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Chapter Title: Adjustment to the First Oil Shock: From Import Substitution to Macroeconomic Restraint

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2 Adjustment to the First Oil Shock: From Import Substitution to Macroeconomic Restraint

In March 1974, when Ernesto Geisel assumed the Brazilian presidency, the euphoria of the economic "miracle" of the previous five years still reigned. Dissident voices were few and discredited. Despite the sharp rise in petroleum prices a few months earlier, prospects for continuing prosperity were bright. Spectacular growth at rates in excess of 10 percent aroused visions of *grandeza,* the attainment of Brazilian destiny on a world stage. Geisel himself was the best prepared among the generals: a proven technocrat not only capable of managing the economy, but also persuaded of the need for a process of guided political liberalization to assure lasting social tranquility.

In August 1979, only months after taking office, President João Batista Figueiredo recalled Antônio Delfim Neto to serve again as economic czar, replacing Mário Simonsen. It was the first change of economic leadership during a presidential term since the military took power in 1964. Such an unprecedented decision signalled the increasing anxiety about the adequacy of Brazilian adjustment to the first oil shock; accelerating inflation and slowing growth threatened. Delfim Neto, the author of the earlier "miracle," promised a second.

In this chapter, we consider the accomplishments and deficiencies of the adjustment strategy of the 1970s, leaving for the next chapter the second oil shock and the evolution of altered policies in the 1980s.

2.1 Origins of the Debt Problem

Brazil faced the sharp rise in oil prices in October 1973 in apparently the best of circumstances. Growth had been extraordinary in the preceding years (figure 2.1), current annual inflation was officially recorded at only 15 percent, and impressive foreign exchange reserves were a defense against shocks in the international economy. Unfortunately, the complete picture was less encouraging.

The main weaknesses of the economy were fourfold: (1) a low saving/income ratio, (2) irregular export behavior, (3) an exchange rate that was becoming overvalued, and (4) resurgent inflation. They exposed Brazil to a special vulnerability to the direct and indirect effects of the increased price of oil.

Economic growth during the "miracle" had benefitted from accumulated excess capacity. Relatively low fixed investment rates and domestic savings

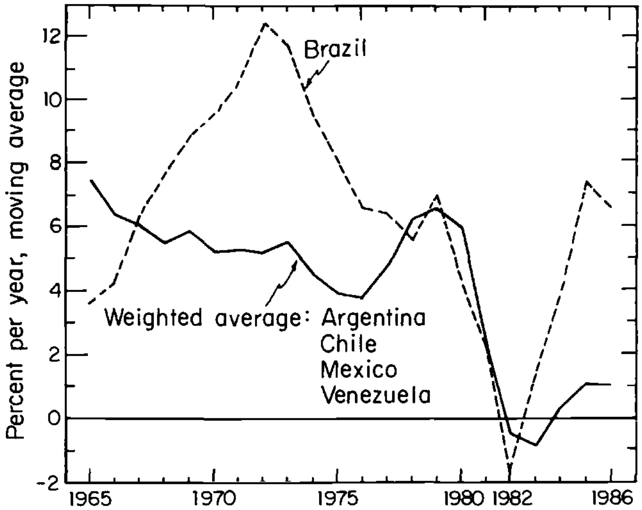

Fig. 2.1 Growth rate of real output: Brazil and other large Latin debtors

had therefore been required. Compared to an incremental capital-output ratio of 2.67 in 1965–70, the average from 1971 to 1973 had been only 1.75.[1] Such good fortune could not be again anticipated. To sustain a continuing annual growth rate of 10 percent implied an increase in the ratio of investment to income of about 4 percentage points, even without considering the implications of the oil price increase. Such greater saving requirements conflicted with the prevailing incentives toward consumer durables as a motivating force in industrial development.

Nor were the impressive international reserves at the end of 1973 an accurate measure of the strength of the balance of payments. Real import elasticities had been on the order of two since the late 1960s: growth at a rate of 10 percent a year implied expansion of real imports at 20 percent. Real export growth in the same interval was only about half as fast and only especially rapid in 1972 and 1973. The difference was made up principally by improved terms of trade. Between 1969 and 1972, Brazilian export prices rose 23 percent; import prices, 3 percent.[2]

These favorable circumstances kept demands for external financing within reasonable bounds. The current account deficit amounted to about only 2 percent of total product. Larger quantities of capital actually flowed in—this was the first show of interest in Brazil by the Eurocurrency market—and reserves were accumulated. This access to loans helped to sustain an exchange rate that had become overvalued because changes in the crawling peg were determined by an underestimate of domestic inflation.

Inflation was in fact on the rise. After several years of decline, to which high rates of productivity increase and lower real wage increases had contributed, Brazil was subject to a reversal of the trend. Demand was strong, fueled by real liquidity increases. An expansionary policy was now confronting bottlenecks, and the response was increased reliance on administrative controls to keep the index at the levels forecast by the departing administration.

Responding with varying intensity to these initial economic conditions and to the political objective of restoring law in addition to enforcing order, the Geisel economic policy unfolded in three distinct phases. First came the effort to cool down the overheated economy through the application of orthodox monetary and fiscal policy in 1974. These good intentions gave way by 1975—in part because they were only marginally effective—to a more aggressive medium-term development strategy designed to accomplish the dual objective of sustaining high rates of growth while promoting adjustment to the oil shock. This bold strategy was soon modified in the third phase after mid-1976. A short-term, stop-and-go macroeconomic policy designed to keep inflation and external disequilibrium within bounds was superimposed on medium-term import substitution. Increasing capital inflows became the only means of reconciling the growth and stabilization objectives. This uneasy combination of government investment, monetary stringency, and larger external indebtedness characterized the remainder of the period to 1979.

2.2 From Orthodoxy to Foreign Borrowing

The initial attempt at orthodoxy in 1974 was condemned to failure on two counts, one economic, the other political. Fiscal and monetary restraint was unable to make much headway in the short term against accelerating inflation, but did provoke a slowdown in industrial activity as well as lead to a major financial failure (of the Halles Group). Given a commitment to "corrective inflation" that deregulated administered prices, inflation in 1974 could hardly have failed to accelerate. Generalized increases in dollar import prices, part of the oil price explosion, added to the pressure. Even where moderated by subsidies, import prices were passed along to domestic prices. Efforts to sustain relative prices did the rest.

At the same time that economic policy made few gains in the fight against inflation in the absence of further reductions of growth, politics called for bold expansion. The ruling government party's unanticipated defeat at the polls in November 1974 did not provide scope for unpopular austerity measures. By early 1975 the die was cast for resumed expansion. Brazil was to be an "isle of tranquillity" in the midst of international economic turbulence.

The choice was feasible for two reasons. First, higher inflation was tolerable domestically because of widespread indexing. And, second, a much weaker external payments position because of increased oil imports did not need to deter Brazilian growth; more liberal international finance was then available owing to petro-dollar recycling. Brazil had already discovered during 1974 that the old, pre–oil crisis financial rules no longer held. A trade deficit of $6.2 billion was financed with the use of less than $1 billion in reserves. The sudden increase in capital inflows brought the gross debt level to more than $17 billion, with exports less than half as large. The debt strategy, although initially unplanned, had begun in earnest.

Few voiced concern. Instead, foreign financing increasingly became an instrument of choice satisfying three objectives. First, it dampened domestic inflationary pressures inherited from 1973. It did so not only by augmenting the supply of imported inputs in 1974 but also by allowing the government the luxury of not raising domestic prices of imports, and especially of fuel, to the full extent that might have been anticipated. There was no imperative to cut back on consumption of energy or on other imports if the greater cost could be covered by borrowing. Only gasoline prices went up substantially, and even this rise was well below the percentage increase in the world price of oil.

Second, abundant and relatively cheap imports helped to sustain high rates of fixed investment by providing access to needed equipment and intermediate inputs. Although the rate of industrial growth declined throughout the calendar year, the principal sectors affected were automobiles and other consumer goods. The producer goods sectors retained their dynamism, averting more serious deceleration in aggregate industrial growth and assuring a basis for the eventual resumption of rapid expansion.

Third, access to foreign saving resolved the dilemma of inadequate finance for high growth rates, now that excess capacity had been used up. Ambitious growth targets could be compatible with continuing increases in consumption and did not require large increases in domestic saving. On the contrary, thought could be given to correcting the lagging consumption standards of the poor by implementing a more liberal wage policy.

2.3 External Debt As Solution

A full commitment to external debt as a way to facilitate balance of payments adjustment and to finance growth progressively became the basis of the Geisel development strategy. This reliance was enshrined in the implementation, if not the formulation, of the Second National Development Plan. The strategy was based on stimulating public investment and import substitution while relying on debt to avert the need for changes in relative prices or reductions in aggregate expenditures. The deterioration in the terms of trade that threatened ambitious Brazilian growth targets would be neutralized.

An orthodox response to the rise in oil prices through changed relative prices and reduced real income via real devaluation, was resisted for several reasons. For one, reliance on devaluation presumed significant price responsiveness of imports and exports. Many Brazilian policymakers had limited confidence in the absorptive capacity of the world market, particularly during international recession; after all, even during the "miracle" years, exports had not performed all that well. At the time it was also believed that imports, particularly oil, had very low elasticities of substitution. In addition, it was certain that indexing would convert these ineffective price changes into generalized inflation through widely ramified nominal responses of wages and other inputs. Other parts of a conventional adjustment package, higher interest rates and rationed credit, would merely penalize production and investment without eliciting more saving.

There was some truth to such a view. Yet the "heterodox" Brazilian response to the oil crisis was itself flawed in two important dimensions. Ironically, one weakness was the apparent coherence of the import-substitution strategy, which attempted to resolve the short-term balance of payments problem at the same time that it deepened and extended the Brazilian industrial structure. Import substitution was too import intensive to work in the short run as an effective policy to ameliorate the balance of payments problem. As formulated in the development plan, moreover, with very large-scale projects requiring significant initial investment, this generic defect of the import-substitution approach was further exaggerated.

Import substitution can only alleviate balance of payments problems in the short run when there is significant excess capacity to be exploited. Brazilian reality was otherwise. Brazil entered 1974 with the highest level of capacity utilization in the entire postwar period. In addition, the development plan called for moving into entirely new sectors, not just expanding domestic share in established industries. Therefore, as was also true in the 1950s, import substitution could only be pursued with the aid of external capital.

There was a second contradiction in the strategy. It anticipated both a strong public sector and constructive relations with the private national sector, neither of which was borne out in reality. Public sector expansion entailed increasing deficit finance and came to rely on external resources to fill the gap. The state became larger but also economically weaker. At the same time, state enterprises increasingly impinged upon private terrain, requiring larger subsidies to national entrepreneurs to mollify their opposition. These transfers came at the expense of further imbalance. Thus, facilitated by privileged access to large capital inflows from abroad, government deficits—fiscal and monetary—steadily increased.

In sum, Brazilian adjustment came to depend upon external indebtedness as the only means of reconciling its inconsistencies. But there were bounds. As the current account threatened to get out of control in 1976, when net interest payments already amounted to one-third of capital inflows, some domestic restraint became inevitable in the final years of the Geisel administration. "Stop-and-go," as it was practiced, was an inelegant and ultimately ineffective solution to the problem of incomplete adjustment. Its limits became apparent in 1978 when inflation returned to its higher 1976 level despite only moderate GDP growth.

Conventional restraint was powerless against adverse agricultural harvests and rising food prices which other sectors quickly felt through the transmission mechanism of higher wage demands. The Brazilian system of indexing was now operating to the disadvantage of policymakers. It had helped in promoting deceleration of inflation so long as it had been manipulated to reduce real wages and so long as supply-side shocks exerted a positive force. Now, as civil society was increasingly voicing its demands, and shocks were adverse, real wages could no longer be determined as the residual income share. Instead, controls proliferated at the expense of priorities.

As sectors and interests defended their entrenched positions, the absolute level of subsidies rose without changing relative incentives. The net tax burden declined even while there was resistance to public sector encroachment. Private investment decisions were increasingly conditioned on government policy. The role of pure market forces in determining the allocation of resources progressively receded.

2.4 The External Situation

External policy did not perform much more satisfactorily than the domestic instruments. The exchange rate depreciated only in line with Brazilian relative inflation and not much more. Larger devaluations were ruled out by the expectation that they would soon be passed along in prices and wages. Between 1974 and 1977, the real exchange rate moved within a narrow range. Its limited devaluation in 1978 derives primarily from the dollar's decline relative to other currencies. Subsidies to manufactured products, excluding indirect tax exemptions permitted under GATT, did rise from about 20 to 40 percent of their value over this period; their effect, however, was partially offset by downward pressures on international prices of Brazilian exports.

There was thus no mechanism to assure increased incentives to penetrate external markets. While exports continued to grow during 1974–78, as they had done earlier, and their composition diversified to include more manufactured goods, a decomposition of the sources of growth shows a marked difference relative to the preceding period. In 1971–74 increased Brazilian competitiveness accounted for close to half of the rise in exports; in 1974–78, less than 20 percent. Indeed, Brazilian participation in world trade remained approximately constant. For manufactured products exclusively, the conclusion is again telling: 71 percent is explained by competitive improvement in 1971–74, but only 43 percent in 1974–78.

A vigorous export expansion was a necessary corollary of the debt adjustment strategy that had been followed. Because the economy was already so closed, additional import restrictions and substitution could make available only limited foreign exchange to meet the increasing debt service. Export growth, however, did not play its role. Debt increased on the order of 28 percent per year between 1973 and 1978 and faster than exports. Ever larger debt/export ratios signalled the continuing postponement of the inevitable balance of payments realignment.

At the same time, the real resource contribution of the debt was progressively diminishing. Each dollar of new borrowing brought less foreign saving that could be applied to real investment. Growing return interest payments reduced the margin by which imports could exceed exports and placed more of a burden on domestic saving to sustain the high rate of investment—about 25 percent of product—that had been attained.

Brazil was clearly becoming more vulnerable after 1973, as its integration into the world economy was progressively more asymmetric: its share of debt far exceeded its share of trade. Were export growth not to manage to keep up, or the rigid control over imports to be breached, or the debt to give rise to much more costly interest remittances, the balance of payments constraint was waiting like the sword of Damocles. Even without deterioration of the external environment, there was a potential debt problem in Brazil's future.

From table 2.1 the precarious nature of the external adjustment after the first oil shock is apparent. Reduction in the current account deficit, although

Table 2.1 **The Balance of Payments and the First Oil Shock (in billions of U.S. dollars)**

	1973	1974	1975	1976	1977
Trade balance	0.0	−4.7	−3.5	−2.3	0.1
Net interest	−0.5	−0.7	−1.5	−1.8	−2.1
Current account	−1.7	−7.1	−6.8	−6.1	−4.0
External effects resulting from:[a]					
Higher oil prices		−2.2	−2.3	−2.9	−3.1
Reduced export volume		−0.6	−1.5	−1.4	−1.9
Change in coffee price		−0.1	0.1	1.4	2.0
Actual medium- and long-term net debt	6.2	11.9	17.2	19.5	24.7
Policy-adjusted net debt assuming:[b]					
Export increase		11.5	16.3	17.4	21.8
Import limits		9.5	13.3	14.1	20.7
Slower growth		10.3	14.5	16.3	23.2

[a]External effects were calculated by comparing actual data with results obtained by assuming that: oil prices were fixed at 1973 value; deviation in estimated noncoffee export volume was caused by slower OECD growth relative to 1968–73 average (deviation calculated from regression for period 1969–82 relating Brazilian export growth to OECD growth rate, yielding an elasticity of 2); and coffee price was fixed at 1973 nominal value.

[b]*Export increase:* consequences for noncoffee export growth of a 10 percent real exchange rate devaluation, using a medium-term elasticity of 0.6. The latter is a composite of the medium-term value of 0.75 for manufactured products and 0.5 for nonmanufactures. See Instituto de Pesquisa Economicá Aplicada do Ministério de Planejamento (IPEA), *Perspectivas de Longo Prazo da Economia Brasileira* (Rio de Janeiro 1985) and Musalem (1984). *Import limits:* consequences of a unitary real import elasticity, post-1973, with actual growth sales. *Slower growth:* consequences of 5 percent annual growth, 1974–77, with actual import elasticity in 1974 and 1 thereafter.

continuous after 1974, was very gradual; in 1977 it remained $4 billion compared to the peak $7.1 billion in 1974. This style of accommodation translated into a rapid intervening accumulation of debt: in net terms after subtraction of reserves, the external debt stood in 1977 at almost $25 billion. It became an independent force. The current account deficit was large in 1977 even though the trade balance, helped by coffee and other commodity prices, had barely moved into surplus. An important reason was the mounting interest cost on the debt that already explains about one-third of the increase in the net debt between 1974 and 1977.

An adverse international economy contributed to the deficit in two ways: higher oil prices and slower trade growth. Of these two factors, the first was far more important. Had oil prices remained at their 1973 level, Brazil's actual imports would have cost $10.5 billion less between 1974 and 1977; the increasing effect of higher oil prices reflects the larger import volumes that Brazilian policy did little to deter. Slower OECD growth in 1974–77 than in 1968–73, by contrast, penalized export receipts by a cumulative $5.4 billion, or less than half as much as higher oil prices cost. Against these negatives, rising coffee prices provided an increasing offset by 1976 and 1977, virtually eliminating the OECD effect. Indeed, overall Brazilian terms of trade were more favorable in 1977 than they had been in 1973.

On balance, then, a little more than half of the addition to the net debt can be directly traced to external circumstances. With the additional contribution of interest service, that leaves only a small residual in the increased debt to be explained, once Brazil had opted for its fuel-intensive, high-import-requirement model of adjustment. We can get at this issue another way, by asking what effect other potential Brazilian policies would have had on the net debt. Three such policies are shown in table 2.1: the effects on export growth of a real devaluation of 10 percent; less import intensity, such that real imports only increased proportionally to product growth; and slower product and import growth, reflecting a more conservative response to the oil shock, but taking effect only from 1975 on.

Export gains would have had a modest, but increasing, impact in substituting for debt. Cumulative increases in exports would also have improved the debt/export ratio. A less import-intensive strategy, through immediately higher costs of fuel and other inputs, and a less ambitious industrialization program would have reduced debt more, particularly between 1974 and 1976 when the import elasticity remained high.

The third option, slowing growth to 5 percent in 1974 but lowering the import elasticity only thereafter, shows the limitation of relying on income effects as long as imports remained relatively cheap in 1974, as they did. It is therefore not surprising that this initial policy was soon abandoned by the government. Import restrictions were increasingly imposed so that by 1977 the actual import elasticity fell below unity; that is why the hypothetical import-limit policies in table 2.1 would have been less effective than the actual trade barriers were in curtailing debt growth.

These calculations make clear that an early and steady implementation of a combination of policies, rather than a single measure, was necessary to prevent the oil shock from unduly interrupting growth or saddling the country with an extensive debt. Instead, Brazil had been late to react to a flood of imports in 1974 and had then gambled on an ambitious plan of import substitution and limited relative price change. Muddling through after 1976 was able to keep the resulting disequilibrium within bounds. So long as disaster was averted, as it was, and the economy continued to grow, as it did, attention could continue to be directed to the delicate task of commanding the pace of popular participation, which the Geisel administration did with skill. The new Figueiredo administration was left to deal with the incomplete economic adjustment problem.

2.5 New Initiatives

The presidential succession in March 1979 defined a new approach to economic policy. It went beyond validation of just another episode of "stop-and-go" to slow down accelerating inflation and defend the fragile balance of payments. The guiding principles were two in number. First, the role of market signals, including the exchange rate, would be strengthened and controls diminished. Second, the effectiveness of fiscal policy would be enhanced by increasing the transparency of expenditure and reducing reliance upon the monetary budget to finance deficits. There was little attempt to conceal the probability that lower growth might be the price for such a substantial reordering of the Brazilian economy.

This reformist vision of Mário Simonsen, moved from his post as Geisel's finance minister to Figueiredo's planning minister and economic czar, was relabeled "recessionist" by its Brazilian critics, who were numerous. Private entrepreneurs challenged the utility of looming recession when their profits were already under pressure. Workers were experiencing the erosion of real wages from acelerating inflation because indexed adjustments were only made once a year; they did not look forward to weaker demand in addition. Private banks did not welcome the Bank of Brazil competing directly for prime clients rather than distributing credit subsidized by the Central Bank to priority sectors.

Within the government, the new ministers were eager to spend, not to reduce, their expenditures and their power. There was no lack of worthy causes. Poor agricultural harvests reinforced the case for abundant and cheap credit to the sector. The alcohol program was in need of new investment for a second, hydrated phase based on alcohol-powered cars. State enterprises had critical projects underway; Petrobras, the state oil company, in particular, wished to increase substantially its expenditures for exploration.

President Figueiredo, beset by the rise in OPEC prices in June 1979 and the need for a "war economy," soon yielded. In August, Simonsen was dismissed in favor of Antônio Delfim Neto. Delfim promised a supply-side approach to mounting internal and external disequilibrium that would make demand restraint unnecessary. That was sweet music to the ears of a president elected because of his pledge to wider popular political participation, who was persuaded that prosperity was a necessary condition to its success. Unfortunately, as the next chapter shows, the realization was much different than the expectation.

3 Adjustment in the 1980s: From International Monetarism to the *Plano Cruzado*

As our discussion has shown, Brazilian adjustment policies, even before the second oil shock, were in need of a midterm correction. Simonsen's orthodox approach was rejected barely after its announcement and before it could be implemented. Delfim's more optimistic heterodoxy was much more congenial. But it too proved inadequate, both because of its own limitations and the deteriorating international economic environment. Brazil by 1981 was in the midst of a harsh austerity program designed to compensate for its mounting external disequilibrium. It could hope to succeed only if external credit were restored. The Mexican debt crisis in August 1982 dashed that hope and soon sent Brazil scurrying to the International Monetary Fund for assistance.

The experience with the IMF was tumultuous and marked by repeated letters of intent and waivers for nonfulfilled targets. Improved external performance came partially at the expense of domestic inflation and investment objectives. Still, with the large increase in exports of manufactures in 1984, the economy began to show signs of recovery and resumed growth. The new civilian government that took office in 1985 soon defined itself as committed to expansion rather than macroeconomic restraint. Ample reserves made it possible to delay any long-term agreement with private creditors and to allow the extended program with the Fund to lapse.

Accelerating growth in 1985 was accompanied by accelerating inflation that threatened the transition to sustained growth and provoked popular discontent and political dissatisfaction. The *Plano Cruzado,* in February 1986, was the heterodox response. In the mold of similar programs previously launched in Argentina and Israel, it identified inertial inflation as the source of inflationary rates that had already exceeded annual rates of 300 percent. It was a bold, and temporarily successful, way to devise a recession-free domestic adjustment to match that of the external accounts.