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1 Introduction

1.1 Pre–World War II Experience

Historical perspective shows that external debt is nothing new to Brazil. The accumulation of debt began shortly after the proclamation of independence in the 1820s. During the nineteenth century the government continuously borrowed abroad, mainly through the intermediation of British investment banking houses. The proceeds were on the whole applied to the construction of needed public works; once, however, in 1865, debt was contracted explicitly to support the war then underway with Paraguay. As an ever more active participant in the international economy after 1850, led by its increasing exports of coffee, Brazil stood second only to Argentina in Latin America as a recipient of foreign capital in the nineteenth century.

As a consequence, Brazil benefitted from a growing railway network which supported its international trade, but also was subject to variable conditions of external capital supply. When English capital flows to Argentina came to an abrupt halt in 1890 in the aftermath of the Baring crisis and railroad overinvestment, the effect spilled over to the valuation of all South American securities and hence Brazilian creditworthiness. In the Brazilian case, the much increased domestic money supply—a product of new economic policies during the first years of the Republic—played a more important role than diminished foreign investment in the massive depreciation of the exchange rate during the decade. Brazil did not experience a debt crisis until the declining price of coffee decisively began to erode export receipts after 1895.

Eventually, in 1898, it was necessary to contract a funding loan to capitalize prospective external interest payments for the next three years. As coupons on the prior debt came due, they would be redeemed by the new issue. In addition, amortization on much of the debt was postponed for thirteen years. The loan, however, was conditional on domestic stabilization.

Finance Minister Joaquim Murtinho presided over a deflationary shock treatment. Paper currency was destroyed in proportion to drawings on the funding loan. Government income was increased largely through the imposition of new internal consumption taxes and later through a rising gold quota on import duties. Adjustment took place through a classical curtailment of income, imports, and investment.[1]

With recovery of the balance of payments, borrowing from abroad was renewed during the next cycle of international credit expansion at the beginning of the twentieth century. Foreign debt was now contracted to finance Brazilian stockpiling of coffee, which took place in order to help sustain its price. Other issues were applied more conventionally to infrastructure projects. So long as export earnings continued to grow, there was no problem sustaining increasing debt service. But by 1913, the cumulative effects of a weakened external performance amid continuing government deficits and mounting uncertainty about the capacity to sustain convertibility made new arrangements inevitable. In 1914, soon after the start of the First World War, a second funding loan became necessary.

The 1920s saw another period of expansion, this time largely financed from expanding New York capital markets and extensively contracted by state and local governments. Other Latin American countries did the same: between 1926 and 1928, almost one-third of all foreign bonds issued in New York were of Latin American origin. Creditworthiness of developing countries was aided by the wartime inflation that reduced the burden of previous debt and by high commodity prices at the beginning of the decade.

By 1929 commodity prices were already weakening. Soon thereafter, prices collapsed and so did the capital market. With the Great Depression, there were no additional capital outflows and the inevitable, and generalized, debt moratorium soon followed. Latin American countries were prominent among those declaring a moratorium. With Bolivia leading the way, Brazil, Peru, and Uruguay also stopped servicing their debts in 1931; they were joined in the following year by Argentina (albeit only on its dollar debts) and by Cuba. Brazil resumed partial payments in 1934, but because of a reduced trade balance in 1937 it ceased service again. This default was ranked by *The Economist* "among the most cynical that the London market remembers." Such offense taken at the Brazilian decision was exaggerated during a decade in which international obligations were more honored in the breach than the observance.[2]

1.2 The Postwar Period

In 1943, aided by wartime trade surpluses, Brazil rescheduled its debt on favorable terms, reducing the outstanding balance considerably. Bondholders also gained from the subsequent appreciation in market prices of Brazilian bonds. Brazil's external debt contracted from its peak level of U.S. $1,300

million in 1931 to some $600 million in 1946. Further real reduction was achieved through a new bout of wartime inflation. As a result, Brazil entered the postwar period with a virtually clean slate.

It was not long before new entry of capital became necessary to finance an ambitious industrialization drive. Brazil, disappointed by the absence of expected large U.S. public lending in the aftermath of close wartime collaboration, had to turn to private sources instead. Total capital inflows, both from direct investment and loans, increased sharply after 1955, especially in the form of medium-term suppliers credits. Inflation and external debt again became part of the Brazilian scene, as budget deficits increased and balance of payments problems became more severe. President Juscelino Kubitschek, rather than jeopardize rapid growth and his industrialization Target Program, broke with the IMF and found finance elsewhere through reductions in reserves, short-term swap loans, and other compensatory operations. At the end of 1960, the external debt stood at double its 1955 level and the new president, Janio Quadros, faced a serious debt and accelerating inflation problem.

In an effort to resolve these financial difficulties, ties with the IMF were restored and more orthodox policies followed. But that effort at stabilization was ended prematurely with Quadros's resignation in August 1961. To economic disequilibrium was added intense political agitation. Quadros's successor, João Goulart, was viewed with suspicion by conservative forces in society as a populist, at best, and perhaps more radically inclined. The withdrawal of the IMF mission in 1962, after the stabilization program had been irreparably weakened by the concession of large public sector wage increases, complicated access to needed new external resources. Despite the new funds potentially available under the aegis of the Alliance for Progress, the United States was increasingly reluctant to support Goulart's reform efforts. Finally, as the economic situation deteriorated, a program loan was negotiated with the United States in 1963, but the conditions for its disbursement were never fulfilled. During this turbulent period, capital inflow had virtually ceased. The World Bank, previously an important source of official resources for Brazil, did not authorize a single loan to the country between 1960 and 1964.

When the military seized power in April 1964, inflation had mounted to almost 100 percent on an annual basis and housewives were protesting in the streets. The middle class welcomed the demise of a Goulart government that was both leftist and ineffectual. The new government predictably found a more favorable international reception. Debt rescheduling was facilitated, and new loans from the Agency for International Development as well as new IMF credits were made available.

Debt rescheduling and new credits did not prevent a stabilization-induced recession that was the result of contractionary monetary and fiscal policies. Import demand fell because of the reduction in aggregate demand; combined

with a recovery of exports, this produced trade surpluses in 1964–66 and the elimination of arrears and other short-term debts. The supportive international environment, however, did help prevent an even steeper decline in income and allowed scope for the resumption of import growth in the early stages of recovery in 1967.

1.3 Integration into World Capital Markets and the Oil Shocks

As Brazilian growth accelerated after 1967, the government consciously embarked on a policy of tapping private capital markets to underwrite rapid expansion. Brazil was one of the first countries to respond when in the late 1960s the Eurodollar market first welcomed and then actively sought developing countries to which to lend. Brazil was also the developing country that relied most extensively on this external capital market, implementing a debt-led model of development to help finance the mushrooming capital and intermediate goods imports associated with the "miracle" of rates of growth averaging close to 10 percent between 1968 and 1973. Another component of the strategy was explicit adaptation to inflation through indexation, not only of wages, rents, and financial assets (as introduced in 1964) but also of the exchange rate in 1968.

When the oil shock struck in late 1973, Brazil was the largest oil importer among the developing countries. Already faced with the prospect of weakening growth as the boom matured, the government was not inclined to risk a significant decline in real income from the sudden adverse terms of trade. Increased external debt was an attractive alternative. Borrowing could postpone the contractionary effects of the petroleum "tax" and permit domestic expansion to proceed. After a surge of imports and an increased current account deficit, Brazil opted for adjustment through an ambitious program of generalized import substitution rather than export promotion or domestic recession.

An elastic supply of debt that responded to Brazilian requirements and brief episodes of slowed domestic activity were adequate to keep the balance of payments under control after 1973. Higher coffee and other commodity prices also contributed by reversing the terms of trade decline. Brazilian economic performance after the oil price shock remained above its trend level of growth (of 7 percent per year), and the results evoked widespread admiration for the success of the growth-led debt model. Now growth requirements determined the need for debt, rather than available capital permitting higher rates of growth. Petro-dollar recycling apparently had worked to transfer considerable resources to worthy developing countries, sustaining high rates of investment and economic growth. What had been only expedient to offset a disequilibrium in the world balance of payments, turned into significant development finance.

On the eve of the second oil shock, the Brazilian debt was the largest in the world. As such, it would be especially vulnerable to the reversal in interest rates that was in the offing. Indeed, the debt had become so great that already in the late 1970s, before the sudden surge in interest rates, the reverse flow of service payments was beginning to cancel the new inflows. Whereas the first stage of debt accumulation saw a large transfer of real resources, in later stages more and more borrowing was going simply to cover interest obligations on earlier loans. The dynamics of debt-led debt had become part of the Brazilian story, a process that rising interest rates would magnify with a vengeance.

Not surprisingly then, in 1980, after oil prices had risen and interest rates were rising, Brazil was one of the first countries to test the response of the private capital market to a large debtor encountering a balance of payments crisis. Limited additional finance was available and only on more expensive terms as spreads widened. Oil producers were the favored borrowers, not oil importers. Well before the generalized debt crisis in 1982, Brazil was forced to introduce a more austere set of policies and domestic adjustment in 1981. For the first time in the postwar period, income declined. Brazilian discipline was rewarded with new capital flows. Markets seemed able to respond to debt problems with the right dosage of conditional liquidity, and countries seemed able to implement the right amount of belt-tightening.

When Mexico declared its virtual default in August 1982, Brazil, itself subject to the adverse balance of payments consequences of sharply higher interest rates, replayed its earlier approach to private creditors. The Brazilian government insisted that their situation was distinct from that of Mexico and capable of simple remedy. They claimed that Brazil continued to be creditworthy owing to its own domestic policies and that it had only minimal need for new resources. With a congressional election in November threatening the government's control, politics precluded any official appeal to the IMF until after the votes had been counted. Then the inevitable acceptance of IMF supervision occurred, and Brazil joined the rapidly lengthening queue of problem cases. But Brazil did so with the disadvantage of having its own, and inadequate, stabilization program on the table beforehand, which only served to reduce the size of the finance made available.

Brazil was therefore impelled to a stronger adjustment of its external accounts. What differentiated Brazil from other large Latin American debtors was a greater export recovery in 1984. Between 1982 and 1984, export receipts rose by 35 percent; with a decline in imports of almost 30 percent, the current account was quickly restored to balance and the foreign exchange constraint became less pressing. Output in 1984 was already on the way up, led by industrial exports. While the results were worse than the Great Depression for Brazil, the intervening decline in per capita income

was smaller than for other problem debtors. Brazil's more diversified industrial base allowed for both export increases and import substitution.

In this sense, Brazilian adjustment was more successful than elsewhere. In another sense, it was less successful—progress on the external account was not matched internally. Successive letters of intent under IMF programs had no sooner been dispatched than they were made obsolete by accelerating inflation that did violence to the monetary targets. That experience led to the development of new deficit concepts, adjusted for the widespread indexation of government debt, which are now widely applied to other countries. The Brazilian experience also led many, but not all, to the understanding that improvement of the balance of payments and domestic equilibrium were not tightly linked. Indeed, trade surpluses might themselves create new problems for macroeconomic policy.

1.4 The Lingering Debt-Shock Aftermath

A new civilian government took office in March 1985, and the rules of the stabilization game profoundly changed. In the hands of these leaders, Brazil's large export surplus, only recently established, became a potent instrument of independence. Relations with the IMF deteriorated, and previous plans for a multiyear rescheduling agreement with the banks were scrapped. Although interest was fully paid, there were no inflows of new capital. Recovery was now based on internal demand, with limited import increase. Inflation began to accelerate from already record levels of more than 200 percent. Despite strong output growth, there were additional worrying signs: high real interest rates and increasing government internal debt service, low investment rates and stagnant exports. Bold measures were called for.

The *Plano Cruzado* was implemented in February 1986 as a substitute for a conventional recession-based strategy of stabilization. The similar Argentine Austral Plan had been put into place seven months earlier. Both were based upon the premise that high rates of inflation were driven by the inertial, self-replicating force of indexation. Accordingly, the Cruzado Plan forced a sophisticated, short-term standstill that maintained real income positions and abolished future indexation. Henceforth, inflation would be zero. In the words of the then finance minister, Dilson Funaro, Brazil would be a country of "Swiss inflation and Japanese growth." For a few months it seemed true, and there was generalized euphoria. But signs of disequilibrium from excess demand mounted without inducing adequate compensatory response. Another election loomed, and in the best Brazilian political tradition, corrective actions were placed on hold.

Indirect tax increases, announced immediately after the election, proved much too late and much too little. Because their immediate impact was to raise prices, they were ineffective. The dam of controls had broken, and

there was no restoring an orderly process of readjustment of prices and wages. Events rapidly moved out of control as inflation rates mounted. There seemed to be policy impotence. The deterioration in the balance of payments was as significant as the mounting internal problem. Exports declined sharply in the last quarter of 1986 as imports continued their modest rise, and the trade surplus rapidly eroded. Suddenly, Brazil's comfortable cushion of reserves had disappeared.

In February 1987 Brazil declared a moratorium on the largest part of its commercial bank debt. In part, it was a strategy intended to appeal to internal nationalist sentiments and to strengthen support for a beleaguered president; in part, it was (as it turned out) a misguided effort to obtain broad international support and creditor-government intervention in behalf of a new political solution to the debt problem; and in part, it was a final and unavoidable act reflecting errors in macroeconomic policy that contributed to a new liquidity crisis.

Thus Brazil had come from being the epitome of the successful and well-behaved debtor to being the challenger of the entire debt regime, unwilling to accept the burden of external adjustment at the expense of continuing economic growth. In the end, and not very long after the event, Brazil was forced to yield and to devise an alternative strategy that incorporated negotiations with the banks. There appears to be little sympathy in the industrialized countries for public intervention or broader solutions. The closest anyone has come to bold innovation is Citibank's dramatic upward revision of loan-loss reserves, now followed by all other major banks and reaching $20 billion in total. That accounting change creates new possibilities for writing down debts on the bank books, but there is still a need to translate it into equivalent benefits for the debtor countries. The Brazilian renegotiation in 1988 once again moved the Brazilian debt to center stage, but with disappointing results. Not until the spring of 1989 would official policy move to the side of debt reduction. When it did, Mexico, and not Brazil, was the first beneficiary.

1.5 Overview

This capsule history highlights several issues that we will analyze in the following chapters in more detail.

One theme brought out by the Brazilian debt experience is the importance of the political economy of the domestic response. Borrowing was frequently used as a conscious policy instrument to achieve immediate gains. That is the sometimes fatal attraction of debt: it holds out the prospect of something for nothing, at least for the time being. But the piper must be paid. Brazilian policymakers incorporated reliance upon external finance into their adjustment strategy after 1973. When the country was unexpectedly buffeted by a more adverse international economy, their successors were faced with the

consequences. The vaunted Brazilian technocratic capacity more than met its match in the demands placed upon policy by the oil and interest rate shocks. Ministers did not hesitate to improvise. Authoritarian though the government was, it still could not risk the consequences of an orthodox response to external disequilibrium.

Policies of debt management were not always optimal. Sometimes they were flawed by inappropriate assumptions and incomplete models. Almost always they bowed to broader political objectives and considerations. For the most part in this period, a controlled transition toward greater civilian participation was an important goal. In chapter 2 we trace the origins of the debt strategy in the 1970s and its execution from 1973 to 1979.

Another side of the blend of politics and economics was the requirements of adjustment to the changed international environment. In chapter 3 we examine the period of pre-IMF adjustment to the oil shock, the decision to seek a Fund agreement in 1982, the sequence of letters of intent and IMF-sponsored stabilization, and the conjunction of accelerating growth and inflation under the New Republic. Three essential elements emerge. One is the error of the heterodox initiatives adopted by the government in 1980 in a vain effort to sustain rapid economic growth in the face of the deteriorating international economy. Second is the inadequacy of the Fund stabilization program in its initial finance, in its nominal monetary and fiscal targets inadequate to a highly inflation-indexed economy, and in the striking divergence between successful achievement of trade surpluses and increasing domestic disequilibrium. Third is the commitment of the new civilian government to design its own policies and to seek its own solutions, of which the Cruzado Plan was the eventual outcome.

The focus in chapter 4 is on the design of efficient stabilization programs: how to stop inflation without inducing large output costs. The basis of the Cruzado Plan was recognition of the central role of indexing in projecting price increases into the future. To stop inflation effectively under such conditions requires a coordinated standstill of wages and prices. In order to work, the plan required the elimination of other sources of inflationary pressure, especially fiscal deficits. In the event, fiscal policy was not neutral and wage policy encouraged rather than restrained the increases in real wages that had already been in motion as a result of the 1985 expansion.

A comparison of the failure of the Cruzado Plan with the success in 1964–67 in decelerating inflation suggests three lessons. One is the greater ease of gaining control over the fiscal deficit when public debt is small and there is ready foreign aid. The second is the excessive boldness of the Cruzado Plan in aiming for zero inflation and abolishing indexation. While indexation contributes to the propagation of inflation, it is also protection against the kind of volatile inflationary acceleration that occurred at the end

of 1986 and beginning of 1987. The third is the difficulty of managing neutral disinflation. In 1964 wage compression permitted continued progress in reducing the rate of inflation. In 1986 real wages were increasing at the expense of profit margins, helping to provoke shortages, disorderly growth, and the creation of black markets.

This central question of the relation between budget deficits, external finance, and inflation is the focus of chapter 5. Our contribution is twofold. The first is the clarification and measurement of these deficits in an indexed setting. The second is presentation of a simple, two-equation model that incorporates debt finance in an open economy and specifies inflation dynamics in response to excess demand and indexing. It is designed to illuminate the linkage between the growing inability to externally finance the public sector deficit after 1979 and the acceleration of inflation.

The debt problem here is shown to be much deeper than its balance of payments consequences. The domestic macroeconomic structure is also profoundly influenced by the suddenly limited access to external finance.

In chapter 6 we turn to the trade component of the debt problem. The responsiveness of imports and exports to devaluation is key to the relative weights of expenditure reduction and expenditure switching in adjustment. While Brazilian trade policy has long been protectionist and oriented to import substitution, compensating export subsidies dating from the late 1960s have contributed to a rising trend of industrial and nontraditional agricultural exports. Exchange rate indexation from 1968 on, largely prevented the extremes of overvaluation that earlier periods had seen. Nineteen eighty was a prominent and costly exception, when Brazil dabbled in "global monetarism." Fortunately, the experience was of less duration than in the Southern Cone. Unfortunately, the experiment occurred just when the second oil shock hit; a less propitious moment for overvaluation could hardly have been picked.

Brazil, in common with other indebted countries, was forced into a massive reduction of imports after 1981. However, Brazil achieved a large rise in exports in 1984 and surpluses of more than $10 billion annually. That is what made continuing interest payments feasible and also led some to the conclusion that foreign exchange constraints to growth were no longer a central concern.

Closer analysis of Brazilian import demand and export supply casts doubt upon that interpretation. Import elasticities in the 1980s show no decisive structural break with the 1970s. Higher rates of growth thus imply more than proportional increases in imported inputs, especially of capital goods. Relative price elasticities remain low, limiting the impact of real devaluation. For exports, such limited response is also the rule for primary commodities, which still make up one-third of total export receipts and are also less

favorably influenced by expansion in industrial country income. A key point is the influence of capacity utilization upon both import demand and export supply. Prosperity threatens to rapidly diminish large trade surpluses and to present the need for increased external finance.

Chapter 7 is both conclusion and epilogue. Our ultimate concern in examining the debt problem is its effect on growth and development. A direct measure of the gravity of the problem is the continuing low ratio of capital formation to total income. Brazilian investment is inadequate to support high rates of substained growth, let alone a competitive capability to ensure continuing performance in the export of manufactured products. The position of the public sector is badly compromised by the need to extract resources from the private sector for debt service. Uncertainty and inflation encourage speculation in real assets and in the black market and detract from productive capital accumulation. Highly variable real wages provoke strong defensive reactions from organized labor eager to protect its real income and hence unwilling to desist from nominal wage demands.

Domestic adjustment can only go so far. Real resource transfers of 4 to 5 percent of product cannot continue indefinitely. That is the lesson of the February 1987 moratorium. Analyses that focus on projection of the balance of payments miss this point. Massive trade surpluses are incompatible with high and sustainable rates of Brazilian growth. There are two ways out: more lending or reduced debt service.

Brazil has the capacity to absorb more debt productively. One problem, however, is the unreliable supply of additional flows. The Baker Plan formulated in 1985 has failed to meet its minimal, and inadequate, targets. The other is the great uncertainty of the international environment. Starting from a debt/export ratio that is close to 5 in 1987, there is no margin for error. Brazil is vulnerable to any and all adverse changes in interest rates, terms of trade, and industrialized country growth, not to mention domestic policy errors.

The case for blending new flows with some relief is given by market prices that value Brazilian debt at a considerable discount. This tells us that full debt service is improbable and that creditors could do just as well by substituting a smaller debt with more secure payment. There is clear scope for a mutual gain through effective official intermediation in the market. It was only a matter of time, and of other adverse shocks, until this mechanism for relief came to be accepted in the Brady Plan in 1989. Now it remains to be seen when Brazil will qualify.

The basic lesson of this study of Brazilian external debt is how quickly debt can turn from being part of the solution to becoming a central part of the problem. We may be approaching the point where it is again possible to unleash the productive forces in Brazil and in other developing countries, and to turn them to making up for a lost decade of development.