

UNDERSTANDING INTERDEPENDENCE

— The —

Macroeconomics of the Open Economy



PETER B. KENEN, Editor

A Retrospective on the Debt Crisis

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1 Introduction

In 1992 and 1993, private capital inflows to Mexico equaled about 7 percent of Mexico's gross domestic product (GDP). These private capital inflows were larger than in any year before 1982, when Mexico's suspension of debt-service payments marked the beginning of the debt crisis that dominated the economic circumstances of many developing countries for a decade. The resurgence of private capital inflows to developing countries has been widely distributed but has been particularly evident in developing countries that did not experience debt-servicing difficulties and in countries that have participated in Brady Plan rescheduling agreements (Calvo, Leiderman, and Reinhart, 1993).

This remarkable turnaround makes it particularly important to take a retrospective look at what has been called a "lost decade" of economic stagnation for the debtor countries.¹ Only a few years ago, experts agreed that the developing countries would not return to private international credit markets for at least a generation. Do we now understand enough about the 1982 crisis to predict that a renewed accumulation of external debt will not lead to a repeat of 1982 and to the considerable costs that followed for the debtor countries? Unless the memories of investors and debtor-country governments are very short, they must believe this new round of international lending will have a different outcome.

It is very likely that economic developments external to the debtor countries, in particular recent declines in interest rates in industrial countries, explain an important share of recent capital inflows (Bulow, Rogoff, and Bevilacqua, 1992; Dooley and Stone, 1993). It therefore follows that highly indebted developing countries will remain vulnerable to external shocks, particularly to a combination of recession and high real interest rates in the industrial countries. The analysis of the 1982 crisis developed in this chapter

I would like to thank Polly Allen and Kenneth Rogoff for their helpful comments.

¹ See Dooley and Corden (1989), Cohen (1991, 1992), Cooper (1992), and Arora (1993) for comprehensive reviews of the debt crisis.

suggests, however, that the recent buildup in external debt is unlikely to generate economic costs for debtor countries comparable to those that followed 1982, even if bad luck or bad policies lead to another round of debt-servicing difficulties. By contrast, those debtor countries that have not restructured and reduced their existing debt to commercial banks are vulnerable to a return to economic stagnation.

The basic theme of this discussion is that the enormous costs borne by the debtor countries after 1982 were the result of prolonged self-interested bargaining between the commercial banks and their own governments, not between the banks and the debtor countries. The new buildup of debt will not generate similar bargaining because recent lending has not involved the commercial banks of the industrial countries.

The origins of the bargaining game between international commercial banks and industrial-country governments are found in relationships among creditors established long before the summer of 1982. For this reason, I begin with a brief review of the buildup of the external debt of developing countries in the 1970s.

2 Accumulation of External Debt, 1970–82

Historical Review

The striking aspect of the debt buildup before 1982 is the dominant role of commercial banks in providing medium- and long-term credits to residents of developing countries. Following widespread defaults on international bonds issued by developing countries in the 1930s, new lending to developing countries before 1974 was generally restricted to government-to-government loans or loans from international organizations such as the World Bank and the International Monetary Fund (IMF). One of the keys to the interpretation of the debt crisis offered in this chapter is that the emergence of banks as financial intermediaries in the 1970s can best be understood as a process in which the banks replaced the governments of industrial countries as lenders to developing countries but did so with the approval, encouragement, and implicit support of the governments of the industrial countries.

The economics behind the debt buildup are straightforward. The dramatic rise in the price of oil in 1974 and again in 1979 generated huge current-account surpluses for oil-exporting countries. As shown in Table 7.1, the counterparts of current-account surpluses for the oil exporters were deficits for both the industrial and the developing countries. The oil exporters' current-account surpluses reflected their desire to smooth consumption. This implied that a large share of their revenues had to be "recycled" to oil-importing countries in the form of capital flows from oil exporters to oil importers.

TABLE 7.1

Current-Account Balances (billions of U.S. dollars)

	All Industrial Countries	Fuel Exporters	Non-Fuel Exporters
1970	6	2	-9
1971	9	1	-11
1972	6	2	-5
1973	11	6	-4
1974	-27	65	-22
1975	7	33	-31
1976	-15	31	-18
1977	-20	20	-13
1978	11	-5	-21
1979	-27	53	-32
1980	-64	94	-52
1981	-23	32	-68
1982	-27	-20	-59

Source: IMF, *World Economic Outlook*.

The economics behind the pattern of financial intermediation between surplus and deficit countries is much less obvious. Although private capital markets were the obvious vehicle for capital inflows to industrial countries, the traditional pattern would have been for governments and international organizations to act as intermediaries for lending to developing countries. Governments, however, particularly the U.S. government, were reluctant to take on this responsibility either directly through an expansion of government-to-government loans or indirectly through international organizations.

Oil exporters were also an unlikely source of direct credit for the developing countries. In fact, oil-exporting countries realized that they were not the most popular investors at that time and wanted financial assets that were as liquid and immune from political reprisals as possible. Direct loans to residents of developing countries did not fit this description.

Bank deposits were an ideal instrument from the point of view of the oil exporters, and commercial banks saw the recycling of oil money as a profitable new business. Banks operated in many offshore banking centers, and deposits were typically passed on to several banks in different countries before being loaned to a nonbank. There was thus no correspondence between the location of a deposit and the location of the ultimate loan to a nonbank. More-

over, it was generally recognized that banks were special institutions that had proven to be "too big to fail." Governments had consistently stepped in to save large banks in order to prevent a general financial panic.

On the other side, borrowers in both industrial and developing countries preferred bank credits to more traditional private and official financial intermediaries because banks were willing to charge only a small margin over their cost of funds when setting lending rates. The wisdom of banks in entering into this business and lending at very narrow spreads to compensate for credit risk has been widely questioned in recent years. My interpretation of this phase of the crisis is that banks were rational; they realized a bad outcome was possible but also realized that the losses generated by bad outcomes could be shifted to their own governments.

In summary, the buildup of external debt in the 1970s is generally attributed to a series of external events that seemed to provide economic reasons for lending to the developing countries. Relative price increases for oil and other commodities provided a demand for credit, and the surplus of the Organization of Petroleum Exporting Countries (OPEC) provided a supply of internationally mobile savings. Low *ex post* real interest rates on loans denominated in major currencies may have contributed to the willingness of the developing countries to incur debt, although those low interest rates should have encouraged other borrowers equally.

Policy during the Buildup of Debt

The hypothesis that banks relied on their own governments' implicit guarantees of their loans to developing countries helps to make sense of the implausibly naive statements by bankers about the inability of countries to fail. The one thing that could stop the banks from taking on this profitable but risky loan portfolio was the attitude of regulators toward country risk. The banks knew that their exposure to individual countries was much larger than would normally be permitted under domestic concentration ratios. Thus, the banks had every incentive to reassure the regulators that there was no risk involved in the quite clearly risky positions the banks were taking.

An alternative interpretation is that banks really were naive but turned to their governments for a bailout after the crisis occurred and used the earlier official support for the recycling of oil money as a convenient *ex post* rationalization for help from their governments. The banks were quick to point out after 1982 that "the public and government applauded them for successfully 'recycling' the soaring revenue of oil-producing countries in the 1970s" (Lawrence Rout, "A New Solution for the World's Debt Crunch," *Wall Street Journal*, March 3, 1983).

The conjecture that creditor governments were expected *ex ante* to guaran-

tee bank claims on the developing countries is important to my interpretation of the buildup in debt but is less important to my interpretation of the subsequent bargaining between banks and their governments, which can be explained in terms of an *ex post* claim to support. In either case, the banks saw a good chance of collecting from their own governments what they could not collect from their developing-country debtors following 1982. The policy decision that led to protracted negotiations between the banks and creditor governments was the refusal of conservative governments in the United States and other industrial countries to provide the expected backup. The longer this game went on, the higher was the loss to the debtor countries.

There is ample evidence for the existence of an implicit backup by creditor governments before the debt crisis became apparent in 1982. Officials of the Federal Reserve System, for example, were concerned about the size of the banks' exposure. As early as 1974, Arthur Burns (1978), then chairman of the Federal Reserve Board, warned that banks were taking excessive risks in international lending. Governor Henry Wallich (1981, 1987) repeatedly pointed out before 1982 that the banks' exposure to sovereign risk threatened their capital and argued that additional lending should be constrained by the regulatory authorities.

Economists also pointed out the potential problem arising from the excessive concentration of country risk on the banks' balance sheets. John Kereken (1977, p. 506) warned that, "at the end of 1976, Citibank had LDC loans amounting to about 6 percent of its total assets. And we know it had capital, as conventionally measured, amounting to 5 percent of its assets. That suggests, at least to me, that there may be some slight danger, particularly if Citibank is not all that untypical. The Federal Reserve, which along with other central banks can make good loans out of bad, may in certain circumstances, be tempted to do just that." Marina Whitman (1978, p. 151) argued that the official sector should play a larger role in intermediating oil surpluses through the IMF. "Should the pessimists turn out to be right," she wrote, "and widespread defaults loom, the American banks would look for bailout, not to an IMF facility totaling less than \$10 billion, but to the incomparably greater resources of our own Federal Reserve System."

By contrast, the U.S. Treasury consistently argued that the banks were the preferred financial intermediaries for loans to developing countries. As De Vries (1985) shows in her history of the IMF, Treasury secretary William Simon was the main opponent of an expanded role for official lending through the IMF. Moreover, as Weintraub (1983) notes, the U.S. Treasury had encouraged U.S. banks to pursue international lending long before the first oil shock.

Finally, the fact that regulatory agencies allowed banks to "bet the bank" on loans to individual countries suggests that the official community believed that the public benefits of smoothly and efficiently recycling oil money would exceed the potential costs of bailing out the banks. Wellons (1987) documents

the cautious approach taken by U.S. regulators in defining limits on lending to individual developing countries and argues that U.S. bank regulators responded to strong political pressure against interfering with recycling to developing countries by declining to enforce such lending limits.

In summary, the governments of the industrial countries had conflicting policy objectives. Oil money had to be recycled, but the governments did not want to do it themselves. Moreover, the majority of industrial countries were not enthusiastic about expanding the roles of international organizations as financial intermediaries. A widely held view was that market forces would lead to the most efficient allocation of financial resources across countries.

Was it rational for the governments of the industrial countries to permit their banks to intermediate loans to developing countries? It could be argued that the governments had little choice. The financial intermediation was thought to be important for maintaining aggregate demand in the oil-consuming world. If this premise is accepted, *some* government or private institution had to accept the country risk associated with international lending. The governments of the industrial countries seem to have believed that official lenders were not very good at identifying the most efficient allocation of funds. The banks took the same view, pointing out that they were experts at the analysis of country risk and that the discipline of the marketplace was preferred to bureaucratic decisions by the IMF and other multilateral institutions (Friedman, 1977). In the following pages, I argue that, once committed, the creditor governments made a major policy error in refusing to provide the expected backstop. This policy choice transformed an unremarkable financial crisis into a decade-long economic crisis for the debtor countries.

Analytical Literature during the Buildup

The buildup of the external debt of the developing countries generated a substantial academic literature both before and after the crisis of 1982. The majority of papers before the crisis dealt with the ability of the debtor countries to repay their loans. Until very late in the day, the consensus was that servicing the loans was not likely to be a problem (Solomon, 1977).

In retrospect, an important element missing from the evaluation of debtor countries during the years when debt was growing rapidly is that the private sector of the debtor countries was typically accumulating gross claims on the rest of the world at an impressive rate.² There are several reasons why what later came to be known as capital flight was entirely missed at the time. Pri-

² See Dooley (1986) for estimates of the stock of flight capital for debtor countries and comparisons between balance-of-payments data and debt-reporting-system estimates of external debt. In 1983, I and others prepared a paper for the Board of Governors of the Federal Reserve System that provided comprehensive statistical estimates of capital flight (see Dooley et al., 1986).

vate capital outflows from the debtor countries were largely unrecorded and did not show up in balance-of-payment statistics of the debtor or creditor countries. Perhaps more surprising, medium- and long-term borrowing was also not always reported in the balance-of-payments statistics of the debtor countries, even when it carried official guarantees.

The lack of attention to gross capital flows may be explained by the fact that there is no particular reason to be concerned about the scale of financial intermediation as long as all goes well. It is only after an accident that the consequences for different groups of debtors and creditors have to be sorted out. Cooper (1992) makes the interesting point that the fact that a substantial part of the stock of external debt was "matched" by capital flight is one reason why creditor governments were unwilling to support proposals that would have provided the bailout the banks had anticipated. More generally, the cost of the debt crisis to debtor countries arose largely because the participants had perverse incentives to jockey for position in the workout process.

There were interesting attempts to explain why banks had "overlent" to developing countries. Kletzer (1984) argued that the fact that banks were poorly informed about the loans other banks had made or would make to developing countries could account for what appeared *ex post* to be excessive lending. Guttentag and Herring (1986) argued that banks and most of the rest of us seem to suffer from "disaster myopia," in the sense that decisionmakers systematically ignore really bad outcomes. Devlin (1989) argued that banks are complex organizations that tend to do what other banks are doing to maintain market share. He also mentions the possibility that banks have to keep growing so that they remain too large to fail.

My explanation is that the banks acted rationally. If all went well, they would have enjoyed substantial profits; if things went badly, they planned to shift the loans to their governments on terms that were not well defined but that were unlikely to call into question the wisdom of making the loans. In the event of trouble, creditor governments were expected to "nationalize" the banks' claims on the developing countries and then collect what they could. This argument is appealing because it avoids the need to invent naive or poorly informed bankers (specimens I have seldom encountered in negotiations over restructuring packages). More important, it provides a better basis for understanding the negotiations that followed the 1982 crisis.

3 A Banking Crisis

Historical Review

The system of financial intermediation through commercial banks that had developed to accommodate international transactions among residents of in-

dustrial countries was easily modified to channel funds to, and from, developing countries. Moreover, syndicated credits commonly used in Euromarkets were uncritically adopted for lending to developing countries. Unfortunately, just as generals prepare to fight the previous war, financial markets design contracts to accommodate the previous shock. The floating-rate loan contracts used for the bulk of commercial-bank lending to the developing countries were ready for an increase in the rate of inflation, the dominant shock in the 1970s. The shock in 1982, however, was recession and a fall in the rate of inflation in the industrial countries that was accompanied by a spectacular and durable rise in real interest rates, a rise in the real value of the dollar, and a fall in the relative prices of oil and other commodities.

In my view, the probability of such a shock to the system was very low *ex ante*. No one predicted in the late 1970s that a conservative Republican president would generate fiscal deficits that far exceeded any outside those produced by major wars, and that the Federal Reserve would launch a major disinflation initiative at the same time.

The resulting rise in the real interest rate on dollar-denominated loans to the developing countries fell entirely on the debtors. The floating-interest-rate credits that generated this result were widely used in Euromarket lending and were a natural reaction to the inflationary shock in the industrial countries in the 1970s. Commercial banks had learned the hard way that fixed-interest assets placed them at risk in the event of unexpected increases in inflation rates. Thus, the dominant form of debt contract for all international lending was medium term in maturity but with an interest rate that was adjusted twice yearly and was tied to the six-month London interbank offer rate (LIBOR) for the currency of denomination. The popularity of these floating-rate loans was based on the fact that both the banks and debtors would be protected from surprises in the inflation rate.

The banks hedged currency risk by matching deposits to loans and hedged interest-rate risk by using floating-rate loans. The latter, however, shifted the surprise in real interest rates entirely and almost immediately to the debtor countries and for this reason contributed to credit risk. The spread over LIBOR on loans determined profit margins and presumably reflected expected losses from credit risk. As is natural for banks, their attitude toward credit risk was influenced less by the quality of the borrower than the quality of the collateral. In this case, the collateral was, first, a debtor-government guarantee of loans to the residents of the developing countries and, ultimately, the political commitment of a creditor-country government to the debtor government. When the credits were put at risk by the new economic conditions, the banks called the collateral, pointing out that they had been asked to recycle the oil money and that the solvency of the banking system was very important to the governments of the industrial countries.

Policy Response and Damage Control

The initial reaction to the banks' refusal to roll over credits was as expected. First, developing-country private debt was rapidly transformed into developing-country government debt even in countries like Chile where there was no formal guarantee and the government had said that it would not step in to bail out private debtors. Second, there were immediate calls on the governments of the creditor countries to provide the debtor governments with the means to meet their obligations to the banks. Third, bank regulators in all the industrial countries reassured the markets that they would not close banks the capital of which was threatened by losses on developing-country loans.

But the surprise was that the creditor governments refused to provide the banks with an opportunity to sell their doubtful credits to their governments on any terms, favorable or not. Proposals for a comprehensive debt facility were met with considerable hostility in several important creditor countries. The strategy, instead, was to "coordinate" continued bank lending until IMF programs could put the debtor countries back on their feet. Thus, the initial official credit was typically a short-term bridge loan that was supposed to be liquidated after a few months by an IMF credit.³ Some important officials apparently saw this as a unique opportunity to force debtor countries to embrace the reforms that they believed had been postponed unduly by the developing countries' easy access to credit before 1982. This call for "conditionality" found wide acceptance at international organizations and among academic economists who had favored greater official involvement with recycling.

Analytical Literature

The academic literature immediately following the debt crisis pursued a number of interesting lines of thought. The classic theoretical treatment of sovereign debt by Eaton and Gersovitz (1981) developed the idea that the key difference between a sovereign debtor and other debtors is that the creditor cannot seize collateral in the event of default. Put differently, a bank cannot force liquidation of the debtor and thus make the best of a bad loan judgment. For this reason, the creditor has to rely on the ability to impose punishments on the debtor. Eaton and Gersovitz considered punishment in the form of trade sanctions, and the related loss of gains from trade in the form of exclusion from future lending and the associated loss of the debtor's ability to smooth consumption. This basic framework helps explain why a sovereign-debt problem can take an extended time to resolve. Because there is no outside arbiter

³ See Sachs (1989) for a description of the immediate official response to the crisis.

to divide the collateral and "protect the debtor" from residual claims, default will be followed by prolonged renegotiation for partial payment. The basic insight provided by this theory is that sovereign default normally results in a continuous renegotiation of payments based on the changing power of the two sides in an ongoing game.

This emphasis on a game between a debtor and a representative creditor, however, was adopted with too much enthusiasm by subsequent researchers. I have argued that loss of reputation or fear of trade disruption was not the basis for the enormous private loans extended to developing countries through 1982. More important from our point of view is that the events following the debt crisis cannot be adequately modeled as a game involving only debtors (developing-country governments) and creditors (commercial banks). By leaving out the interested and relatively wealthy third parties (industrial-country governments), this framework fails to capture the basic nature of the problems generated by the crisis. An important exception is the paper by Bulow and Rogoff (1989b), which shows that the governments of creditor countries may have good reasons to make side payments to banks and debtor countries in order to resolve conflicts over repayment. In the context of the argument presented in this chapter, this insight might be seen as a reason why the banks expected the creditor governments to make good on their implicit guarantees.

The refusal of creditor governments to "bail out the banks" was consistent with another important strand of academic inquiry, which developed the idea that the debtors faced a temporary "liquidity" problem but were "solvent" in the long run. This judgment was based on calculations that suggested that the debt was small relative to the payments capacity of the debtor country. Influential studies by Cline (1983) and Feldstein (1986) argued that a normal recovery by the industrial countries from the recession would provide export markets to developing countries and thus allow them to service their debt. This analysis fit the policy of concerted lending and conditional official lending to get the debtor countries over a brief liquidity crisis.

A number of researchers, including Sachs (1984) and Krugman (1985), sought to explain why banks refused to lend to illiquid but basically solvent countries. The basic idea in these papers is that the value of individual loans depends on the continued participation of other lenders. An individual bank would prefer to wait for other banks to make new loans so that it could receive full payment without increasing its exposure. This interesting line of research followed the earlier convention of modeling a game between the debtor and a group of commercial banks. It argued that the banks would find it difficult to organize themselves to make loans that were in their mutual interest. It recognized that there might be an expected loss to be distributed among the banks but pointed out that even a small expected loss could paralyze new lending unless an outside force were to organize concerted lending. The free-rider

problem provided an elegant justification for concerted lending and appeared to explain the inability of private markets to keep on lending to the developing countries. The same line of analysis is also consistent with the idea that an official debt facility (Kenen, 1983, 1990; Corden, 1989) or a private investor (Dooley, 1989) would have an economic incentive to buy up all the existing debt and internalize the coordination problem. If debtor countries were solvent, this could be done at no expected cost.

Early proposals for a debt facility implicitly addressed the issue I turn to next, the coordination problem among official creditors, private creditors, and potential investors in the debtor country. In retrospect, it is unfortunate that these proposals did not have more influence on the analytical work that followed. The conflict among the creditors is at least as important as the conflict between debtors and creditors for understanding the ensuing economic crisis of the debtor countries.

A debt facility would have resolved the conflict between the banks and official creditors. The proposals for such a facility called for the official creditors to buy the debt from the banks, perhaps at a discount, and hold it until the debtor countries benefited from the expected turnaround in the world economy.⁴ In one important sense, these proposals focused on the key problem associated with the debt. The commercial banks expected to be bought out and viewed the refusal to do so, particularly by the U.S. government, as an *ex post* change in the rules of the game. The struggle that followed between the official and private foreign creditors left the debtors without a basis for entering into credible contracts with new creditors.

4 Conflict among Creditors and Economic Stagnation in the Debtor Countries

Historical Review

The years following the debt crisis are marked by a prolonged struggle among broad groups of creditors and the related dismal economic performance of the debtor countries. The rough outline of how the creditors fared is shown in Table 7.2. At the end of 1982, debtor countries owed \$278 billion to commercial banks and \$115 billion to official creditors. Over the next seven years, the *real* value of commercial-bank debt fell to \$241 billion, whereas the *real* value of official debt rose to \$236 billion (both in 1982 dollars).

How did this happen? Clearly, the commercial banks did not forgive any of the debt, and (before 1989) only small amounts were exchanged for nondebt claims on the debtor governments. The answer, first, is that most debtor countries made all their interest payments to commercial banks. Given an average

⁴ See Dornbusch (1989, chap. 5) for a comprehensive review of proposals for a debt facility.

TABLE 7.2

Real Debt of Developing Countries with Debt-Servicing Difficulties (billions of 1982 U.S. dollars)

	To Commercial Banks	To Official Creditors
1982	278	115
1983	290	129
1984	286	143
1985	276	162
1986	278	187
1987	283	224
1988	254	232
1989	241	236
1990	222	251
1991	213	251
1992	200	252

Source: IMF, *World Economic Outlook*.

inflation rate of about 4 percent in industrial countries, this means that a debt of \$100 in 1982 on which all interest payments were made would still have a nominal value of \$100 in 1989. But the real value of debt would have fallen to about \$79. This is roughly what happened after 1983. From where did the interest payments come? They must have come partly from new credits provided by the official lenders and partly from earnings through net exports. This process insured that the historically unusual bulge in private lending in the 1970s was being slowly returned to its historical norm as official credits once again dominated lending to the developing countries.

The second important aspect of this phase of the crisis is the dismal economic performance of the debtor countries. Table 7.3 shows growth rates for per capita GDP for developing countries with and without debt-servicing difficulties. Slow growth in the industrial countries surely accounts for some of the slowdown of growth in the developing countries, but, as discussed in detail below, it seems likely that the overhang of external debt also played a role in this weak economic performance.

The third important institutional development was the emergence of a secondary market for external debt. As shown in Figure 7.1, starting in 1985, a well-organized secondary market allowed banks to buy and sell their participation in syndicated credits. This market is important because it gives a sensitive barometer of the expected value of future payments on this type of debt.

TABLE 7.3

Per Capita GDP Growth in Developing Countries, 1972-91

	All Developing Countries	Countries with Recent Debt-Servicing Difficulties	Countries without Debt-Servicing Difficulties
1972-81 ^a	2.3	1.7	3.5
1982	-0.2	-2.0	3.3
1983	-0.1	-3.9	5.1
1984	1.8	0.4	5.8
1985	1.7	1.1	4.8
1986	1.7	1.3	4.2
1987	1.4	0.3	5.3
1988	2.1	-0.2	5.6
1989	0.9	-0.5	2.6
1990	0.4	-2.5	3.5
1991	1.9	0.8	3.4

Source: IMF, *World Economic Outlook*.

^aAverage of compound annual rates of change; excludes China.

In 1985 and 1986, prices settled at about \$0.60 per dollar of face value. If a credit was supposed to pay LIBOR, plus a typical spread of about 1 percent, the secondary-market yield was roughly $(\text{LIBOR} + 0.01)/0.60$. Falling prices through 1989 indicated that an increasing risk premium was demanded by investors to induce them to hold the existing stock of bank debt.

Policy of Muddling Through

Regardless of the merits of the case, a comprehensive debt facility was politically unacceptable in most creditor countries. The preferred alternative was "concerted rescheduling," in which all creditors did their "share" in providing credit to debtor countries. The banks cleverly called their contribution "new money," which, in reality, was neither new nor money. An only slightly cynical view of this process is that the banks organized the official creditors rather than the reverse.

This strategy was formalized in the Baker Plan announced in 1985. The essence of the plan was that industrial-country governments would provide (a little) new lending to the debtor countries, both directly and through the inter-

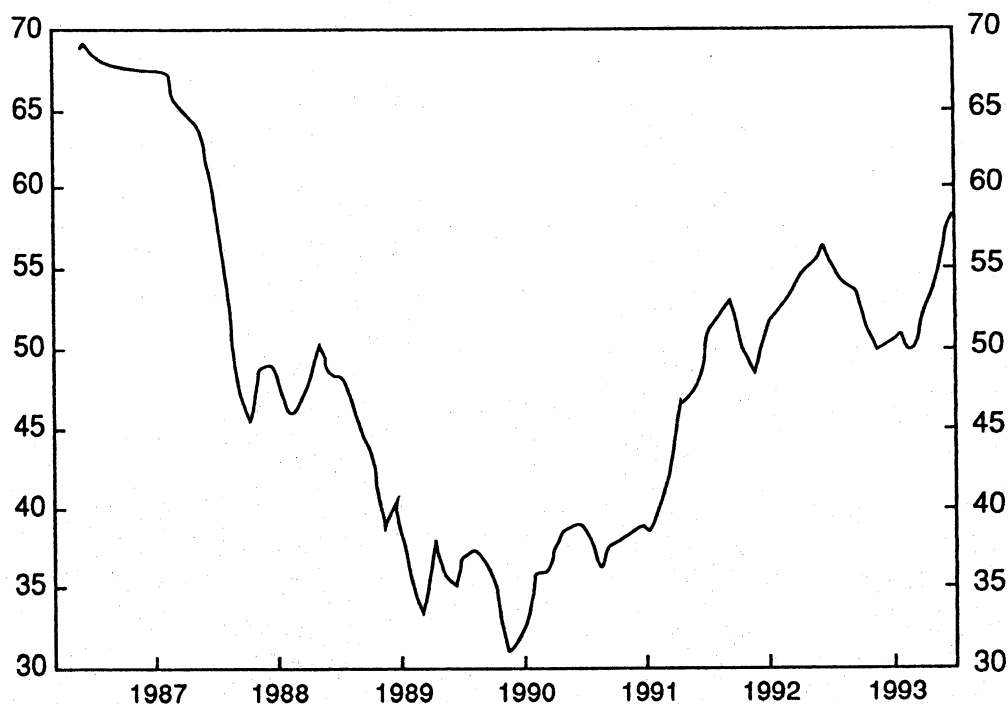


Figure 7.1 Secondary-Market Prices for Developing-Country Debt, 1986–93

national institutions they both financed and controlled, and would thereby “catalyze” (a large volume of) new credits from the banks. The Baker Plan added “catalyze” to the list of terrible international finance jargon but did not result in new lending by the banks. As shown above, the key in interpreting how private and official creditors were working out their relative positions during this phase of the crisis is to look at their balance sheets rather than to listen to their words.

The banks were the clear winners of this phase of the game, because the expected bailout was forthcoming, although at a very slow rate, as official debt gradually displaced bank debt. I believe that the banks understood the nature of the game very well but, of course, were not anxious to discuss the matter in these terms.⁵ The official sector was less well informed. In retrospect, it seems to me that, for a long time, the strategy that was intended to force the banks to continue to lend while the debtor countries embarked on reform programs worked in the narrow interests of the banks.

It was, and is, easy to miss the essential nature of this game between the banks and their governments. The argument did not usually explicitly focus on which creditor would receive interest payments but on the mirror-image question of which creditor would make a new loan. Given payments from the debtors’ resources, making a new loan is the same thing as giving a payment

⁵ Calvo (1989) and Cohen (1992) give an interesting calculation of the *ex post* returns realized by the banks over the entire period.

to the other creditor. Neither the banks nor the creditor governments, however, saw any advantage to presenting their position with excessive clarity. Banks were winning the game as it was being played, and governments that had asserted they would not "bail out the banks" were not anxious to concede that they were doing slowly what they would not do quickly.

Analytical Literature

This phase of the debt crisis can be interpreted as a protracted negotiation between heavily indebted developing countries and their creditors—and, more important in my view, among the creditors—to rationalize contracts and implicit understandings that could not be carried out as written or understood by the various participants. As discussed above, the analytical literature immediately following the crisis emphasized the conflict between a debtor and a representative creditor. This framework continued to dominate the subsequent literature, which turned to the question of the effects of debt on the economic performance of debtors and the effects of debt forgiveness. As outlined above, an important aspect of this phase of the crisis was the miserable economic performance of the debtor countries. The key to the academic literature that addressed this issue was to model the relation between existing debt and economic performance.

One approach was to model debt-service payments as a tax on future output (Krugman, 1988; Sachs, 1988; Froot, 1989; Helpman, 1989, 1990; Dooley and Helpman, 1992). Like any expected tax on current investment, debt service can be expected to discourage investment and encourage current consumption in debtor countries. The link between the contractual value of debt and its market value can be summarized in a "debt Laffer curve" that relates the stock of debt to its market value. The market value of debt will increase as the stock of debt rises as long as tax receipts rise. But, as the tax rate rises, the disincentives from a higher tax rate eventually generate a decline in investment and income that dominates the increase in tax rates.

These models emphasize the behavior of the debtor in evaluating the effects of a debt overhang and debt reduction. Forgiveness of debt is in the interest of creditors as a group if the country is on the wrong side of the debt Laffer curve, that is, only if the market value of debt rises as debt is forgiven. Empirical estimates of the relation between the stock of debt and its market value suggest that very few debtor countries have been in such a position (Claessens, 1990).

An alternative approach developed by Dooley (1986) focuses on the behavior of various groups of existing and potential creditors. This approach emphasizes the expected sharing of a given pool of debt-service payments among creditors. It seems clear in retrospect that there are at least four important

classes of creditors of debtor-country governments. These include banks, official creditors, domestic creditors, and potential investors in real capital in the debtor country.

Potential investors in a debtor country are the most important and least obvious of the government's creditors. Investors are creditors because they implicitly enter into a tax contract with the government that sets out how revenues are to be shared with the government. In that sense, potential investors are offered contracts by governments that are similar to those held by the internal and external creditors. In an environment where there is uncertainty concerning the government's ability to satisfy its obligations, all creditors and potential creditors will position themselves to maximize their payments at the expense of other creditors. A new investor has the option of moving to a country that does not have a debt overhang.

The interdependence among creditors suggests that there is a strong relation between the market return available on existing debt and the rate of return on additions to the capital stock located in the debtor country. Because rates of return on existing debt had risen by 1986 to four to ten times the risk-free interest rate, this argument implies that existing creditors expected to be subject to a very high marginal tax rate. If new investors expected to be subject to that same marginal tax rate, few new investment projects could plausibly promise such a high rate of return. The critical issue is the expected seniority of various creditors. The assumption that all existing and potential creditors face the same expected marginal tax rate seems the most appropriate. Dooley and Svensson (1994) show that it is difficult for a debtor government credibly to establish seniority that will protect a new investor from existing creditors.

The interdependence of old and new creditors has important implications for the behavior of individual creditor groups. For example, for the commercial banks as a group, the unilateral debt reduction that made sense in the context of the debt Laffer curve discussed above would generate capital gains for official creditors, domestic creditors, and taxpayers in the debtor countries. More important, if transfers to the debtor by official creditors were related to the level of misery in the debtor country, banks would have even less reason to be concerned about the negative incentives for investment generated by a debt overhang. It is possible in this situation that, even if a country were on the "wrong" side of a debt Laffer curve (so that debt forgiveness by banks would increase expected payments by debtors), the gain for the banks would be more than offset by lower expected transfers from official creditors because of better economic conditions in the debtor country.

In summary, an emphasis on the interdependence of the creditors is based on the view that the banks did not see much payoff in trying to influence the behavior of the debtor-country governments. They were, however, accustomed to influencing their own governments, and, in crude terms, that is where the money was.

The economic consequences of what came to be known as a debt overhang have been evaluated in a number of empirical models (Borensztein, 1990; Cohen, 1992). There remains a wide range of opinion about the importance of the overhang for the economic performance of debtor countries and, therefore, about the benefits from reducing debt through various techniques. It seems very likely that, among the players in this game, the debtor countries had the most to lose from the inability of the banks and the official creditors to resolve their conflict.

5 Confrontation among Creditors

Historical Review

The rescheduling of Mexico's debt in 1986 was the beginning of a new and more confrontational relation between the official and bank creditors. Periodic reschedulings were necessary because most external debt had been combined into a multiyear rescheduling agreement that had to be renegotiated every few years. Naturally, all the creditors saw these negotiations as opportunities to reduce their exposure on terms better than they could get on the secondary market. The real problem, however, was not coordination among the banks. In my view, the banks did not believe they could gain much at the expense of other banks. The real payoff was in convincing official creditors to increase lending.

The 1986 negotiations were different in that they started with an explicit statement by the Mexican government that expressed the interest payment to be made to the banks as a percentage of GDP. This opening bid by the debtor forced official creditors to take a stand on whether the Mexican offer was reasonable in light of the debtor's economic condition. In addition, it was clear that any financing gap between the debtor's offer and the banks' counter-offer would have to be filled by official credits. If the official creditors did not provide the residual financing, no agreement was possible and interest arrears would emerge. The banks felt abused in this negotiation in that the creditor governments reportedly assigned "new-money" quotas to the banks.

Shortly after this episode, U.S. banks created substantial loan-loss provisions against their developing-country debt, and market prices for all sovereign debt fell dramatically. The initial Mexican offer put all creditors on notice that the debtor countries were unwilling or unable to continue to tap domestic credit markets in order to make external debt payments. The resulting fall in market prices was the natural consequence of the fall in the de facto senior status relative to other creditors that bank debt had enjoyed since 1982 (see Dooley and Stone [1993] for an empirical analysis of this conjecture).

Policy Options

The showdown in the Mexican deal in 1986 clarified the conflicting interests of the creditors. It clearly demonstrated that the official and bank creditors were competing for the same limited pool of payments from the debtor countries. The insistence on the part of official creditors that banks provide new money was equivalent to their insistence that their own lending not be used to amortize bank claims.

At the same time, the fall in market prices for the debt made the proposition that the debtors were solvent increasingly difficult to sell. The substantial discounts on secondary markets seemed to offer the official creditors better terms for reducing bank claims than they were getting through concerted lending packages. After all, interest payment to another creditor is a buyback at a price of unity. Moreover, the process of slowly financing interest payments to banks with new official credit was proving very tough on the debtor countries.

The Brady Plan was an amazingly muddled attempt to deal with the conflict. The original Brady Plan proposal was thought by its proponents to offer a great deal of debt reduction at little cost to the official creditors providing the resources. Those with a more analytical frame of mind, including the banks, recognized that the resources available to support the plan would generate significant debt reduction only if the banks were given no choice but to sell at existing market prices—which had, at the time the plan was first announced, reached a low of about \$0.30 on the dollar.⁶ The U.S. Treasury, however, never had any intention of making the plan mandatory. The Treasury view was that each agreement would be purely voluntary. This was practical, in a way, because it was not clear how the U.S. government could force the banks to accept an agreement that was contrary to the interests of their shareholders.⁷

The result, in addition to a good deal of confusion, was a protracted series of negotiations that usually began with the debtor expecting and asking for a large amount of debt reduction and ended with an agreement involving debt reduction at prices that reflected the market's view of the value of debt remaining after the debt reduction. For this reason, the amount of debt reduction in the Brady deals was quite limited, especially when new official debt was added to the calculation of net debt reduction.⁸ As late as the spring of 1990,

⁶ Krugman (1989) and Dooley and Symansky (1989) discuss why the ancillary aspects of the Brady rescheduling agreements did not allow official resources to retire more debt than is suggested by a simple buyback at prices expected to prevail after the buyback.

⁷ The Federal Reserve was particularly hostile to forced write-downs of debt and rightly questioned the practical difficulties in defining and administering an equitable administrative restructuring (Volcker and Gyohten, 1992).

⁸ See Claessens, Diwan, and Fernandez-Arias, 1992, for a careful evaluation of the Brady Plan agreements.

economists agreed that the scale of debt reduction possible under voluntary agreements could not make a material difference in the fortunes of the debtor countries (Dornbusch, 1989; Krueger, 1989; U.S. Congress, 1990).

Analytical Literature

The main topic in the theoretical literature relevant to this phase was the analysis of debt reduction and restructuring. An important issue was the extent to which a secondary-market discount on sovereign debt offered an opportunity for official creditors to purchase the debt cheaply, forgive a portion of the contractual value, and enjoy the capital gains on the remaining debt when the debtor economies revived.

A very simple analysis made it clear that any voluntary transaction would generate a rise in the price at which the debt could be purchased, because the expected value of the existing debt would rise (Bulow and Rogoff, 1988, 1989a; Dooley, 1988a, 1988b). This placed the official creditors in direct and open conflict with the commercial banks. If, for example, the industrial-country governments were to offer to buy all private debt and forgive all of it, an individual bank would hold out and expect to receive full payment following the deal. The obvious solution would be to threaten to default on any debt not sold at a price set by the buyer, but the industrial-country governments refused to force the banks into that position.

In practical terms, this meant that the market value of claims surrendered by the banks in a Brady restructuring had to be comparable to the expected market value of the new claims or cash acquired. If this condition was not met, the banks had the option of refusing to grant the waivers necessary for a restructuring and of waiting for a better offer. The banks were "held together" by the requirement that 60 to 100 percent of the participants holding existing credits had to vote to approve the waivers required for a restructuring agreement. The creditor governments that financed the deals also had the option to set conditions and wait for a better agreement. It follows that the division of the surplus provided by the creditor governments between the banks and the debtors reflected the relative bargaining power or the impatience of the banks and their governments.

In an extreme case in which the creditor governments have no bargaining power, it is clear that, once the market is aware of the resources available for the buyback, the market price will be set equal to a rational forecast of the value of debt after the buyback. Some simple arithmetic will help develop the point (Dooley, 1988a, 1988b). Suppose the expected present value of payments from the debtor is \$100. Initial debt consists of dollar-dominated loans—\$100 "bank debt" held by foreign banks and \$100 "official debt" held by creditor governments. Suppose also that all creditors expect to share all future

payments strictly in proportion to the contractual value of their claims. This is sometimes called an "equal-sharing clause," and it is found in all syndicated credit agreements. The market price of both types of debt would be \$0.50, the expected present value of payments divided by the contractual value of total debt. If official creditors lend \$10 to the debtor government for a buyback, it is clear that the debt remaining after the restructuring will be $\$210 - \$10/p$, where p is the price at the time of the transaction. If market participants are rational, they will set p at the level expected to prevail following the restructuring. Setting the buyback price equal to the expected market price, $p = \$100/(\$210 - \$10/p) = \0.524 . It follows that the rise in the market price generates a capital gain for the banks, a net loss for the official creditors, and no direct gain for the debtor.⁹ In addition, the scale of debt reduction possible is constrained by the resources available to compensate creditors.

In most restructuring agreements, a menu of options has been offered to the banks. The basic points made above, however, are not altered by an expansion of the instruments involved. Most agreements, for example, include a variety of new bonds, often convertible into equity, that carry guarantees of interest and/or principal. As long as the assumption of equal sharing is maintained, however, a new instrument can be decomposed into country risk that has the same market value as other unsecured claims on the country and a risk-free component the value of which is equal to the collateral behind the guarantee. Arbitrage conditions insure that, if the same \$10 were used to collateralize the principal and interest of a new instrument, an exchange of old for new debt would generate the same equilibrium as shown above.

A related issue is whether or not voluntary debt reduction is an efficient use of resources. The fact that banks realize capital gains as debt prices rise suggests that most of the benefits might go to existing creditors rather than to the debtors. In the above example, it is difficult to see what difference a small amount of debt reduction could make for the debtor. A market price of \$0.52 rather than \$0.50 is unlikely to generate a measurable change in the investment in the debtor country (Bulow and Rogoff, 1988; Dooley, 1988a). The debtor might be better off to keep its resources and invest in reserves or domestic activities.

A buyback makes more sense in the context of a three-party game when one of the existing creditors is financing the buyout of another creditor. In the simple example above, the official creditor makes a new loan that immediately falls to a discount on the secondary market. This loss can be interpreted as a side payment by one creditor to another. The circumstances under which this is a rational policy choice are presented in Bulow and Rogoff (1989b). Their framework shows that a range of outcomes is possible depending on the pref-

⁹ Dooley, Haas, and Symansky (1993) provide an accounting framework for evaluating the effects of debt restructuring on various classes of creditors.

erences and market power of the lenders. For example, it shows that, if lenders are competitors and thus have no market power, side payments from creditor governments will go entirely to the debtor. This framework also helps clarify the extent to which the market value of the debt depends on expected side payments from the creditor governments and expected payments from the debtor.

It is certainly possible that the Brady restructuring agreements were able to exploit the power of creditor governments to force the banks to make concessions to consummate the deals. In fact, empirical evaluations of the agreements suggest that the debtor countries and the banks shared about equally the surplus generated by side payments from creditor governments (Van Wijnbergen, 1991; Bulow, Rogoff, and Bevilacqua, 1992; Claessens, Diwan, and Fernandez-Arias, 1992). Nevertheless, as shown in Dooley (1993), it is difficult to rule out the possibility that all the direct benefits of the Brady deals to date went to the banks. Moreover, it is generally agreed that the direct benefits of the Brady restructurings have been too small to account for much of the increase in the secondary-market prices since 1990.

6 Another Debt Buildup, 1990–93

Historical Review

Why, then, have the financial positions of debtor countries improved since 1990? As mentioned in the introduction, private capital inflows into Brady Plan countries have been very strong, prices for external debt have risen, and stock and real-estate markets have seen large increases in prices. Is the debt crisis dead, as suggested by several observers recently, or is it only sleeping?

As documented by Bacha (1991), the increase in debt prices has been greater for Brady Plan countries than for other debtor countries.¹⁰ There are good reasons to guess that the crisis is over for some countries. A clear change in economic policies has been an important aspect of the turnaround in some countries. In Mexico, Argentina, and Chile, for example, impressive reform programs have included substantial increases in the primary budget surpluses and the amortization of internal and external debt. In addition, privatization of important financial and nonfinancial enterprises and a significant opening up to foreign competition promise to provide a lasting improvement in the return on investment. Although the relative contributions of debt reduction and economic adjustment are difficult to disentangle for these countries, it makes little difference for the purpose of assessing the permanence of the turnaround as long as policy reforms are maintained.

¹⁰ Bacha includes Chile even though Chile's debt-reduction program relied on debt-equity swaps rather than on a formal restructuring.

Even in the cases above, however, reversible good luck also appears to have played a role. The rise in international interest rates that caused the problem in the first place was gradually reversed after the first quarter of 1989, and real interest rates have continued to fall to very low levels. This will change as the industrial countries recover from the current recession and real interest rates begin to regain historically normal levels.

The recovery in debt prices since 1989 has been highly correlated with the fall in real and nominal interest rates in the industrial countries. This comovement is consistent with the possibility that expected payments by debtor governments are independent of market interest rates, so that the market value of the debt rises as expected payments are discounted at lower interest rates (Cohen and Portes, 1990; Dooley and Stone, 1993). But we do not have a good statistical model of debt prices that would discriminate among reasonable alternative hypotheses.

It is certainly possible that the important forces behind the recent return of many debtors to the markets could be quickly reversed. The argument developed here, however, suggests that the consequences of such a reversal might be less serious than in 1982 for the subset of debtor countries that have restructured their external bank debt. In particular, a fall in the expected value of the new debt would not generate the drawn-out conflict among creditors that characterized the previous experience. By the same logic, however, countries that still have a large stock of floating-rate bank debt, and arrears on that debt, could be very vulnerable to a new period of economic stagnation. It should be remembered that only a handful of countries have taken advantage of the improved climate since 1990 to reduce or transform a significant part of their debt.

Recent capital inflows to Brady Plan countries may well generate capital losses for investors, but it is unlikely that the debtor countries will suffer from a debt overhang. Under the Brady Plan, foreign investors have acquired domestic-currency claims on the developing countries. This might suggest that a relatively painless (from the debtors' point of view) currency depreciation would reduce the value of debt if expectations were to change. A qualification of this argument is that, in many cases, debtor governments have staked the credibility of their anti-inflation programs on maintaining a fixed nominal exchange rate. Moreover, the debtor governments have accumulated large reserve positions that would presumably be used to defend the exchange rate.

To reduce the chances that private debts will become socialized this time, some debtor governments have placed limits on their commercial banks' foreign borrowing or have imposed high reserve requirements against foreign deposits in order to limit the governments' implicit guarantees of such deposits. If the incentives for capital inflows are not reduced, however, foreign borrowing by domestic nonbanks will surely replace borrowing by banks.

Moreover, should foreign creditors call in loans, domestic banks might not be able to let firms with large domestic bank loans default to foreign lenders without calling into question their own claims on these firms. It thus appears at least possible that private domestic-currency debt could once again be quickly transformed into government liabilities effectively denominated in dollars because of the fixed exchange rate.

The important contrast to 1982 is that commercial banks in the industrial countries are not the lenders this time. Instead, investors, including residents of the debtor countries, have acquired claims on developing countries through a variety of nonbank financial intermediaries. These intermediaries include high-yield bond funds and emerging market-equity funds located in both the industrial and developing countries, and they are not likely to receive much sympathy from their creditor governments if losses on their holdings should occur. A tentative conclusion is that there will be winners and losers in this new round of debt accumulation in the developing countries but that recent inflows will not set the stage for a repeat of the 1982 crisis.

By contrast, debtor countries that still have large stocks of floating-rate bank debt outstanding are vulnerable to a continuation and intensification of the economic consequences of a decade-long failure to resolve the debt overhang from the 1970s. In fact, attention should now focus on the majority of countries that have not taken advantage of the recent decline in interest rates or the availability of official credit to finance debt reduction. For these countries, voluntary, and therefore expensive (from the point of view of the creditor governments), debt-reduction deals remain the best solution to the debt problem.

The relative effectiveness of official lending for debt reduction and official lending to support economic-adjustment programs remains an open empirical question. In the face of considerable uncertainty about what went right for Brady Plan countries to date, it seems clear that the best strategy is to continue to support "voluntary" debt-reduction programs even if all the direct benefits go to the banks. I do not believe we have learned enough about the costs and benefits to advise debtors to hold out for better terms that might someday be available in the unlikely event that creditor governments decide to impose settlements on their commercial banks.

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