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# 15 Private Capital Flows to Problem Debtors

Paul Krugman

#### 15.1 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. Bank lending in particular was expected to provide most of the capital flow under the debt strategy as it first emerged in 1983, and 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. 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.

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.

The chapter is in three parts. Section 15.2 reviews the rationale for new private capital flows to countries that are having difficulty servicing their current debt. Section 15.3 asks why this seemingly solid rationale has not so far been matched by an equally solid flow of financing in practice. Section 15.4 then considers whether private capital can be attracted through innovative mechanisms, such as debt-equity conversions, instead of through the concerted bank lending that has been the basis of private capital flows so far.

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#### 15.2 The Rationale for Private Capital Inflows

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. Its rationale rests on two 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.

#### 15.2.1 The Analytics of Debt Growth and Creditworthiness

Consider the following numerical example. 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.

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 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 (noninterest current account) 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.

Despite this favorable long-term arithmetic, claims on many heavily indebted countries continue to be viewed as highly risky, and sell at well below par on the secondary market. The reason for this is presumably that the favorable arithmetic depends on countries' willingness to continue moderate resource transfer for very extended periods. With debt equal to half of GNP, growth at 3 percent, and 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 ten 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.

#### 15.2.2 The Case for Defensive Lending

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 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 obligations 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 very 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 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.

#### 15.3 Bank Lending to Problem Debtors Since 1982

#### 15.3.1 The Magnitude of Bank Lending

Table 15.1 presents a first overview of the lending of banks from the opening of the debt strategy at the end of 1982 to the end of 1986. 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

Table 15.1 India	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		
Current account	-42.4	- 10.9	-2.6	4.7	- 16.1		
Resource transfer	-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		

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

private new money. Only in 1986 was there a move toward current account deficit, which must have had capital inflows 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 15.2 and 15.3 provide some information on these issues. They show that while the details are more complex than aggregates convey, the essential point remains that there has not been much bank lending to problem debtors, especially after 1983–84. The central question is why the seemingly forceful case for defensive lending generated only a brief, modest injection of new money.

#### 15.3.2 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. However, there are good reasons to discount this view. For one thing, the criticism seems unreasonable. Debtor countries have achieved trade surpluses greater than anyone believed possible in 1983. Admittedly this is the inevitable counterpart of the absence of new money, but it still means that in the most direct issue of performance,

	1983	1984	1985	1985 1st half	1986 1st half
15 Heavily Indebted	11.1	5.4	- 1.9	- 1.2	-3.4
Countries					
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

 Table 15.2
 Bank Lending to Selected Countries (billions of dollars)

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

		8							
	1981	1982	1983	1984	1985	1984:1	1984:2	1985ª	1986 <sup>a</sup>
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	0.1	0.1	0.2
Concerted			13.3	14.8	2.4	11.1	3.7	2.3	7.7

 Table 15.3
 LDC Lending Commitments (billions of dollars)

Source: See table 15.2.

<sup>a</sup>First 3 quarters

the ability and willingness to generate foreign exchange with which to service debt, the countries have delivered more, not less, than was expected of them.

More fundamentally, the asserted link between debtor performance and the availability of new money confuses defensive lending with freemarket 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. 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. 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 performance and the supply of new money is evident 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.

#### 15.3.3 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. There is an inherent free-rider problem in defensive lending: The *collective* 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.

Data on U.S. banks does show evidence of a free-rider problem. 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. However, the concentration of debt in the hands of larger banks is sufficient that this has been only a minor drag on net bank lending. Put differently, even if all banks had increased their exposure as rapidly as the money center banks, there would still have been a very modest flow of bank lending to problem debtors. And as long as defensive lending remains worthwhile, free riding should have led to *faster*, not slower growth in the exposure of the core banks.

#### 15.3.4 Bargaining Power

The simplest explanation for low bank lending 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.

One point that may help explain the acquiescence of the countries is the cynical but unfortunately apparently valid political observation that only the recent rate of change of the economic situation, 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, the impression one gets is that the countries felt they were doing well enough to be unwilling to press their case with the bankers and set in motion unknown risks.

Another 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 a nonfinancial kind will be imposed on debtors that fail to service their debt.

#### 15.3.5 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. 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 that 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, then bank lending can still be provided, as the Mexican package illustrates.

#### 15.4 Debt Conversion Schemes as an Alternative to Bank Lending

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, financial industry experts have pressed strongly for the conversion of foreign debt into equity claims. Thus our discussion of bank lending must be supplemented by a discussion of this alternative. 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. Some cooling of enthusiasm has occurred as careful analysis has shown that a debtequity 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 schemes in which investors who have acquired some of a country's external debt at a discount on the secondary market are permitted to redeem that 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.

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 services 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 backdoor 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. On the other side is the distinction between conversions involving private debt, which have no fiscal impact, and those involving public or publicly-guaranteed debt.

#### 15.4.1 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% additionality—the conversion reduces net capital inflows. Since some substitution of debtequity 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.

### 15.4.2 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 resource 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 conversions 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.

## 15.4.3 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 debt. 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 worsened fiscal situation.

#### 15.4.4 Summary

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 buyback 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 debtequity 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.

#### **15.5 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 stalling 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 chapter has been that the supply of capital to problem debtors is, in the end, driven by the demand.

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