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7 Private Capital Flows to Problem Debtors

Paul Krugman

7.1 Introduction

One of the key elements of the approach to the debt problem that has dominated official thinking since 1982 has been an effort to mobilize private flows of capital to countries with debt-servicing problems. The interest payments on LDC debt, it has been widely accepted, are more than the debtors can or, at any rate, will pay out of current export income. This gap between feasible resource transfer and interest due must be filled in some way. It could be filled by official lending, but this is an unlikely and probably undesirable prospect. It could also be filled by large-scale debt forgiveness, but the whole point of the US-IMF strategy has been to avoid forcing such drastic action. What remains is private capital flows. Bank lending was expected to provide most of the capital flow under the debt strategy as it first emerged in 1983, and it was supposed to play a major role under the Baker initiative of 1985.

Yet in fact private capital flows to problem debtors have consistently fallen far short of expectations. Even in 1983–84, the banner years of "concerted lending," much of the funding that came in the front door was lost through the back door. In the following two years, private capital flows to problem debtors were minor, despite a few highly visible injections of new money. To a first approximation, the debtors have made resource transfers equal to interest less official inflows. Since official inflows themselves have been fairly small, the end result has been that debtors have been forced to run massive trade surpluses.

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The purpose of this chapter is to reexamine the prospects for private capital flows to problem debtors. The central question is whether it is possible to induce sufficient capital inflows to aid substantially in the servicing of debt. To analyze this it necessary to ask, in particular, why efforts to mobilize private capital to date have been so disappointing. Thus the chapter focuses on the reasons for the stalling of the process of concerted lending after 1984 as a key test of the possibilities for inducing capital flows.

The chapter is divided as follows. Section 7.2 examines the rationale for private capital flows to countries that are already in debt trouble: Why should we ever expect to see new money provided to a country whose servicing of existing debt is in question? Section 7.3 reviews the experience with private capital flows since 1982, and examines alternative explanations of the failure of these flows to materialize on the scale that was originally envisaged. Section 7.4 examines the feasibility and desirability of attracting private capital through channels other than bank lending, notably through direct foreign investment or the currently popular option of debt-equity swaps. Finally, section 7.5 attempts to assess the prospects for generating private capital inflows in the future.

7.2 The Theory of Defensive Lending

To a man from Mars, or *The Wall Street Journal,* the proposition that new lending is essential to deal with the debt crisis seems extremely strange—a proposal to throw good money after bad. Yet private capital inflow has been a centerpiece of the official strategy for dealing with the debt crisis (although not of its execution—see section 7.3 below). To understand why this may be a good idea, it is necessary to appreciate two key points: the possibility that a country may have growing debt yet be growing more creditworthy over time, and the possibility that lending at a loss may be in the interest of the creditors if it defends the value of existing claims. On the other side, the problems that may block desirable capital inflow must be noted, as well as the potential role of official agencies in promoting such inflow.

7.2.1 The Analytics of Debt Growth and Creditworthiness

At the heart of the orthodox analysis of the debt problem, as represented for example by Cline (1983) and Feldstein (1986), is the analytical point that a country can simultaneously be increasing its debt and steadily improving its debt position as measured by such indicators as the ratio of debt to GNP or to export. The key point is that the debt indicators are *ratios,* whose denominators can be expected to grow over time. Thus it is possible for debt—the numerator—to grow while

creditworthiness steadily improves, as long as it grows more slowly than GNP or exports—the denominator.

Consider the following numerical example, drawn from Feldstein et al. (1987). A country has a GNP of $200 billion, and an external debt of $100 billion (slightly above the average debt to GNP ratio for the IMF's category of "fifteen heavily indebted countries"). It must pay an interest rate of 9 percent on the debt. The world inflation rate is 4 percent, and the country's real GNP is expected to grow at an annual rate of 3 percent.

If the country were obliged to pay all interest out of current income then even if all principal were rescheduled it would be obliged to run a surplus on noninterest current account of $9 billion, or 4.5 percent of GNP. While such a surplus is not impossible to run, it is sufficiently large to impose substantial strains on the economic and political situation in debtor countries. A sustained resource transfer at this rate would raise risks that "debtor fatigue" will lead to increasing unwillingness of the debtor to pay. Thus some reduction in the size of the resource transfer is crucial.

Suppose, however, that the country is able to attract $4 billion of new money. Then it will need to run a noninterest surplus of only $5 billion, or 2.5 percent of GNP—a more tolerable number. It might at first seem that this simply puts the country even deeper into debt, which in a literal sense it does, since the debt grows by 4 percent. The country's real GNP, however, we have assumed will grow at 3 percent, which together with the price increase of 4 percent will imply a 7 percent growth in money GNP. Thus the ratio of debt to GNP will fall, and the country will be in a more favorable position, not a less favorable one, at the start of the next year.

In fact, if the country were merely seeking to stabilize its ratio of debt to GNP, it could borrow $7 billion, and make net payments of only $2 billion, or 1 percent of GNP. If it were able to borrow this much, and willing to devote 1 percent of GNP to net interest payments indefinitely, it could honor all its debt commitments. If the real interest rate were lower, or the growth rate higher, the necessary resource transfer would be even smaller. Calculations of this kind underlay the optimism of many economists about the debt of LDCs in the 1970s, and continue to be the basis of optimistic assessments now (again see Feldstein 1986).

If coping with debt seems relatively easy even given realistic levels of indebtedness, historically high real interest rates, and an assumed growth rate that is low by past standards, why is there a debt problem? The immediate answer is that the new money that in our example reduces the interest burden to an easily tolerable level has not been forthcoming. Lenders have not voluntarily lent to problem debtors (this

is essentially the definition of a problem debtor), nor indeed have they provided much new money even under duress. This observation, however, only leads to the next question: Why does this favorable algebra not convince lenders to be willing to lend?

The main answer seems to be that while a modest annual rate of resource transfer to creditors will suffice to honor the debts even of countries that have high ratios of debt to GNP, this will only be the case if the resource transfer is very sustained. In the example we have just given—debt equal to half of GNP, growth at 3 percent, and a real interest rate of 5 percent—resource transfer at the rate of 2.5 percent of GNP would have to continue for 25 years to work off all the debt. If "debtor fatigue" were to set in before that, preventing further resource transfer, the debt would be worth less than par, even if the country were willing to run surpluses for quite a while. For example, even 10 years of resource transfer would provide a present value of resource transfer equal to only 45 percent of the value of the debt.

Doubt over whether debtors will be willing to run the trade surpluses needed to honor their debts for the very extended periods thus envisaged underlies the unwillingness of banks or other lenders to provide new money to the problem debtors. However, there remains a case for new lending by existing creditors to defend the value of their claims. This case for "involuntary," or perhaps more accurately, defensive lending, underlies the concept and rhetoric of the US-IMF debt strategy.

7.2.2 The Case for Defensive Lending

When a country's willingness to service its debts in full is uncertain, a potential lender with no existing stake in the country could be induced to lend only by being offered a high interest rate, which itself would provide an incentive for future nonpayment. Thus, in the case of problem debtors, new lending from the markets has dried up. Creditors may have an incentive to relend part of their interest due, however, as a way of protecting the value of the loans they have already made. This incentive forms the basis of the hopes for inducing bank lending to problem debtors.

When does it make sense to lend more money to a country already having trouble servicing its debt? The issue is often framed as one of liquidity versus solvency: The country is *illiquid,* that is, short of cash to pay its debt service, but it is *solvent,* that is, given time it will be able and (more important) willing to make resource transfers to its creditors equal in present value to its debt. However, it is quickly apparent upon reflection that this cannot be quite right; if a country were known to be merely illiquid, not insolvent, it would be able to attract voluntary lending to deal with its liquidity problem. It is only the possibility of a solvency problem that creates the liquidity problem.

The right way to think about the situation, as stressed by Cline (1983), Krugman (1985), and Sachs (1984), is as one of uncertainty in which defensive lending by existing creditors buys an option to collect on their claims in the future if the situation improves. Suppose that it is fairly likely that a country will fail to pay its debt in full even if it is able to avoid an immediate crisis; but that it is virtually certain that the country will repudiate an important part of its obligation if its creditors attempt to collect full interest immediately. Then new lending that reduces the interest burden, although a losing proposition in isolation, may be worthwhile because it improves the expected value of the initial debt.

Even under quite adverse circumstances this defensive lending argument can justify quite substantial increases in creditor exposure. To see why, consider the basic algebra of the situation. Let D be a country's outstanding debt, and d be the subjective discount that creditors place on that debt (which may be inferred from the secondary market price if that market is sufficiently well developed). Suppose that by relending part of the interest, and thus averting an immediate liquidity crisis, creditors can reduce the discount to some smaller amount, d'. Such a program will have a cost—the expected loss on the new lending—and a benefit—the increase in the value of existing claims. The cost will be $d'L$, where L is the value of new lending; while the benefit will be $(d - d')D$. Thus a program of defensive lending will be worth undertaking as long as

$$d'L < (d - d')D,$$

or

$$L/D < (d - d')/d'.$$

Now suppose that in the absence of a program of defensive lending the discount on claims would be 50 percent, while even with such a program the discount would be reduced only to 40 percent. Even with these fairly dismal numbers, it would be worthwhile for creditors to expand their exposure by 25 percent to protect their original investment.

The orthodox view of the debt problem, as exposited most famously by Cline (1983), was that this incentive for defensive lending could be used to mobilize new bank lending on a sufficient scale that, combined with adjustment efforts by the countries and an improving external environment, problem debtors could be returned to normal capital market access after a few years. It was recognized from the beginning, however, that there were serious obstacles to mobilization of capital flows from existing creditors; these obstacles now look more serious than was realized in 1983.

7.2.3 Obstacles to Defensive Lending: The Free-Rider Problem

The first obstacle to a program of defensive lending was immediately noted by many observers: There is a free-rider problem. The *collective* defensive lending of existing creditors raises the expected value of their *collective* claims, but for any *individual* creditor it would be preferable to opt out. In effect, the call for defensive lending from creditors asks that lenders, whom we suppose act competitively under normal circumstances, suddenly begin to act collusively once the country is in debt trouble.

Cline (1983) offered a convenient formulation of this issue, by supposing that the creditors consist of a collusive core and a competitive fringe. Defensive lending is undertaken only by the core that owns a fraction, f, of the outstanding claims. Assuming that it is possible to arrange for complete rescheduling of the principal of the fringe (which is a little optimistic; see section 7.3 below) the criterion for defensive lending now becomes

$$L/D = f(d - d')/d'$$

That is, the smaller the collusive core the less defensive lending will be worth undertaking.

In 1983 the hope was that this free-rider problem could be overcome through a variety of ad hoc means. First, while international capital markets may be highly competitive ex ante, the claims on any individual country are much more concentrated ex post. Second, most lending took the form of syndicated loans in which a certain amount of cooperative behavior was already built in. Third, the form of negotiations between a country and its creditors, in which an advisory committee represents the banks, itself tends to foster cooperative behavior among the creditors. Fourth, informal pressure from the central banks of creditors countries could be brought to bear on the smaller commercial banks to go along with collective lending packages. Fifth, official lending could reduce the extent of defensive lending required to an extent that would make the necessary cooperative behavior more feasible.

Does the limited extent of lending since 1984 show that these ad hoc means of overcoming the free-rider problem were inadequate? Before jumping to this conclusion, we need to recognize that free riding is not the only potential obstacle to defensive lending.

7.2.4 Obstacles to Defensive Lending: Bargaining and Conflict

To the extent that creditors are able to overcome their free-rider problems and act as a unit, they next find themselves in a situation of bilateral monopoly vis-à-vis the debtor country. There is a range of potential rates and terms of lending between the minimum acceptable

to the country and the maximum acceptable to the banks. For the banks, any defensive lending that is less than the interest payments on existing debt—that is, any program that leads to a positive resource transfer from the country—is better than no payment at all. From the point of view of the country, there is a range of rates of resource transfer that is preferable to failure to reach an agreement, which would end the resource transfer but lead the banks to invoke penalties.

In general, economic theory does not offer any determinate outcome to bilateral monopoly. However, a useful light is shed on bilateral monopoly by recent developments in bargaining theory. The literature started by Rubinstein (1982) and applied to international debt by Bulow and Rogoff (1986) envisages a situation in which bargaining parties are able to make alternating offers, which continue until one party accepts. Each party pays some price for waiting. Such bargaining games have a simple and elegant solution: The first offer is in fact set at a level that will be accepted, with the terms of that offer depending on both the threat points of the players—the minimum settlement that each prefers to no agreement at all—and the cost to each of waiting.

While bargaining models are not easily applied to debt in a rigorous fashion, they suggest several useful points. First, it is a useful metaphor to think of capital flows from creditors to debtors as the outcome of a bargain. The determinants of that bargain are *not* the degree of optimism about the debtor's future, or the rewards for good behavior; they are the perceptions of each side about the level of welfare it can achieve without an agreement and the relative cost of delaying an agreement.

Second, by focussing attention on the bargaining aspect of the provision of new money, we are led to focus on the incentives for the parties to reach agreement. For the creditors the cost of failing to reach agreement is obvious—they do not get paid. For the debtor, however, the costs are more subtle and questionable: loss of future access to capital markets? disruption of trade? sanctions by creditor country governments? A key question in understanding the limited extent of capital flows is to ask why the rather fuzzy costs of failure to reach agreement have nonetheless left the countries in such an apparently weak bargaining position.

Third, the bargaining approach is a useful way to begin thinking about the problem of default. As Bulow and Rogoff have emphasized, the usual discussion, in which a country either pays or defaults, fails to capture the ongoing process of negotiation. On one side, a debt restructuring may considerably reduce the present value of debt obligations without any declarations of default or invocation of sanctions. On the other side, a country may fail to reach agreement with creditors, and be formally in default for a time, without precluding the possibility of eventually reaching an agreement. Thus rather than

posing the question whether the country will pay or not, we need to ask *how much* it will pay, on one side, and how long it will take to reach agreement, on the other.

In the simplest bargaining models agreement is always reached immediately, because the first offer is set at a level that is just acceptable. However, this result depends on the parties having the same information. If one or both parties have private information—for example, if the country knows better than its creditors how costly it would be for it to go without an agreement, or the creditors are better informed about the consequences for them of having to declare loans nonperforming—then there is the possibility of a costly period of failure to reach agreement. The reason is that paying the costs of a temporary bargaining impasse may be the only way for either the debtor or the creditors to credibly establish bargaining strength. Brazil may feel that it is able to cope well with the consequences of not paying interest; if its creditors were convinced of this they would make concessions that would avert the need for Brazil to carry out its threat. A simple declaration of a tough posture, however, may not be enough; Brazil may need to go through a period of suffering the consequences of a debt moratorium to show that it really means it.

This point of view suggests that a failure to reach agreement should be viewed as a normal part of the bargaining process rather than a catastrophic event. It is not, however, necessarily appropriate for governments and official agencies to stand aside and allow the bargaining process to follow its bumpy path. Like the costs incurred to signal desirable attributes in other areas of economics, the cost incurred by a failure to reach agreement represent a real social cost (e.g., through disruption of trade, financial flows, political stability, etc.). It may be worthwhile for the Brazilians and their bankers to accept this cost in order to demonstrate their toughness, but it is preferable from the world's point of view, and possibily from the point of view of the parties themselves, if agreement can be reached more quickly. Thus there is a potential albeit problematic role for creditor country governments and multilateral agencies as facilitators of agreement.

7.2.5 The Contribution of Third Parties

Official agencies, such as the International Monetary Fund and the U.S. Treasury, can act to facilitate bank lending to problem debtors in several ways. To the extent that the free-rider problem is dominant, they can use indirect pressure to induce lending by reluctant banks, especially small potential free riders. They can also provide enough additional lending to make a defensive lending program by a collusive core worthwhile in circumstances where defensive lending is actually in the creditors' collective interest but not worthwhile for the collusive core alone.

The IMF and others can also enter into the bargaining process. Most benignly, the third party could simply serve as a mediator, making offers that serve as focal points for agreement. More problematically, it can use sticks and carrots to induce quicker agreement between the bargainers. If IMF resources are made available as a significant contribution to the pot, but only contingent on an agreement that also meets IMF terms, this provides an incentive for the players to forgo the costly process of signalling their toughness and to reach quick agreement. If the U.S. government implies that it will retaliate economically or politically against a country that fails to reach agreement with its bankers, this is also an incentive to reach an agreement quickly.

A bargaining perspective is again useful for examining this role. What it makes clear is that while an adroit intervention by third parties can facilitate the flow of private capital to a troubled debtor, a less adroit intervention can easily reduce that flow and perhaps even reduce the total capital flow to the country. Suppose, for example, that the country and its creditors would have reached agreement quickly without the carrot of official money; then provision of official money will not avoid any social costs, while it will typically be at least partly offset by a reduced supply of new money from the private creditors. (If the creditors make a take-it-or-leave-it offer to the country, then they will reduce the offer by the full amount of the official resources contributed. More generally, in a bargaining situation the country will get more but the banks will give less (see Bulow and Rogoff 1986).

If the third party threatens (or is perceived to threaten) sanctions against the country if agreement is not reached, this will make agreement take place more quickly, but it will also reduce the bargaining strength of the debtor. Thus while the risk of disruption as a result of hard bargaining goes down, so does the capital flow that eventually results. As I will argue below, U.S. policy may well have had this perverse effect, especially for some of the smaller debtors.

The point to be made is that the role of official agencies in a debt negotiation is, in economic terms, a second-best attempt to deal with a market failure. Like all second-best policies, its effect is sensitive to the details of the situation; a policy that does good in one case may do harm in an apparently similar case.

7.3 Bank Lending to Problem Debtors since 1982

I have now examined the rationale for continued bank lending to problem debtors. The theory suggests that there is an incentive for creditors to supply a continuing flow of funds, but that the process of lending may be hampered both by free-rider problems and by the efforts of parties to establish strength through bargaining. I now turn to the experience of bank lending since 1982, and its implications.

7.3.1 The Magnitude of Bank lending

Table 7.1 presents an overview of the lending of banks from the opening of the debt strategy at the end of 1982 to the end of 1986. Here two aggregates of debtor countries are considered: the IMF's group of "fifteen heavily indebted countries," and Latin America. The essential impression conveyed by the table is that the mobilization of private capital flows to debtors that was a central element of the debt strategy took place to a very limited extent in 1983 and 1984 and basically not at all since. Whether one looks at the broader aggregate of problem debtors or the narrower aggregate of Latin America, one sees that since 1982, and especially since 1984, debtor countries have run noninterest surpluses large enough to cover the bulk of their interest due, with a small contribution from official sources and very little from private new money. Only in 1986 was there a move toward current account deficit, which must have had capital inflow as its counterpart; more on this turn of events later.

Admittedly, this aggregative picture is somewhat misleading, for two reasons. First, it conceals differences among countries. While banks were on net withdrawing from some troubled but still relatively liquid debtors (e.g., Venezuela), they were significantly expanding their exposure in others. Second, the flow of funds reveals disbursements, but it is at least equally important to look at commitments, especially given the role of "concerted" lending for defensive purposes. Tables 7.2 and 7.3 provide some information on these issues.

Table 7.1 **Indicators of Bank Lending to Problem Debtors**

	1982	1983	1984	1985	1986
15 debtors					
Private debt	336.9	337.3	347.0	341.8	342.0
(growth rate)	—	0.1	2.8	−1.5	0.1
Current account	−50.6	−15.2	−0.6	−0.1	−11.8
Resource transfer	−12.8	21.0	38.3	37.4	21.1
Debt/GDP	41.7	47.0	46.8	46.3	48.4
Debt/exports	269.8	289.7	272.1	284.2	337.9
Latin America					
Private debt	291.9	292.1	303.2	303.8	308.0
(growth rate)	—	0.0	3.8	0.2	1.4
Bank debt (growth)	6.1	3.1	−0.1	2.7	0.9
Resource transfer	−42.4	−10.9	−2.6	−4.7	−16.1
Current account	−8.1	21.7	32.1	28.3	12.4
Debt/GDP	42.9	47.3	47.6	46.8	48.5
Debt/exports	273.8	290.3	277.1	295.5	354.7

Sources: International Monetary Fund (1987) and UNCTAD (1987).

Table 7.2 **Bank Lending to Selected Countries ($ billion)**

	1983	1984	1985	1985 1st half	1986 1st half
15 Heavily indebted countries	11.1	5.4	−1.9	−1.2	−3.4
Argentina	2.3	0.3	0.6	0.7	0.1
Brazil	5.2	5.2	−2.9	−1.0	−1.0
Korea	2.2	3.5	2.3	1.4	−0.2
Mexico	2.8	1.2	0.7	0.1	−0.8
Venezuela	−1.3	−2.2	0.4	−0.1	−0.3

Source: M. Watson., R. Kincaid, C. Atkinson, E. Kalter, and D. Folkerts-Landau, *International Capital Markets: Developments and Prospects*, International Monetary Fund, December 1986.

Table 7.3 **LDC Lending Commitments ($ billion)**

	1981	1982	1983	1984	1985	1984:1	1984:2	1985[a]	1986[a]
All capital importers	47.0	42.6	32.6	29.9	16.1	17.6	12.3	13.2	18.7
Latin America									
Total	25.2	23.0	15.3	15.4	2.5	11.4	4.0	2.4	7.9
Spontaneous	25.2	23.0	2.0	0.6	0.1	0.3	0.3	0.1	0.2
Concerted			13.3	14.8	2.4	11.1	3.7	2.3	7.7

Source: See table 7.2.

[a]First three quarters.

Table 7.2 offers some more detailed information on the financing of Latin nations. It shows that there was indeed more bank lending than the aggregates suggest, because in the aggregates the programs for Mexico, Brazil, and Argentina are masked by such events as the outflow from Venezuela and (in the larger aggregate) Korea's move toward current account surplus. For Argentina, Brazil, and Mexico, private capital did make a significant though modest contribution in 1983, and 1984 was not quite as bad as it seems in the aggregate. Nonetheless, the essential failure of bank lending to make much contribution after 1983 and especially 1984 remains apparent.

Table 7.3 looks at commitments rather than disbursements. By this measure the difference between 1983 and 1984 is less clear-cut; rather, the limited process of concerted lending seems to have run aground only in the second half of 1984. The table essentially reflects the conclusion of Brazilian and Mexican new-money packages in January and April of 1984 respectively, which were in effect the last large-scale attempts to mobilize new money until the desperation Mexican package of August 1986. The Mexican package is the main component of a sharp

revival of concerted lending in 1986; the key question is whether this represents an aberration or the beginning of a new trend.

Taken together, these tables suggest the following summary of the effort to mobilize banks to provide new money for the debtors. First, even in 1983–84, when the new money was supposed to provide a major part of the solution, its supply was modest. Second, after mid-1984 new money from banks essentially ceased to be a recourse of the debtors.

The central question regarding the behavior of the banks, then, is why the seemingly forceful case for defensive lending generated only a brief, modest injection of new money. I will consider three possible explanations: that the creditors became unwillingly to lend because of unsatisfactory performance on the part of the debtors; that the free-rider problem blocked lending that was in the banks' collective interest; and that the absence of new money reflected an outcome of bargaining in which the countries were relatively weak and the banks strong.

7.3.2 Debtor Performance and the Supply of Funds

The bankers themselves prefer to ascribe their limited willingness to lend to the failure of the countries to show adequate progress in economic policy. One banker in conversation justified a lack of funding on the grounds that the debtor governments were "like children" who would simply waste any funds received. On this view the banks were in effect practicing conditionality, withholding funds contingent on reforms of economic policy.

This view raises two separate questions. First, is the indictment of the debtor governments correct? Second, and quite separate, is a judgment of debtor policies relevant to the explanation of limited lending? Do the volume and terms of lending to problem debtors depend positively on the performance of the countries' policymakers?

Policies in the Debtor Countries

The attack on the performance of the debtors faces in the first place the awkward fact that external adjustment, in the form of enormous trade surpluses, has been greater than anyone thought possible in 1983. This is of course the inevitable counterpart of the absence of new money, but it still means that the countries cannot be charged with having failed to make any adjustment. Instead the attack focusses on three issues: capital flight, budgetary adjustment, and the role of the private sector.

The attack on capital flight has come to assume a central place in the bankers' answer to charges that they have failed to deliver on their part of the debt strategy. For example, de Vries writes (in *World Financial Markets*, September 1986):

> Psychologically, nothing has contributed more to the pervasive sense of frustration over the LDC debt problem than the realization that capital flight persisted, if on a much reduced scale, almost throughout the 1983–85 period of "involuntary" lending. Creditors, both private and official, are understandably reluctant to provide fresh funds unless the debtors put a stop to capital flight (p. 6).

To an outsider this attack on capital flight seems oddly timed, unless it is viewed more as a rationalization than a real explanation. The major period of capital flight was during the inception of the debt crisis rather than in the post-1983 period, and the structural causes of long-term capital flight—overvalued exchange rates and negative real interest rates—have actually been reversed, with very low real exchange rates and very high real interest rates in major debtors. Some capital flight does continue, because of a lack of confidence in the debtor's solvency. However, this is the same lack of confidence that prevents voluntary lending. There is no reason to expect domestic residents to be noticeably more willing to invest in a problem debtor, just because they happen to live there, than foreign investors. To demand that flight capital return before bank lending resumes is in effect to say that there will be no bank lending unless confidence is restored, i.e., that only voluntary lending will be provided. This ignores the whole point of the argument for defensive lending even when there is a perceived discount on claims on a country.

The second critique of debtor policies emphasizes the failure of budgetary adjustment, which manifests itself in particular in the problem of inflation. Here, while measurement issues can provide an endless source of debate, there is undoubtedly a valid point. One way to make this point is that the impressive external adjustment has come essentially at the expense of a decline in investment rather than a rise in saving, largely because of a failure to bring budgets under control. This is a useful point, because it suggests a focus on the fiscal aspect of the debt issue, which is a useful way to cut through some otherwise problematic issues, like the potential role of direct foreign investment and debt-equity swaps.

Finally, it is argued that debtor countries have failed to make essential moves toward freeing up their domestic economies, both in terms of internal liberalization and in terms of opening the way for foreign investment. In part this concern reflects the idea that direct foreign investment can serve as an alternative to bank lending for financing; in part it is related to the proposals for debt-equity conversion. Both of these topics are treated below. There is also an element of supply-side economics, in which countries are urged to pursue more market-oriented policies in order to achieve rapid economic growth, which will restore confidence and allow the debt problem to be resolved. This last

argument requires a degree of certainty about the size and speed of the benefits of promarket policies that does not rest on hard evidence. It is also something new; demands for a radical shift to market-oriented policies were not on the table in 1983, when substantial bank lending was envisaged.

On balance, there are without question serious criticisms of the economic policies followed in each of the debtor countries. In any case, one need not condemn the policies of the debtors to be disheartened at the results. Whether or not one views debtor country policies as having been inadequate, the performance of the debtors has in one major respect been extremely unsatisfactory. One of the key premises of the case for involuntary lending was that countries could increase their debt while reducing the ratio of debt to GDP or exports, and thus become more creditworthy even as they continued to borrow. As table 7.1 makes clear, however, the debt ratios have either stagnated or worsened for major debtors, in spite of their having received far less financing than expected. This unfavorable result is largely due to weak world commodity prices and limited markets for debtors' exports, which have forced the trade adjustment to come primarily on the import side and also forced steep real devaluations that have reduced the dollar value of national income. If lenders are looking at the ratios, it is not surprising if they have become discouraged and are less willing to lend now than they were in 1983.

Although the debtors have thus dissatisfied their creditors with both their policies and their performance, it is questionable whether this dissatisfaction is the source of the unwillingness to lend. An alternative view dismisses complaints about the debtors' performance as rationalizations for the lack of bank financing, not its cause.

The Irrelevance of Debtor Policies

The basic point of this alternative view is that to advance the policy problems of debtors as an explanation of the absence of bank lending is to confuse defensive lending with free-market transactions. For a country that is borrowing from voluntary lenders on the open market, the ability to borrow does indeed depend on confidence in the country's management and prospects. When this confidence is lost, the country becomes a problem debtor. Once problem debtor status has been achieved, however, the new money provided through concerted action is not governed by the same motives. Provided that they are able to act cooperatively, creditors will lend as much as they have to in order to protect their investment, not as much as the country has earned or as much as it can be expected to service. It is by no means clear that good behavior will earn a country the right to more capital. If anything, good economic policies, by reducing the need for new capital, may

weaken a country's bargaining position and lead to a *reduction* of the supply of new money and a worsening of its terms.

A perverse relationship between behavior and the terms of lending is apparent in recent events. Argentina and Mexico, both demanding and receiving new money, have been able to reschedule debt at 13/16 percent over LIBOR (the London interbank offer rate for dollar deposits). The Philippines, rescheduling without asking for new money, had to pay slightly more at 7/8 percent. Columbia, which has never needed to reschedule, recently paid 1 1/8 percent on a new loan (see *The Economist,* 25 April 1987, 77–78).

A perverse relationship between performance and the supply of new money can be seen in the case of Mexico. When Mexico was apparently able to run massive trade surpluses while resuming modest growth, it received no new money. When oil prices collapsed, the first new-money package in more than two years was negotiated.

The reason for pointing out these perversities is not to condemn the banks, or to suggest that their behavior is irrational. It is instead to emphasize that defensive lending is not the same thing as free-market lending. It is determined by what the traffic will bear, that is, by what is necessary to safeguard existing claims. If defensive lending falls off it is because the need for it, as perceived by the creditors, has declined. This means that the criticisms of debtor policies that have been offered to justify the lack of new money should be viewed as rationalizations rather than reasons. The question we need to answer is, why were the creditors able to get by with providing as little new money as they did?

7.3.3 The Free-Rider Problem

One prospect that raised fears in the early stages of the debt problem was that defensive lending by creditors would be paralyzed by the problem of getting collective action, especially by smaller banks. A possible interpretation of the stalling of lending to problem debtors is that the free-rider problem did in fact do just that. How much evidence is there for the free-rider problem's importance?

Data on U.S. banks does show evidence of a free-rider problem, albeit with some puzzles (table 7.4). The small regional banks have consistently either reduced their LDC exposure more or expanded it less than either the money center banks or the middle-sized banks. After 1983, the middle-sized banks have in turn consistently increased exposure less than the money center banks. (Somewhat puzzlingly, in 1982 and 1983 the money center banks accepted smaller exposure growth than the middle-sized banks.) Thus the burden has been borne disproportionately by the larger banks.

The real question, however, is how important the free-rider problem has actually been as an inhibition on bank lending. As a crude effort

at answering this question, the last two lines of table 7.4 compare the actual growth rate of debt with the rate that would have obtained if middle-sized and regional banks had in fact been willing to expand their exposure as much as the large banks. In this hypothetical case exposure would have grown more rapidly in 1984, and fallen less rapidly in 1985 and 1986, but the basic qualitative fact of a near-stagnation in bank exposure would not have been altered. This reflects both the high initial concentration of claims in the hands of the larger banks and the fact that the withdrawal of smaller banks was a matter of gradual reductions in exposure rather than wholesale flight.

Now one might argue that had there been more cooperation from smaller banks the money center banks would have been willing to lend more themselves. The theoretical possibility that was raised in the first section of this paper was that the presence of a noncooperating fringe might make the whole enterprise of defensive lending unworthwhile from the point of view of the core of collusive creditors. However, this seems unlikely as an explanation of what happened in 1984–85. The nine largest banks hold about 60 percent of the total U.S. bank claims on problem debtors. Thus in terms of the criterion for justifiable defensive lending, f is about 0.6. It is hard to believe that the case for defensive lending rested on such a knife-edge that a 40 percent noncooperative fringe made the difference (although if European and Japanese banks are also counted as free riders, the accounting changes dramatically). And as long as defensive lending remains worthwhile, free-riding should lead to *faster,* not slower growth in the exposure of the core banks.

One might also argue that the effect of the attempt to free ride by regionals is reflected not so much in their eventual exposure as in the delay they impose on the process. The recent Mexican new-money

Table 7.4 **Changes in Claims on Debtors (percent)**

	1982	1983	1984	1985	1986[a]
All capital importers					
Money center	8.7	3.6	−0.8	−7.1	−10.1
Medium-sized	11.4	8.1	0.9	−15.1	−21.5
Regionals	5.4	0.8	−7.7	−2.4	−11.6
Latin America					
Money center	8.5	2.1	4.7	−2.7	−4.8
Medium-sized	12.1	7.3	−0.6	−13.0	−13.5
Regionals	4.2	−1.4	−3.0	−2.5	−10.0
Total	8.2	2.3	1.9	−4.5	−7.5
Hypothetical	5.9	1.8	4.0	−2.5	−4.0

Sources: See table 7.2; and author's calculations.

[a]First three quarters.

package was held up for eight months because of the difficulties of getting the smaller banks on board. As we saw above, however, the cessation of capital flows to debtors after mid-1984 reflected an absence of new-money packages, not delays in approval and implementation of packages already negotiated.

The free-rider problem is a real issue, and may have contributed to the toughness of the stance of the large banks in negotiating a bargain with the debtors. However, the best explanation of the failure of the banks to lend is that this represented a collectively rational decision on their part: They lent as little as they did because they did not, as it turned out, need to lend more. This leads us to the third explanation of the lending shortfall, which locates its cause in the relative bargaining power of the creditors and the debtors.

7.3.4 Bargaining Power

The third, and I believe most persuasive, explanation for the stall in bank lending to problem debtors is that the banks did not lend because they did not have to: They found themselves in a strong enough bargaining position to extract full interest from the countries without a quid pro quo of new money. Defensive lending failed to take place because it was unnecessary. The corollary to this view is that the failure of the banks to come up with new money in 1984–86 does not show that they can never be induced to do so; the banks did not fail to act in their own interest.

The principal evidence for the view that banks were simply striking a hard bargain with the debtors is negative. There is no indication that banks were disappointed in the performance of debtors in 1984–85, leading to unwillingness to lend (and in any case we have already argued that there is if anything a perverse connection between performance and defensive lending). There were no cases of new-money packages scuttled by attempts of small banks to free ride. Most important, until 1986 there was no indication that the failure to provide new money was pushing countries to the edge of refusal to pay interest.

In a sense the question should be put the other way. It is not very puzzling that banks lent so little, since they seem to have judged correctly that they could do so without adverse consequences. The question is why the countries were so willing to acquiesce. This remains somewhat hard to understand; even *The Economist* confesses itself "baffled by the good behavior of the Brazilians and other debtor countries up to now." In the jargon of bargaining theory, it is hard to understand why the threat points of the debtor countries were set so low, or perhaps why the threat points of the banks were set so high. What were the threatened sanctions that made countries willing to service so much of their debt?

Bankers and theoretical analysts have both emphasized the importance of good behavior to future access to capital markets (Eaton and Gersovitz 1981). However, the prospects for a return to sustantial net inward resource transfer for the major debtors are distant at best. It would require a very low discount rate for Mexico or Brazil to regard it as worthwhile to make current resource transfers of 4–5 percent of GDP now in order to have a chance at receiving inward transfers of a few percent of GDP sometime in the next decade. There is also considerable question how much current bad behavior threatens future access to capital markets in any case (Kaletsky 1985).

An alternative possibility is that the debtor countries fear retaliation by creditors that would interfere with their trade. Such worries were widely expressed in 1982 and 1983, when it was argued that if a country were to default openly, the efforts of bankers to seize whatever they could would cut off not only trade credit but bank accounts, and even lead to seizure of cargoes in port. However, the experience since then has muted such images. At present eight Latin American countries are failing to service their debt; the consequences to their trade have not been readily apparent. Admittedly there may be longer-term damage because of the loss of reputation, but these costs are certainly diffuse. Also, it is possible to argue that banks have been reticent in invoking sanctions against small countries that are in extremely serious trouble, and that a major or more healthy debtor would finally feel the adverse effects of failing to behave properly. However, as time goes by in the Brazilian impasse without dramatic penalties this suggestion also becomes less plausible.

One point that may help explain the quiescence of the countries is the cynical but apparently valid political observation that only the recent rate of change of the economic situtation, not the level, matters for political purposes. By this criterion the debtors were, in 1984 and 1985, doing acceptably well; although their incomes had taken a severe beating in 1981–83, in 1984–85 Mexico achieved modest growth and Brazil rapid growth, despite the need to run very large trade surpluses. Again, impressionistically it seems that the countries felt that they were doing well enough to be unwilling to press their case with the bankers and set in motion unknown risks.

Finally, an important element in debtors' willingness to accept an unfavorable bargain has probably been the political pressure from creditor-country governments, especially the United States, carrying the implicit message that sanctions of nonfinancial kind will be imposed on debtors that fail to service their debt. These sanctions could include trade action, immigration policy, and changes in U.S. attitudes toward the internal political situation. Whether the creditor nations would ac-

tually use their powers to enforce penalties on Third World debtors is doubtful, but the belief that they might is an important element in the thinking of the debtors. As Dornbusch (1987) puts it, "the governments of the major industrialized countries have insisted on debt service and have managed a system of debt collection. . . [enforcing] the debts by behind-the-scenes political pressure."

7.3.5 Implications

The failure of the commercial banks to provide new money on the scale envisaged in 1983 has been seen by many observers, including myself, as a sign of the unworkability of the strategy of relying on concerted lending by existing creditors. That is, it has been viewed as showing that banks cannot be mobilized to provide new money, as proposed in such plans as the Banker initiative, even if the provision of new money is in their own interest.

This interpretation would be correct if the lack of new money essentially reflected an inability of the creditors to undertake collective action. The discussion here suggests, however, that this was not the case; that creditors *were* acting in a collectively rational fashion, and they lent so little because that was the strategy that made sense in their own interest. If this alternative explanation is correct, then a change in the situation can lead to a very different response from the banks. If the countries become tougher bargainers, or the banks less tough, than bank lending can still be provided, as the Mexican package illustrates.

This interpretation raises two questions: What would make the situation change, and how would the change take place? That is, will there be an extended period of debt moratoria, etc.? We return to these questions in the final section of the paper, but first it is necessary to examine the possibility that alternative sources of financing could obviate the need for bank financing.

7.4 Alternatives to Bank Financing

A number of analysts have suggested that the answer to the debt problem lies to a significant degree in encouraging other forms of capital inflow to substitute for bank financing. In particular, direct foreign investment would be a non-debt-creating flow that would decrease the "leveraging" of debtor countries, and potentially improve their situation. Recently debt-equity swaps have attracted much favorable attention as ways of making the contribution of direct investment not simply incremental but an immediate substitution for part of existing debt.

To assess the prospects for such alternatives to bank financing, it is necessary to start by asking more carefully than most analysts have exactly how new nondebt capital inflows help the debt problem—a subject that is more subtle than one might at first expect. Then we can turn to the prospects for increased direct foreign investment, and finally to the potential for productive debt conversion schemes.

7.4.1 Capital Inflows and the Debt Problem

Do nondebt capital inflows help a debtor country? It may seem odd to pose the question, since they of course reduce the size of trade surplus needed to service the debt. However, asking this question does force us to focus more clearly on the nature of the problem and the limits to what magic wands such as changes in the form of liabilities can do to resolve it.

The key point to be made is that the problem of a debtor country is not simply one of running a sufficient trade surplus to raise foreign exchange to service its external debt. In much discussion of the debt problem the fiction is adopted that the debtor country is a single unit, virtually a single individual, so that the debtor's problem is wholly one of dealing with external creditors—that is, it is purely a *foreign exchange* problem. This is a useful fiction for many purposes. However, when we get down to the level of proposing solutions it is essential to recognize that the debt problem is in the first instance a problem of debtor *governments*. That is, in addition to being a foreign exchange problem it is also, and perhaps even primarily, a more general *fiscal* problem. Most though not all of the debt problem is the problem that governments have in servicing their debt and the debt that they have guaranteed, both foreign and domestic.

Suppose that a debtor country succeeds in attracting a new flow of direct foreign investment. This clearly helps the foreign exchange problem. However, it does not make any direct contribution to the government's fiscal problem, except to the extent that over time the direct foreign investment may induce economic growth that raises the tax base. The only immediate favorable effect of direct foreign investment on the debtor's financial position is the extent to which it allows the government to issue more domestic debt with which to service its foreign debt.

Consider what happens to the consolidated accounts of a government and a central bank when a foreign firm makes a direct investment. The firm uses foreign currency to purchase domestic currency, with which it makes its investment. The central bank therefore sells domestic currency and acquires assets in the form of foreign exchange. However, the domestic currency that has been issued adds to the money supply, and may therefore have an inflationary impact. To sterilize the effect

the government would have to withdraw the money through an issue of domestic debt. If it does this, the net effect on the balance sheet has been to swap an increase in domestic debt for an increase in foreign assets; the net debt position of the government has not changed.

Now it is possible and likely that the change in the government's portfolio will increase its freedom of action. To the extent that money issue has been constrained by defense of the exchange rate the increase in foreign assets will allow greater monetization of debt, in turn allowing lower real interest rates and higher investment. Alternatively, the availability of foreign exchange may allow the government to relax exchange controls, with beneficial results for economic growth. These are real benefits, but they hinge essentially on the proposition that for a problem debtor the shadow price on foreign exchange is less than the price the investor pays for it. This wedge provides the scope for gains from non-debt-creating capital flows, but these flows do not provide a panacea for the fiscal aspect of the debt problem. The point is that a million dollars invested in a new electronics plant in Mexico is *not* a perfect substitute for a million dollars worth of debt relief.

Thus even if the prospects for new capital flows other than bank credit are highly favorable, they provide at best an answer to only part of the problem. Nonetheless, we need to ask how favorable the prospects are.

7.4.2 Prospects for Direct Foreign Investment

Direct foreign investment occurs when foreign investors make two choices: to invest, and to finance by equity rather than debt. The prospects for attracting new flows of this kind depend on the incentives for both actions.

The prima facie case for foreign firms to increase investment in problem debtors is not strong. After all, actual investment in the debtors has fallen substantially, suggesting that local firms have not found it profitable. To suggest that there is an incentive for inward investment, one must argue for a difference in the incentives facing potential foreign investors and local firms.

One possible source of such a difference is capital costs. Real interest rates in the debtors have been very high, possibly reflecting the demands of the government on national saving with external financing cut off. For foreign investors who have a lower cost of capital, investment might still be profitable. It is possible to argue that rates of return on investment in the debtors are actually quite high; while protected import-substitution industries are depressed by the recessions in most debtors, the substantial real depreciations in many debtors since the onset of the crisis (table 7.5) have presumably made new export and/or import substitution activities more profitable than before.

Table 7.5 Real Exchange Rates, April 1987 (1980–82 = 100)

Argentina	53.3
Brazil	74.4
Mexico	62.9
Korea	72.5

Source: Morgan Guaranty Trust (1987).

On this argument, then, profitability of potential new investments has not declined; the fall-off in investment reflects instead a rise in the price of capital that does not apply to foreign firms. If firms had access to capital at world prices, the demand for investment would be sufficient to return debtors to their normal status of capital importers rather than exporters.

This argument raises the question, however, of why the high rates of return on financial instruments in debtor nations have not themselves attracted portfolio investment. The answer is presumably that the prospect of being able to realize these returns is less than certain; that the possibility of foreign exchange controls, inflation, or failure to pay fully on domestic debt is high enough to offset the seemingly high real interest rates in the eyes of international investors. But then the question is whether the same does not apply to the returns on investing in physical capital as well. Japanese residents are not buying Mexican Treasury bills, despite their high returns, because the risks outweigh the returns. Why does the same not hold true for Japanese investment in Mexican electronics plants?

Of course to date the answer has been precisely that foreign investors have regarded physical claims as risky, too. Despite the real depreciations there has not been a rush by foreign firms to manufacture in problem debtors. Hopes of inducing direct foreign investment on a substantial scale rest on the belief that investors can be induced to expect their claims to be treated differently from bank debt. Such a belief is not impossible to justify. Direct foreign investment (DFI), which makes a direct contribution to the economy and generates foreign investment income over a longer time horizon than debt service, could well receive more favorable treatment than debt, especially government debt. Furthermore, in the past DFI has been regarded with suspicion because of the perceived threat to national sovereignty, and it has been limited by restrictions. To the extent that debtor governments can credibly remove these restrictions, they may be able to induce new flows.

The major limitation on direct foreign investment for problem debtors is that foreign investors are potential victims of the fiscal problems that direct investment does little to resolve. As long as the expected ability of a debtor government to pay is less than its debt, there is, as Dooley

(1986) points out, an unallocated loss that may be expected to fall in part on owners of physical capital as well as on holders of debt. Unless this is resolved, the prospects for attracting large inward DFI are doubtful.

7.4.3 Debt Conversion Schemes

Financial industry experts have strongly pressed for the conversion of external debt into equity claims. Advocates of these swaps at first seemed to be claiming that such conversions would simultaneously reduce countries' external obligations and generate an inflow of direct foreign investment (see, for example, *Morgan Guaranty Trust* 1986). Some cooling of enthusiasm has occurred as careful analysis has shown that a debt-equity conversion in fact does neither. The advantages of debt-equity swaps are in fact fairly subtle, and there are potentially serious disadvantages.

Debt-equity swaps are actually part of a broader array of debt conversion schemes. The general characteristic of such schemes is that investors who have acquired some of a country's external debt at a discount on the secondary market are permitted to redeem the debt for some kind of domestic asset. In the largest program of debt conversion to date, that in Chile, more than half of the debt conversion has actually taken the form of sales of debt to the debtors, without any requirement that the proceeds be invested in equity (see Larrain 1986).

Investments made by means of debt conversion schemes in no case contribute to net capital inflow; the whole point is that they allow investors to acquire claims on a country through a transaction with the country's creditors rather than its residents. The potential benefits lie instead in the future effect on a country's stream of net investment income. First, debt, which carries with it an obligation to make a flat stream of nominal payments over time, may be replaced with other liabilities whose payment stream rises over time with growth and inflation. This serves the same aim of shifting the time profile of payments that defensive lending was supposed to accomplish. Second, in some circumstances debt conversion may serve as a back-door route to debt forgiveness; investors may be induced to acquire assets with an expected present value less than the face value of the converted debt.

Against these potential benefits must be set two possible costs. First is that a debt conversion scheme may divert capital inflow that would otherwise have taken place through other channels; since at best debt conversion makes no contribution to net capital inflow, *any* such diversion represents a net capital outflow. Second is the possibility that debt conversion schemes will have an adverse fiscal impact.

Although many debt conversion schemes are possible, the essential advantages and disadvantages may be understood by making two key

distinctions. On one side is the distinction between debt-equity swaps, in which debt must be converted into equity and held in that form, and "debt-peso" swaps in which debt is converted into cash without a restriction on how that cash is to be invested (in the most significant program of debt conversion to date, that of Chile, this distinction corresponds to the distinction between chapter 19 and chapter 18 transactions respectively). On the other side is the distinction between conversions involving private debt, which have no fiscal impact, and those involving public or public-guaranteed debt.

1. *Conversions of private debt to equity:* The most favorable kind of debt conversion is one in which the debt of private firms is exchanged for equity (not necessarily of the same firms). Since dividends can be expected to rise over time with inflation and economic growth, this serves the desirable aim of tilting the time profile of a country's payments to foreign creditors in the direction of the time profile of its ability to pay. A secondary advantage is that to the extent that earnings on equity are related to the economic state of the country, this conversion shifts the country to a more equitable sharing of risk.

Even this most favorable form of debt conversion, however, can aggravate a country's foreign exchange constraint in the short run. To the extent that a purchase of equity through debt conversion substitutes for a purchase that would have taken place in any case—that is, to the extent that there is anything less than 100 percent additionality—the conversion reduces net capital inflows. One way to look at this is to say that a debt conversion that substitutes for capital inflows takes rescheduled debt—that is, debt that has been frozen into long-term claims—and de facto unfreezes it into short-term claims, undermining the purpose of the rescheduling. Since some substitution of debt-equity swaps for capital inflows is surely unavoidable, even this best case of debt conversion represents a trade-off of a worsened capital account now for a more favorable investment income profile in the future.

2. *Conversions of private debt to cash:* A sale of external debt back to the creditor, without a requirement that the proceeds be invested in equity, differs from a debt-equity swap both in being less likely to have favorable effects on the profile of future investment payments, and in running greater risks of worsening the capital account in the short run.

The best case of a "debt-peso" swap would be one in which domestic residents are induced to repatriate external assets that they would otherwise have retained outside the country. The initial capital account impact of this transaction would be zero. Future payments of interest and principal would be reduced. However, because the owners of the repatriated capital would presumably invest the funds domestically, they would in future substitute the income from these investments for additional repatriations. Thus the overall effect on the stream of re-

source transfers that the country must make to the rest of the world is uncertain; it depends on the planned domestic consumption of the investors.

The concern with debt conversations not tied to equity investment is that they offer greater opportunity than debt-equity swaps for actions that worsen the capital account. Most extreme would be the case where debt is converted into domestic currency, and this currency is then converted (legally or illegally) into foreign exchange and exported again. Such "round-tripping" would turn debt conversions into a device for facilitating capital flight. Less dramatically but equally harmful in its effect on the capital account is the use of debt conversions as a substitute channel for repatriation of earnings on overseas assets; the effect of this substitution is to reduce net capital inflows one-for-one.

The main justification that one might offer for unrestricted conversions of debt is that they may serve as an indirect way for a country to buy back its own debt at a discount; more on this below.

3. *Conversion of public debt:* Conversion of public debt, whether into equity or unrestricted, has the same effects as conversion of private debt, with an additional fiscal impact.

The conversion of external public debt into local currency, if not sterilized, will be inflationary. Thus it must be offset by an issue of domestic debt, which turns it from the point of view of the government into a swap of foreign for local currency debt. From a fiscal point of view, this is a definite disadvantage. The reason is that in problem debtors real interest rates on internal debt are far higher than on external. This in turn reflects the fact that the credibility of government promises to repay, both internal and external, is uncertain. In the case of external debt, however, rescheduling agreements have frozen creditors into holding claims at an interest rate well below what they would require to hold those claims voluntarily. A debt conversion unfreezes these claims and converts them into new, short-term claims on which the government must pay a high enough interest rate to compensate for risk of nonpayment. Thus a debt conversion involving public debt, even if it is structured so as not to worsen the capital account, trades off the benefit of an improved composition of external liabilities for the cost of a worsened fiscal situation.

This review of the effects of debt conversions does not convey a favorable impression. However, there is one other potential advantage of debt conversions that may be an important motivation: They offer an end run around some of the legal and institutional obstacles to debt forgiveness. Given the substantial discounts on secondary market sales of problem debtors' obligations, some governments may regard it as a worthwhile investment to buy back their own national debt. However, direct buy back at a discount raises legal problems. By inducing third

parties to buy the debt, and then collecting some fee for the process, governments can achieve approximately the same result. Thus Chile has auctioned off rights to "debt-peso" conversions (though not debt-equity swaps), which in effect allows the government to buy back the debt at a discount equal to the auction premium. Other countries may achieve the same aim by specifying a different exchange rate for debt conversions than for other transactions.

At least so far, however, the debt forgiveness aspect has been limited. In the Chilean case the auction prices on debt-peso conversions have been much smaller than the secondary market discounts, presumably reflecting the fact that within Chile, with capital exports controlled, the shadow price of foreign exchange is higher than its official price. And debt-equity swaps are not auctioned off.

In summary, the idea of using debt-equity conversion as an alternative to defensive lending has been heavily oversold. Such conversions not only cannot eliminate the need for debt-creating capital inflows, they may easily increase rather than decrease the necessity for new borrowing.

7.5 "Financing" through Debt Forgiveness

Through most of this paper attention is focussed on the possibility of reducing the resource transfer burden through new capital inflows. However, an obvious alternative is to deal with the problems posed by an overhang of debt through an agreement by creditors to accept less repayment than originally specified in the loan contracts. That is, debt forgiveness is an alternative to financing. While debt relief proposals are dealt with in detail elsewhere in this volume, it is inevitable that the subject be tackled in this chapter, too. Three questions arise: First, what are the advantages of forgiving rather than financing a debt overhang? Second, what are the offsetting advantages of relying on new capital flows? Third, what operational difficulties might interfere with desirable programs of debt forgiveness?

7.5.1 Advantages of Debt Forgiveness

Debt forgiveness obviously offers a benefit to the country forgiven. However, proponents of debt forgiveness are not usually simply advocating a neutral redistribution of world wealth; they argue that debt forgiveness is in the interest of the creditors as well, or at least would raise world income as a whole. The usual reason given is the simple macroeconomic linkage: With the debt burden reduced, debtors would import more and thus stimulate world output. Except in the very short run, however, and maybe even then, output in the industrial countries is constrained by real or perceived supply limitations, not an inability

to generate aggregate demand. The economic advantages of debt relief lie not in demand creation, but in eliminating the distortions of incentives generated by the overhang of problem debt.

One such distortion has already been mentioned, in the context of the bargaining game between debtors and creditors. As we noted, problem debtors and their creditors can be viewed as bargaining over the rate of resource transfer; in an effort to demonstrate their bargaining toughness, they may be led into actions that temporarily disrupt trade and financial markets, imposing costs on the world economy. One way to say this is to observe that as long as the debt remains too large to allow a return to normal debt service, the debt crisis remains at a continual simmer that must be expected occasionally to boil over. When this happens, the distributional struggle between debtors and creditors reduces the size of the overall pie. If it were possible by a program of debt forgiveness to reduce the remaining debt to a level that eliminated the need for this bargaining game, these costs could be avoided. This would represent a gain for the world economy as a whole, though it might still represent a loss from the point of view of the creditors.

A second distortion has been pointed out by Sachs (1986), and arises from the preverse relation between behavior and treatment of problem debtors. For a country that is engaged in a bargaining situation with its creditors, an enhancement of its economic situation will normally be reflected in a *reduction* in the inflow of new capital, i.e., in an increase in the rate of resource transfer necessary, and to a worsening of the terms on which that capital is made available. This amounts to a tax on the country's efforts to adjust its economy. Policies that expand export capacity, substitute for imports, increase an economy's flexibility, etc., typically are costly for governments to undertake, either because they require diversion of scarce resources or because they require challenging vested political interests. If the countries know that the net effect of such policies will largely be to benefit their creditors rather than themselves, the incentive to take desirable steps will be reduced.

Again, a program of debt relief that settles the issue once and for all can in principle eliminate this distortion. If debt is reduced to a level that countries expect to pay, any marginal improvement in a country's prospects once again accrues to the country rather than its creditors. Thus a successful once-and-for-all debt forgiveness would restore normal incentives, where a continuation of ad hoc financing that results from bargaining provides perverse incentives.

The combined advantages of avoiding costly future confrontations between creditors and debtors and eliminating the perverse incentives that a regime of involuntary lending gives to the debtors suggest that debt forgiveness would not only help the debtors but would tend to

raise world income. Against these advantages, however, must be set the disadvantages, both those for the world as a whole and those for the creditors.

7.5.2 Disadvantages of Debt Forgiveness

From the point of view of the world as a whole, the main disadvantage of debt forgiveness is the moral hazard problem: If countries that ran up excessive debt levels in the past are able to get the debt forgiven, it will distort incentives in the future.

The nature of the distortion would depend on how debt relief is financed. If the debt relief were to come at the expense of creditor governments rather than private banks, the effect might be to encourage both irresponsible lending and irresponsible borrowing, as countries and banks conclude that OECD governments will bail them out in future crises. If (as is more plausible) the relief comes largely at the expense of the private creditors, lending will be constrained in the future, presumably to excessively low levels. However, though their borrowing would be constrained, countries might be tempted to behave irresponsibly in other ways. For example, countries that now have manageable levels of debt might be tempted to pursue policies that threaten their ability to service the debt, in the anticipation that if that should happen the debt would be forgiven. For that matter, debtors that received debt forgiveness once might be tempted to pursue policies that required a second round of forgiveness.

How important is this moral hazard issue? There is essentially no evidence that would let us evaluate it quantitatively. I would offer a purely intuitive guess that it is not, in the present case, very important. The ebt crisis of 1982 was a sufficiently unique event, both in terms of its global extent and in terms of the severe external shocks that debtor nations experienced, that debt forgiveness in this case would probably not be construed as setting a precedent for future debt negotiations. Also, if debt forgiveness can be negotiated at all, it will be such a difficult process that it will hardly facilitate further rounds of forgiveness. However, this is purely a judgement call. The moral hazard argument does make a global argument against debt forgiveness.

Probably a more relevant argument against debt forgiveness in practice is the fact that from the point of view of the creditors debt forgiveness now may reduce the expected value of their claims more than financing a debt overhang for the time being, even if they do not ever expect to be paid in full. The reason is that preserving the nominal debt on a country at its full value, even when it is subjectively viewed as being worth much less than this, gives creditors the opportunity to benefit from unexpected good fortune. Suppose that there are two possibilities: a country might in one state of the world be expected to

repay 75 percent of its debt, in the other 25 percent. If these states are equally likely, debt would be valued at 50 percent of par. One might suppose that it would make sense to recognize the reality that the debt will not be fully repaid, and forgive the 50 percent of the debt that has already been discounted by the market. Yet to do this would prevent the creditors from collecting all 75 percent in the favorable state: The option value of the large nominal debt will have been sacrificed, and the reduced claims would be valued at only 37.5 percent of the original par.

The risks of future confrontation and the perverse incentive effects of a debt overhang work against the advantages of keeping nominal debt large, even for the creditors; they face a trade-off between the option value of financing without forgiveness and the incentive effects of forgiving rather than financing. Because they care about the distributional aspects, however, creditors can be expected to prefer a solution that involves less debt forgiveness than would be advocated by someone trying to maximize world income.

7.5.3 Operational Problems with Debt Forgiveness

Even if there should be a consensus that debt relief is desirable, it would be very difficult to put into practice. It might seem that the fact that debt is already discounted substantially on the market should offer possibilities for clever schemes to convert this discount into a reduction in countries' obligations. However, there are serious collective action and externality problems that block unilateral action on the part of both individual creditors and the debtors themselves.

Suppose first that creditors decide that it would actually be in their interests to offer a reduction in the obligations of a problem debtor. It is still not in the interest of an individual creditor to forgive debt, because this would simply reduce his own share of the claims while enhancing the value of other claims. Thus there may be a "prisoner's dilemma" in which it is in the collective interest of creditors to forgive part of the debt but no individual creditor has an incentive to act.

Suppose on the other hand that a debtor nation tries to take advantage of the secondary market to buy back some of its own debt at a discount (and we suppose that the legal obstacles are somehow waived). The problem in this case is that in the way the bargaining game that we have seen characterizes relationships between a problem debtor and its creditors, such a reduction in nominal debt outstanding will not reduce the country's expected future payments one for one. By reducing the outstanding debt, the country will have improved its objective position, and therefore *weakened* its bargaining strength vis-à-vis the remaining creditors. Conceivably a buyback of debt would serve only to raise the value of the remaining debt to creditors, with no benefit

to the country at all. For example, suppose that a country has $10 billion of debt, but everyone knows that it can pay only $5 billion. If it buys back $1 billion of debt at 50 percent of par, it will have a nominal debt of only $9 billion remaining, but it will still be expected to pay $5 billion, and the buyback will have accomplished nothing from the country's point of view.

These problems mean that even if all parties agree that debt forgiveness in desirable, it cannot be achieved in a piecemeal fashion. A negotiation in which all or virtually all debt obligations are simultaneously reduced would be necessary. Such a negotiation could be forced by unilateral action by a debtor country; otherwise it would require a coordinating and mediating role by third parties, such as international organizations. At the present time there seems to be little inclination on the part of the major debtors to press for a once-and-for-all package of debt forgiveness, and even less inclination on the part of international organizations to take the lead in organizing such packages. That may change, but for the time being forgiveness does not seem about to displace financing as the key concern in the debt problem.

7.6 Outlook for Capital Flows

Direct foreign investment cannot be counted on to provide the financing that banks have failed to provide, and schemes like debt-equity swaps are much more problematic than their sponsors seem to have appreciated. The desirability of debt relief is still controversial, and in any case it poses operational difficulties that none of the actors in the debt situation seem at this point ready to take the lead in resolving. Thus the central question regarding financing for problem debtors is whether involuntary lending by banks can be restarted. This depends crucially on the interpretation of the problems with mobilizing lending so far. If the cessation of lending during 1984–86 really reflected an inability of the banks to act in their own interests, prospects are bleak. If it represented collectively rational behavior on the part of the banks, then the limits on bank lending tell us only that the banks chose not to, not that they will not.

The argument made here is that the evidence is most consistent with the view that low bank lending was the outcome of a bargaining process in which, for a variety of reasons, creditors had very high bargaining power compared with debtors. A shift in that bargaining process will produce a different result. Specifically, the bargain will shift if debtor countries come to realize that a return to normal market access is not imminent, that the internal political costs of continuing full debt service are high, that the external cost from a failure to reach agreement with the banks is low, and, perhaps, that the U.S. government will not take

political revenge on deadbeats. Given a situation of this kind, creditors will prefer to negotiate some combination of de facto capitalization of interest and reduced rates rather than fail to reach any agreement.

What about the possibility of debt moratoria and sanctions against the debtors? If all parties were fully informed about each others' motives and opportunities, we would expect everyone immediately to reach a bargain that reflected the ability of the players to mete out and receive punishment, without any necessity for the actions actually to take place. However, given the uncertainty involved, it will probably be necessary for players to demonstrate their resolve by announcing debt moratoria, seizing assets, and so on. Ideally third parties would be able to mediate and avoid such open confrontations, which have real costs, although less than is often supposed. However, the important point if confrontations cannot be avoided—which will sometimes be the case—is to realize that periods in which debtors and creditors fail to reach agreement are a part of the game, not the end of it.

Thus the outlook, if this analysis is correct, is in fact for a revival of bank financing to the debtors. This financing may for a while take the form of arrearages, until the debtors and creditors reach agreement. Eventually it will be formalized in a new agreement. There will be new bank lending because the countries will need it: The moral of this paper is that the supply of capital to problem debtors is, in the end, driven by the demand.

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