Third World Debt

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The international debt crisis arose from imprudent borrowing, imprudent lending, and major shocks to the world economy from 1980 to 1982. The initial impulse in 1982 was to treat the debt problem as one of illiquidity and thus provide further lending while the debtor countries tried to adjust to the shock. This strategy produced massive recessions in the major debtors (mostly in Latin America) and led in 1985 to the Baker plan, the aim of which is to find ways to permit the debtor countries to resume growth while not defaulting on the debt. The Mexican case is highlighted.

DEBT CRISES ARE NOT NEW TO THE WORLD ECONOMY. They were frequent in the 19th century. More recently, in the 1930's, Latin American countries (along with some in Europe) had to stop servicing their external debts (*1*). By 1946, of total Latin American dollar debts of $1.1 billion, half were in complete default, nearly half were serviced on an adjusted basis, and only 2% were serviced in full (*2*).

There are two chief differences between the experiences of the 1930's and those of the 1980's. First, for the time being the debts are being kept productive, or out of formal default, by a coordinated effort of the creditors—the commercial banks, governments and, as coordinator, the International Monetary Fund (IMF). Governments did not intervene to collect private foreign debts in the 1930's. They are involved this time because of a concern over the vulnerability of the financial and international trading systems, and perhaps simply as a spontaneous reaction. The other difference is that, following the debt moratoriums in the 1930's, Latin America enjoyed a period of growth which was quite striking, certainly in comparison with the industrialized countries. In contrast, during the past few years, there has been a sharp decline in living standards throughout Latin America and a dramatic setback in investment (*3*).

In this article we present an economic framework for analyzing the issues surrounding the debt crisis. Insistence by industrialized countries that the debts be serviced without adjustment or delay would mean significant economic costs not only for the debtors but also for the industrialized countries themselves. To reduce their outstanding debts rapidly, the developing countries would have to run large trade surpluses with the developed countries—either by increasing exports, reducing imports, or both. The industrialized countries have been reluctant to accept rapid increases in their imports and, of course, want to maintain their exports.

Also highlighted is the political dimension: because governments are involved, the debt crisis goes beyond the economics. The economic burden of servicing and even beginning to repay their debts would damage the political stability of the heavily indebted developing countries. Insistence by the United States or the international institutions on punctual and complete servicing of the debt would set U.S. political relations back in a most serious way.

External Borrowing and Debt Crisis

When a country makes more payments abroad than it receives, it has a current account deficit. The deficit has to be financed by selling off assets or by borrowing. Sustained deficits cause an increasing foreign debt that feeds on itself as the interest on the debt and the interest on the interest build up. A debt crisis occurs when a debtor country cannot meet its debt service liabilities because it does not have the foreign exchange to make payments of interest or principal as contracted. Such a crisis may arise from external sources—shocks to the world economy—or from internal mismanagement or shocks. The crisis may be a short-lived liquidity problem, which can be handled by further short-term borrowing, or it may represent insolvency.

A good starting point for the analysis is the definition of the current account. The current account deficit represents the net demand for foreign exchange arising from the excess of spending on imports and interest payments on the external debt over export revenues. It is equal to the trade deficit plus interest payments. The trade deficit is the amount by which import spending on goods and on services (for instance, tourism) exceeds export revenue. The trade deficit as used here is also referred to as the noninterest deficit (*4*).

$$\text{Current account deficit} = \text{trade deficit} + \text{interest payments} \quad (1)$$

The definition of the current account deficit highlights the distinction between a trade or noninterest deficit and interest payments.

A current account deficit needs to be financed. To pay for an excess of outlays over receipts a country, like a household or the government, must run down its assets or increase its debts. The second key equation therefore states that the increase in (net) debt is equal to the current account deficit.

$$\text{Increase in net debt} = \text{current account deficit} \quad (2)$$

Let T be the trade deficit for a given period such as a year, i the interest paid per year per dollar of debt (for example, 0.15 or 15% per year), D the stock of debt, and dD/dt its rate of increase. Then Eq. 2 implies

$$dD/dt = T + iD \quad (3)$$

It is apparent that unless the trade surplus is large enough ($T < 0$) the mere existence of an external debt means that interest payments will cause the net debt to be growing.

The Origins of the Debt Crisis

From 1977 to 1982 the developing countries were adding more than the entire interest bill to their external debts year after year (Table 1). That means that in those years developing countries were

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Table 1. Developing countries' debt and deficits (*7*).

Year	External debt ($\$ \times 10^9$)	Current account deficit ($\$ \times 10^9$)	Trade deficit ($\$ \times 10^9$)	Interest payments ($\$ \times 10^9$)	Commodity prices (1980 = 100)	World industrial output (1980 = 100)	Interest rate* (%/year)
1977	334	37	19	18	83	92	6.0
1978	400	57	33	24	79	96	8.7
1979	475	61	26	35	92	101	11.9
1980	567	77	24	53	100	100	14.1
1981	662	113	42	71	85	100	16.8
1982	749	104	23	81	74	96	13.3

*LIBOR (London interbank offered rate).

not only borrowing enough "new money" to pay back both interest and any maturing debt, but were also borrowing even further amounts to finance a trade deficit. Table 1 highlights the extraordinary growth of interest payments and external debt during the period and especially the final spurt in 1980–1982 (*5*).

The question of the origin of the 1982 debt crisis is easily answered. Imprudent borrowing policies in the debtor countries and imprudent lending by commercial banks had a chance encounter with extraordinarily unfavorable world macroeconomic conditions that exposed the vulnerability of the debtors and the creditors. Some remarks on each of these aspects are appropriate.

There is a strong case for external borrowing to finance productive investments. When a country has investment opportunities in the private or public sector with a yield that comfortably exceeds the cost of funds in the world market, then such investments should be made even if domestic saving is not sufficient to finance the investment. The country can draw on world saving by running a current account deficit, borrowing today to invest, and expecting to repay some time in the future. In this sense, developing countries with investment opportunities would typically be borrowers and rich countries where capital is already plentiful would be the lenders. But a country may also borrow on occasion to finance consumption. This would be appropriate only when the temporary nature of a shock (an earthquake or flood or temporary decline in the price of oil) makes it reasonable to sustain consumption even in the face of a loss in current income.

Borrowing is unwise when it incurs debts merely for an open-ended consumption binge or is used to finance capital flight by domestic residents. In the latter case the government borrows foreign exchange and makes it available to its residents at an artificially low price. With foreign exchange on sale, all who can will, of course, avail themselves of the opportunity to acquire it to make a gain from a later devaluation or to move their wealth to a safer haven.

A large part of Latin American borrowing was wasteful or unjustified in that it primarily financed consumption and government budget deficits rather than investment. A significant part of the increase in external debt has as its counterpart capital flight by residents of those countries. Estimates for the 1979–1982 period suggest extraordinary amounts of capital flight: that $22 billion left Venezuela, $30 billion left Argentina, and $55 billion left Mexico. In other countries part of the debt accumulation financed import binges as, for example, in Chile or in Israel. In only a few instances, notably Brazil, was the buildup of external debt the counterpart of an expansion in productive capacity (*6*).

On the side of the commercial banks there was a remarkable lack of concern for the quality or riskiness of their loans. In the face of serious mismanagement in the borrowing countries, banks stepped up the rates at which they were lending. Even as capital flight arrived in the form of deposits with lending banks in New York, the same banks returned yet more loans to the countries as if they were financing productive investments. The only explanation for the behavior of the banks is that they were certain that they were too big for their governments to allow them to fail.

The third factor is the development of the world economy, particularly the rise in the real interest rate (Table 1) (*7*). Between 1980 and 1982 the fight against inflation in the industrialized countries, especially in the United States, led to a deep recession and to a sharp increase in the real interest rate, the stated or nominal interest rate minus the rate of inflation. The developing countries' export revenues fell because both the quantity and the prices of their export products declined sharply. As borrowers, the developing countries faced a steep increase in the cost of servicing their debt. The real interest rate on long-term debt in the United States rose from about 2 to 8%, increasing the burden of the interest payments on debtors. For instance, real interest payments by Latin American countries amounted to 3.3% of their gross domestic products (GDP) in 1983; they would have been only 0.5% had the real interest rate not increased (*8*). The world recession, tight money and U.S. fiscal policy worsened debtor current accounts both by reducing their export earnings and by raising their interest burdens.

Evaluation of the causes of the debt crisis is not merely an exercise in history. Prescriptions for ending the crisis depend on its causes. In particular, the commercial banks played a significant part in causing the crisis, but have paid a relatively low price for doing so. The debtor countries have already paid a high price in recession, lower standards of living, and low growth. Calling on the banks to contribute to a solution merely recognizes their share in causing the problem.

The first reaction to the external shocks of 1981–1982 was to finance the enlarged current account deficit by yet further borrowing. But that came to an end in 1982 when Mexico was suddenly unable to find enough new money to roll over its debt. All at once the vulnerability of the Latin debtors was revealed: they had vast current account deficits and little chance to meet their lenders' calls for debt service.

The Post-1982 Adjustments

Without central direction, the financial system reacts to debt problems in a competitive fashion: lenders look out for their own interests, each trying to be paid off while the debtors' resources last, and with a keen regard for the fact that there is not enough to go around. In these conditions debtor countries can impose their own terms of settlement, exploiting the lack of a coalition among their creditors. This is the classic case in which the debt is more of a problem for the lender than for the borrower. In the process, banks get into trouble, lending ceases, and the international financial system may seize up.

To forestall this pattern creditor banks, the governments of industrialized countries, and the International Monetary Fund

collaborated between 1982 and 1985 to keep the debt from being repudiated and to maintain the appearance of its continued service. The collaboration took the form of prescribing adjustment programs for the debtor countries, case by case, which would bring about rapid and large improvements in their current accounts. As a counterpart the commercial banks and international organizations would provide limited amounts of new money to cover that part of debt service which could not immediately be met by an adjustment of trade balances toward surpluses.

In developing this approach to the debt problem the creditors were guided by a belief that the debt crisis was primarily a reflection of illiquidity rather than insolvency—that is, a strictly temporary and short-lived inability to service debts rather than a situation where debts were out of line with the countries' ability to meet them anytime, even after the most thoroughgoing adjustment. Given this diagnosis, it is easy to argue that the debtors themselves had an interest in maintaining debt service to preserve their access to future voluntary lending.

The distinction between illiquidity and insolvency is conceptually clear in the case of a corporation. Insolvency occurs when debt exceeds the value of existing assets, that is, the present value of expected future incomes. In that case debtors can only partially recover their claims, and a reorganization is called for. Illiquidity by contrast involves only a temporary inability to service debt and hence implies at worst a need for increased short-term borrowing until future revenues become available. It is much more difficult to identify what solvency might mean in the case of a country. Since the external debts are typically less than a year's income, there is clearly a sense in which these debtor countries are solvent. The problem though is whether it is feasible, economically and politically, to extract the debt service.

The 1982 presumption that debtors were solvent was based on a judgment about the expected growth rate of their export earnings relative to interest rates. If the ratio of debt to exports continues to decline, the debt problem eventually becomes manageable as increased exports provide the earnings with which to meet debt payments. Conversely, a rising debt-export ratio would reflect a growing imbalance that would call into question the country's ability to maintain debt service. The question of the sustainability of debts can be viewed in terms of a simple equation describing the growth rate of the ratio of debt to exports

$$\dot{v}/v = r - x - \alpha v \quad (4)$$

where v is the ratio of debt to exports, r the real or inflation-adjusted interest rate, x the growth rate of exports, and α the noninterest surplus as a fraction of exports.

It is readily verified that the debt-to-export ratio declines if the growth rate of exports exceeds the real rate of interest, unless the country runs a noninterest deficit ($\alpha < 0$). But it is still the case that a sufficiently large noninterest surplus could compensate even for very high real rates of interest. The noninterest surplus would provide the foreign exchange earnings with which to cover interest payments on the debt. To create a noninterest surplus, a country has to reduce imports, increase exports, or both. Over time, such changes can be brought about by a change in the exchange rate. In the short run, though, the surest way to increase the noninterest surplus is to reduce the demand for imports both by devaluation and by restrictive domestic policies that tend to cause a recession.

If the growth rate of export earnings is high, because growth in the industrialized countries creates demand for export products of the debtor countries, and if interest rates are low (or only temporarily high), then the debt crisis is only temporary. Debtor countries can simply "grow out of their debts" by following a transitory period of restraint in which they avoid further debt build-up by paying most of the interest out of trade surpluses generated through devaluation and domestic demand restriction, while export growth reduces the debt-to-export ratio. Conversely, if interest rates rise for a long period while export growth is reduced or even becomes negative, then large trade surpluses are required just to prevent the debt to export ratio from rising. Clearly the view in 1982 was that the world economy had deteriorated for only a short while and that the medium-term outlook fully justified the belief that debtors were illiquid, not insolvent. That view was reinforced by the largely justified belief that these economies could do with large budget cuts which by themselves would improve trade balances, hence contributing to stabilization of debt-to-export ratios.

The historical record shows that export growth in the 1960's and 1970's tended to exceed the real interest paid on external debt. As a result the debt-to-export ratio would have declined had the debtor countries not been borrowing all the interest and more. But since 1980, high interest rates and slow growth in the world economy have turned the outlook around, at least in the short run. Large noninterest surpluses are now necessary merely to stabilize the debt-export ratio.

The problem has been particularly acute in Latin America. A large part of borrowing in many other countries has been at concessional rates from official sources, whereas four-fifths of Latin American borrowing was from commercial sources at market rates (*9*). Debt and interest payments as a fraction of national income have increased so much that even very large trade surpluses have not been enough to keep the debt from growing. In 1977 interest payments amounted to only 2% of income; by 1980 they had risen to 3.8% of income; and by 1985 to 5.3% (*10*). During the period 1977 to 1985 Latin American external debt increased from 30% of national income to 46%.

Figure 1 shows Latin America's trade balance and (nominal) interest payments and highlights the major shift in the external balance between the pre- and post-1982 periods. Latin America shifted from being a net importer of resources—that is, what a trade deficit means—to being a net exporter of goods and services. It is apparent that by 1985 trade surpluses almost equaled interest payments (Fig. 1). Taking inflation into account, the real value of Latin American debt was falling, meaning that Latin America was actually paying off its debts. In other words, there was a net flow of real resources from Latin America to the rest of the world, in particular to the developed countries. That flow is visible to

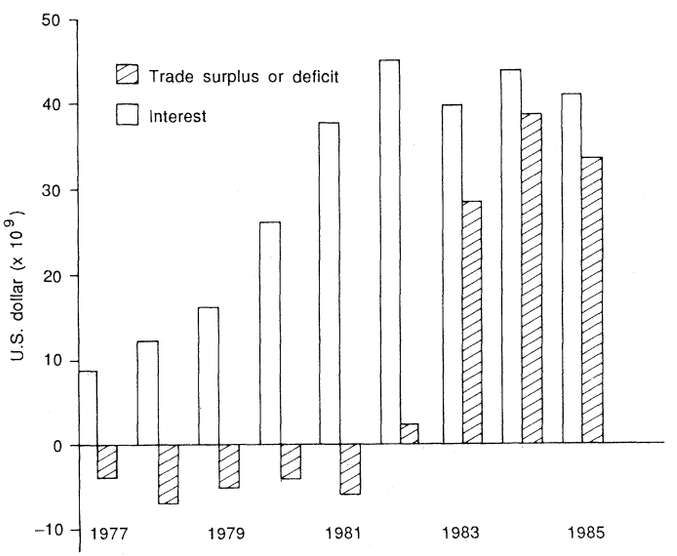

Fig. 1. Latin America's trade account and net interest payment.

American consumers in the form of Brazilian shoes and Chilean grapes and to American producers in the loss of export markets.

The approach that favored debt service and adjustment over repudiation of the debt seems to be supported by Fig. 1. After all, if within only 3 years the countries could almost completely service their debts, they could look forward with a more favorable world economic environment to even larger trade surpluses and hence further debt retirement. The alternative view, more in line with the facts, is that the adjustment is unsustainable because it has been achieved by cutting real wages and standards of living and by suspending essential investment and imports. Dramatic adjustments in public sector deficits through cuts in spending and subsidies and through increased taxes played the key role in correcting the external balance.

The Transfer Problem

When a country sets out to correct an external imbalance, spending must be cut to free resources that can be sold abroad to earn the dollars for debt service. The reduction in spending falls at least in part on traded goods. Reduced import demand results in a saving on foreign exchange. Part of the reduction in spending frees for sale abroad goods that are exportable but that had previously been consumed at home. But not all of a reduction in spending improves the trade balance, because a large part of the decline falls on nontraded goods. The entire production structure of the economy must then be adjusted to shift labor and capital from the nontraded goods sector (say, construction or haircuts) to the traded goods sector.

Changes in relative prices are required to translate a reduction in spending into a trade surplus. In the adjusting country, traded goods prices must rise relative to wages and other prices to make it more attractive to produce tradeables and to discourage consumers from buying these goods that are now the vehicle for earning foreign exchange for debt service. Exchange rate depreciation is the most common means of bringing about these adjustments in relative prices, but that is often reinforced by trade restrictions. The counterpart of the cut in spending and the change in relative prices is a reduction in the standard of living in the adjusting country. By 1985 Latin American per capita income was more than 7% below the 1980 level, with the decline reaching 20% in some countries (Table 2).

To gain external competitiveness, adjusting countries depreciate their currencies, effectively cutting real wages. In the period from 1980–1982 to early 1986 there were massive real depreciations: Argentina, 37%; Brazil, 21%; Chile, 30%; and Mexico, 28%. In effect Latin America put its labor on sale in world markets in an attempt to realize revenue for debt service.

There is another dimension in which the debt crisis affected the macroeconomic performance of debtor countries. The recessions induced by tight policy led in most instances to deterioration of the government budget, with inflationary finance the almost inevitable response. The reason is the following. Much of the external debt had been borrowed directly by governments to finance external deficits or public sector spending. As long as all the interest could be borrowed there was no pressure to pay the bills by printing money. But once governments had actually to pay, they found themselves short of revenue and had to resort to inflationary finance. They printed their domestic money to finance the budget, creating massive inflationary pressures which exacerbated the effects of devaluation on domestic inflation.

In sum, the needs to generate a large trade surplus and to finance large budget deficits combined to create inflationary recessions, cuts in real wages and the standard of living, unemployment, and severe cutbacks in investment. Eventually, in 1985, these domestic effects of the attempt to meet debt payments became the center of attention.

Table 2. Growth and investment in large Latin American countries, 1980–1985 (*9*). Abbreviation: GDP, gross domestic product.

Country	Change in per capita GDP (%)		Investment/GDP (%)	
	1980–85	1984–85	1980	1984*
Brazil	−3.0	4.8	22.5	15.7
Mexico	−2.7	1.3	24.8	16.3
Argentina	−17.7	−4.5	22.4	16.6
Venezuela	−20.8	−2.7	25.2	14.3
Chile	−9.1	0.2	16.6	12.0

*Data in this column for Argentina and Chile are for 1983.

The surprise of the past 4 years is no doubt that it was possible to generate such large trade surpluses. Many would have thought that countries accustomed to trade deficits would have had much difficulty turning their trade accounts around by as much as 6 or 7% of gross national product. By contrast, note that the worsening of the U.S. trade deficit that has attracted so much attention since 1981 amounts to less than 3% of gross national product (GNP). It is important to note that the Latin American adjustment took place primarily on the side of imports. In 1985 Latin American exports were approximately at their 1982 level, but imports had fallen nearly 30%. These dramatic declines in imports reflect in part an adjustment that shifted demand away from scarce imports toward domestically produced goods in the debtor countries. But even more it is a reflection on the demand for imports of the extraordinary decline in investment and reduced economic activity in the debtor countries.

The Baker Plan

The prolonged recessions induced by measures to deal with the debt crisis in Latin America led by 1985 to the conclusion that restoring growth in those countries was a political as well as economic necessity. Through the year the commercial banks were reducing their exposure in the debtor countries, in effect forcing the debtors to repay principal as well as interest. In October, Treasury Secretary James A. Baker III proposed a new plan for dealing with the debt situation.

The plan had three elements. First, the debtor countries would pledge themselves to growth-cum-stability–oriented economic reform, giving market forces a greater role in the economy. Second, the commercial banks would agree to increase lending to the affected countries by 3% per year, less than the interest rate, but more than they had been doing during 1985. Third, the IMF, World Bank, and other multilateral development banks (for example the Inter-American Development Bank) would increase their lending to the debtor countries.

To accompany the increased emphasis on growth, the World Bank, which has traditionally involved itself in particular investment projects, rather than broad macroeconomic issues in developing countries, would take a larger role in directing the flow of resources. The IMF, the World Bank, and debtor governments expressed interest in the plan. Some time later, commercial banks holding 95% of the debts announced their support. They were expected to request Treasury guarantees for any increase in their lending, but were not expected to receive them. The banks, which had been lending at a rate well above the cost of their funds, and including heavy fees and commissions in the cost of lending, were asked to

Table 3. The Mexican debt problem: key indicators (*7, 10*).

Indicator	1981	1982	1983	1984	1985
Noninterest budget deficit (% of GNP)	7.4	5.9	−6.3	−6.6	−5.0
Investment (% of GNP)					
Total	26.6	23.6	16.0	16.3	17.0
Public sector	9.6	8.0	5.7	5.3	4.9
Per capita growth	5.4	−2.6	−7.9	1.1	1.3
Real wage (1981 = 100)	100	105	76	73	67

significantly reduce both the fees and markup they were charging.

The thrust of the Baker plan is in the right direction. Nonetheless it raises several issues, including how rapidly and how far deregulation in the affected countries should proceed, how bank and official lending will be coordinated, and how the relative roles of the IMF and World Bank will be worked out in the new approach. Most important, the effects of deregulation and increasing economic efficiency on growth are slow-moving, and there remains the question of how to restore growth in the short run while longer-run supply-side measures are put in place. The increased flow of resources envisaged by the Baker plan is essential here.

Debt and the U.S. Banks

Despite the Baker plan, it is far from certain that the debtor countries will be able to continue meeting debt payments in full. One of the issues in the debt crisis is how U.S. banks would be affected by a possible write-down of debts. At the end of 1984, U.S. banks held claims somewhat above $100 billion on non-oil developing countries. The claims were highly concentrated in the hands of the major banks. The largest nine banks accounted for more than 60% and the next 15 banks for another 20%. Loans were also concentrated geographically: loans to Argentina, Brazil, and Mexico accounted for more than half the total. For the major banks loans to the five largest Latin borrowers amount to over 100% of stockholders' equity.

So long as interest payments continue to be met, U.S. banks continue to carry their loans to developing countries at full book value. The banking system is at risk from the possibility of a write-down of debts or from outright repudiation by the debtors. An outright loss on all the loans would wipe out stockholders' equity. Of course, a full write-off on all Third World debt is remote. More likely is a partial write-off on the debts of a particular country, say Mexico, or a very limited writing down on all the debt.

Gradual writing down of the debt would reduce the threat that the debt crisis poses to the U.S. banking system. For the last 4 years the difficulty of writing down debt in the context of U.S. bank regulations has been given as a reason for insisting on full payment of existing obligations by debtors, no matter what the cost to their domestic economies. Stock market price of bank shares suggest that Latin American debt is valued by the market at about 75 to 80 cents on the dollar. Recognizing that fact by requiring banks to gradually reduce the value at which they carry the affected assets on their books would accept reality and reduce the threat that measures to postpone or reduce payments by the debtors would cause major banking difficulties in the United States. Banks in several European countries have already written down their loans.

In case of a write-down the U.S. government would without doubt step in to ensure that the banking system does not fail. Insured liabilities to depositors would be met, but stockholders would suffer losses—though probably not much more than they have already.

Mexico

Recent developments in the world economy have significantly changed the prospects for many of the developing countries. Falling interest rates, lower oil prices, and the hope of continued growth in the industrialized countries are singularly fortunate for most debtor countries. These developments mean high export growth and low debt service and hence a good possibility for most debtors of growing out of their debts. But the reduced price of oil has, of course, very different effects on oil importers and exporters. For an oil-importing country like Brazil the outlook with cheap oil and low interest rates becomes distinctly favorable and a possibility of a return to voluntary lending is all of a sudden not remote. The same applies to Korea. But that is distinctly not the case for Mexico.

Mexico's performance is closely tied to the price of oil. Revenues from oil are an important part of public sector revenues and account for more than 60% of export earnings. A decline in oil prices therefore implies a major shock to the Mexican economy. The recent decline in oil prices from $26 per barrel to around $12 involves a loss in foreign exchange revenue of $7 billion or $8 billion and a deterioration in the budget by as much as 4% of national income. There is a significant gap in the external balance between the debt service owed and the resources available to close the gap. But at the same time the political enthusiasm for further domestic adjustment through budget cutting and reduced real wages is at an end. Table 3 shows the problem.

Table 3 reports a massive adjustment in the government's budget—a shift concentrated in 1983 of more than 10% of the national income that was achieved by cutting expenditures and raising taxes in an effort to marshal resources for interest payments. The national economic performance shows a dramatic deterioration: a decline in per capita income, a cut in real wages of nearly 40%, and a large reduction in investment and hence growth potential. The real wage cut put the purchasing power of the minimum wage at only 60% of what it averaged in the period from 1977 to 1981. But note that the adjustments shown in Table 3 took place before the recent decline in oil prices.

With these tough adjustments accomplished, Mexico had expected a gradual recovery of economic activity, real wages, and investment. The collapse of oil prices opens up the question of whether even further large trimming of the budget is possible. Those who believe waste in government is pervasive will argue that there is plenty of scope. But those concerned with political stability based on a recovery of activity and living standards would be extremely concerned at the prospect of going through another 3 or 4 years of adjustment.

The agreement reached between the IMF and Mexico in July 1986 shows the impact of the Baker plan. The IMF will provide credit to Mexico for 18 months, the amount to increase if the price of oil drops. Mexico agreed to join GATT (General Agreement on Tariffs and Trade), implying a commitment to tariff reductions and a more open economy. The World Bank and commercial banks together will provide substantial additional loans. The interest rate on these loans will be close to LIBOR—the London interbank offered rate, which means that the banks will cut their fees.

Whether these additional loans will be sufficient for Mexico to begin to grow again remains to be seen; further declines in the price of oil certainly will not help. If these measures do not succeed, Mexico will have to seek alternatives. One possibility will be to negotiate—or failing that, to announce—further reductions in the interest rates charged by the banks. A second possibility, which avoids the need for Mexico to generate foreign exchange, would be for Mexico to pay interest to commercial banks in the form of pesos. The banks could in turn lend those funds on a medium-term basis to

Mexican firms that are now starved of investment funds. In other words the debt, rather than being taken out of the economy, would be recycled into the Mexican economy. Similar arrangements could be made in other heavily indebted countries.

Conclusion

Declining real interest rates and lower oil prices have completely changed the nature of the world debt crisis. Foreign debt problems are again becoming manageable for many of the oil-importing countries. But the problems of oil producers, such as Mexico but also Nigeria and Ecuador, have worsened. Adjustment policies that emphasize the possibility of growth while working off their debt problems are essential for those countries. They are also within reach through a coordinated attack involving growth-oriented policies in those countries and contributions by the international institutions and the commercial banks.

REFERENCES AND NOTES

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2. Foreign Bond Holders Protective Council, *Annual Report for the Years 1946–49* (New York, 1950).
3. A. Maddison, *Two Crises: Latin America and Asia 1929–38 and 1973–83* (Organization for Economic Co-operation and Development, Development Center Studies, Paris, 1985).
4. We are also neglecting dividends that are the income from direct investment. Dividends and direct investment have been relatively unimportant in the context of the present debt problem.
5. Although prices were rising during this period, the real value of the debt (the dollar value divided by the price level) rose by 68% from 1977 to 1982, with prices in the United States used as the measuring stick. A more relevant measure of the real burden of the debt to the debtors is obtained by deflating the dollar value of debt by commodity prices (Table 1). Commodity prices are related to the prices the developing countries receive for their exports. The collapse of commodity prices between 1980 and 1982 implies that the real burden of the debt to commodity export debtors increased by 78% just between 1980 and 1982.
6. The World Bank, *World Development Report 1985* (Oxford Univ. Press, New York, 1985); R. Dornbusch, in *International Debt and the Developing Countries*, G. Smith and J. Cuddington, Eds. (World Bank, Washington, DC, 1985), pp. 213–235.
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8. United States inflation was used to calculate real interest rates; when commodity export prices were used, real interest rates were negative in the late 1970's and well above 20% in the early 1980's. By that measure the increase in the real interest burden would be even more remarkable.
9. It is appropriate to focus on Latin America in discussing the international debt problem, even though there are many other countries and regions, for instance sub-Saharan Africa, with more severe long-term economic development problems. Although their problems must bulk large in considering where the need for economic growth is most urgent, those countries are not at the center of the international debt issue.
10. The deterioration is much more marked if the real interest burden is calculated—in the late 1970's inflation was eroding the real value of outstanding debt more rapidly than nominal interest was increasing it, whereas in the 1980's real interest rates are far higher than they have been since World War II.

"It's Archimedes, he's within six decimal places of pi."