than simply impacting the composition of their exposures, is a function of the extent of development of markets for the country's external debt, and more generally of how closed and well-controlled its capital account is. In the case of Brazil, there was a ready market for international banks to offset

Box 5.6. Ecuador and Nigeria: The Next Test for Private Sector Involvement

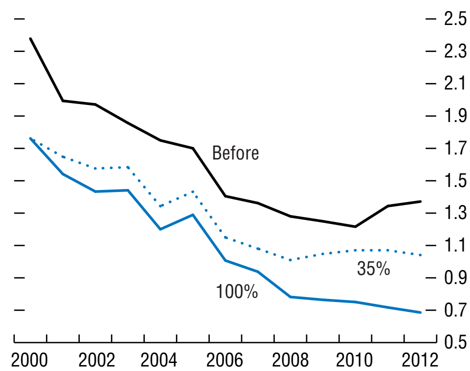
Ecuador

On September 28, 1999, Ecuador became the first sovereign to default on a Brady bond after the expiration of a 30-day grace period. It can be argued that the crisis had been long in the making and reflected internal political problems aggravated by external shocks, such as the "el Niño" weather phenomenon. At the time of the default Ecuador's external bonded debt consisted of collateralized Bradys (Pars and Discounts) with an outstanding amount of $3.1 billion, uncollateralized Brady (Past-Due-Interest, PDIs) amounting to $2.8 billion, and a stock of $0.5 billion of dollar-denominated eurobonds.

Markets were aware of the increasing risk of nonpayment by Ecuador and this was duly reflected by high secondary market spreads. Even though markets generally perceived Ecuador to be a test case for the official community's new PSI policy, the effects of Ecuador's default were effectively "ring-fenced" as its importance in many emerging market investors' portfolios was small (Ecuador's weight in J.P. Morgan's EMBI+ index is about 1.2 percent). However, the precedent value of Ecuador did receive some attention and led to the forming of the Ecuador Creditors Advisory Group (a group of bondholders) and to the subsequent acceleration of the defaulted Discount bond.

Since then, continued domestic turmoil has precluded any real progress in normalizing Ecuador's relationship with external creditors through a voluntary bond exchange. However, following what seems to be a successful dollarization program and the potential three-year $2 billion loan package provided to Ecuador by the official community, more positive momentum emerged, leading market participants to analyze the outcome of a potential restructuring case if it is done similar to Russia (see first figure, which is based on market estimates of the debt service profile of Ecuador using alternative scenarios of private sector haircuts in terms of initial face value (debt write-offs)). The analysis has some relevance as the market now fully believes that Ecuador's bond exchange offer will include some debt write-off. While the first figure shows different haircut assumptions reflecting market analysis, the resulting debt-service profile for Ecuador remains relatively unchanged due to debt service made to official creditors (under assumed Houston terms), which will still be fairly high in 2000 and 2001 although very little is paid to private creditors (nothing in 2000) in those two years (due to an assumed step-up exchange bond).

Ecuador: Debt-Service Profiles with Alternative Debt Write-Offs
(In billions of U.S. dollars)



Source: Market estimates.

Nigeria

Market participants have worried for some time about the Paris Club invoking the comparability of treatment principle in the case of Nigeria and encouraging the restructuring of the Brady Par and P-notes.[1] According to market participants, underlying the Paris Club's motivation is the fact that Nigeria currently has Paris Club arrears of roughly $22 billion[2] of a total debt owed to the club of $26 billion. The debt service on this debt is estimated, if a nonconcessional flow rescheduling is given, at $2.3 billion in 2000. In

[1]Previously restructured trade credits, repackaged into a bond in 1988.

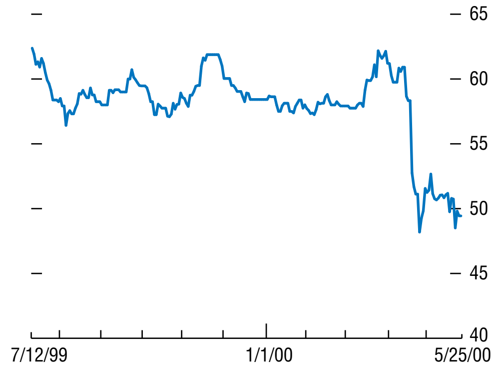
[2]Debt and debt-service numbers are based on market estimates.

all, Paris Club debt constitutes roughly 80 percent of total Nigerian sovereign external debt. Private sector debt, in the form of collateralized Brady Par bonds and uncollateralized P-notes are together estimated at an outstanding $3.8 billion with $335 million in estimated debt service. Debt service due to multilateral creditors was estimated at $700 million.

A factor increasing the likelihood of a Nigerian restructuring is its self-imposed debt service cap at $1.5 billion a year. This cap, originally announced when the oil price stood at about $10 a barrel, has drawn the ire of the markets as it remains unchanged despite a near tripling in oil price. According to some market participants, the Paris Club has agreed to the size of the cap and is ready to limit expected debt service to a more modest size to comply with the cap. The view that Nigeria will at some point restructure its private sector debt gathered strength following the IMFC/World Bank meetings, when a major investment bank published in April its views on the key facts that had emerged from the meeting.[3] The reaction took place in the form of a sharp correction in the

[3]See Chase Manhattan (2000a).

Mid-Price of the Nigerian Brady Par Bond



Source: Bloomberg Financial Markets L.P.

market price for Nigerian Par and P-notes (see second figure).

Against a backdrop of strong Nigerian export receipts due to the high oil price and hence an improved balance of payments, market participants are keenly watching how the case of Nigeria will be handled in the event the Paris Club calls for comparable treatment and what this entails for the official community's PSI strategy going forward.

their loan exposures by shorting the country's external debt, while such an exercise was much more difficult in the case of Korea, where the amount of external debt outstanding was limited. A clear conclusion is that undue emphasis cannot be placed on interbank rollovers alone, and for them to be effective they must be part of comprehensive crisis resolution packages.

A key lesson from the 1980s is that as particular lending instruments are involved in restructurings, the private sector will seek out new instruments that increase the probability of repayment and are insulated from restructurings. The large-scale restructuring of syndicated bank loans in the aftermath of the 1980s debt crisis, while leaving eurobonds untouched, provided an important impetus to the use of the international bond market for emerging market borrowers. Experience following the most recent string of crises has firmly pierced the halo surrounding international bonds. This experience with bond restructurings and PSI continues to evolve relatively rapidly, with the market focused presently on the cases of Ecuador and Nigeria (see Box 5.6), which raise new questions. It is natural to expect that, as bond restructurings become more common, private sector creditors will increasingly try to structure debt so that it is harder to restructure, for example, by issuing securitized or guaranteed debt. Indeed, many have indicated their desire to securitize a greater share of debt issued by state-owned enterprises (for instance, debt collateralized by export receivables) and, in some instances, to seek government or multilateral guarantees on loans to private enterprises.

References

Ariyoshi, Akira, and others, 2000, *Capital Controls: Country Experiences with Their Use and Liberalization,* IMF Occasional Paper No. 190 (Washington: International Monetary Fund).

Bank for International Settlements, 1998, *BIS Consolidated International Banking Statistics for End-June 1998* (Basel, November).

———, 1999, *BIS Consolidated International Banking Statistics for End-June 1999* (Basel, November).

Bank of England, 2000, papers prepared for IPMA Roundtable on Legal and Technical Features of the Emerging Debt Markets, London, February.

Basel Committee on Banking Supervisions, 1999, *Supervisory Lessons to be Drawn from the Asian Crisis* (Basel, June).

Bloomberg, 1999, "Citigroup Increases Trade, Loans to Brazil" (March).

———, 2000, "Ecuador Officials to Meet Bondholders Starting May 1" (April).

Buchheit, Lee, 2000, "Sovereign Debtors and their Bondholders" (unpublished; New York: Clearly, Gottlieb, Steen & Hamilton).

———, and G. Mitu Gulati, 2000, "Exit Consents in Sovereign Bond Exchanges," *UCLA Law Review*, Vol. 48 (forthcoming).

Bulow, Jeremy I., and Kenneth Rogoff, 1989, "A Constant Recontracting Model of Sovereign Debt," *Journal of Political Economy*, Vol. 97 (February) pp. 155–178.

Chase Manhattan, 2000a, *Burden Sharing in Africa—A Report from the Interim IMF/World Bank Meetings*, International Fixed Income Research (New York, April).

———, 2000b, *What Is the Best Way to Facilitate Sovereign Debt Workouts*? Weekly Focus, International Fixed Income Research (New York, May).

Cline, William R., 1984, *International Debt: Systemic Risk and Policy Response* (Washington: Institute for International Economics).

Corrigan, Gerald, 2000, "Resolving Financial Crises: A Shared Responsibility," *Goldman Sachs Global Economics Weekly* (New York, May).

Council on Foreign Relations, 1999, *Safeguarding Prosperity in a Global Financial System: The Future International Financial Architecture* (Washington: Institute for International Economics).

———, 2000, "Sovereign Restructuring Principles" (unpublished; May).

Dixon, Liz, and David Wall, 2000, "Collective Action Problems and Collective Action Clauses," *Financial Stability Review,* Bank of England (June), pp. 142–53.

Dooley, Michael P., 1994, "A Retrospective on the Debt Crisis," NBER Working Paper No. 4963 (Cambridge, Massachusetts: National Bureau of Economic Research).

———, 2000, "Can Output Losses Following International Financial Crises Be Avoided?" NBER Working Paper No. 7531 (Cambridge, Massachusetts: National Bureau of Economic Research).

Dow Jones Newswires, 1999, "Creditors Say Ecuador Must Treat All Bondholders Equally" (October).

Eichengreen, Barry, 1999, "Toward a New International Financial Architecture: A Practical Post-Asia Agenda" (Washington: Institute for International Economics).

———, and Ashoka Mody, 2000, "Would Collective Action Clauses Raise Borrowing Costs?" NBER Working Paper No. 7458 (Cambridge, Massachusetts: National Bureau of Economic Research).

Folkerts-Landau, David, and Peter Garber, "The New Architecture in Official Doctrine," *Global Markets* (London: Deutsche Bank, April).

Gallego, Francisco, Leonardo Hernández, and Klaus Schmidt-Hebbel, 1999, "Capital Controls in Chile: Effective? Efficient?" Working Paper No. 59 (Santiago: Central Bank of Chile, December).

Group of Ten, 1996, The Resolution of Sovereign Liquidity Crises: A Report to the Ministers and Governors (Basel: Group of Ten).

Haldane, Andy, 1999, "Private Sector Involvement in Financial Crisis: Analytics and Public Policy Approaches," *Financial Stability Review,* Bank of England (November).

H.M. Treasury, 2000, "Chancellor Encourages Use of Collective Action Clauses to Promote Financial Stability," News Release (London, January).

International Financial Institution Advisory Commission, 2000, *IFIAC Report*. Available via Internet: phantom-x. gsia.cmu.edu/IFIAC/usmrptdv.html

International Monetary Fund, 1994, *Official Financing for Developing Countries*, World Economic and Financial Surveys (Washington, December).

———, 1995a, *International Capital Markets: Developments, Prospects, and Key Policy Issues*, World Economic and Financial Surveys (Washington, September).

———, 1995b, *Official Financing for Developing Countries*, World Economic and Financial Surveys (Washington, December).

———, 1998a, *Capital Account Liberalization: Theoretical and Practical Aspects*, IMF Occasional Paper No. 172 (Washington, September).

———, 1998b, *International Capital Markets: Developments, Prospects, and Key Policy Issues*, World Economic and Financial Surveys (Washington, September).

———, 1999a, "Involving the Private Sector in Forestalling and Resolving Financial Crises" Policy Development and Review Department (Washington: IMF, April).

———, 1999b, *International Capital Markets: Developments, Prospects, and Key Policy Issues*, World Economic and Financial Surveys (Washington, September).

———, 1999c, "Report of the Managing Director to the Interim Committee on Progress in Strengthening the Architecture of the Financial System" (September).

Krugman, Paul, 2000, "Reckonings; Errors of Commission," *New York Times*, March 8.

Lane, Timothy, and others, 1999, *IMF-Supported Programs in Indonesia, Korea, and Thailand: A Preliminary Assessment*, IMF Occasional Paper No. 178 (Washington: International Monetary Fund).

Meltzer, Allan, 2000, Statement of Allan H. Meltzer at the Hearing on the Final Report of the International Financial Institution Advisory Commission, Senate Committee on Banking, Housing and Urban Affairs (March 9).

Milivojević, Marko, 1985, "The Debt Rescheduling Process" (London: Frances Pinter).

Mussa, Michael, 1999, "Reforming the International Financial Architecture: Limiting Moral Hazard and Containing Real Hazard," in *Capital Flows and the International Financial System,* Reserve Bank of Australia Economic Group, Conference Proceedings (Sydney: Reserve Bank of Australia), pp. 216–36.

Petas, Peter, and Rashique Rahman, 1999, "Sovereign Bonds—Legal Aspects That Affect Default and Recovery," *Global Emerging Markets—Debt Strategy* (London: Deutsche Bank, May).

Rhodes, William R, 1989, "A Negotiator's View," in *Solving the Global Debt Crisis: Strategies and Controversies by Key Stakeholders*, ed. by Christine Bogdonowicz-Bindert (New York: Harper & Row), pp. 19–28.

Standard & Poor's, 1999a, "Commentary: Paris Club Agreement Raises Probability of Default on Sovereign Bonds" (New York, March).

———, 1999b, "The A to Z of Indonesia's Paris Club Process," *CreditWeek* (April).