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## Our LDC Debts

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### *1. Rudiger Dornbusch*

The United States has a major stake in the world debt problem because it affects the profitability and even the stability of our banking system. But it also matters because debt service requires trade surpluses for debtors. We are now experiencing the reverse side of the coin from collecting debt: debtor countries, having made their goods extra competitive, are selling in our market and are competing with our exports. The debt problem is therefore a part, though perhaps a small part, of the U.S. trade crisis. Finally, we have a major foreign policy stake in the debt crisis because debt collection brings about social and political instability.

This paper reviews these various aspects of the debt problem. Section 3.1 sets out debt facts, followed in section 3.2 with a brief look at the origins of the debt problem. That issue is important in laying the groundwork for solutions that involve sharing the adjustment. The “transfer problem” in section 3.3 is the general framework in which we discuss the problem of debt service for the debtor countries. Section 3.4 deals with bank exposure and the quality of less developed countries’ (LDCs) debts. The U.S. trade implications of the debt crisis are briefly addressed in section 3.5. The paper concludes with an overview of alternative proposals for solving the debt problem.

#### **3.1 Debt Facts**

In this section I provide an overview of debt facts: in the aggregate and in country detail who owes whom how much, with what maturity, and in which currency.<sup>1</sup>

## 3.1.1 An Overview

Table 3.1 shows aggregate debt data for selected years both in current and constant dollars. There is a problem in finding a suitable deflator for the world economy. Possible candidates are the U.S. GNP deflator, or either import or export prices for LDCs. I select instead the price (export unit value) of industrial countries' exports as a broader price index of trends in the world economy. World trade prices since 1980 have declined and even in 1986 are below their 1980 level. Accordingly, this index behaves very differently from, for example, the U.S. deflator, which has been steadily increasing.

Since 1978, LDC debt has increased by 142 percent in nominal terms and 88 percent in real terms. In these aggregate data we observe the slowdown of debt growth since 1982 and the effect of changing trends in world prices with inflation in the early period and deflation since 1980.<sup>2</sup>

A second perspective is provided by looking at debt relative to some scale variables. The most common scale variables are exports of goods and services and GDP. Table 3.2 shows debt relative to GDP.

The most interesting point made by this data is that differences, at least at this aggregate level, are minor. Latin America is normally singled out as *the* problem case. But on a debt-income basis, non-oil Middle East countries stand out as carrying an even larger burden. The other point to note is the deterioration in debt ratios since 1982. This is surprising when one sees banks today rationing credit. The explanation lies primarily in the fact that GDP in U.S. dollars has declined for most debtor countries as a result of large real depreciation.<sup>3</sup>

There is another interesting presentation of debt-income ratios in singling out different groupings of countries. Interestingly small, low-income countries have a higher debt-GDP ratio (64.0 percent) than net oil imports (35.3 percent) or the group of problem debtors (46.6 per-

**Table 3.1** Capital-Importing LDC Debt (billions of U.S. dollars; billion 1980 dollars)

	1978	1980	1982	1984	1986	1986 % Share
Total	399	570	763	849	967	100.0
Africa	72	94	117	128	144	14.9
Asia	93	135	180	212	265	27.4
Europe	48	68	77	82	101	10.4
Non-oil Middle East	30	43	56	68	75	7.8
Western Hemisphere	156	231	333	359	383	37.5
Total (1980 Prices) <sup>a</sup>	523	578	822	974	987	—

Sources: IMF *World Economic Outlook* and *IFS*.

<sup>a</sup>Deflated by industrial countries' unit export value.

**Table 3.2 Debt GDP Ratios (percentage)**

	Africa	Asia	Europe	Non-Oil Middle East	Western Hemisphere
1978	32.2	15.9	23.7	52.9	31.8
1982	36.3	21.5	30.8	66.6	43.5
1986	44.3	30.0	40.0	63.2	47.0
Cumulative Real GDP Growth, 1982–86	4.2	31.1	11.4	-0.3	5.5

Source: IMF *World Economic Outlook*.

cent). Thus countries in a group with Afghanistan and Bangladesh have higher debt ratios than the group including Brazil and Mexico. We shall see below that this does not translate into higher debt *burdens* since much of the poor countries' debt is concessional.

### 3.1.2 Short, Long, Official, and Private Debt

The maturity structure of the debt is primarily medium term. Throughout 1978–86, the share of short-term debt (less than one-year maturity) in total debt of all capital-importing LDCs never exceeded 20 percent. But, of course, there are significant differences between countries. The larger the borrowing from commercial banks, the shorter the maturity of debt. In the period to 1982 there was an increase in the share of short-term debt, reflecting the increasing recourse to commercial bank financing. But since then, with rescheduling and increased official lending, the share of short-term debt has declined from 20 percent to only 13 percent. Since most debtors are not in a position to amortize their debts, the distinction between short- and long-term debt is becoming increasingly irrelevant.

Table 3.3 shows the share of debt to official creditors in total debt. The table reports the data for various regions.

The differences among country groupings in their funding is quite striking. Latin America stands out as borrowing a very much larger

**Table 3.3 Share of Long-Term Debt to Official Creditors in Total Debt (percentage of total)**

	Africa	Asia	Europe	Non-Oil Middle East	Western Hemisphere
1978	34.0	54.9	27.6	57.6	15.9
1982	38.9	42.5	30.7	58.5	12.4
1986	48.6	43.5	33.3	58.5	20.3

Source: IMF *World Economic Outlook*.

share from private sources than the remaining countries. But there is also an interesting difference in behavior over time. For Latin America and Africa, the absolute and relative increase in official credit since 1982 is much more substantial than for other regions. In 1985, for example, commercial bank exposure declined in absolute terms, while official exposure, especially of multilateral agencies, increased.

### 3.1.3 Debt Service Burdens

The burden of debt service is made up of interest payments and amortization. As such it is affected by three factors:

1. The maturity profile of debt, which dictates the amount of amortization in a given year. Any bunching of maturities would translate into large year-to-year fluctuations in debt service.

2. Interest rates on the debt. This factor depends on the private-official composition of the debt. Official debt may be concessional and long term while private debt typically involves floating-rate interest payments.

3. Debt service measured relative to some benchmark such as exports or GDP. The benchmark is affected by the country's real exchange rate. Real depreciation, as already noted, will reduce real GDP in dollars and hence raise the debt-income ratio. Measuring debt relative to exports implies that changes in the value of exports, say as a result of exchange rate policy or as a consequence of changes in world commodity prices, will affect the debt-export ratio.

The distinction between long- and short-term debt, in an environment of universal rescheduling, is becoming uninteresting. I thus focus only on interest payments. Table 3.4 shows debt service measured by interest payments as a fraction of debt, GDP, and exports. I again focus on the geographical distribution.

The first row makes apparent the difference in effective interest rates paid. Africa and Asia have a significantly larger share of concessional loans, and, accordingly, interest payments as a fraction of debt are in excess of two percentage points less than for Latin America. As a benchmark we can compare the effective interest rate with the LIBOR

**Table 3.4 LDC Interest Payments, 1986**

	Africa	Asia	Europe	Non-Oil Middle East	Western Hemisphere
Percent of Debt	6.8	5.8	8.0	7.3	8.4
Percent of GDP	3.0	1.7	3.2	4.6	3.9
Percent of Exports	14.4	6.1	10.8	17.0	27.7

Source: IMF *World Economic Outlook*.

(London Interbank Offered Rate), which in 1985–86 averaged 7.8 percent. Divergences of the effective rate from LIBOR reflect concessional loans and the spreads above LIBOR on commercial bank loans.

The interest burden as a fraction of GDP shows Africa and Europe in the middle range, a low figure for Asia, and a high indebtedness for Latin America and the non-oil Middle East. Differences between the GDP and export-based comparisons reflect economic structure. Europe is wide open while Latin America is much more closed. Latin America's export-to-GDP ratio is much lower than that for Asia, for example.

The difference between debtors with commercial as opposed to concessional debt becomes particularly apparent when comparing effective interest payments. While the effective interest rate for small, low-income countries in 1986 averaged 3.4 percent, for the remaining groups it was between 6.9 percent and 8.7 percent.

#### 3.1.4 Currency Denomination

The currency composition of lending to LDCs is not well documented. There is little doubt that the major part of loans, perhaps 60 percent to 70 percent, is in U.S. dollars. The denomination issue is very important since large fluctuations of real exchange rates between the United States, Europe, and Japan involve changing burdens of real debt and changing bank exposure.

Since February 1985 the dollar has declined in world markets by more than 50 percent relative to key currencies. Over the same period, prices of industrial countries' exports, which we might use as an index of prices in world trade, have fallen only 5 percent while prices of commodities exported by LDCs fell 7 percent over 1982–86. The movement of the dollar thus did not carry significant consequences for debtor countries if they were entirely denominated in dollars. If, however, a significant part was denominated in yen or in European currencies, the vast exchange rate movements would have meant an increase in real debt burdens.<sup>4</sup>

#### 3.1.5 Major Problem Debtors

We conclude the review of facts with a listing of major *problem* debtors. This group of countries corresponds to the fifteen heavily indebted countries shown in Table 3.5, along with their total debts, interest payments, and debt per capita.

In this table, Chile, Peru, and Bolivia are shown as having the highest debt-GDP ratio, while Chile, Argentina, and Mexico show the highest per capita debt figures. Bolivia and Morocco are interesting in that their debts are predominantly to official creditors. Finally, Nigeria is of interest because of the relatively low per capita debt by comparison with the other countries.

**Table 3.5** Fifteen Heavily Indebted Countries

Country	Debt <sup>a</sup>	Debt Per Capita <sup>b</sup>	Interest-GDP Ratio <sup>c</sup>	Share of Debt to Private Creditors
Argentina	50.8	1,662	7.9	86.8
Bolivia	4.0	622	10.0	39.3
Brazil	107.3	791	5.8	84.2
Chile	21.0	1,740	12.9	87.2
Colombia	11.3	395	3.3	57.5
Ecuador	8.5	906	6.0	73.8
Ivory Coast	8.0	846	8.7	64.1
Mexico	99.0	1,261	6.3	89.1
Morocco	14.0	842	8.2	39.1
Nigeria	19.3	210	1.9	88.2
Peru	13.4	680	10.8	60.7
Philippines	24.8	456	6.2	67.8
Uruguay	3.6	1,204	9.8	82.1
Venezuela	33.6	2,000	8.1	99.5
Yugoslavia	19.6	848	n.a.	64.0

Sources: *Fortune*, December 23, 1985; *Economist*, September 27, 1986; *International Financial Statistics*; and World Bank 1986.

<sup>a</sup>Billions of U.S. dollars.

<sup>b</sup>Thousands of U.S. dollars.

<sup>c</sup>Interest payments on the external debt as a percentage of GDP.

## 3.2 The Origins of the Debt Problem

In this section we review the origins of the debt problem. Three facts combined to produce the debt crisis of 1982. The proportions vary from one case to another, but in almost all instances there is a combination of the following factors: (1) poor macroeconomic policies of debtor countries, including overvaluation of their currencies; (2) the downturn in the world economy, involving sharply higher interest rates and lower growth; (3) initial overlending and subsequent credit denial by commercial banks.

### 3.2.1 Domestic Mismanagement

In the late 1970s, debtor countries worldwide, with rare exceptions, embarked on policies inducing currency overvaluation. The policies were motivated by a single purpose: to contain and reduce stubborn inflationary pressure. The popularity of the policy, in the short term, stems from the fact that real wages increase. The increase in real wages translates only gradually into lower employment. Hence there is a period of euphoria as standards of living are artificially inflated by the real appreciation while the resulting external imbalance is financed via reserve depletion and external borrowing.

Each of the countries in table 3.6 showed some real appreciation in 1979–82, indicated by an increase in the real exchange rate index. For

**Table 3.6** Real Exchange Rates (index 1980–82 = 100)

	Argentina	Brazil	Chile	Mexico	Venezuela	Korea
1976–78	73	116	75	98	95	92
1979	101	96	79	98	94	95
1980	116	85	95	104	93	96
1981	107	103	108	114	100	101
1982	76	112	97	82	110	103
1983–85	74	85	86	86	98	96

Source: Morgan Guaranty World Financial Markets.

example, in Argentina the real exchange rate moves from a value of 73 in 1976–78 to 116 in 1980. Not all cases were as extreme, and the annual averages conceal some of the even higher peaks. But the basic point is that most debtor countries, sometime in 1979–82, experienced real appreciation of some degree.

The exact timing of real appreciation differs but the story is invariably the same. There are, however, significant differences in the magnitude of overvaluation. Argentina, Chile, Mexico, and Venezuela had much more extreme experiences than Brazil or Korea. Brazil is interesting because its policy of using (normally) a crawling peg geared to the United States–Brazil economywide inflation differentials assured that high-productivity growth in tradables translated into a steady real depreciation. Dollar depreciation reinforced the gain in competitiveness in the late 1970s, but when the dollar strengthened in the 1980–82 period, competitiveness was lost. In Korea's case the real appreciation was very short lived and in fact quite minor compared to, say, Argentina.

The particular details of mismanagement differ between countries. For example, we look at Argentina, Brazil, Chile, and Mexico.

### *Argentina*

Under Finance Minister Martinez de Hoz in the post-Peronist military government, inflation was reduced from more than 600 percent in 1976 to less than 200 percent by 1978. But further inflation reduction was hard to achieve. A large budget deficit was an obvious reason, yet the government preferred to focus on the inflation-depreciation spiral and the role of expectations.

Appealing to the law of one price, and the critical role of expectations, the government implemented in December 1978 a policy of preannouncing the rate-of-exchange depreciation. The preannounced *tablita* showed a steady deceleration of the rate of depreciation, and this was actually implemented. But inflation reduction was very slow, hence the real exchange rate became steadily overvalued.<sup>5</sup> Even so the policy was continued until March 1981 when it ultimately broke down.

The consequences for debt of overvaluation came primarily from the side of the capital account. Argentina had liberalized international cap-



ital flows entirely. As a result, residents, aware of the growing overvaluation, could freely shift into foreign assets ranging from dollar bills to foreign deposits and securities or real estate. The extreme overvaluation, reaching more than 40 percent, led to large-scale capital flight. The government borrowed in New York, using the proceeds to sustain the exchange rate along its preannounced path. The public bought dollars and redeposited them in the very same banks from which the government had borrowed. And that process continued, in the fullest knowledge of all concerned, until a change in the military government led to a collapse of the policy.

My estimate of Argentine capital flight in 1978–82 is \$23 billion, not counting unrepatriated interest earnings which would raise the figure to well above \$30 billion.

### *Chile*

The Pinochet government instituted free market reforms and fiscal orthodoxy in Chile. These included elimination of tariffs and quotas and a balancing of the budget.<sup>6</sup> But inflation, while sharply reduced from the near hyperinflation levels of 1972–74, would not disappear. By 1979, with inflation the only major economic problem, the government fixed the exchange rate. The rate was fixed at 39 pesos/\$ even though inflation was still near 30 percent, way above world inflation, and wages were indexed in a backward-looking fashion.

Not surprisingly, the exchange rate became increasingly overvalued. Wage increases far outpaced world inflation and thus the real exchange rate appreciated steadily. In the short run the policy was popular since it raised living standards. But it became increasingly apparent that an unsustainable overvaluation was accumulating. By 1981 the system started to unravel. The public responded in their accustomed way. Taking advantage of what was perceived to be a very transitory “sale” of imports, the entire country participated in the flight into imports (in particular durables).

The real exchange rate appreciated by more than 25 percent between 1978 and 1981. The value of imports increased by 50 percent. Import volume indexes tell an extraordinary story: breeding stock +328 percent, automobiles +226 percent, electro domestic equipment +156 percent. The Chilean example highlights that, especially in the case of producer and consumer durables, a transitory exchange rate overvaluation has major effects on the timing of purchases. The government was not deterred by these developments. Steadfastly, the authorities maintained the exchange rate and asserted that the exchange rate policy was visibly successful as evidenced by the declining rate of inflation.

As in all other cases, the policy ultimately broke down. Tariffs are back today and so are quotas. Inflation is back to the point where the

adventure started. The lasting difference is an extraordinary debt burden and extremely high unemployment. We return to these issues below.

### *Mexico*

The large increase in oil prices during 1978–79 would lead one to expect that Mexico should have done well. But even with sharply increased revenues from oil, the current account deteriorated in 1979–81 from \$5 billion to \$13 billion. At the same time there was a major outflow of capital.<sup>7</sup>

An estimate by Morgan Guaranty places the amount of capital flight during 1976–82 at \$36 billion while a World Bank estimate for 1979–82 gives \$26.5 billion (*World Financial Markets*, March 1986; *World Development Report*, 1986). The extent of capital flight is associated with a peculiarly Mexican institution: the sixth and final year of the presidency. Such a year was 1982, and people expected, correctly, that overvaluation and an excess of spending would ultimately lead to a balance of payments crisis. Under these circumstances, capital flight became extreme.

### *Brazil*

The Brazilian case is special in that the policy mistakes may well have been minor. Brazil certainly ran very large budget deficits. Oil price increases and increased world interest rates were absorbed by the public sector deficit, and the resulting external deficit was financed by increased borrowing abroad. But much of the earlier borrowing by state enterprises, especially in 1972–78, financed a massive national investment effort (Cardoso 1986).

In Brazil's case, tight restrictions on imports and the near absence of capital flight made for an experience very different from that of Argentina, Mexico, or Chile. The chief source of debt accumulation was the public sector, which meant that the damage was much more limited than was the case in the other countries. Indeed, by early 1985 it seemed that lower interest rates and a sharply reduced oil price helped solve Brazil's debt problems for the major part. Since then the current account has once again deteriorated, in part as a result of an overly expansionary policy. But even so, Brazil is among the debtor countries that are more likely to be able to sustain growth and debt service.

### 3.2.2 The World Macroeconomy

A major part in the origins of the debt crisis was played by the sharp downturn in the world economy during 1979–81. In the 1970s, partly as a result of the oil shocks, but also because of overexpansionary policies, the United States had experienced increasing inflation. In 1979–81, under the pressure of the collapsing dollar, U.S. policies

changed sharply. The full-employment budget was cut by nearly 1.5 percentage points of GNP. Nominal interest rates were allowed to rise from 9 percent in 1978 to 17 percent in 1981, and real interest rates increased sharply.

The sharp change in the world economic environment is shown in table 3.7, which compares the early 1970s and the period preceding the debt crisis. The early 1970s favored debtors: strong growth, high inflation, and low interest rates. By comparison, in 1980–82 inflation was low, interest rates were extraordinarily high, and growth was stagnant.

It is particularly important in this context to see the *real* interest rate issue. For debtor LDCs the U.S. real interest rate is hardly appropriate. An alternative is provided by the inflation rate in world trade. Manufactures prices were declining by 2.4 percent while commodity prices fell by 13.3 percent per year. Any realistic estimate of real interest rates cannot fail to come up with extraordinarily high rates.

Commodity price developments have different effects depending on whether a particular debtor is a net exporter or a net importer of commodities. The point is important in a comparison of Korea and Latin America. Korea (like Japan, for example) is a net importer of commodities. As a result, the collapse of commodity prices in 1979–81 helped offset in part the oil price increase. Brazil, by contrast, is a net exporter of commodities and has a production structure that makes the country vulnerable to oil price increases and commodity price decreases. Table 3.8 shows terms of trade changes and highlights the very different experience of various debtor groups.

**Table 3.7** Key Macroeconomic Variables of the World Economy (annual percentage rates)

	LIBOR	Inflation <sup>a</sup>		OECD Growth
		Manufactures	Commodities	
1970–73	7.6	12.4	14.4	5.9
1980–82	14.7	–2.4	–13.3	0.9

Sources: IMF *IFS* and World Bank *Commodity Trade and Price Trends*.

<sup>a</sup>Inflation rate in world trade

**Table 3.8** Terms of Trade Changes, 1978–82 (cumulative percentage change)

	15 Heavy Debtors	Small Low-Income Countries	Non-Oil LDC Exporters	Net Oil Importers
Fuel Exporters	54.5	7.9	–27.8	18.2
				–20.1

Source: IMF *World Economic Outlook*.

These world economic developments meant that most LDCs experienced a sharp deterioration in their current account. Reduced export revenues, on account of the decline in commodity prices and world recession, were reinforced by sharply increased nominal debt service burdens. Thus debtors were made illiquid. To continue on the accustomed course, external financing needed to increase sharply. The lack of smooth financing in the case of Mexico then brought on generalized credit rationing.

### 3.2.3 Overlending and Credit Rationing

In the period to mid-1982, reckless lending was the rule. It is possible today to search the 1980–81 discussion of debt problems for warnings of the crisis to come. The Bank for International Settlements had expressed concern at least since 1978. A Group of Thirty inquiry in 1981 sought to uncover whether banks felt debt was a major issue and failed to find dominant concern (Group of Thirty 1981a, 1981b; Kraft 1984). In a survey of one hundred banks the question was posed, “Last time no serious debt defaults arose. This time do you think that a general debt problem affecting countries is likely to emerge?” In response, 72 percent of the banks questioned expressed the view that a debt crisis was not likely, 13 percent thought it might possibly happen, and only 15 percent replied in the affirmative (Group of Thirty, 1981b).

If there were some concerns, they were certainly not enough to stop a final lending boom. Table 3.9 shows Latin America’s current account deficit and its financing. Between 1979 and 1981, private lending to Latin America exactly doubled. It is unclear how these credits were justified at the time. There were two arguments. One was the need for

**Table 3.9 Latin America: Current Account Imbalances and Financing**  
(billions of U.S. dollars)

	Current Account	Borrowing	
		Official Creditors <sup>a</sup>	Private Creditors
1978	19.4	2.2	25.8
1979	21.8	2.7	27.4
1980	30.2	6.1	35.9
1981	43.3	6.5	54.1
1982	42.0	14.6	28.8
1983	11.4	17.7	2.0
1984	4.9	10.7	7.0
1985	5.9	5.1	-0.6

Source: IMF *World Economic Outlook*.

<sup>a</sup>Including reserve-related liabilities. Private capital flows (flight) and errors and omissions make up the difference in the row sums.

recycling, which had worked well at the time of the first oil shock. The other was the lack of information on country exposure. Neither of course is a reasonable explanation.

Subsequent to overlending was credit rationing following the Mexican moratorium of August 1982. As shown in table 3.9, private lending fell off dramatically and in 1985 even turned negative. The credit rationing phenomenon is not surprising; faced with a country's inability to meet debt service, each individual lender is reluctant to put up money that would only serve to pay other banks' claims. Hence without a cartel there is no lending. But if there is no lending then, of course, debt service is impossible and hence debtors will default.

The problem in 1982 was therefore to develop a system that would organize creditors. They would have to provide the part of debt service that could not be extracted by improvements in debtor-country external balances. At the same time the cartel would serve, much as the occupation of customs houses in the old days, to extract a maximum of debt service by a lien on the debtor countries' macroeconomic policies. The IMF, having been ignored in the 1970s, eagerly (and skillfully) assumed the task of orchestrating debt collection, fiscal discipline, and forced lending.

### **3.3 The Transfer Problem and Debt Service Fatigue**

We now ask why debt service appears to be such a major problem. In one sense the answer is quite straightforward: countries that used to spend, borrowing the resources from official and private creditors (with little thought of how to service or even less repay the loans), now no longer command these resources—they are limited to spending (this section draws on Dornbusch 1985b, 1986b, and 1986c). The adjustment is complicated by two facts. The first is the macroeconomics of earning foreign exchange; the second is the political economy problem of finding extra budget resources for debt service. These issues are familiar from the discussion of German reparation payments following World War I.<sup>8</sup> Exactly the same issues arise in the context of the involuntary debt service now underway.

#### **3.3.1 The Reduction in Spending**

The first issue is how a country adjusts to a reduction in its spendable resources. Before the debt crisis, foreign loans supplemented domestic income, enlarging the resources that could be spent. Interest payments on loans were automatically provided in the form of new money, and the principal on debts was automatically rolled over. With managing the debt so easy, and with ready access to resources beyond what was required to service the debt, spending ran high. After credit rationing

began in 1982, spending had to be limited, and absorption fell below the level of output as interest now had to be paid out of current production. Interest payments now had to be earned by noninterest surpluses in the current account.

Table 3.10 shows the debt service process at work. In the post-1982 period of involuntary lending, debtor countries achieved a shift in their noninterest external balance of nearly 5 percent of GDP. This external balance improvement served to make net transfers of interest to the creditors. It was matched by a nearly equal reduction in investment in the debtor countries.

This perverse resource transfer, of course, came at the expense of living standards in the developing countries. But more important, the transfer had as a counterpart a sharp decline in investment. Interest payments thus were really financed by a mortgage on future standards of living and on the debtors' growth potential. In countries where population growth is high and income distribution is appalling, such a policy may turn out to be very shortsighted.

But there remained the issue of how to distribute the cut in spending between its various components: government, consumption, and investment. As we saw above, a large part of the cut took the form of reduced investment. There was, of course, also a decline in consumption. A fall in investment was not enough due to two special features of the adjustment process. First, cutting total demand has macroeconomic multiplier effects that translate into a reduction in output, income, and hence private spending. Second, at the same time that involuntary debt service started, there also occurred a deterioration in the world economy that required an extra downward adjustment in spending.

### 3.3.2 The Foreign Exchange Problem

The second macroeconomic issue in adjusting to debt concerns the fact that the country needs to earn dollars, not pesos. In other words it needs to generate a trade surplus. The cut in spending will, of course, reduce import demand and also free exportables for sale abroad, but for two reasons that will not be enough. First, a sizable fraction of the

**Table 3.10 Latin America: Investment and the External Noninterest Surplus (percentage of GDP)**

	1977-82	1983-85	Change
Gross investment	24.3	18.5	-5.8
Noninterest external surplus	-0.6	4.7	5.3

*Source: IMF World Economic Outlook.*

expenditure cut will fall on domestic (nontraded) goods, not tradables. The spending cut thus creates directly unemployment rather than potential foreign exchange earnings. Even for those goods that are directly tradable it is not necessarily the case that increased supplies can be sold. Often there is the problem of obtaining market access, and, if the goods are not homogeneous commodities like cotton or copper, a cut in their price is required to realize increased sales. Even then, unless demand is sufficiently responsive, total earnings may not increase.

To translate the spending cut into foreign exchange earnings, a gain in competitiveness is required. The gain in competitiveness draws resources into the tradable goods sector and in the world market makes it possible to sell the increased production of tradable goods. Of course, the only way to gain competitiveness is by reducing the wage in dollars by a real depreciation. But the real wage cut also generates increased unemployment, at least in the short run, as the spendable income of workers is cut. The size of the required cut in real wages is larger, the larger the share of trade goods in income and the smaller the share of wages in GDP.

The overwhelming difficulty in the adjustment process is that external adjustment via a gain in competitiveness reduces employment. The dominant effect on employment is from the reduction in real wages and the resulting reduction in domestic demand. The positive employment response that would be expected in the tradable goods sector from the gain in competitiveness is often very weak and slow. One reason is that expectations of a *sustained* change in competitiveness do not take hold immediately. The traded goods sector thus adopts a wait-and-see attitude, which makes real depreciation a highly precarious policy tool. The Mexican experience in this respect is particularly instructive.

A second important difficulty arises from the worldwide adjustment to forced debt service. Since most debtor countries were overspending in the early 1980s and are now under a forced debt service regime, they all had to resort to real depreciation to enhance their competitiveness. But that means they are competitively cutting their wages relative to each other, and not only relative to those of the creditor countries. As a result, an isolated country, cutting its dollar wage, say, by 50 percent, will gain much less in terms of increased dollar revenues because all the competing LDCs are doing much the same.

### 3.3.3 The Budget Problem

The third macroeconomic problem in the adjustment process involves the budget. Much of the external debt is public or publicly guaranteed. Of the part that was not initially public, much has wound

up in the public sector in the aftermath of the crises, as a result of bank failures. The government thus must service a debt that before was either in private hands or automatically serviced by new money. The problem, of course, is where to find the extra 3 percent or 4 percent of budget revenue that will pay these new interest costs.

There are basically four avenues: raising taxes and public sector prices, reducing government outlays, printing money, or issuing domestic debt. Raising taxes is notoriously difficult since most of the taxes are already levied in the form of social security taxes on workers. An easier solution is to raise public sector prices or to eliminate subsidies. The elimination of subsidies is particularly cheered by creditors and international agencies since it means moving closer to efficient resource allocation.<sup>9</sup> Of course, the imposition of extra taxes or the withdrawal of subsidies is inevitably inflationary from the price side unless the tax increase or subsidy cut is offset by a reduction in other prices or wages. Of course, via the revenue side reduces the growth in money and hence, in combination, it leads to a recession with inflationary pressure sustained by prevailing inflation.

Cutting government spending is another option. Attention here focuses on the often extreme inefficiency of the public sector. The public perceives that there must be a way to pay the bills out of increased efficiency, rather than reduced private absorption. The fact is, of course, that there is little room for public sector improvements in the short term. Large-scale firing of redundant workers would create an overwhelming political problem. Plant closings are of the same kind, and selling inefficient, overunionized firms runs into the obvious problem that the potential buyers might need to be paid to take over the liability. Perhaps the best advice may be that public sector firms should be simply given away. The problem is that the workers might oppose even that.

The most common adjustment is a cut in or freeze of public sector wages. This has happened in most of the debtor countries, and in some cases on a very large scale. It does help the budget, but it presents its own problems. The reduction in relative wages for the public sector promotes an exodus of the wrong kind. The efficient workers leave and only those with little alternative stay in the public sector.

In many of the debtor countries the answer to forced debt service has almost inevitably been to increase government budget deficits and to finance this by issuing debt or printing money. Money finance brings with it the problem of high and often extreme inflation. It is no accident that Argentina and Brazil experienced extraordinary inflation rates in the aftermath of the debt crisis. When deficits are financed by debt, while the imminent inflation problem may be absent, there is still the issue of excessive debt accumulation which ultimately poses the risk of an inflationary liquidation or a repudiation.



There is an interaction between the foreign exchange problem and the budget problem. The need to devalue to gain competitiveness implies that the value of debt service in home currency increases. A given payment of, say, \$1 billion now amounts to more in pesos, produces a larger peso deficit, and hence gives rise to the need for increased inflationary finance. Thus devaluation is a source of inflation not just directly via the increased prices of traded goods and any accompanying indexation effects. It works also indirectly by raising the required inflation tax. In the classical hyperinflations, major movements in the exchange rate were the prelude to the outbreak of uncontrolled inflation; there is some evidence that exactly the same process is at work in the debtor countries today (see Dornbusch and Fischer 1986; Fischer 1986a, 1986b).

The budget is also adversely affected by the problem of capital flight. To stem capital flight, provoked by the inflationary consequences of debt service or perhaps by an impending tax reform, the country will have to raise real interest rates to very high levels. These high real interest rates in turn apply to the domestic debt, causing it to grow more rapidly, and thereby raising future budget deficits and hence the prospect of instability. That in turn feeds more capital flight and yet higher rates. There is thus an extraordinary vicious circle surrounding the sudden need to service debt and the inability to do so through ordinary taxation.

To earn foreign exchange, the real wage must be cut in terms of tradable goods, thus enhancing competitiveness. But to balance the budget it is often necessary or at least recommended to cut subsidies for such items as food or transportation, and that also means a cut in real wages. There is thus competition between two targets—a cut in the dollar wage or a cut in the tortilla wage. A choice must be made because there is only so much one can cut. Because of the lags with which the trade sector adjusts, the competitiveness adjustment should take precedence and that budget balancing should follow once the economy's resources are reallocated. Since the real depreciation by itself is already bound to produce slack, there is no risk of overheating in this sequence of adjustment.

A final point is the link between budget cutting and the extraordinary fall in Latin American investment. In the category of government spending, the easiest cuts are in investment. Postponing investment and maintenance is much easier than firing workers. The resulting impact on aggregate investment is so large because the public sector, in the form of public sector enterprises, accounts for a large part of total investment and because the public sector was in the forefront of adjustment. This is a very ineffective means of adjustment because it fails to recognize the distinction between the public sector's current and capital accounts.

### 3.4.4 Case Study: Mexico

Mexico illustrates in a striking way many of these issues. The least noted fact, apparent in table 3.11, is the dramatic shift in the budget over the past three years. The *noninterest* or primary budget has improved by more than 7 percent of GDP. From a deficit of nearly 4 percent of GDP in 1982, the noninterest balance has shifted to an estimated surplus of 3.2 percent in 1986. The improvement is all the more impressive in view of the large decline in oil revenue in 1986. Note that the whole improvement in the noninterest budget went to finance increased interest payments on the domestic and foreign debt.

The total budget records a deficit of nearly 16 percent of GDP for 1986. The increase in interest payments is largely a reflection of inflation. Inflation and the accompanying exchange rate depreciation raise the nominal interest rates required to make Mexicans hold the depreciating asset. These interest rates in turn translate into a large interest bill in the budget. There is a budget deficit because there is inflation, not the other way around.

Table 3.12 shows further details on the Mexican macroeconomic situation. We already saw the cut in public sector investment. The table indicates that total investment shows a sharp decline, leaving little *net* investment.

**Table 3.11 Mexico's Budget (percentage of GDP)**

	1982	1983	1984	1985	1986 <sup>a</sup>
Budget deficit	17.1	8.9	7.7	8.4	15.8
Primary deficit	3.7	-5.2	-5.4	-4.2	-3.2
Operational deficit	n.a.	-0.2	-0.7	-0.9	-2.1
Public investment	9.3	6.6	6.5	6.1	5.1

Source: Mexico, Presidencia de la Republica and Secretaria de Heacienda y Credito Publico.

<sup>a</sup>Estimate.

**Table 3.12 Mexico: Macroeconomic Indicators**

	1970-81	1982	1983	1984	1985	1986 <sup>a</sup>
Per capita growth	3.5	-2.8	-7.5	1.4	0.4	-6.3
Inflation	17	99	81	59	60	100
Investment/GDP	23.6	21.1	16.0	16.3	16.9	14.9
Real wage (1981 = 100)	n.a.	105	76	73	67	64
Current account/GDP	-3.5	-3.8	3.8	2.5	0.3	-2.6
External interest/GDP	n.a.	7.5	7.1	7.0	6.0	6.4
Price of oil (\$US/barrel)	12.4	28.6	26.4	26.8	25.4	11.2

Source: IMF and Secretaria de Hacienda y Credito Publico.

<sup>a</sup>Estimate.

Consider next the current account. There is a striking turnaround, from the deficits prior to the crisis to surpluses afterward. In 1983–84 the surpluses were enough to help finance capital flight and also meet the interest payments. In 1985, interest was paid out of these surpluses by attracting a reflow of private capital via very high interest rates. But with the oil price decline the external financing problem returned, forcing a choice between further real depreciation and an alteration in the terms of debt service.

The real exchange rate and the real wage both declined sharply in the past few years. Real wages today are 40 percent below their 1980 levels, and the external competitiveness has improved by 40 percent. These are extraordinary adjustments for any country to make. Finally there is the employment story. The labor force is growing at 3.5 percent per year, but employment after an initial decline has been entirely stagnant over the past four years. The informal sector and migration to the United States were the main shock absorbers in employment. Thus unemployment is growing and so too is social conflict. The lack of employment growth, even after so extreme a real depreciation, is an issue of major concern. It suggests that depreciation reduces employment for quite a while before the substitution takes over.

Early results for trade were disappointing. More recently Mexico has started to build up a strong non-oil export growth, but that has turned out to be a mixed blessing. U.S. trade concerns have spilled over to Mexico in the form of more than one hundred countervailing duty cases!

### 3.3.5 Case Study: Brazil

Brazil, just like Mexico, started off her adjustment with a large decline in per capita income and with a sharp acceleration of inflation. The inflation acceleration is largely due to the real depreciation required to generate a noninterest surplus. The presence of indexation translated exchange depreciation into an increase in inflation. The higher inflation in turn showed up in a sharply larger budget deficit (see table 3.13).

The noninterest external balance improved sharply. This is seen in table 3.13 in the shift of the noninterest current account from a deficit of 2 percent of GDP in 1982 to a 3.5–5 percent surplus in 1984–86. In contrast to Mexico, the Brazilian budget has not improved sharply, which has meant more stimulus to growth and to recovery.

The difference between the case studies of Mexico and Brazil, in 1986, is in both oil and macroeconomics. Lower oil prices in Brazil's case more than compensate for the adverse conditions of the boom on the external balance. But the external balance is certainly also improved by the import substitution and export capacity expansion made possible by the investments of the early 1970s, which came on line just in time to help service the debt.

**Table 3.13** Brazil: Macroeconomic Indicators

	1982	1983	1984	1985	1986 <sup>a</sup>
Inflation	99	142	197	227	65
Per capita growth	-1.3	-5.5	2.3	6.1	6.8
Budget deficit <sup>b</sup>					
Actual deficit	16.7	19.9	22.2	27.1	10.9
Operational deficit	6.5	3.0	1.6	3.5	5.1
Current account deficit <sup>b</sup>	8.5	3.5	—	0.1	-0.1
External interest	6.5	5.3	5.4	4.7	3.7
Noninterest deficit	2.0	-1.8	-5.4	-4.6	-3.6

Source: Banco Central do Brasil.

<sup>a</sup>Estimate.

<sup>b</sup>Percentage of GDP.

### 3.4 Bank Exposure and the Quality of Debts

In this section we review the debt problem from the side of commercial bank creditors by looking at the extent of exposure and at the quality of debts.

#### 3.4.1 Exposure

Table 3.14 gives a broad overview of loans by U.S. banks to regions other than the industrial countries or offshore banking centers. In these categories, Nigeria and Venezuela are included among the OPEC countries while Mexico is part of the non-OPEC countries.

Between 1977 and 1982, claims on non-OPEC countries more than doubled. By contrast, since then there has been a complete standstill in lending. The table shows that loans to Eastern Europe are small and relatively stable in size. Exposure to OPEC countries is more sizable and has declined since 1982.

Table 3.15 looks at lending to non-OPEC developing countries, this time disaggregating by size of bank. We also show how these claims have evolved relative to equity capital.

Three conclusions emerge from table 3.15. First, debt is a "big bank" problem. More than 60 percent of total debt is owed to the major money center banks, and nearly 85 percent to only twenty-five major banks.

**Table 3.14** U.S. Bank Claims on Nonindustrial Countries (billions of dollars)

Year	OPEC	Non-OPEC	Eastern Europe
1977	14.3	45.0	7.0
1982	23.2	101.9	6.6
1985	20.4	100.9	5.1

Source: Federal Reserve.

**Table 3.15 U.S. Bank Claims on Non-OPEC LDCs**

	All Banks	9 Major	15 Major	All Other
Total claims (billion \$)				
1978	52.5	33.4	9.9	8.9
1982	101.9	61.5	20.6	19.8
1985	100.9	63.5	19.8	16.9
Percentage of capital				
1978	110	163	107	57
1982	154	227	162	75
1985	99	156	99	41

Source: Federal Reserve.

Second, small banks have managed to reduce their claims over the past three years by 15 percent. Third, all banks and in particular the money center banks have been able to reduce their exposure measured as a percentage of capital. The exposure reduction has occurred primarily via a buildup of capital, in part by issuing equity commitment notes. But in part the exposure reduction is due to sell-off of loans, write-downs, and a slowdown or actual halt in new money commitments.

To judge the implications of LDC problem debts for the banking system, we look at table 3.16 at the group of most heavily indebted countries. For simplicity we take all of Latin America (including Venezuela) plus Nigeria, the Philippines, Morocco, and Yugoslavia. The total exposure in 1985 was close to \$100 billion and approximately 90 percent of bank capital. Thus, in the extreme situation of all these debtors repudiating their debts completely, bank stockholders would be largely, though not altogether, wiped out, while depositors would be left fully intact. That picture is more favorable than much of the public discussion of the "LDC debt bomb" might lead one to believe. Of course, this point holds only in the aggregate and thus is not very

**Table 3.16 U.S. Bank Exposure to Problem Debtors, 1985**

	All Banks	9 Major	15 Major	All Other
Total exposure (billion \$)				
Latin America	80.4	60.5	16.0	15.2
Other debtors	12.6	8.8	1.9	1.2
Percentage of capital				
Latin America	78.9	148.6	80.0	36.9
Other debtors	12.3	21.7	9.5	2.9

Source: Federal Reserve.

revealing. The more revealing comparison disaggregates by bank size. In this case it becomes apparent that their exposure is far in excess of their equity. Brazil, Argentina and the Philippines alone (to take the 1987 major confrontation cases) account already for more than half of the capital of major banks.

Even Latin America's debt is to a large extent held by non-U.S. banks. The Bank for International Settlements reports Latin American debt to banks in the reporting countries of \$160 billion in 1985. Table 3.17 shows that only about one half of that debt is owed to U.S. banks. For the remaining problem debtors, the BIS total is \$37 billion. In their case the U.S. loans are thus only one-third of the total of exposure to banks in the United States and elsewhere (Bank for International Settlements 1986).

There is an important difference, though, between European and U.S. banks. During the period of dollar appreciation, European banks were forced to increase their reserves against dollar loans. Furthermore these loan provisions were facilitated by tax advantages. Since 1985 the dollar has depreciated significantly, and this has worked to further increase European loan loss reserves relative to their claims. As a result, European banks are said to have been able, in some instances, to set aside loan loss reserves to fully cover problem debts. This, of course, is far from the case for U.S. banks.

**Table 3.17**                    **Market Price of Problem Debt, December 1986 (billions of dollars)**

Country	Total Debt	Debt to U.S. Banks	Price <sup>a</sup>
Argentina	50.8	8.4	66.0
Bolivia	4.0	0.1	7.5
Brazil	107.3	22.2	75.5
Chile	21.0	6.5	68.0
Colombia	11.3	2.2	86.5
Ecuador	8.5	n.a.	65.5
Ivory Coast	8.0	0.4	77.0
Mexico	99.0	24.2	56.5
Morocco	14.0	0.8	69.5
Nigeria	19.3	0.9	39.0
Peru	13.4	1.5	19.0
Philippines	24.8	5.1	73.5
Uruguay	3.6	0.9	66.5
Venezuela	33.6	9.7	74.5
Yugoslavia	19.6	2.2	79.0
Weighted average			67.1

*Source:* Dealer information.

<sup>a</sup>Average of bid and offer price in cents per dollar debt.

### 3.4.2 The Quality of Debts

In the nineteenth century and until World War II, LDC debt mostly took the form of bonds traded on organized markets and widely held by the public. The postwar debt, by contrast, is owed to official institutions and commercial banks. Accordingly, there are no good price quotations that might be used as a measure of the quality of debts. Very little of claims on debtor LDCs takes the form of bonds.<sup>10</sup> But for some time, bank claims on various LDCs have been swapped between banks, sold outright between banks, and are now even being sold to nonbanks. The market has become central to discussions of debt-equity swaps. In these transactions, further discussed below, purchase of discounted debt is the starting point for a foreign investment in a debtor country.

Table 3.17 shows the average of the bid and offer price in the secondhand market. It would be a mistake to believe that all debts are actively traded, but even so the prices provide some indication of market valuation.

There are quite extraordinary divergences in prices. Bolivia, Peru, and Nigeria have low valuations, but perhaps more interesting is the difference between Mexico and Brazil. Why is Brazil thought to be so much better a credit risk than Mexico? The major difference would have to be between being an exporter and an importer of oil. The average price of problem debts is 67 cents per dollar. Discounts of 25 percent and more suggest that these are indeed problem debts and that the prospect of a return to voluntary lending might be very remote.

However, the story is not that simple. Consider the case of Uruguay. The country's debt stands at a discount of 23.5 percent, suggesting that the debt is poor. Yet in the fall of 1986, Uruguay issued a long-term public sector bond at the same rate as the U.S. Treasury. This suggests that the large discounts reflect above all a market that is too narrow, so it is illiquidity of banks that dominates in depressing the prices.

### 3.5 U.S. Trade Effects of the Debt Crisis

There is considerable difficulty in allocating the deterioration of the U.S. external balance between competing causes: the overly strong dollar, the rapid domestic growth relative to that abroad, the budget deficit, and the turn around forced on debtors' trade balances by the need to service external debts.

Table 3.18 gives some indication of the shift in our trade with Latin America. Not all of the shift can be attributed to the debt crisis since our loss in competitiveness must certainly account for some part of what happened. Also, the trade figures of the early 1980s are inflated by Latin America's overvaluation and spending spree. But even so,

**Table 3.18 U.S. Trade with South America (billions of U.S. dollars)**

	Exports	Imports	Trade Balance
1979	13.6	13.2	0.4
1980	17.4	14.4	3.0
1981	17.7	15.5	2.2
1982	15.3	14.4	0.9
1983	10.5	16.0	-5.5
1984	11.0	21.0	-10.0
1985	11.0	20.9	-9.9

Source: *Survey of Current Business*.

there was a major shift in the bilateral balance amounting to \$10–12 billion from 1979 to 1985.<sup>11</sup>

Table 3.19 compares the evolution of Latin American trade with different countries, showing a substantial shift toward bilateral surpluses with respect to each of these groups. While the surplus with the United States is far larger in absolute terms, this is not the case when the change is expressed relative to exports. This is a crude way of illustrating that the dollar appreciation may not be so dominant in this bilateral trade balance swing.

If \$10 billion is taken as the change in the bilateral trade balance, even attributing it to the debt crisis, one does not come up with much damage to the United States. After all, this change is less than one-quarter of one percent of U.S. GNP! Of course, this does not exhaust the damage, and GNP is not the proper scale variable. Other damage to U.S. trade and investment interests occurs via the depression of demand and profitability in the debtor countries. U.S. multinationals that produce in those countries have sharply reduced sales and profits. Similarly, there are declines in U.S. exports of services (other than interest) to debtors. There are no ready estimates of losses in service exports.

In judging whether a \$10 billion deterioration in the trade balance is large, one must bear in mind two points. The swing in the trade deficit helps facilitate a noninflationary absorption of our budget deficit.

**Table 3.19 Latin America's Bilateral Trade Balance with Various Groups (billions of dollars)**

	U.S.	Japan	EEC	Industrial Countries
1980	-3.4	-2.4	2.8	-4.2
1985	10.8	0	7.7	18.7
Change as % of exports	42.9	54.8	20.8	35.1

Source: *IMF Directions of Trade Statistics*.



Switching lending from LDCs to the U.S. Treasury helps finance our own deficits under better (short-term) macroeconomic conditions. But there is clearly a cost for the affected industries. A large share of the trade deterioration, for example, is in the capital goods sector as Latin America's decline in investment reduced our exports. For this sector the trade deterioration with Latin America is, of course, far above the one-quarter of one percent of income. Even so, it would be difficult to make the debt crisis the main reason for our \$150 billion trade problem.

### **3.6 Solutions to the Debt Problem**

The ordinary aftermath of imprudent borrowing and adverse international conditions, as in the 1920s and 1930s most recently, is debt default.<sup>12</sup> Debts are normally written down or simply not serviced for many years. When servicing is ultimately resumed, it occurs without full payment of arrears and often at reduced interest rates.

The major differences in the present debt crisis are two. First, commercial banks and governments, rather than bondholders, are the main creditors. A more significant difference is that the governments of the major industrialized countries have insisted on debt service and have managed a system of debt collection, with the IMF as the chief coordinating agent. The system avoids illiquidity by making available essential "new money" at profitable spreads over the cost of funds to banks, and it enforces the debts by behind-the-scenes political pressure. The creditors are efficiently organized in this case-by-case approach, while debtors have been unable to put up a united front.<sup>13</sup>

The debtors' problem, especially in the case of Latin America, is how to gain debt relief or additional credit, so as to make available resources for investment and develop speculation in support of the government's ability to promote growth policies without risking financial instability. Tax reform and improved tax enforcement are certainly of overriding importance in this. Improved efficiency in the public sector is important, but measures to attract capital or secure relief on the external debt seem the most desirable or practicable alternatives. We review here five possible directions of change: an improved world macroeconomy, a facility, debt-equity swaps, a reversal of capital flight, and Bradley-style debt relief.

#### **3.6.1 The World Macroeconomy**

In 1982 the prospects of strong growth in the industrialized countries, lower interest rates, a weaker dollar, and stronger real commodity prices were the central scenario that encouraged the "muddling-through

process.” This favorable scenario implied that by the end of the decade, debt-export ratios would have declined significantly. Some of these developments have in fact occurred, and for some countries they have even been reinforced by an unexpectedly large decline in oil prices. But the expected benefits in terms of enhanced creditworthiness have not in general appeared. It is true that South Korea is at present not a problem debtor, but Brazil is and so are many other countries.

Looking ahead to the next few years, what macroeconomic developments can be expected and how will they affect the debt situation? The most important development for the world economy is U.S. budget balancing. There are basically three scenarios. In one case, rapid budget cutting is accommodated by monetary expansion in the United States and in the rest of the world. In this setting, interest rates decline sharply, growth is sustained, and the main exchange rates between industrial countries remain unaltered. This is a highly favorable scenario for LDCs in that much lower interest rates implicitly transfer to them resources in amounts far in excess of what can be expected from creditor-country taxpayers.

The second scenario envisages the same budget cutting, perhaps more spread out in time, but without monetary accommodation. In that case, interest rates decline somewhat, but there will be a world recession. Most debtors would not benefit, or at least very little, since the lower interest rates are offset by slack in their export markets.

A third scenario envisages a hard landing: budget cutting and a flight from the dollar that forces the Federal Reserve to *raise* interest rates to stem the inflationary impact of depreciation. Such a development would bring about systemwide illiquidity and likely default.

The world macroeconomy does hold out some promise. A Gramm-Rudman-Hollings budget cut, soon and with worldwide monetary accommodation, would make a major advance toward solving the debt problem. But for the time being there is not much of a sign of either the budget cutting or the monetary accommodation.

### 3.6.2 Debt-Equity Swaps

The debt problem has two aspects. The first is that debtors cannot service their debts as contracted. Moreover, the interest they pay comes largely at the expense of much needed investment in their economies. Thus debtors have a resource and investment shortage. On the lenders side, small banks are tired of the acrobatics involved in debt collection. They want to avoid yet another round of rescheduling. But there is no money in the debtor countries to pay them off, nor can the large banks do so, given their already extravagant exposure. These twin problems strain the skills of regulators, accountants, and policymakers worldwide.

The poor quality of LDC loans can be judged by the discount at which they trade in the emerging secondhand market. The large discounts suggest that an imminent return to voluntary lending is highly unlikely. Creditors' attention is therefore shifting to new ways of liquidating debts without taking outright and massive losses on the entire portfolio. But if banks are to get out, who will get in?

Debt-equity swaps have emerged as a seemingly attractive solution to the debt problem—clearly not *the* solution, but a sound contribution with all the rings of free enterprise.<sup>14</sup> Their apparent merit is in solving two problems at once: they allow banks to sell off loans without a massive decline in loan prices, and debtors can reduce their external debt and at the same time pull in foreign investment. All things considered, the swaps appear to be a good idea. But there are reasons for skepticism.

Before turning to these objections, a qualification is important. There should be no doubt that debt-equity swaps agreed to between private firms and their commercial bank creditors (without government intervention or subsidies) are entirely appropriate. Likewise, there can be no objection to direct foreign investment. On the contrary, there should have been more in the past, and the more there is in the future the better. The objections raised here concern exclusively the use of already strained debtor budgets to grease the wheels.

The basic difficulty is that debt-equity swaps amount to a budget subsidy by debtor countries that will allow banks to get out and foreign investors to get in. Here are the mechanics: First Regional Bank sells Brazilian government bonds at a discount to Dreams, Inc., a U.S. firm specializing in services. Dreams, Inc., presents the debt to the Banco Central do Brasil to be paid off in cruzados. The proceeds are used for the purchase of a Brazilian firm. It seems that everybody gains: the bank has found a way of selling some its illiquid portfolio without depressing the secondhand market; the investing firm gains the advantage of buying cruzados at a discount; and Brazil gains because she can pay the foreign debt in local currency rather than in dollars. Moreover, much needed investment takes place.

The debtor government will have to finance the repurchase of debt from the foreign investor. One cannot simply print local money to pay. In fact the government will issue domestic debt and use the proceeds to buy back its foreign debt as it is presented by the foreign investor. Hence, when everything is done, the government has a reduced external debt, but a matching increase in domestic debt. The country owns less of its capital stock, since the foreign investor will have bought some, and in return has redeemed some of its external debt.

Is there any advantage for the budget? In the budget there will now be reduced interest payments on external debt offset by increased

domestic debt service. There is a net reduction in interest if the debtor country can appropriate most of the discount at which the external debt is traded and if the real domestic interest rate (in dollars) is not too high relative to the cost of servicing the external debt. The net result is likely to be an increase in debt service because real interest rates in debtor countries are exceptionally high.

On the balance of payments side, however, swaps might seem to be good news: foreign debt is reduced and as a result burdensome interest payments to abroad come down. But the reduced external interest payments are matched, at least potentially, by increased remittances of dividends or profits by the new foreign owners of the national capital stock. Hence, on the payments side the trick also does not do much good. In fact, the country becomes less liquid since it is much easier to control the service of bank debt than the remittances of multinationals. The massive outflow of remittances from Brazil in 1986 makes this point.

Debt-equity swaps are primarily a balance sheet operation, not a net resource transfer. One might argue that the government could target deals to make them less a transaction in existing assets and instead be directed toward new, extra investment. More likely, financial intermediaries will look for firms, domestic or foreign, that are already investing. They will approach the firms with a new kind of financing package involving debt-equity swap that, because of an implicit subsidy by the government, turns out to be less costly than alternative sources of finance. Thus debt-equity swaps will finance investment, but they finance at the budget cost of a subsidy investment that would have taken place anyway. This explains the reluctance of debtor countries to plunge into the scheme.

Debt-equity swaps bring together, with the glue of budget pesos, two entirely separate operations that would arise in a free, unregulated market. To solve the banks' problems, marking to market of LDC debts would occur and hence debts could be sold to the nonbank public. To cope with the resource problem, debtor countries would set up investment funds in which nonresidents can invest in the private economy with liberal facility for repatriation of dividends. The two separate steps assure that old, bad debts do not prevent new investment. The bad debts are distributed more widely, though at a possible loss to all the banks' stockholders. The debtor countries gain extra resources which they may use to expand investment or to buy back their debt, whichever appears more profitable. This is the market solution. Debt-equity swaps, by contrast, are a way of nationalizing the transaction, pushing budget subsidies to bank stockholders rather than to extra investment.

Balance sheet tricks are not a substitute for gaining extra real resources for investment. Improved government budgets in the debtor

countries, increased private saving, increased efficiency in their public sector, and net resource transfers from abroad are the only way for investment and growth to return. Of course, debtor countries should open all doors to foreign direct investment—the sooner and wider, the better. But there is no justification for subsidizing such investment.

### 3.6.3 Reversal of Capital Flight

Wishful thinking turns to the \$100 billion or more of Latin American assets that have fled from financial instability and taxation to the industrial countries, especially the United States. Reversing these capital flights, primarily in the case of Mexico or Argentina, would make it almost possible to pay off the external debt; much of the debt was incurred in the first place to finance the exodus of private capital.

Estimates of the amount of capital flight in the 1970s and early 1980s differ widely. But whatever the methods by which the magnitudes are estimated, the fact of at least a \$100 billion capital flight from Latin America is not in question. Estimates are particularly large for Mexico, Argentina, and Venezuela and much smaller for Brazil and Chile. For both Argentina and Mexico, estimates of \$25 billion to \$35 billion are not uncommon, hence the suggestion that reversing the mammoth out-flow could help pay off the debt without tears.

The idea that private capital could be the main solution, or at least provide an important contribution, is naïve. There is little historical precedent for a major reflow, and when it does happen it is the last wagon of the train. Einaudi once observed that savers “have the memory of an elephant, the heart of a lamb, and the legs of a hare.” Capital will wait until the problems have been solved; it will not be part of the solution and is even less likely to provide a bridgehead.<sup>15</sup>

It is often argued that if only countries adopted policies guaranteeing savers a stable positive real rate of interest, there would be no capital flight problem. But that argument is not very realistic in three respects. First, in the context of adjustment programs, devaluation is often unavoidable. Compensating savers for the loss they would have avoided by holding dollar assets would place a fantastic burden on the budget, which in turn would breed financial instability. Second, maintaining high real interest rates poses a serious risk to public finance. The public debt that carries these high real rates snowballs, and that in turn is a source of instability. Third, raising the return on paper assets above the prospective return on real capital is terrible supply-side economics; it ultimately erodes the tax base and deteriorates the financial system by souring loans. A country in trouble simply cannot make its chief priority keeping the bondholders in place.

Capital controls, where feasible, are a better strategy for restoring order in public finance than papering over extreme difficulties for a

while using extraordinarily high real interest rates. The latter strategy was, indeed, at the very source of the mess in Argentina under Martinez de Hoz and explains some of the difficulties in Mexico today.

The capital flight problem is encouraged by the fact that the U.S. administration no longer withholds taxes on nonresident assets. For with this tax-free U.S. return, anyone investing in Mexico (and actually paying taxes there) would need a yield differential, not counting exchange depreciation and other risks, of several extra percentage points.

There is much talk about the problems of banks putting in new money only to see it used by debtors such as Mexico to finance capital flight. Of an extra dollar of new money conceded by creditors, 70 cents are said to leave in extra capital flight. This indicates the need for a cooperative approach where debtor-country governments, the tax authorities in creditor countries, and the commercial banks cooperate in stopping capital flight and tax evasion. Of course, none of the three parties can succeed alone.

#### 3.6.4 The Facility

A number of proposals have been made over the past four years by academics, business leaders, and politicians in an attempt to drive a wedge between old, bad debts and the recognized need for new investment in debtor countries. Old debts are seen in this context as oversized mortgages on the debtor countries that impede the free and voluntary flow of new funds. The means to achieve such a flow is a facility that buys up LDC debts from banks and reduces debt service costs for debtors.<sup>16</sup> Lightening the burden of old debts and using an international fund with its diversification possibilities and possible credit standing provides important opportunities for passing on benefits to the debtors, without destructive effects on the solvency of banks or the asset position of their stockholders.

The details of such facility schemes vary. Invariably they are administered by the World Bank and involve allusions to the Marshall Plan, recycling, and the sharing of international burdens by strong currency countries or countries with significant external surpluses. On the basis of a capital subscription to be made by an as yet undesignated donor, leveraged by significant borrowing in the world capital market, the facility would take LDC debts over from banks or buy these in the secondhand market. Benefits to the LDCs occur because the facility will have a lower cost of capital than the individual LDC, both because of diversification and guarantees. The benefit of the reduced cost of capital and of the facility's purchases at discount of debts from banks would be passed on to debtors in the form of more favorable interest rates or debt reduction.

The concept of a facility draws attention to an important practical problem in credit markets. The higher the interest rate charged on credit, the less likely that it can and will be paid. Hence a policy of risk premiums is exactly that—it makes loans risky. Thus the facility would avoid this problem by charging a common interest rate, but it would reward countries for performance by writing down outstanding debt.

Such a facility would introduce a new party into debt negotiations. Concerned with the solvency and productivity of the facility, the management could take positions on rescheduling agreements to assure that the value of the assets it carries is not impaired by extortionary settlements or unreasonable adjustment programs. One might imagine that the facility makes available a long-term reconstruction loan to a particular country, say Mexico, and in exchange secures from the banks extraordinary reductions in spreads or maturities. Of course, to perform this function aggressively would require that the manager of the facility have stature and independence beyond the immediate reach of the U.S. Treasury.

The main question about the facility, the issue of the donor aside, is Who should be the beneficiaries? The facility must, ultimately, involve taxpayers' money, although this may occur in a highly remote, off-budget, and leveraged fashion. The use of taxpayers' money makes it reasonable to ask whether the facility should benefit starving African debtors, middle-income Latin America, or winners such as Korea. Assigning the use of the fund primarily to Latin America rather than to Africa, whose debt is mainly to property authorities, is politically attractive.

### 3.6.5 Debt Relief

Debtor countries have failed to form an effective cartel that could impose debt relief in the form of a write-down, sharply reduced interest rates, generous grace periods, or the consolidation of debt into perpetuities. On the contrary, debtor countries have competed with each other and, as a result, have wound up with poor terms and a short leash.

So far, only two attempts have been made to turn debt service into a major political issue. One is the case of Peru, where the government unilaterally limited its debt service to a specified fraction of export revenue. The other is the Mexican case of 1986. In each instance the large domestic costs of debt service and the destructive effects on investment, inflation, and growth potential led the governments to try and limit the damage. It is hard to believe that Peru got very far, but it is certain that Mexico initiated an important change in policies and procedures. The Mexican success suggests to some observers that with enough determination (and a favorable geographic location), debtors

can in fact secure reduced spreads, contingency funds, and even an underwriting of growth.

At the same time, the debt problem is starting to become a political issue. Henry Kissinger, Lord Lever, Sen. Bill Bradley, and an increasing number of policymakers and policy economists are advocating a more political approach to the debt problem. This is the case in part for reasons of foreign policy. But poor U.S. trade performance is also starting to be seen as a reflection of debtor countries' need to earn foreign exchange for debt service. This point has been emphasized especially by Senator Bradley (1986a, 1986b). The Bradley debt plan accordingly emphasizes the need to create a vehicle for trade-debt discussions. Focusing explicitly on the link between trade concessions by debtor countries and targeted, limited debt relief, this approach consciously makes debt a political issue. Besides adapting the regulatory system to facilitate write-downs agreed between debtors and creditors, the proposal also calls for reduced interest payments, extra money, and debt write-downs.

Several negative responses to the Bradley proposal have been voiced, suggesting that the plan is impractical or undesirable. One argument is that the particular details—for example, the annual debt summit—are implausible, complicated, or useless. The trade issue, viewed from the perspective of the U.S. external sector and growth, is small—there has been only a \$12–15 billion swing in the bilateral balance with South America. Moreover, the write-downs are felt to be insufficiently conditioned on performance of the debtor countries and hence not worth making. Another criticism is more basic. It amounts to the assertion that any and all kinds of debt relief reduce or even destroy the beneficiaries ultimate chances of renewed access to the international capital market. Countries that accept debt relief, it is argued, will be tainted. Only those that service humbly will see the day of voluntary lending. Historical precedent for all of Latin America suggests the opposite.

Political solutions to the debt problem are likely to be close to the arrangement Mexico secured and far away from the ambitious Bradley Plan. Resistance to write-downs might soften, even if there is no indication of this at present, and terms might become more flexible. But even so the debt problem will remain an overwhelming burden on the growth prospects of Latin America. Taxpayers are unwilling to underwrite Latin American growth, and politicians are unwilling to underwrite the banks. Growth in Latin America will therefore depend in equal parts on a solution to the U.S. deficit problem with generous monetary accommodation and on the introduction of reasonable public finance in the debtor countries. With these two conditions met, and excepting extreme episodes such as the 1986 Mexican oil decline, growth can start again, although the losses of the 1980s will not be made up.



Debt relief can come from direct government intervention, but it can also come if governments withdraw from organizing the debt collection process. Meltzer (1984) has advocated this course and Milton Friedman (1984, p. 38) has observed: "So I think the way you solve the LDC 'debt bomb' problem is to require the people who make the loans to collect them. If they can, fine, and if they can't, that's their problem." There is little doubt that a withdrawal of governments (and the IMF) from the debt collection process would lead to a rapid disintegration of the creditors' cartel and a reduction of debts to levels more congenial to debtors.

### 3.6.6 Moral Hazard

Solutions to the debt crisis involving debt relief encounter one apparently overwhelming objection: Latin America's debt reflects to a large extent mismanagement and capital flight. Granting debt relief to Latin debtors, but not to countries where management was more careful, amounts to rewarding poor policy performance and thus invites repetition.

But the moral hazard argument can also be made in two other ways. First, not giving debt relief means that the governments of creditor countries enforce bad loans. They thus encourage poor lending policies on the part of commercial banks, which now expect their governments to help collect even the poorest sovereign loans. Second, in the context of capital flight it is frequently argued that amnesty for tax fraud and illegal capital transfers is an effective and desirable policy for encouraging a reflow. Of course, the same moral hazard argument applies, as future tax morality would be undermined.<sup>17</sup>

The major weakness of the moral hazard argument in cases such as Mexico and Argentina results from capital flight: those who pay are primarily workers whose real wages are cut. Owners of external assets are rewarded by capital gains and thus turn out to be net beneficiaries of the debt crisis. The moral hazard argument thus can be turned around to support the case for debt relief.

## Notes

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1. There is a lot of flux in debt data. A good survey of the problems can be found in Mills 1986. We use here the IMF data, data reported by Morgan Guaranty *World Financial Markets*, and the U.S. country exposure survey, except where otherwise noted.

2. The classification of countries follows the IMF. See *World Economic Outlook* (October 1986): 31–34.

3. Note that real GDP and dollar GDP behave very differently. A real depreciation may raise real GDP but is certain to lower dollar GDP.

4. This increase in real debt burdens would have outpaced any advantages from cumulatively lower interest rates on nondollar debt. As is well known, exchange rate movements have far exceeded the depreciation implicit in international interest differentials.

5. See Dornbusch 1985 and 1986a on the Martinez de Hoz experiment.

6. On the Chilean experiment, see Edwards and Edwards 1987, and Ramos 1986.

7. On the Mexican case, see Cardoso and Levy 1986.

8. See especially Fraga 1986 for a comparison between Germany in the 1920s and Brazil in the 1980s. See, too, Dornbusch 1985b.

9. The fact that it is often food subsidies that are eliminated, without the proverbial neutral lumpsum tax to compensate the losers, does not seem to limit the case for the policy recommendation.

10. There are a few public sector bonds outstanding. Edwards 1986, and Dornbusch 1986b and 1986c look at the yields of Mexican, Argentine, Venezuelan, and Brazilian bonds.

11. The change in the bilateral trade balance in manufactures is more significant than the change in the total bilateral trade balance because declining oil and commodity prices reduce our import bill and hence are reflected in a smaller change of the total balance.

12. For an extensive discussion of solutions, see Lessard and Williamson 1985.

13. The Mexican settlement forced the commercial banks to put up an unexpectedly large contribution. The settlement has demonstrated that the debt problem is not dead, but also that government involvement might boomerang.

14. For a strong statement of support for debt-equity swaps, see the Morgan Guaranty *World Financial Markets* issue of September 1986.

15. The public opinion survey on Mexico reported in the *New York Times* on November 16, 1986, makes most apparent just how pessimistic nationals of debtor countries are about the chances of economic recovery.

16. The most recent proposals are the editorial by David Obey and Paul Sarbanes in the *New York Times*, November 9, 1986, and the suggestion for a Japan Fund made in various speeches by Jim Robinson of American Express.

17. There is an interesting difference in public finance ideology: government debt write-downs in the form of a capital levy are said to undermine the very foundations of government credit, but tax amnesty is viewed as a practical response.

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## 2. Thomas S. Johnson

### U.S. External Debt and LDC Debt: Twin Problems

In 1982, when the international debt crisis burst into our collective consciousness, it was seen as a compartmentalized and “compartmentalizable” problem. Indeed, the strategy for dealing with it underscored that view. Emphasis was on the individual debtors, and debt restructurings were negotiated one at a time, each country with its group of creditor banks. Similarly, we handled the necessary macroeconomic adjustments on a case-by-case basis, each country working out its reforms and adjustment policies with the International Monetary Fund.

It will be up to economic historians to decide whether the compartmental approach was the correct one at the time—we think it was the right approach. Whatever the final answer to that historical question, however, today the international debt problem extends beyond the debtor countries and their creditor banks.

Considerable progress has been made—from both debtor and creditor perspectives—since the summer of 1982. The “Baker group” of fifteen countries—which together owe about \$460 billion of the \$1 trillion of LDC debt—have moved, in the aggregate, from deep current account deficit much closer to balance. Moreover, prices for their exports appear to have stabilized, interest rates on their debt have come down, and substantial debt restructuring has taken place.

We on the creditor side also have made progress. The five years since the problem became a crisis have allowed a substantial buildup of bank capital and reserves. As of late last year, lending exposure to the Baker-15 LDCs amounted to 125 percent of the capital of the nine largest U.S. banks, down from 200 percent in June 1982.

While acknowledging this progress, many believe that we may have come as far as we can using the compartmental approach alone and that systemic reform may now be needed. We will undoubtedly continue to succeed in restructuring and extending existing credits, but substantial impediments lie in the way of providing the flow of new funds that the LDCs need in order to grow:

- Unceasing negotiations with individual debtor countries are draining the analytical and managerial resources of official institutions, private creditors, and the developing nations themselves. For example, the energy toll among the top managers in our industry is very costly, and it clearly impairs, to some extent, our ability to do other things.
- The case-by-case approach had considerable merit in the early stages of the debt problem when adjustment was the priority. Now, when the emphasis has to shift to growth, reliance on the case-by-case approach alone may actually be inhibiting development of broader solutions.
- Multilateral programs for LDC financing that have been proposed thus far, such as the Baker Plan, continue almost exclusive reliance on commercial bank lending. Given the cloud that hangs over the commercial banks for the exposures they already have, continued emphasis on bank lending may be unrealistic at best and dangerous to the viability of the system at worst.

Beyond these institutional considerations, however, lie more fundamental reasons why further progress is problematic without going well beyond the case-by-case restructuring pattern. The United States, in acting as the world’s largest consumer, has contributed to LDC

progress in the short run, but, in becoming the world's largest debtor, in the longer run it has increased the vulnerability of the borrowing countries to shocks emanating from the industrialized world.

Between 1982 and 1985, the United States accounted for 75 percent of the rise in industrialized countries' total imports, and U.S. imports as a percentage of total world exports grew from 15 percent to more than 20 percent. Expansion of domestic demand in the United States has accounted disproportionately for expansion in worldwide demand and for growth of LDC exports. However, the unsustainability of U.S. consumer demand growth, complicated by our dangerously growing external imbalances, now exposes the LDCs to persistent and destabilizing concern over the potential for a sudden worsening of their situation.

How the industrialized world copes with its major imbalances will bear crucially on the ability of the LDCs to emerge from their debt crisis. A sudden loss of confidence in the United States as a debtor, or simply a portfolio preference shift away from U.S. financial instruments, would raise dollar interest rates and the LDC debt service burden and at the same time slow or shut down growth in the United States—the LDCs' major market.

However, a successful multilateral approach to the imbalances among industrialized nations would maintain demand for LDCs' products and reduce the risks of substantial increases in dollar interest rates. This is the challenge.

The accumulation of the U.S. debt in some ways is far more worrying and potentially disruptive than the accumulation of LDC debt. It is true that they differ in important ways. The U.S. debt is far smaller when measured against our income and resources. Moreover, we owe the debt in our own currency, rather than in the creditor's currency, so in that sense we can always repay.

In another sense, however, the debts are disturbingly similar. In each case, the borrowing has *postponed* an essential adjustment of real living standards. Borrowing in order to facilitate a more fundamental real adjustment is an appropriate use of credit for short periods of time. But its use to avoid adjustment, as seen in the LDC experience, merely makes for a more wrenching adjustment eventually. Financial markets, of course, will ultimately cause the adjustments to occur, potentially in very destabilizing ways.

I am not reassured by the progress to date in attacking the imbalances present in the industrialized world. So far, there has been too much reliance on monetary policy in the coordination of G-5 policies, and too little movement toward correcting the saving-investment imbalances at the heart of the problem.

The massive lending to the developing nations in the late 1970s occurred in an environment of excessive worldwide liquidity growth. In retrospect, this occurred in the mistaken belief that the labor markets and physical plant of the developed world offered substantial margins of excess capacity.

Today, regulatory changes and sharp declines in nominal interest rates complicate interpretation of money growth rates. Nonetheless, there appears to be a similar complacency developing regarding the margins of unused capacity. There is no doubt in my mind that the strong growth of U.S. demand, which has in major part benefited the LDCs, has been encouraged by an accommodative U.S. monetary policy that may, with hindsight, prove to have been too easy.

Meanwhile, the call for foreign monetary authorities to finance faster growth ostensibly to stimulate U.S. and LDC export growth may amount, in effect, to a new way to monetize U.S. deficits. Similarly, efforts by foreign policymakers to stabilize nominal foreign exchange rates against the dollar will tend to create a potentially dangerous expansion of foreign money supplies. Such efforts already have entailed widespread acceleration of monetary aggregates and, in some cases, unwelcome overshooting of monetary targets. Time will tell whether the enormous lending to the United States is being facilitated by excess liquidity creation, as was the LDC lending. The danger, of course, is a new burst of inflationary pressures at some point.

There seems to be widespread agreement among policymakers that the fundamental imbalances are found in differential saving and investment patterns. It is a familiar theme, expressed at the Plaza, in Tokyo and most recently in Paris. The United States must reduce its budget deficit and thereby its excessive demands on the world's capital. The industrialized countries having external surpluses must find another outlet for their excess saving.

One way to effect these changes is identified in all of the G-5, G-6, and G-7 communiqués: stimulating domestic demand in the surplus countries through more aggressive use of fiscal and tax policies. This can be supplemented by exploring mechanisms to channel capital to LDCs, a subject to which I will return.

Before turning to some thoughts regarding an appropriate policy mix going forward, I must note that we are running out of time. While the LDC problem grew over a long period of time, the door to credit availability closed suddenly in 1982. Such a dramatic event is probably not likely to confront the United States as a debtor. Since our debts are in dollars, they will always be repaid, though at what real value is unknown. But developments over the last year suggest to me the door is beginning to close.



Through 1985, international investors appeared to view the United States as a good credit risk, given the size of its economy and its productive resources. More recently, there have been ominous signs of a shift away from preference for U.S. investments, perhaps because U.S. monetary policy has been so accommodative.

The middle two quarters of last year saw a sharp drop in spontaneous private inflows of capital to the United States. In 1985, net private capital inflows ran at \$103 billion, exceeding the total recorded inflows, as official capital of \$8 billion flowed out. In the second and third quarters of 1986, recorded private net capital inflows slowed to an annual rate of \$65 billion—barely half the total capital inflows—as official flows into the United States accelerated to nearly \$60 billion. Even that rate of official inflow was probably surpassed in the first quarter of 1987. Meanwhile, we have witnessed several worrisome episodes in the last twelve months in which the dollar's foreign exchange value has declined even as the U.S. interest rates have risen.

In this context, the Paris G-6 agreement is meaningless if it does not deliver substantial shifts in policies affecting fundamental saving-investment balances. The accord so far has apparently succeeded in relieving speculative pressures on the dollar, as currencies have traded in recent weeks over fairly narrow ranges. But the underlying market mood remains bearish, and a new speculative run—against which the central banks would have little leverage—could occur at any time. This makes it all the more important that policymakers move quickly to meet, or even exceed, the commitments they made to correct the saving-investment imbalances.

The litany of the required policy adjustment bears repeating: the U.S. administration and Congress must not let up on their efforts to reduce the federal budget deficit. Significant progress has been made, but I sense that a level of frustration is developing which threatens that progress.

The discipline inherent in Gramm-Rudman has put a significantly declining budget deficit within our reach. Regardless of whether we meet the arbitrary timetable set forth in the act, the main objective has to be creating credible expectations of declining budget deficits. The most important discipline has been resistance to any new programs. However, we now see our new programs—such as catastrophic health insurance and welfare reform—being talked about, and it will require even greater efforts to hold the line. Budget deficit reduction in the United States will help maintain lower real U.S. interest rates and free up funds for productive private investment in the United States and abroad.

The surplus countries have taken some important steps and will have to continue their efforts to stimulate their domestic economies. My

sense is that still more can be done through tax incentives for investment and local public works expenditures to replace export demand lost to the lower dollar. These initiatives, of course, must take place while making every effort to keep markets open to international trade.

We can add another dimension to these policies. A fundamental disequilibrium in the surplus industrialized countries is their excess of domestic savings. We also know that the LDCs require more diversified credit sources and markets for their products. A result of better economic policy balance among the developed countries should be a marginal, at least, improvement in the relative attractiveness of investments in the developing countries.

This challenge—providing a new flow of funds to promote growth—may require that we review the compartmental approach we have taken thus far on LDC debt. This debt is no longer a “bank” problem, and is too big for the banks to solve alone. The governments of the industrialized world, through excessive liquidity creation and mercantilist trade policies, helped create it, and governments must help solve it.

The ultimate answer may lie in some form of multilateral lending institution created to channel new capital to these countries and assist in diversifying the risks and the investor base. New cash for additional lending could be raised through some combination of equity contributions or credit guarantees from governments, together with more imaginative ways to deal with existing debt. The emphasis of the new approach, to which the creditor banks ought also to contribute, should be on new funds in response to longer-term economic reforms in the debtor nations.

The alternative—relying solely on case-by-case restructuring of existing debts—may not provide enough flexibility and time for the reforms to produce sustainably better performance in these countries. What we and they need now is breathing room.

Ideas of this sort require much more work. However, I am convinced that the problems confronting the LDCs and those of the industrialized world are really the same problems. They must be solved together, if they are to be solved at all.

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### *3. Anne O. Krueger*

#### The Problems of the LDCs' Debt

Debt-servicing difficulties are not a new phenomenon. American economic history contains episodes of default and servicing difficulties,

and even in the “golden era” after the Second World War reschedulings often accompanied IMF stabilization programs. Until the 1980s, however, debt-servicing difficulties and reschedulings were seldom noted outside of the international institutions and country in which they happened.

In the 1980s, a number of large developing countries, with sufficiently sizable debt to arouse concern for the macroeconomic stability of the international financial system, encountered debt-servicing difficulties at almost the same time. Because these difficulties were simultaneous, it was natural that many observers took debt to be the problem, rather than a symptom. Indeed, there were perceived to be (at least) two problems: one, the financial institutions in credit countries, and the other the heavily indebted developing countries. While the two problems are not identical, it is clear that if the borrowers succeed in servicing their debt and restoring growth, both problems will be solved. I, therefore, concentrate on this issue in most of my remarks. In the conclusion, I briefly address the question of what might happen if there were an alternative outcome.

Almost any country confronted with debt-servicing difficulties has, by definition, a “balance of payments crisis.” If it could service its debt, it could also obtain financing for its current obligations on international capital markets. This does not mean that debt-servicing obligations “caused” the balance of payments crisis; on the contrary, the usual story is one of chronic current account deficits that are financed by borrowing until creditors are unwilling to extend additional credit. It is not the existence of debt per se that triggers a crisis, but rather the inability to command yet more loans. However, in 1982–83 the world recognized the “crisis,” but failed to appreciate the nature of the longer-term problems that had led to it.

For this reason, any assessment of the problems associated with the debt of individual developing countries must start with an understanding of the origins of the difficulties. I, therefore, address that question first. Thereafter, individual countries’ prospects for resolution of their particular problems, given the current outlook for the global economy, are analyzed. On that basis, it is possible to evaluate potential changes in the international environment that might enhance economic prospects for some of the heavily indebted countries and for the world economy, which is the final topic.

### What Led to the Debt Problem?

It is useful to recall the textbook explanation of capital flows, which for present purposes I shall equate with accumulation of debt. Capital-rich countries have relatively high savings rates (because of their high incomes) and relatively low rates of return on investment, contrasted

with capital-poor, developing countries. Therefore, capital should flow from rich countries to poor countries because savers will receive higher returns and world economic growth will be enhanced.

During the 1970s, most observers viewed the expansion of private lending to developing countries as a sign of success with development: LDCs that had earlier been dependent on official capital flows (foreign aid and lending from government agencies and the multilateral development banks) were able to borrow from the private international capital market. That appeared to confirm the conventional wisdom and to signal that the private international capital market was functioning well in allocating the world's savings to high-return activities. Then came the "debt crisis" of the 1980s, which led some to question the textbook wisdom.

The conventional analysis is not wrong, but it is surely incomplete, at least as stated above. Borrowing to finance high rate-of-return investments can certainly yield a sufficient increment to income to permit the borrower to service the debt and simultaneously earn a higher income. But borrowing to finance an excess of consumption over income cannot be continued indefinitely. And, of course, investors' expectations may be wrong, either with regard to the stream of returns they will earn or with respect to the expected real interest rate they will pay over the life of their loan.

What happened in the 1970s was a combination of many things. Some countries' economic policies were conducive to high rates of return on investment, and they borrowed much as in the textbook story. Even those countries had to adjust in the early 1980s to worldwide recession and much higher real interest rates, but they were by and large able to do so, albeit not without difficulty.

Other countries, however, had macroeconomic policy stances in which domestic investment (some of which yielded low real returns) exceeded domestic saving, and foreign borrowing financed the difference. To some extent, the excess of domestic investment was the result of large public sector deficits (even when the authorities raised domestic interest rates to encourage the private sector to do the foreign borrowing); another contributing factor was the failure by some countries to have adjusted domestic incentives after the oil price increase in 1973. In a very permissive international environment, with negative real rates of interest and rising nominal export prices, these policy stances were not inconsistent with some growth of real per capita incomes and continued debt servicing, although alternative policies would have yielded even more rapid, and certainly more sustainable, growth. When the global environment changed in the early 1980s, however, these countries were confronted with major debt-servicing difficulties, and the economic policies that had earlier sustained satisfactory growth were

no longer adequate to the task. To compound matters, there was a required adjustment to the almost-simultaneous sharp rise in real interest rates, deteriorating terms of trade, and decline in net capital flows.

Other countries fared even worse: their macroeconomic policies were so unrealistic that they were unable to sustain growth even in the 1970s. In some instances, there were debt crises and sharp shifts in policies even before the 1980s. Turkey is the most visible case. Many sub-Saharan African countries, of course, also experienced negative rates of growth of per capita income in the 1970s. However, a large portion of their debt was on concessional terms, and aid was sufficiently large so that many did not confront unmanageable debt-servicing difficulties until the 1980s. Then the impact of the altered global environment was magnified by the accumulated inefficiencies resulting from past policies.

To be sure, not all countries fell into any of these three categories. Some, most notably the South Asian countries, were sufficiently fiscally conservative that they did not borrow much from the private capital markets in the 1970s. Their situation is, therefore, not considered in what follows, although the fact that some low-income countries are not heavily indebted must be borne in the mind when considering policy options for improving the prospects of the heavily indebted countries.

The precise mix of internal and external factors that resulted in debt-servicing problems varied significantly from country to country. No one diagnosis pertains to all, or even the majority of countries. Nonetheless, all of the heavily indebted countries that encountered debt-servicing difficulties are confronted with a much harsher international economic environment in the 1980s: they cannot base their policies on the expectation that there will be a return to the conditions of the 1970s. This means that policies must be changed, not only or even primarily because of the need to service and perhaps reduce debt, but simply because the policies that were at least marginally sustainable throughout the 1970s are not feasible in the mid-1980s. New capital inflows, if and when they take place, will be economically warranted only in financing more efficient investment programs than was the case in the 1970s. Even without debt, therefore, policy shifts would have been necessary and economic prospects would have deteriorated for the heavily indebted developing countries under their policy regimes of the 1970s.

### Prospects for Growth and Creditworthiness

Resumption/acceleration of economic growth is an important objective, not only for the well-being of people in developing countries, but also for American political and economic interests. It is difficult to imagine a continuation of debt servicing over the intermediate and

longer-term with stagnant or falling living standards in the heavily indebted countries. At any event, it is highly doubtful if exports could be increased enough to maintain debt service without growth in real output. Thus, while growth is desirable in itself, it is also a prerequisite for resolution of the debt problem.

The fundamental questions, in my judgment, are (1) What rates of economic growth would be attainable in the absence of any debt given a global environment not too different from that prevailing during the past several years? (2) To what extent do debt-servicing obligations reduce the attainable growth rate? and (3) What conflict is there, if any, between acceleration of growth and ability to maintain debt-servicing obligations and restore creditworthiness? Much public (and professional) discussion of the debt problem has been muddled by confusion of these questions.

The attainable rate of economic growth of any country, given the global environment, is a function of its resource endowment, the rate at which it is accumulating resources, its policy stance (which is crucial in determining the efficiency with which resources are used and also the rate of saving and resource accumulation), and its willingness to alter its policies to improve growth prospects.

With a few exceptions, the policy reforms undertaken to date have been demonstrably inadequate to the task. In most heavily indebted developing countries, one would make similar policy prescriptions to enhance prospects for resuming/accelerating growth: adoption and maintenance of a realistic exchange rate; dismantling quantitative controls over imports and reducing the bias of the trade regime against exports by sharply reducing protection conferred to import-substituting industries and imposing a low ceiling on the height of any remaining tariffs; reduction in the size of the public sector deficit (but with appropriate attention to the investment/consumption composition of public expenditures and the incentive effects of the tax structure); removal of many domestic controls over private economic activity; reduction in the inefficiencies associated with parastatals; and movement toward more efficient mechanisms for channeling credit to its most productive uses.

If "ideal" or "near-ideal" reforms could be achieved, improved resource reallocation, increased efficiency of resource utilization, and faster rates of growth of savings and investment would all conduce toward higher growth rates. Initially, one would anticipate a burst of exports and some degree of rationalization, if not reduction, in the size of the import-competing sector. Simply because incentives have been so distorted toward import-competing activities, the shift in incentives under this "ideal" reform would result in a period during which export growth would exceed GNP growth as the share of trade in GNP rose

to a more appropriate level, and one would expect new private investment to be heavily oriented toward exportables and public investment to expansion of ports, communications, and other essential support services for expansion of international trade.

While the growth rate that might be achieved with such a shift in the policy environment would naturally vary from country to country, the historical evidence is that even during times of slow growth of the world economy, countries with reasonable policy environments have been able to achieve growth rates of 6–7 percent. If a country could somehow get to the 6–7 percent growth rate path, with an even more rapid rate of growth of export earnings for a half decade or so, debt-servicing problems would become manageable and diminish in importance with time.

There are, however, two reasons why things are not so easy as that even from the individual country's viewpoint (I later address the global issue of protectionism and what it does to export prospects). The first is that many countries' reform efforts have generally fallen far short of "ideal"; the second is that, in some countries, debt-servicing obligations may make the attainable rate of growth significantly lower than 6–7 percent without some capital inflow to supplement domestic savings.

Turning to the first issue, the needed "ideal" reforms are politically painful. Inevitably, the political process generates pressures to reduce the extent of reforms to the "necessary minimum." While economists can, to a considerable extent, identify larger and smaller deviations of policy from those most conducive to growth, it is not yet possible, given the state of the art, to quantify the essential minimum that will be effective in, for example, stopping a decline in per capita income or in permitting a growth rate of  $x$  percent per capita per annum, quite aside from the fact that any such quantification would necessarily be conditioned on the state of the international economy. Some "reform" programs, when whittled down by the political process, might succeed, if at all, only under highly favorable assumptions.

In these circumstances, many reform programs appear to be "too little, too late." And in some instances they are. Even in prospect, it was hard to understand how the international community gave its blessing to some of the programs; in many other instances, it could readily be judged that prospects were at best doubtful. To be sure, had global conditions returned to those prevailing in the mid-1970s, some of these programs would have been sufficient. But absent such conditions, it is almost certain that further policy reform programs will be essential in many of the heavily indebted countries.

Undertaking halfhearted and ill-fated reform programs has a number of costs. Political opposition (in other countries and in later efforts in the failing country) can point to the "failure" of these efforts as an

argument against other attempts. And to the extent that international resources for supporting reform efforts are limited, the support of these programs diverts resources from more thoroughgoing efforts with far greater likelihood of success. Finally, there is some evidence that potential lenders cannot discriminate among reform programs: the failure of any makes them more reluctant to support all others without discrimination among them.

Thus, any attempt to evaluate prospects for growth and resolution of the debt problem must start with an assessment of the adequacy of the reforms undertaken thus far relative to the magnitude of those needed. I have already said enough to suggest that I am, in many instances, skeptical of the adequacy of the programs. But so far I have assumed there is no debt problem, only an international economic environment less permissive of policy mistakes than was that of the 1970s. The question next arises as to how the existence of debt and debt-servicing obligations complicates the analysis.

In most countries, the necessity for debt servicing creates a significant cost in that it diverts the attention of some of the most able policymakers from longer-term issues to the short-term problem of debt servicing and rescheduling. This "crisis management" mentality is not conducive to longer-term economic reforms, and it is all too easy to think of debt as the sole cause of difficulties. Ability to blame the debt also helps increase opposition to the necessary longer-term reforms.

Aside from that very real, but unmeasurable, cost, debt servicing poses two problems: (1) generating the foreign exchange for debt service, and (2) obtaining the necessary finance (since in most countries the debt is largely a government obligation).

For many countries, these problems would reduce the rate of growth attainable from "ideal," or even realistic, reforms. Nonetheless, the arithmetic is such that in most cases, attaining sufficient policy reform is the problem: export and GNP growth would and could be rapid enough to permit a fairly rapid reduction in debt-service ratios, with a consequent diminution of the debt problem.

There are some countries, however, whose debt obligations are so large, and whose incomes are so low, that it is difficult to imagine (on reasonable assumptions about the world environment) that even ideal reforms could deliver quick results without some additional external capital. New investment is usually needed to permit more than a short-term response out of excess capacity to newly realigned incentives. In countries where the domestic savings rate (public and private) is 12–14 percent of GNP, it is almost inconceivable that debt-servicing obligations (which usually have to be financed out of public revenues) of 6–7 percent of GNP can be met while simultaneously increasing net savings sufficiently to permit enough investment to achieve a reason-



able rate of growth of exports and efficient import substitutes. If there were no "debt overhang," the high rates of return associated with realigned incentives would induce voluntary private capital flows. While an improved environment for direct private investment and other, non-debt, private capital flows can perhaps increase capital inflows (or reduce outflows) to some extent, it is highly unlikely that the order of magnitude can be sufficient to improve prospects significantly, given the reluctance of lenders to increase their exposure in countries encountering debt-servicing difficulties. And, until growth resumes, it is doubtful whether countries' prospects will appear sufficiently favorable to induce private lending from abroad. There thus may be a vicious circle in which the failure of capital inflows implies low growth which implies future debt-servicing difficulties.

This "debt overhang" problem is well known in the corporate finance literature: a burden of debt from past investments can act as a "tax" on future earnings so that even if companies have high prospective rates of return on new investments they may be unable to raise the finance for them (although it must be pointed out that holders of equity may have incentives to invest in some highly risky ventures even with negative expected returns since unfavorable outcomes cannot make their situations worse). Although a need to raise revenue for debt service equal to 5, 6, or 7 percent of GNP does not at first sight seem that high, it can be formidable when viewed in the context of economies where per capita incomes are very low and where there is an imperative to reduce the size and disincentive effects of the public sector.

The problem posed to policymakers by the debt (quite aside from whether the costs of reform may be high enough to be politically destabilizing) is to differentiate between cases of insufficient reforms, when prospects for growth and resumption of creditworthiness are in any event bleak (and where, therefore, additional debt will only make the problem worse when an adequate program is finally undertaken), and cases of "debt overhang" where reforms have been sufficiently far reaching but are unlikely to succeed because of the burden of debt service.

Based on these considerations, it is simple to answer the third question I posed. Except in cases of debt overhang, there is little, if any, conflict between resumption/acceleration of growth and resolution of the debt problem. To be sure, adequate reforms would yield even higher benefits in the absence of debt, but attainment of sufficient growth would surely permit the resumption of voluntary lending and thus reduce the drag. Indeed, it can be argued that the pressures created by debt-servicing obligations may, in some circumstances, induce more sizable reforms than would otherwise be undertaken and in that sense lead to more satisfactory long-term prospects.

That much said, however, the magnitude of policy reform required with debt service to achieve any "target" growth rate is certainly greater than it would be in the absence of debt. When there are political constraints on how much can be done, there may indeed be instances where the existence of debt-servicing obligations constitutes the critical margin of drain on resources. Nonetheless, in the longer term it remains true that the policy efforts that would accelerate growth are the same ones that would ease debt-servicing problems.

### The Global Environment

Despite the feasibility of resuming satisfactory growth and of resolving the debt problem, the outlook that it will happen is not bright. Many countries' governments have undertaken what can at best be described as partial reform programs, and there are signs of political difficulties even then. Even in some of those countries where the policy package appears to be fairly far reaching, the "debt overhang" appears to be an issue.

At best, under present conditions, those few countries with the political strength to undertake sufficient reforms will accelerate growth and restore creditworthiness, or at least service their debt without major difficulties. Most of the heavily indebted countries, however, are more likely in the near term to suffer low growth and continuing debt service problems. In the longer term, of course, it is almost unthinkable that political stability could be maintained with stagnant or declining per capita incomes and continued voluntary debt servicing. But for the next three to five years, it is likely that there will be slow growth, with recurring suspensions of payments and protracted negotiations and reschedulings, with different countries taking center stage at different times. Of course, there will likely be a few lasting success stories, but they will be the exception unless something in the global environment changes.

The analysis thus far has been based on the assumption that world economic prospects are for a continuation of conditions much as they were in 1985–86: annual OECD growth of between 2.5 percent and 3 percent; growth of world trade about 5 percent; little new private lending to the heavily indebted countries except in support of reschedulings; and concessional flows to the very poor countries, especially sub-Saharan Africa, at approximately present levels.

Even this rather unsatisfactory outlook is premised on the continuation of existing growth rates of world trade. Existing protectionist pressures against developing countries' exports are worrisome not only for the long-run damage they could do to the economies of the protectionist countries but also because any significant effective increase in protection would spell macroeconomic doom for the prospects of

the developing countries. Should the OECD, for example, limit the growth of exports from developing countries to the present share of OECD markets, that would imply expansion of LDC exports in the aggregate at a real average annual rate of 3 percent. Developing countries as a group could not then experience sufficiently satisfactory rates of export growth to finance both debt servicing and the growth of imports that would permit realization of satisfactory growth (and such protection would, in any event, provide further ammunition for the foes of policy reform in the developing countries).

Although the link between the Uruguay round of trade negotiations and the developing countries' prospects may seem remote, it is in fact very close: the restoration and maintenance of a liberalized trading regime is perhaps the single most important policy imperative from the developing countries' viewpoint. Recognizing that, more rapid growth of the OECD would also improve the odds. While maintenance of a liberalized trading regime would in any event be a necessary condition for sustained OECD growth, there is good reason to believe that something in the neighborhood of 3 percent OECD growth may be a watershed: historically, world trade had grown at about 1.5 times the rate of growth of the OECD GNP; developing countries have been able to increase their shares in trade, with growth rates about half as much again. On these norms (which presume no increase in protectionism), a 2.5 percent OECD growth rate would witness a 4 percent real rate of growth of world trade, which in turn could support about a 6 percent growth rate of developing countries' exports. That is barely above the real rate of interest; in these circumstances, the prospects for many developing countries would be poor indeed. By contrast, 3.5 percent OECD growth would probably permit about a 7.5 percent growth rate for developing countries' exports; this would provide a small margin for error and still permit some reduction in the overall debt service ratio for developing countries. To compound matters further, a lower rate of OECD growth would very likely be associated with a higher real rate of interest.

But while the world economy is important for the prospects of developing countries, the fate of issues that need to be addressed to assure more rapid growth will depend on political imperatives within the OECD countries and not on considerations of the debt problem or of developing countries' interests. The question, then, is whether other changes might improve prospects.

The obvious prescription is to increase capital flows, especially to those countries where policy reform appears to be reasonably far reaching and where debt overhang seems to be a significant issue. This would be doubly attractive. It would improve the long-term prospects for those countries where there are high real rates of return but insufficient

savings to support a rate of investment that would allow a realistic change for growth. It would also increase the attractiveness of sufficiently bold policy changes in other countries to increase the likelihood that policy changes would in fact accomplish their intended goals.

To date, there has been insufficient differentiation between degrees of reform effort, and the developed countries and international institutions have fairly evenhandedly supported efforts in countries without as much regard to the adequacy of reforms as might have been desirable. In part, this has been because assessment of what is adequate depends on one's forecast of future global conditions and other uncertainties. In part, however, political pressures have supported relatively uniform, and somewhat uncritical, reform efforts.

To be sure, augmented capital flows to the heavily indebted countries would reduce the needed degree of reform. But barring a large increase in capital flows, the case for greater targeting of available resources to those countries having undertaken adequate programs would appear very strong.

Some greater degree of concentration of limited resources would surely increase the rate of return on capital flows to developing countries. Assurances of support for a period of several years for, say, trade liberalization would provide needed credibility to reform efforts and often the critical margin between success and failure. Especially since more resources may otherwise result in less reform, the case for a highly selective targeting of available resources to the most thoroughgoing policy reform efforts seems very strong.

While it would require concerted action of the major OECD countries, such support could come through a special window of the IMF or World Bank, with eligibility limited to countries meeting reasonably stringent criteria. For example, countries might be eligible only if they undertook to maintain a policy regime with no quantitative restrictions on imports; no tariffs higher than, say, 10 percent; automatic adjustments in the exchange rate whenever the current account or trade balance deficit exceeded a certain figure (perhaps set as a percentage of GNP); no controls over domestic prices; a public sector deficit of less than 2 percent of GNP; and a real rate of return to domestic savers in excess of 3 percent. Whether additional requirements should be made judgmentally or not could be the subject for discussion, but my predilection would be for reasonably tight automatic criteria so that political considerations not come into play. In saying this, I recognize that there are ways of "cooking the books" on the size of the public sector deficit, the tariff rate, and so on. Nonetheless, reasonably "clean" guidelines would provide support for those administering the window and simultaneously permit negotiation over the degree to which the numbers were a reasonable reflection of underlying reality.

What would induce countries to continue to adhere to the terms of the window and not reverse their reforms after a year or two? Obviously, there are no guarantees, but there could be a few inducements: (1) the assurance of support for the current account deficit up to the specified level; and (2) a negotiated debt repayment schedule that was annually effective contingent on satisfactory performance as agreed.

Such a facility, if it had adequate resources to underwrite thoroughgoing reform efforts of this nature, would do several things: (1) it would substantially increase the probability that reforms would be sustained and therefore would be effective, especially since a lack of credibility has often been a major reason for slow responses to altered incentives; and (2) it would probably increase the number of political leaderships willing to undertake policy reform packages of adequate proportions to induce results.

One fears, however, that the status quo—slow growth and recurring debt-servicing difficulties followed by new reschedulings—will continue to be the order of the day unless a major disaster focuses the attention of the international community on the problem or worldwide economic conditions revert to those prevailing in the mid-1970s. Given the enormous costs that would be associated with either of those outcomes, one can only hope that a buoyant international economy and a successful Uruguay round make a sufficient difference so that more countries can, more quickly, escape from their present difficulties.

## Summary of Discussion

A major part of the discussion centered around the role of conditionality in solutions to the debt problem. Anne Krueger suggested that given the stop-and-go history of the policy reform apparatus in Latin America, the international community should assume the support of correct policy over the long horizon, laying down conditions in advance so that rollover can happen automatically. The problems should be handled in a more global and less case-by-case manner, and the political interests of the major bank/fund shareholders should be kept out of the process. The rules should be more clean.

Krueger contended that the Bradley plan did not recognize the scarcity of resources and the resulting fact that they should be carefully aimed. International competition for resources would increase the chances of successful policy reform. Currently the fund and bank resources are spread with insufficient selectivity to all countries that undertake any kind of reform. More resources are indeed needed, but in exchange for sufficient reforms.

Thomas Johnson agreed that any new institution to deal with the debt problem should get the rewards on the table ahead of the policy reform itself. From this perspective, he argued, an institution that buys debt from the banks, as in Bradley, could be counterproductive. Strict discipline with new credit over time could be quite effective.

Rudiger Dornbusch argued on the basis of a reading of Bradley's actual proposals that in the Bradley Plan a rolling revision of conditionality is matched to write-downs of debt and trade credit. Trade liberalization and other reforms are required. The problem with this plan for some is that the banks have to bear some of the burden. He warned that Congress is rampant with plans that would result in the reduction of stockholder equity.

Johnson agreed that the correct words about conditionality are there but asserted that the institutional setting is lacking.

The discussion shifted to the question of what might happen in the absence of a major new multilateral initiative. Johnson made a distinction between relief and write-down of debts. The marketplace is already doing the bookkeeping on the value of the loans, although there has been no forgiveness or write-downs by the banks. He raised the possibility of the banks walking away from the situation in 1989 or 1990, after they have increased reserves enough so that there will be no leverage over them, and argued that this scenario without a setting for new financing for the LDCs would be the worst possible outcome.

Martin Feldstein turned the issue around, asking why the big three debtors would not default, since they will not get as much in new loans as they have to pay in interest. He noted that the threat of exclusion from world trade might be credible. Krueger recalled the "dollar shortage," the Club of Rome predictions, and the "energy shortage." When the U.S. budget deficit shrinks, she contended, capital will flow to poor countries. The only hope for growth for debtor nations is integration into the world economy, and since trade credits will be the first to go, the debtor countries will hang on until they lose these credits. John Block wondered if the debtors could not improve their credit rating by walking out on their current obligations, which have such a depressing effect on prospects for growth. Krueger maintained that the fundamental determinants of growth would be the same.

Differences between the banks will not cause the situation to unravel, contended Johnson, who believes that the stakes are too big for the situation to fall apart.

The issue of book-market discounts was raised by several participants. Johnson pointed out that this market is highly illiquid. He explained that U.S. banks do not reflect market discounts but believes that there is room for growth to resume if imbalances in Western nations can be corrected. Gerald Corrigan agreed that the secondary market

for LDC market is small, primarily used for debt-equity swaps, and should therefore not be considered a bellwether.

Thomas Enders pointed out that European banks have provisioned for much of their Latin American debtor portfolio, since their reserves are above the discounted value of the debt, and are moving it off their balance sheet. The Japanese may be doing the same thing, implying that U.S. banks would be the major holders as banks of LDC debt. U.S. banks have increased capital set-asides, but the recent drop in the LDC debt as percentage of equity from 90 percent to 45 percent masks an uneven distribution of debt, with the money center banks more exposed. Still, no U.S. banks are writing anything off.

Johnson agreed that the problem of the bank balance sheets is secondary to the question of how to deal with policy reform and growth, and how to maximize the likelihood that nations can play their financial and trading role in the world community.