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Third, the continued imbalance in the payments of the industrial countries threatens expansion of world trade in two ways. One is a recession induced by restrictive macroeconomic policies in the United States unmatched by expansion in Germany and Japan; the other is rising protectionism and increased attention to bilateral trade balance that limit the scope for debtor country import penetration.

Fourth, on the import side, there may be an overestimate of the structural reduction in Brazilian income elasticities owing to the large program of import substitution. Artificially low investment, despite income recovery in 1985 and 1986, has helped to keep import demand in check. But such a pattern cannot be projected, nor is it consistent with sustained development. Export growth itself becomes dependent upon access to imports. Brazilian ability to generate large trade surpluses due to previous investment should not be exaggerated.

Taken together with recent experience, these considerations suggest that Brazilian trade performance and policy are not settled issues. It will require a sustained effort to assure that export growth occurs in a more regular fashion. It will also require careful attention to assure that import limitations and emphasis upon the internal market do not, in the end, worsen rather than improve the balance of payments. In the last analysis, meaningful trade projections cannot be made within the context of debt service requirements alone. A broader perspective, incorporating the debt as an integral part of the Brazilian development problem, is necessary.

7 Epilogue: Debt and Development

Thus far we have stressed the problems of macroeconomic adjustment to the large Brazilian external debt. Debt service has imposed new demands upon trade performance and upon the public sector. The former has responded better than the latter. Since 1984, record export surpluses have been attained. Fiscal deficits and inflationary pressures have persisted, however, and the Cruzado Plan, despite its promising start, has failed. Once again, while trade surpluses have recovered to the \$10 billion level, inflation exceeded 400 percent in 1987. Instead of external and internal equilibrium being joint, the strong balance of trade has been gained, to some extent, at the cost of domestic imbalance.

But the debt problem goes even deeper. It is rapidly evolving into the central problem of economic development in the 1990s. After almost a decade of slower growth to facilitate adjustment through limited imports, future prospects are dimmed by low rates of investment since 1982.

Investment averaged 23 percent of gross product in 1975–79 and 21.6 percent in 1980–82, but only 17.7 percent in 1984–86. Figure 7.1 illustrates the behavior of investment and savings shares in GDP. Recent investment rates are well below the requirements necessary for sustained rates of growth adequate to absorb a growing potential labor force and capable of underwriting a continuing transition to political democracy.

In this concluding chapter, we explore both this development problem and the adequacy of debt policy. The moratorium on interest has come to an end, and a conventional new money package was granted in 1988. That agreement, unfortunately, did not provide a happy ending to this story of Brazilian indebtedness. Now, a debt reduction agreement awaits the inauguration of a new president in 1990.

7.1 Crowding Out Investment

At the heart of the Latin American adjustment to the requirements for continuing interest payments after 1982 has been a large export surplus and transfer of resources to creditors. Although principal has been rescheduled, interest payments have not. Voluntary lending has been minimal, and concerted arrangements have been limited. As a consequence, between 1983 and 1987, Latin America has paid some \$120 billion more in interest than it has financed from new borrowing.

The experience in Brazil has been typical for the region, as shown in figure 7.2. Indeed, its resource transfer between 1983 and 1987 amounted to about \$45 billion, more than its share of regional debt. The export surpluses

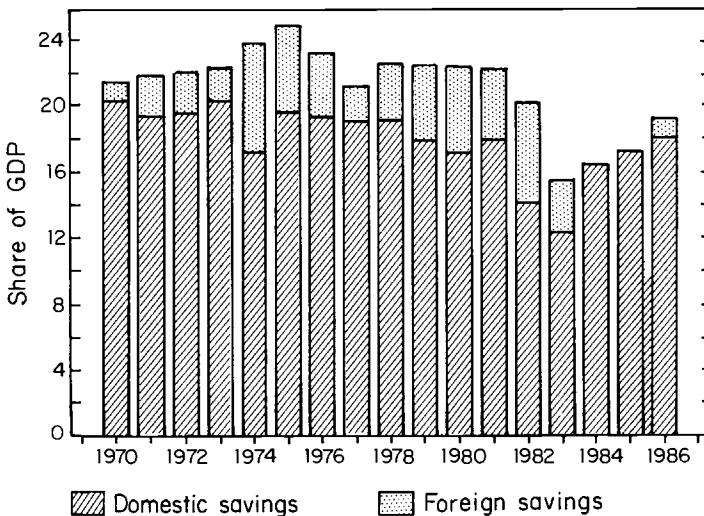


Fig. 7.1 Gross investment and savings in Brazil, 1970–86

needed to effect the transfer have averaged more than 5 percent of gross product since 1984. The counterpart domestic resources have come primarily at the expense of investment rather than consumption.

Instead of reduced consumption paying the lion's share of external interest in response to reduced national income, and thus a rise in the national saving rate, consumption has been sustained. The consequence has been high real interest rates that crowd out private capital formation in order to satisfy the equality between uses and applications of resources. More austere fiscal policy and greater saving would avert such an implication. But political realities and economic behavior prevent such a solution.

Brazil, despite relatively high levels of taxation, has not found it easy to increase taxes enough to raise the cash surplus required to meet its internal and external interest obligations while simultaneously paying for its purchases of goods and services. The lesson from the failure of the Cruzado Plan was the difficulty of augmenting public sector financial capacity. The government eventually resorted to increasing indirect taxes, with only modest effect. Larger collections and reduced outlays are a policy imperative, but they may be easier to achieve while the economy is expanding, rather than during stagnation. Taxation has adverse effects on incentives. These effects, however, can be offset by the larger incomes in a growing economy.

High interest rates have made it possible for the public sector to sell the internal debt needed to finance its borrowing requirements. But they have done so by portfolio substitution rather than by inducing an outpouring of new saving. Theory is ambiguous about the relative weight of income and substitution effects of interest rates. Careful empirical analysis suggests that

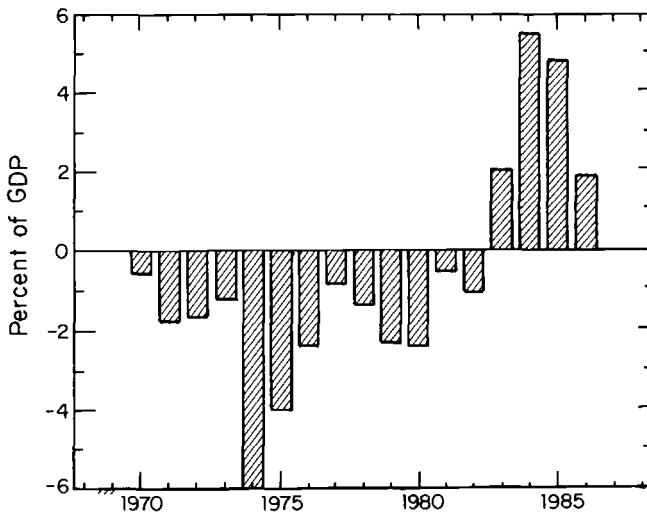


Fig. 7.2 Real resource transfers (as a share of GDP)

there is virtually no systematic net effect. On the other hand, high interest rates tend to increase the large component of government expenditures dedicated to debt service and thereby to build in continuing high deficits.

If consumption is to be restrained, other instruments will be required. Whether by reason of pent-up demands after earlier austerity or uncertainty about the future, Brazilian consumption has been quite strong and unresponsive to larger foreign transfers. Saving is too small, particularly in a world in which foreign saving is likely to remain limited over the next decade. Domestic saving will have to increase, but the more promising route is through higher rates of growth rather than austerity.

There is a medium-term vicious circle. Investment is too limited to sustain adequate rates of growth while underwriting expanding exports and permitting the transfer of technology required to remain competitive in world markets. Growth is driven by consumption demand and public sector deficits that negatively affect the balance of payments, inflation, and real interest rates. Structural reforms have limited priority when immediate macroeconomic disequilibrium occupies center stage. Soon, the only option is another dose of stabilization and austerity. This encounters political resistance and fails to yield durable consequences.

At the heart of this sequence is the adverse effect of large transfers of resources to service the external debt. Note that the effect stressed here is not the additional short-term problem of domestic resource reallocation to tradables associated with making the export surplus possible. Because much of that burden falls upon expenditure reduction and import contraction, stabilization is usually costly. For both reasons, analyses of capacity to pay debt service based on projections of imports and exports are inherently excessively optimistic. They ignore short-term inflexibilities and pay no attention to where the counterpart real domestic resources are coming from in the medium term. Large trade surpluses are not feasible when there is a continued reduction in capital formation. There will be neither growth nor assured debt service.

7.2 The Debt/Export Ratio

Figure 7.3 plots the debt/export ratio from 1929 to 1986. The debt/export ratio today is almost as high as it was in the early 1930s. A solution to the debt crisis and the restoration of creditworthiness would be translated into a reduction of the debt/export ratio.

The basic debt dynamics model focuses on this ratio, which evolves according to the familiar equation:¹

$$(1) \quad d_t = b d_{t-1} - n_t - f_t; \quad b = (1 + i^*) / (1 + x)$$

where: d is the ratio of debt to exports; i^* is the average interest rate on the external debt; x is the rate of growth of exports; n is the noninterest current

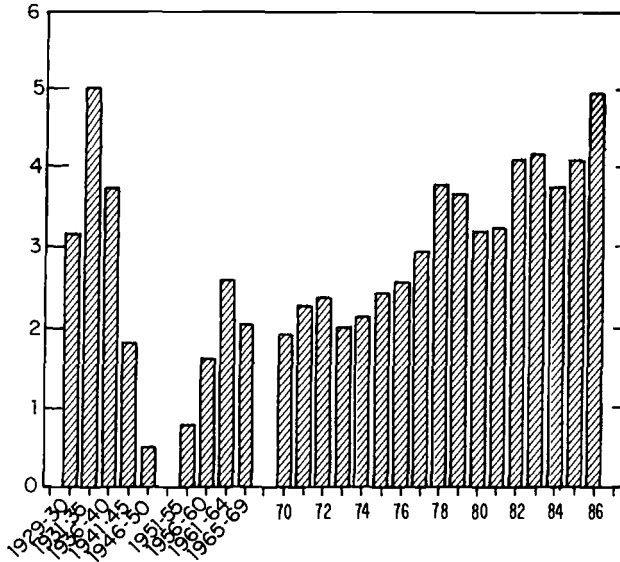


Fig. 7.3 Debt/export ratio, 1929-86

account surplus as a ratio of exports; and f is the non-debt-creating capital inflows as a ratio of exports.

The equation highlights three main determinants of the behavior of the debt to export ratio. The first one captures the automatic element of debt accumulation. As long as the international interest rate exceeds the rate of export growth, the current debt/export ratio exceeds the past ratio. The next element is the noninterest current account surplus. Other things being equal, the higher the noninterest current account surplus, the lower the debt/export ratio. The noninterest current account depends in part on domestic policies and in part on the external environment. The ease with which Brazil will be able to generate a noninterest current account surplus—consistent with domestic growth, moderate inflation, and high investment—is the key issue in the solution of its debt problem. Finally, non-debt-creating capital inflows can help reduce the rate of debt accumulation. Direct investment would be beneficial, while repatriation of foreign investment and capital flight would create extra problems.

Figure 7.4 shows the historical series for the Brazilian debt/export ratio, as well as three scenarios for the 1987-98 period. The projections start from the initial ratio of 4.9 in 1986.

Scenario 1. This scenario is a pessimistic one. We assume that the noninterest current account surpluses and non-debt-creating capital inflows cancel each other out to equal zero throughout the period ($n + f = 0$). The international interest rate is assumed to be 9 percent throughout the period.

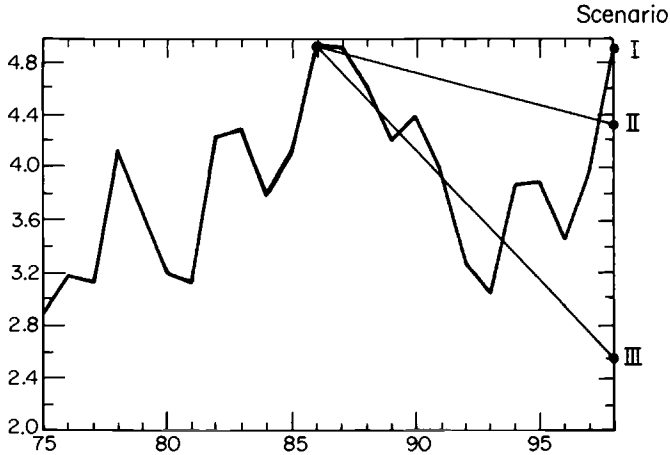


Fig. 7.4 Debt/export ratio, 1975-98

The export growth rate is assumed to behave as erratically as in the past—its behavior between 1975 and 1986 is repeated year after year between 1987 and 1998. The result is dismal. By 1998 the debt/export ratio would be equal to 4.9, as bad as the starting point in 1986.

Scenario II. This scenario is more optimistic than the previous one. The noninterest current account surplus and the non-debt-creating capital inflows are assumed to be as large as 10 percent of exports. We also assume that the export growth rate is kept constant and falls short of the international interest rate by 1 percent. Under these circumstances we would observe a small reduction of the debt/export ratio to 4.3 in 1998.

Scenario III. This scenario is overly optimistic. We assume that every year the growth rate of exports would match the international interest rate. The noninterest current account surplus and the non-debt-creating capital inflows are assumed to add up to 20 percent of exports. We observe that 20 percent was the average ratio of noninterest surpluses to exports between 1982 and 1985, when Brazil achieved its highest trade surpluses ever. That means that in any year between 1987 and 1998, Brazilian imports would not exceed 80 percent of the revenue from exports and direct investment. Under these circumstances, the debt/export ratio would be reduced to 2.5, just below its level in 1975.

These simulations give some idea of how important noninterest surpluses and nondebt capital inflows are in order to compensate for the effects of large interest payments. The key problem is how to achieve those surpluses without sacrificing imports necessary for investment. Here, finding a reliable mechanism to finance that portion of interest payments not supported by exports will play a central role in solving the debt problem.

7.3 Debt Policy

There is scope for both international and internal policy to improve present prospects. Reduced resource transfers require new understandings with creditors; they will not come about through spontaneous new credit flows nor lower international interest rates. The conventional settlement of the moratorium did not resolve the issue. It provided finance for 1987 interest arrears, as well as limited new loans. In 1989 these resources have not even been available because of a lack of an IMF agreement. These packages have been the norm for other debtors, and with the same negative implications for investment and growth.

The capital flows required to significantly reduce the resource transfers as a percentage of income are not in prospect. That was a major defect of the initial Baker Plan that called for annual flows of less than \$13 billion. There is a broad consensus that such a level was too small by half, and such flows were never realized. Banks refused to make new commitments and continue to remain reluctant.

Martin Feldstein's (1987) optimistic assessment of the debt problem in general, and the Brazilian situation in particular, is flawed for this reason. His calculations, presented in *The Economist*, for net external borrowing requirements based on a resource transfer of 2.5 percent of product were seen as eminently reasonable. Yet the \$4 billion that would be needed annually for the next few years is much larger than capital inflows obtained in any year since 1982. If there had been access to such lending, there would have been no moratorium, a much stronger basis for increased investment, and, very probably, a much more successful outcome to the Cruzado Plan.

Brazil is apparently one of the countries capable of absorbing new loans as a means of adjusting to its debt overhang. Up until recently, it has not been afflicted by a large capital flight, as have other debtors, so there is a counterpart stock of real assets corresponding to external liabilities. Moreover, much of the investment was productively applied. As long as international interest rates are not larger than the growth rates of exports and of product, even modest trade surpluses will permit continuing reductions in debt/export and debt/product ratios. Those more modest surpluses would be possible because of new credits and increases in the debt. In terms of figure 7.4, this would yield a favorable outcome intermediate between scenario II and III.

But one should also not ignore the peril of such a strategy. The problem is that new loans are added on top of a 1987 debt export ratio that has already reached a level much higher than projected or desired. Brazil begins with a ratio of 4.9. That translates into considerable short-term vulnerability. Increases in interest rates, higher oil prices, slower industrialized country economic growth, and domestic policy mistakes would all mean larger borrowing requirements than initially projected. But there is a limited willingness, given the level of exposure, to accept the risk of financing such

additional needs. Domestic growth rates then suffer. They are not the target to which capital flows accommodate, but rather the principal variable that must adjust.

In the last analysis, a policy of growing into debt by new borrowing works when the supply of new capital is highly elastic and the environment relatively stable. Neither accurately describes the present situation. Efforts to introduce greater certainty through interest rate capitalization or by establishing a new interest rate compensatory fund at the IMF have made very little headway. There is continued resistance to assured interest capitalization. Muddling through works by avoiding a crisis at the expense of developing countries' growth. It has involved too little additional credit expansion to permit countries to adjust, but too much for the taste of banks. The implications of another decade of muddling through are nicely captured by figure 7.4's scenario I of temporary, but unsustainable, improvement in the debt/export ratio.

The case for debt reduction derives from the possibility of benefitting debtors and creditors. For a long time, developing country loans have been quoted at discounts of more than 50 percent (table 7.1). Banks do not expect the loans to be serviced fully, which is why yields are so high and why they have added to their loan loss reserves. Creditors could do just as well by substituting a smaller debt with more secure payment. It makes little sense for countries to contradict the market expectation when there is no reward. If full service translated into increased capital flows, there would be that incentive. Now, there is none. There is an open invitation to find reasons to reduce debt service.

Brazil dared a unilateral moratorium on interest payments in February 1987. It failed because it did not evoke broad political support and because it was seen to emanate from domestic policy errors rather than an incapacity to pay. Conversely, the Brazilian decision to suspend the moratorium and to adopt a less confrontational posture should not be seen as a mistake. In a world where only conventional solutions were possible, it is rational to borrow as much as one can at the lowest spread in order to alleviate the resource transfer. Large short-term credits and interbank deposits are hostages to fortune that limit Brazilian negotiating strength.

In 1989 the Brady Plan finally accepted the reality of debt reduction as an integral part of debt renegotiation. Mexico concluded an agreement in which

Table 7.1 **The Discount in the Secondary Market for Brazilian Debt**
(cents per dollar, selling price)

	July 1985	January 1986	July 1986	January 1987	May 1987	July 1987	September 1987
Discount	75	75	73	74	64	57	39

Source: Salomon Brothers.

discounts of 35 percent of principal or comparable reductions of interest rates were accepted. Equally important, the new money option extends over a four-year period. Brazil needs no less.

Two issues are central. One is the acceptance by the IMF, the World Bank, and the creditor banks of the simultaneity of a domestic stabilization package and a meaningful debt renegotiation. Our basic message is that the success of an adjustment policy is linked to reduction of the external resource transfer. The second requirement is the availability of adequate industrial country support to underwrite an appropriate package. Like the Baker Plan, the Brady Plan is substantially underfunded.

Better Brazilian economic management will be necessary, not only to qualify for debt reduction, but to permit resumption of sustained economic development. Domestic saving will have to increase. Exports will have to receive continued priority. The public sector deficit will have to be controlled. Debt will continue to severely limit the range of the possible, but this is no excuse for not trying to make the best of a difficult situation.

Appendix: Brazilian Statistics

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