

**External Liberalization in  
Asia, Post-Socialist Europe,  
and Brazil**

*Lance Taylor*

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*Edited by*

Lance Taylor

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## **Belindia Goes to Washington: The Brazilian Economy after the Reforms**

*Matias Vernengo*

### **1. Introduction**

Taylor and Bacha (1976) developed the Belindia<sup>1</sup> model to portray the evolution of certain developing economies that were large enough to support integrated domestic markets. According to the authors, this process was characterized by changes in the structure of production (the share of consumer durables and intermediate goods in total production increased), worsening income distribution, an increasing gap between the wages of skilled and non-skilled workers, and the dominance of multinational corporations in domestic production. In other words, industrialization beyond the production of simple goods was possible as a result of increasing wage inequality and considerable foreign capital participation.<sup>2</sup> Brazil was, as the authors themselves noted, one of the countries that well fit the pattern of development formalized in the Belindia model.

The development strategy followed by Brazil in the post-war period up to the debt crisis in 1982 is

generally described as import-substitution industrialization (ISI). High levels of import tariffs and a relatively high dispersion of the tariff structure protected domestic production. Overvalued exchange rates discriminated against the exports of primary goods and favored intermediate and capital goods imports. As a result, the rate of growth was highly dependent on the expansion of domestic demand.

The debt crisis led to a revision of the conventional wisdom on development that culminated in the so-called Washington Consensus. According to this view, inward-oriented strategies produced tremendous inefficiencies, associated with excessive state intervention, leading to lower rates of growth and increased inequality. The successful experience of the East Asian countries led many, including the World Bank (World Bank 1993; Edwards 1995), to conclude that outward-oriented development strategies were conducive to rapid and sustainable development.

Brazil, however, was a late convert to the liberalization, deregulation, and privatization creed of the

Washington Consensus. Only after the Real Plan of July 1994 did Brazil clearly adopt the set of policies promoted by Washington, even though trade and capital account liberalization started in the early 1990s under the Collor administration.<sup>3</sup> A peculiarity of the Brazilian reform process in the early 1990s was the coexistence of trade and capital liberalization with high inflation. This might, in part, explain the excessive zeal in the use of the exchange rate as a stabilization instrument and the disregard for the consequences of exchange rate overvaluation in the context of trade liberalization.

Indeed, reform-minded authors such as Franco (1999) favor an overvalued exchange rate, for it reduces the cost of imported goods, leading to a rise in the imports of intermediate and capital goods.<sup>4</sup> Increased imports, in turn, lead to increased productivity and, as a result, rising exports and growth rates. The export boom makes the initial trade deficits sustainable in the longer run perspective. It was also expected that market-friendly reforms would lead to an increase in foreign direct investment (FDI) that would again translate into higher rates of growth. In particular, it was argued that FDI would generate a positive macroeconomic externality and lead to an increase in domestic investment.

By and large, the expectation was that post-reform growth would be higher and led by exports. The greater emphasis on exports together with a more efficient use of imports would produce larger trade surpluses. An important complement of the reform package would be labor market deregulation that would maintain real wages and keep unemployment relatively low. As a result, the reforms would lead to higher growth and productivity, with a relatively low level of unemployment.

This expectation proved to be the Achilles' heel of the arguments in favor of reforms: since the trade deficits persisted, rates of growth have been modest and unemployment is on the rise. In fact, in a recent evaluation of the macroeconomic performance, sponsored by the Banco Nacional de Desenvolvimento Econômico e Social (BNDES), Pinheiro, Giambiagi, and Gostkorzewicz (1999, 13) argue that it is difficult not to agree with the proposition that the 1990s have been a second lost decade. In their view, the only important achievement was stabilization. Yet they argue that reforms might lead to higher rates of growth in the future, and the solution for economic woes is speeding up the reforms, particularly fiscal

reform. Specifically, reforms should force the reduction of fiscal deficits, since "[fiscal] deficits reduce saving and investment" (Dornbusch 1997, 13).

Critics of the stabilization process, such as Delfim Netto (1998) and Tavares (1999), have argued that one of the consequences of foreign exchange appreciation in particular, and of the reforms in general, is higher unemployment and reduced international competitiveness. This, in turn, implies higher trade deficits, making the economy extremely dependent on short-term capital flows, and leading to increasing balance of payments vulnerability. Finally, for some authors, the high interest rates needed to attract capital flows are the most important cause of the soaring budget deficits. The crisis of January 1999, even though lacking the depth of the Mexican or Asian crises, put on display the fragility of the reforms.<sup>5</sup>

This paper discusses the effects of the reforms on macroeconomic performance, growth, employment, wage differentials, income distribution, and poverty in Brazil. The results are compared with recent evaluations of the effects of the reforms in other Latin American countries. The next section discusses the effects of the debt crisis and the move toward the reforms. The succeeding section analyzes the growth performance of the Brazilian economy, before and after the reforms. The following sections examine the effects of the reforms on the labor market, on income distribution, and on poverty. The last section pulls the results together for an evaluation.

## 2. Late Stabilization and Reforms

The international debt crisis triggered by the Mexican default in August 1982 had a severe impact on the Brazilian economy. High levels of inflation and stagnant growth rates marked the macroeconomic performance during the 1980s, the so-called lost decade. The average rate of inflation in the 1980s was around 341 percent per year, and the peak annual inflation was 2596 percent as measured by the GDP price deflator (see table 2.1). Looking at the whole post-war period, one must conclude that the growth performance of the Brazilian economy is divided in two periods, before and after the debt crisis. The real GDP growth was, on average, 7.45 percent from 1948 to 1980, and it slowed down to only 2.47 percent in 1981 to 2000. The real rate of growth in the 1980s was 3.3 percent if we exclude 1980, and 3.94 if we

TABLE 2.1 Inflation, Growth, and Labor Productivity

Years	Inflation (GDP Deflator)	Real GDP Growth	Real GDP per Capita Growth	Productivity Growth
1948–1980	45.3	7.45	4.40	4.1
1981–1989	341.2	3.30	1.28	0.6
1990–1994	1643.6	0.79	-0.77	1.0
1995–2000	8.9 <sup>a</sup>	2.62	1.24	2.6 <sup>b</sup>
1990–2000	757.8	1.78	0.33	1.7 <sup>b</sup>

Source: FGV Dados (n.d.), Bonelli (1994).

a. Figure for the 1996 to 1999 period.

b. Figure goes up to 1998.

include it. Growth has been even lower in the 1990s: 1.78 percent for the whole decade, 2.69 if we exclude the 1990 recession, and 2.62 for the period after stabilization. Table 2.1 also shows the differences between the first part of the 1990s and the post-stabilization period. Inflation decreased drastically, but the rates of growth recuperated only slightly. As far as growth rates are concerned, the 1990s—and not the 1980s, as one would expect—is the lost decade.

Table 2.1 also shows that labor productivity growth was higher in the 1990s, in both subperiods, in comparison with the 1980s. However, the rate of growth of productivity is still considerably below the level of the import-substitution period. This is not surprising since there is a well-established positive correlation between output and productivity growth.<sup>6</sup>

The results in table 2.1 show that the effects of the debt crisis were powerful. Yet the crisis did not immediately lead to a dramatic change in policy orientation in Brazil, at least in the direction of liberalization. Arguably, the extremely successful growth performance of the post-war period (with an average rate of growth of 7.45 percent) led to considerable inertia in policy formulation. The 1980s were marked by heterodox stabilization plans that built on the structuralist explanations of inflation, according to which inflation was caused mainly by balance of payments constraints, and propagated by generalized indexation (Arida and Lara-Resende 1985). According to this view, both a fixed exchange rate and deindexation were crucial for successful stabilization. All the heterodox plans (Cruzado, Cruzado II, Verão, and Bresser) froze domestic prices and eliminated wage indexation rules in order to eliminate inertial inflation.<sup>7</sup>

According to the structuralist view, two problems still remained elusive in the early 1990s and made

any attempts at stabilization problematic. First, indexation prevented incomes from being eroded, but also tended to freeze the pre-existing set of relative prices. This set of relative prices did not necessarily correspond to the equilibrium set, that is, the one that was desired by economic agents. Hence, a price freeze and the elimination of indexation rules also tended to freeze an out-of-equilibrium relative price structure. When the freeze was removed, prices exploded as agents tried to impose their incompatible income claims. In this case, Amadeo (1994) suggests a social pact is needed if stabilization is to succeed.

The second problem was the outflow of capital caused by the debt crisis. In fact, the debt crises not only eliminated external finance but also reversed the direction of capital flows, forcing a huge drain of resources from Brazil to developed countries (Cardoso and Fishlow 1988). Figure 2.1 shows the large trade surpluses (positive *BT*) that were generated in order to pay for the service of the foreign debt, and the variation in the real exchange rate (*E*) needed to obtain those surpluses. A trade deficit of 2.2 percent of GDP in 1980 was transformed into a trade surplus of 5.9 percent of GDP in 1984. It must be emphasized that this was achieved through large devaluations (expenditure switching) and also by a reduction in the rate of growth (expenditure changing).

In 1987 the foreign exchange shortage led to the suspension of external debt service payments. The episode was short lived and Brazil resumed payments in 1988. Not long after the Brazilian moratorium, in

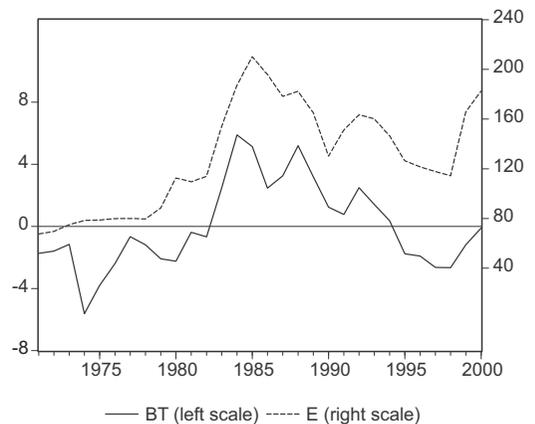


FIGURE 2.1 Trade Balance and Real Exchange Rate  
Source: FGV Dados (n.d.).

March 1989 the U.S. government announced the Brady Plan. Recognition that the existing debt could not be serviced on its original terms led to the major program of restructuring the terms of obligations. The Brady Plan and the structural adjustment loans of the World Bank were negotiated on the basis of Brazil's capacity to repay, which, in turn, was seen as being dependent on the implementation of the reforms. This indicates that, although it may take some time, debt crises are instrumental in forcing countries into restructuring their economies along market-friendly lines.

In the early 1990s, contemporaneously with the Brady negotiations, capital flows returned to Latin America, and brought along with them the new problem of how to cope with increasing and volatile capital inflows (Agosin and French-Davis 1996). Figure 2.2 shows that the resumption of capital flows, represented by the change in the sign of the capital account (KA), led to an unprecedented accumulation of foreign reserves (FR). Foreign reserves went from being less than \$10 billion after the default to approximately \$60 billion in the late 1990s. According to Calvo, Leiderman, and Reinhart (1993), the central reason for the reversion in the direction of capital flows was external, namely, the recession in the United States and the reduction in U.S. interest rates.

The main problem in the early 1990s was whether to implement the reforms after or simultaneously with the stabilization of the economy. Stabilization was not seen as a pre-condition for the actual

execution of the reforms.<sup>8</sup> In fact, one of the arguments for trade liberalization was that it would have a stabilizing effect on the price of tradable goods. The Collor Plan, implemented in March 1990, was the last of six heterodox stabilization plans, all of which failed in bringing down the rates of inflation to reasonable levels. As with all previous plans, stability was short lived. The generally accepted conclusion was that heterodoxy failed, and a great deal of orthodoxy was needed to solve the inflationary problem.

The failure of the plan and of trade and financial reform was accompanied by a considerable increase in the central bank foreign reserve levels. As shown in figure 2.2, it is only in the aftermath of the Collor Plan that foreign reserves start to be accumulated. This accumulation of reserves allowed a successful exchange rate-based stabilization plan in 1994, along the lines of plans implemented in other Latin American economies. The Real Plan was designed to follow the consensus on shock therapy, which appeared to include some of the lessons from the heterodox plans of the 1980s. According to Bruno (1993, 7), "The root of high chronic inflation, like hyperinflation, turns out to lie in the existence of a large public-sector deficit, the quasi-stability of the dynamic process... [comes] from an inherent inertia strongly linked with a high degree of indexation or accommodation of the key nominal magnitudes (wages, the exchange rate, and monetary aggregates) to the lagged movements of the price level."

The adoption of a fixed exchange rate regime would eliminate the propagation mechanism, but successful stabilization would require fiscal reform. In general, the explanation for the advantages of exchange rates as anchors is rooted in the literature on credibility and time consistency rather than on inertial inflation (Edwards 1995, 101). With respect to exchange rate regimes, this debate has been translated into the consensual view that fixed exchange rate systems create environments that are more prone to producing fiscal discipline and low inflation. The argument is that if foreign central banks were committed to price stability, then a worldwide concerted assault on inflation would be successful. In this sense, fixing the exchange rate might be a good strategy for fighting inflation. This was the basic argument in favor of the exchange rate-based stabilization policies in Latin America, in particular in the Southern Cone stabilization plans of the 1970s and in the Convertibility Plan in Argentina.

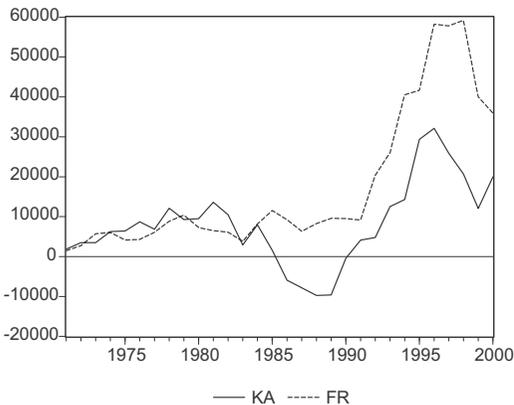


FIGURE 2.2 Capital Account and Foreign Reserves  
Source: Banco Central do Brazil (n.d.).

Interestingly enough, the Brazilian exchange rate-based stabilization plan seems to be more related to the heterodox plans of the 1980s than what is generally assumed.<sup>9</sup> First, the deindexation process was engineered in a way that resembles the so-called Larida proposal of the mid-1980s. A new unit of account that corrected for inflation by the average of three different inflation indexes was introduced. Inflation accelerated in the old currency, while the new unit of account was unaffected by inflation. This process had a great advantage over the previous price freezes, since it allowed relative prices to change before the monetary reform. The adjustment of relative prices in the transition period increased the distributive neutrality of monetary reform.<sup>10</sup>

Second, and most importantly, Brazil never proceeded with the fiscal adjustment that was crucial for the consensus therapists. In fact, as a quick inspection of Table 2.2 shows, in the first half of the 1990s primary fiscal surpluses (revenue minus spending excluding interest payments) were obtained and coexisted with high inflation, and the primary deficit only increased after the Real Plan. In contrast, the operational deficit had been high all through the 1990s, with the exception of 1993 and 1994, but exploded after the Mexican crisis of December 1994. In other words, the fiscal results worsened after stabilization.

Furthermore, the Mexican crisis forced interest rates up, directly impacting debt servicing and leading to an operational deficit of 9.4 percent of GDP in 1999. The hike in interest rates and the relatively lower rates of growth associated with the need to reduce current account deficits led to the increase in net public debt from 29.2 percent of GDP in 1994 to

almost 50 percent in 1999. These negative trends have since been reversed to a considerable extent. Growth resumed in the aftermath of the 1999 depreciation, and interest rates were reduced from more than 40 percent on an annual basis to 16.5 percent. Yet, despite the recent improvement, the evidence clearly shows that the public deficit, especially the operational deficit, and public debt increased after the stabilization. The fiscal results indicate that the fiscal problems are the result of the stabilization process and not the cause of inflationary pressures.<sup>11</sup>

Bacha (1994) argues that the fiscal deficits in Brazil are repressed, and that a better measure of the deficits would be what he calls the potential deficit. According to this view, Brazilian inflation does indeed have its fundamental cause in a fiscal imbalance. Potential deficit is measured as the actual deficit inserted in the official budget approved in Congress. Potential deficits are extremely large, and according to the estimates quoted by Bacha (1994, 9), it would be around 10 percent of GDP in 1991, when the operational deficit was at 1.4 percent of GDP. Inflation is the mechanism that represses the potential deficit, since the budget calculations assume a lower rate of inflation than the actual rate of inflation. As a result, spending is eroded, while all revenues are indexed. This result implies the existence of an inverse Olivera-Tanzi effect, that is, a negative relationship between inflation and deficits.

Looking at the operational deficit and the GDP deflator evolution in the 1990s, there is some evidence of the existence of a negative Olivera-Tanzi effect. A cursory look at the data shows that in the early part of the 1990s, the operational deficit fell while the inflation rate soared after the failure of the Collor Plan. The reverse is true after the Real Plan, when the rates of inflation approached international levels but the operational deficit increased steadily.

The fact that operational deficits have soared after the Real Plan, and continued increasing even after the crisis of January 1999, leads one to suspect that it is the financial component of the deficits that is problematic. One way to evaluate whether the potential deficit hypothesis or the financial hypothesis is the correct one is to look at various federal government spending categories. This would give us a more accurate picture of the composition of government spending. The potential deficit hypothesis implies that after stabilization, those spending categories that were repressed would rise. According to this view,

TABLE 2.2 Public Surplus, Public Debt (% GDP)

<i>Year</i>	<i>Primary Surplus</i>	<i>Operational Surplus</i>	<i>Net Public Debt</i>
1991	2.8	-1.4	37.9
1992	2.3	-2.2	37.2
1993	2.7	0.3	33.0
1994	5.3	1.4	29.2
1995	0.4	-4.9	30.5
1996	-0.1	-3.8	33.3
1997	-1.0	-4.3	34.5
1998	0.01	-7.5	42.4
1999	3.2	-9.4	49.5
2000	3.5	-1.2	49.5

Source: Roberto Macedo (2000) and Banco Central do Brazil (n.d.).

TABLE 2.3 Federal Government Spending by Category (%)

Year	<i>Interest on Domestic Debt</i>	<i>Wages and Salaries</i>	<i>Transfers to States and Cities</i>
1991	0.10	32.2	25.2
1992	10.9	32.3	24.0
1993	16.2	29.7	20.4
1994	7.1	38.3	19.3
1995	7.8	39.3	20.3
1996	10.2	37.9	19.7
1997	8.4	35.2	19.3
1998	12.5	31.9	18.2
1999	15.0	30.6	20.4
2000	10.0	22.6	15.6

Source: FGV Dados (n.d.).

federal transfer to states and cities, and wage and salary expenses, would rise, since those categories are considered problematic. On the other hand, according to the financial hypothesis, the interest payments on debt would increase.

Table 2.3 reveals that the financial component of the deficit is increasing in the second part of the 1990s. It can be seen that interest payments on debt service rise from 7.1 percent of total government spending in 1994 to 15 percent of government spending in 1999. In the first part of the 1990s, as a result of the Collor Plan, interest payments fluctuated a great deal. On the other hand, wages and salaries expenses have been remarkably constant, while transfers to states and cities have been falling steadily. The evolution of fiscal policy shows that the conventional view—according to which sound fiscal policies and the increased openness promoted by the reforms are the backbone of macroeconomic stability—do not seem to have empirical foundation in the case of Brazil.

It is correct to argue that reforms were influential in the reversion of capital flows in the 1990s, and capital inflows were crucial for the exchange rate-based stabilization program. In that respect, reforms were instrumental for price stability. However, the reforms and the capital inflows created several further imbalances. The high rate of interest needed to attract capital flows worsened fiscal deficits, and led to the appreciation of the exchange rate. This, in turn, led to recurrent problems of balance of payments sustainability.

In addition, the combination of current and capital account liberalization has imposed considerable adjustment pressures in particular on the ability of the government to use both monetary policy and fiscal policy for domestic purposes. The stabilization-cum-liberalization had severe effects on the ability to grow without generating unsustainable current account deficits, and led to increasing unemployment and worsening income distribution, as far as wage differentials are concerned (Amadeo 1996). The following sections deal with those imbalances.

### 3. Openness and Growth

The notion that trade liberalization is an optimal development strategy has become a dominant feature of mainstream economics. In addition, the notion that capital openness leads to higher rates of growth is also part of conventional wisdom. Above all, the contrasting experiences of the relatively closed Latin American economies and the relatively open East Asian countries have led many authors (e.g., World Bank 1993; Edwards 1995) to argue that outward-oriented development strategies are more conducive to growth.<sup>12</sup>

However, the literature on the advantages of economic openness is far from being consensual. Measures of openness do not seem to be consistent across studies (Pritchett 1996). Taylor (1991b, 100) argues that structuralist models of both commodity and capital flows suggest that “openness or a hands-off policy in either market will not necessarily lead to faster growth or less costly adjustment to external shocks.” Further, Rodriguez and Rodrik (1999) find little evidence that open trade policies are significantly associated with higher growth. In their recent study on the effects of structural adjustment reforms in Latin America, Stallings and Peres (2000) find that capital and current account liberalization had a significant but small effect on growth.

At first glance, the Brazilian experience lends little support for the notion that there is a positive correlation between openness and growth. If one classifies the 1948 to 1980 period as inward oriented, 1981 to 1989 as the crisis or transition period, and the 1990s as outward oriented, then one must conclude that import substitution was quite successful (see table 2.1).<sup>13</sup> In Brazil’s case, at least, it is difficult to agree with Edwards’s (1995, 41) view, according to which “the

ever-growing presence of the state in the 1950–80 period eventually stifled efficiency and growth.”

According to the conventional view, the protectionist policies that dominated the agenda in Latin American economies generated an anti-export bias that discouraged both the growth and diversification of exports. Two channels were responsible for the relatively poor export performance. First, tariffs and quotas increased the cost of imported intermediate and capital goods used to produce exportable goods. Second, protectionist policies were, in general, complemented by overvalued real exchange rates that reduced the competitiveness of exports.

In Brazil’s case it is clear that at least from the late 1960s onwards, there has been a concern with maintaining a relatively competitive exchange rate regime in order to promote exports.<sup>14</sup> On the other hand, the reduction of tariff and non-tariff barriers was only intensified in the late 1980s. That is, trade liberalization started in the period of high inflation.

Figure 2.3 shows the reduction of average tariffs for consumption (*TCG*), capital (*TKG*), and intermediate goods (*TIG*), and the reduced dispersion of the tariff structure. Note that by the late 1980s, tariffs were already lower than in the 1960s and were considerably lower than the tariff levels during the oil shocks and the debt crisis. This suggests that the main restriction to imports after the debt crisis was the shortage of foreign exchange rather than protectionism per se (Resende 2000).

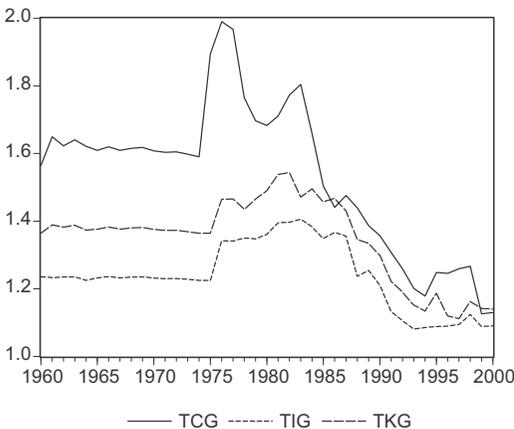


FIGURE 2.3 Tariff Reduction

Source: SECEX (n.d.).

Note that tariffs reached their highest levels during the two oil shocks and the debt crisis. One would expect that during this period of reduced openness, domestic demand forces would be the main forces driving output growth, while in the 1990s growth would be export led.<sup>15</sup> Following the decomposition of effective demand presented by Berg and Taylor (2000), however, one finds that the opposite is true. In fact, the early 1980s up to 1994 may be characterized as a period of export-led stagnation, while the post-stabilization period has been a domestic demand-led stagnation.

As figure 2.4 shows, up to the debt crisis, growth was led by domestic demand, where the domestic stance (*DS*) is given by public and private investment over the national savings rate. This has also been true since 1994, whereas the period from the debt crisis in 1982 to the Real Plan in 1994 was export led. The foreign stance (*FS*) is defined as exports over the import propensity, and *X* represents aggregate supply.<sup>16</sup>

Breaking down the components of the domestic stance is a difficult task, since data on public and private investment are usually presented together in the Brazilian national accounts. There is some evidence that the bulk of the reduction in total investment in the 1980s was caused by the reduction of public investment, especially investment carried out by public enterprises (Carneiro and Werneck 1993, 66–69). Also, there is evidence that public investment continued to be depressed in the 1990s, a reason that has been frequently used to defend the necessity of the privatization process. Hence, it is reasonable to

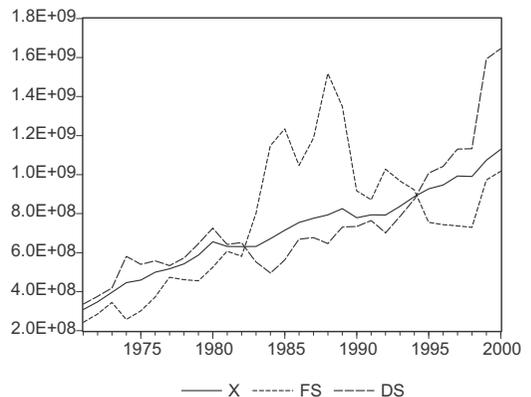


FIGURE 2.4 Demand Decomposition

Source: FGV Dados (n.d.) and author’s calculations.

assume that the domestic stance in the 1970s was led by public investment and in the 1990s was dominated by private investment, which, however, did not reach the levels of the 1970s.

For consumption, however, the story is reversed with an increase in government consumption in the mid-1980s. Government consumption increased from around 10 percent of GDP in the 1970s to 18 percent in the 1990s. Private consumption, in contrast, was around 70 percent in the 1970s and stands at a little bit more than 60 percent in the 1990s. Private consumption fell in the high inflation period, but it never recovered the levels of the 1970s. Furthermore, there is no indication that the liberalization process led to a considerable change in the level or the (private and public) composition of consumption.

In short, the evolution of the domestic stance shows that while in the 1970s government investment and private consumption were the crucial components of demand, in the late 1990s private investment and government consumption became more significant. It is also important to note that the swings in the domestic stance have been considerably smaller than the changes in the foreign stance. The foreign stance swings are related to the debt crisis and the Real Plan, changing signs in 1982 and 1994. Those swings in the foreign stance show the difficulties in restoring and maintaining economic growth in the face of external imbalances.

In fact, it appears that the liberalization process increased import penetration without reducing the anti-export bias of the Brazilian economy. Table 2.4 shows the evolution of the rates of growth of export and import volumes from the 1980s onwards. In the 1990s there is clearly an explosion in the rate of growth of the volume of imports. The rate of growth of the volume of exports, on the other hand, is lower on average in the 1990s than in the 1980s. That is, in the 1980s the rate of growth of exports averaged 11.5 percent, whereas in the relatively more open 1990s the rate of growth of exports was 5.8 percent.

TABLE 2.4 Exports and Imports (% Growth)

	Exports	Imports
1970–1980	15.5	~2.1
1981–1989	11.5	~1.4
1990–2000	5.8	14.3

Source: IPEA Data (n.d.).

The increase in import penetration, in conjunction with the sluggish rate of growth of exports, in the context of a relatively open economy spells trouble for the sustainability of the current account. Furthermore, the exchange rate stabilization plan—which meant appreciated and relatively fixed exchange rates—implies that lower rates of growth are instrumental in keeping the current account under control. These lower rates of output growth explain the fall in the rate of growth of imports.

One may conclude that trade liberalization intensified the balance of payments restrictions imposed on the economy. Following Amadeo (1996), we develop a simple framework to analyze the restrictions on economic growth imposed by external imbalances. We assume that the balance of trade (*BT*) is a negative function of the rate of growth of domestic output (*G*) and a positive function of the real exchange rate (*E*).

The *BT* line in figure 2.5 represents the equilibrium in the trade account for a given rate of growth and real exchange rate, and for a given degree of openness. As correctly pointed out by Amadeo (1996, 6), the liberalization process leads to a movement of the *BT* line to the southeast from *BT0* to *BT1*.<sup>17</sup> In other words, an economy in the surplus region (below *BT0*) would be in the deficit region (above *BT1*) after liberalization, even if it remained at the same initial position (constant growth and real exchange rate). The stylized trajectory of the economy in countries that implemented stabilization-cum-liberalization plans indicates that initially the rate of growth

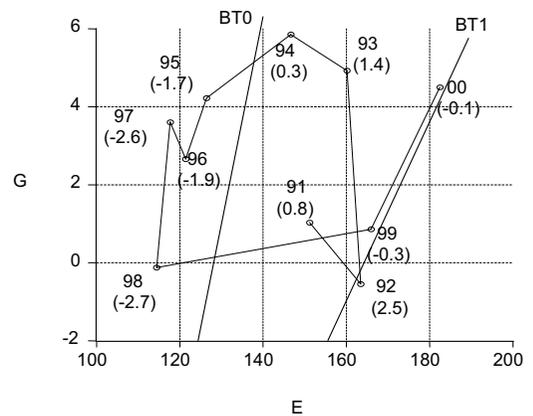


FIGURE 2.5 Trade Deficits and Growth

Source: FGV Dados (n.d.).

increases and the exchange rate appreciates. Eventually, the unsustainable size of the trade deficit leads to a combination of low rates of growth and depreciation. The dilemma is whether to move higher growth by promoting a nominal depreciation (Brazil and Mexico) or by domestic deflation (Argentina).

The actual evolution of the Brazilian economy closely follows the stylized pattern described above. Figure 2.5 shows the rate of growth of real GDP and the real exchange rate, and the data in parentheses represent the balance of trade deficit (–) or surplus (+) as a proportion of GDP. The rate of growth has consistently been falling after the Real Plan, and even after the depreciation of January 1999, growth has remained at relatively low levels for the trade deficit to be sustainable.

Furthermore, there is some evidence that the *BT* curve moved to the southeast and is more flat in the post-stabilization period. Figure 2.5 shows that the position in 2000 would have represented a surplus position in the early 1990s, whereas now it is in the deficit position, showing the movement of *BT* to the southeast. Also estimating the income and price elasticities of *BT*, I found that after liberalization, the trade account has become more sensitive to real GDP than to the real exchange rate. Table 2.5 shows the income and price elasticities of *BT* and imports (*M*).<sup>18</sup> As can be seen, the income elasticity is higher in both cases in the post-stabilization period, while the opposite is true for the price elasticity.

We also included the more conventional estimates of the income and price elasticities of imports, since they give a more clear understanding of the impact of liberalization. The income elasticity of imports increased from 0.81 to 2.34 in the two periods.<sup>19</sup> The main consequence of the rise in the income elasticity of imports and the reduction of the price elasticity (from 0.06 to 0.03) is that in order to grow faster without generating trade deficits, the real exchange rate would have to be considerably more devalued than it currently is. The impossibility of maintaining a

depreciated currency in an economy that is more open to capital flow movements may very well imply that the economy will be trapped in stop-go cycles in the near future. That is, relatively low levels of growth continue to be instrumental in the achievement of a sustainable trade account deficit.

Yet one suspects that the defenders of the liberalization process expected the rise in the income elasticity of imports. In their view, the structural change promoted by a higher degree of openness would have certain costs, but those costs would be outweighed by the benefits. Furthermore, trade liberalization, represented by the reduction of tariffs and the elimination of non-tariff barriers, would have to be complemented with the opening of the capital account. This was done in 1991 when the participation of non-residents in domestic financial markets was regulated by law (Annex IV, Resolution 1289/87).<sup>20</sup>

The benefits from capital account opening depended on two events, according to conventional wisdom. First, capital account opening would lead to an inflow of long-term inflows of foreign direct investment (FDI) rather than short-term volatile portfolio flows. Second, it was argued that the inflows of FDI would have a positive impact on productivity, and hence on growth and export performance, allowing the economy to grow faster without incurring balance of payments problems.

The increase in FDI flows relative to portfolio flows was confirmed, at least since 1995, as can be seen in figure 2.6, in which both flows are measured in proportion to GDP. Regarding the positive effects of FDI on growth, the evidence is controversial and more difficult to ascertain.

The theoretical justification for the benevolent view of the role of FDI is based on the notion that transnational firms are the main vehicles for the introduction of new techniques of production and new products into developing economies for which domestic firms do not have the know-how. In this view, FDI should raise efficiency, expand output, and lead to higher economic growth in the host country (Moran 1998, 20). In contrast, the maligned model of FDI and development assumes that instead of filling the gap between savings and investment, FDI may lower domestic savings and investment by driving domestic firms out of business and using imported inputs (Moran 1998, 21).<sup>21</sup>

Dutt (1998, 283) develops a North-South model in the structuralist tradition in which “one should

TABLE 2.5 Income and Price Elasticities

	1971–1989		1990–2000	
Elasticity	<i>BT</i>	<i>M</i>	<i>BT</i>	<i>M</i>
Income	–0.01	0.81	–0.05	2.34
Price	0.06	–0.26	0.03	–0.08 <sup>a</sup>

a. Statistically insignificant.

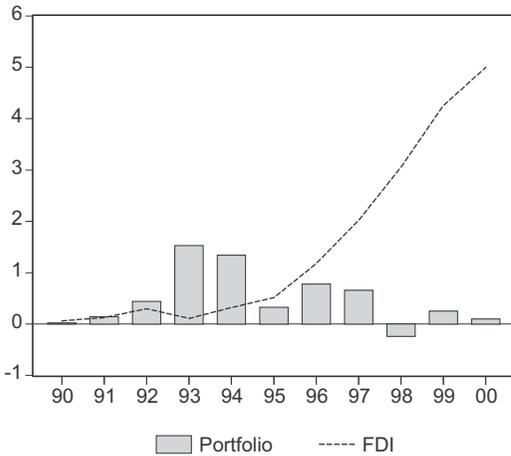


FIGURE 2.6 Capital Flows (% GDP)

carefully distinguish between different types of *FDI* before concluding that the effects of *FDI* on Southern development are good or bad.” The model assumes that there are two countries, North and South, and two goods produced under fix-price and flex-price conditions along Kaleckian lines. According to the model, *FDI* flows from the northern to the southern country would have a positive impact on growth in the South if foreign investment goes to the production of the northern good, which is produced under oligopolistic conditions (fix price). The reverse is true if *FDI* goes to the production of the southern good that is produced under competitive conditions (flex price).

In the same vein, Agosin and Mayer (2000) developed a theoretical model that identifies whether *FDI* crowds out or crowds in domestic investment. The authors run a regression of the domestic investment to GDP ratio on the rate of growth of output (acceleration principle), and on the *FDI* to GDP ratio, both variables with several lags. They verify that *FDI* is not directly correlated with GDP. Their results show that the positive impacts of *FDI* on domestic investment are not assured. In the case of Latin America, the results show that *FDI* has had a negative effect on domestic investment. In the case of Asian countries, however, *FDI* has crowded in domestic investment.

In Brazil’s case, their results are statistically insignificant. Following Stallings and Peres (2000, 86–87), I run a regression of the rate of domestic investment on capacity utilization, *FDI*, and some indicators of macroeconomic instability,<sup>22</sup> namely, the variation of the real exchange rate,  $D(E)$ , and a dummy for high inflation. The results are summarized in table 2.6.

A first glance, Table 2.6 shows that capacity utilization has a positive impact on domestic investment, as would be expected. Also, *FDI* has a positive impact on the domestic investment ratio, which runs against the other results in the literature. Finally, the macroeconomic instability variables have the expected signs, with the change in the real exchange rate and high inflation having a negative effect on investment, but are generally not significant in statistical terms.

TABLE 2.6 Determinants of Domestic Investment (1971–2000)

Independent Variable	(1)	(2)	(3)	(4)	(5)
Constant	2.8 (39.1)	2.8 (33.9)	-5.66 (-1.4)	-5.2 (-3.9)	2.7 (112.7)
Capacity	0.15 (4.1)	0.13 (3.6)	1.91 (2.3)	1.92 (6.7)	1.6 <sup>a</sup> (31.1)
<i>FDI</i>	0.05 (1.3)	0.05 <sup>a</sup> (2.3)	0.05 (2.2)	0.05 (6.6)	0.02 (2.5)
$D(E)$		-0.03 (-1.4)	-0.06 (-3.4)		
High Inflation	-0.05 (-0.6)				
Trend				-0.02 (-15.3)	
$R^2$	0.65	0.81	0.72	0.95	0.98
Adj. $R^2$	0.59	0.74	0.66	0.94	0.98

Source: FGV IMF Dados (n.d.), and IBGE ( $t$  statistics shown in parentheses). The dependent variable is the domestic investment to GDP ratio in (1) to (4), and domestic investment to capital stock ratio in (5). Capacity is measured as the rate of growth of GDP in (1) and (2). Capacity utilization is measured as the gap between actual and potential GDP in (3) and (4). Several measures of potential GDP were estimated, and the one used was estimated with a Hodrick-Prescott filter. Finally, capacity was measured as the output to capital stock ratio in (5). *FDI* is also divided by the current dollar value of GDP in (1) to (4), and as a ratio to the stock of capital in (5). The high inflation dummy is 0 for rates of inflation lower than 400, and 1 otherwise. Other inflation values were used with similar results.

a. Variable with a one period lag.

The results of the effects of macroeconomic instability on domestic investment should be read with caution. The effects of exchange rate variation and high inflation are not robust, despite the fact that in regression (3) the coefficient for  $D(E)$  is significant. This seems to indicate that instability does not affect investment in a meaningful way. This result contradicts most econometric studies on the subject.

The coefficient for FDI is significant in four of the five regressions presented in table 2.5, and the size and statistical significance are relatively insensitive to the model specification and to the lag structure adopted. This result, however, should not be taken as a complete vindication of the positive effects of FDI. In the first place, the effects of FDI on domestic capital accumulation are relatively small. An increase of FDI of 5 percent would have an impact of somewhere in between 0.25 and 0.1 percent in domestic investment. Second, this analysis says nothing about the effects of FDI on the balance of payments.

Arguably, only greenfield FDI would have a positive effect on domestic investment and growth, since it will not compete directly with already established firms in the host country. On the other hand, mergers and acquisitions (M&A) or brownfield FDI inflows could have a negative effect on domestic investment.

Around 30 percent of all FDI inflows go to the privatization process, 20 percent correspond to M&A, and the rest go to the modernization of already established multinational firms or new multinational firms. That is, around half of FDI inflows imply only a change in the ownership. Arguably, this change in ownership might lead to an improvement in management and an eventual increase in productivity. Moreira (1999, 343) argues that foreign ownership (defined as foreign ownership of the majority of the voting capital) has a positive effect on labor productivity.

The weight of the evidence indicates that, although positive, the effects of FDI have been negligible. Another result from the equations in table 2.6 is that the principle of acceleration is significant and probably the driving force of domestic investment. In that sense, domestic investment did not recover to the levels of the 1970s, mainly because output growth or capacity utilization did not recover either. In addition, the main reason for lower rates of growth in the second part of the 1990s has been associated with the need to keep the balance of trade under control. Yet, the combination of current account liberalization

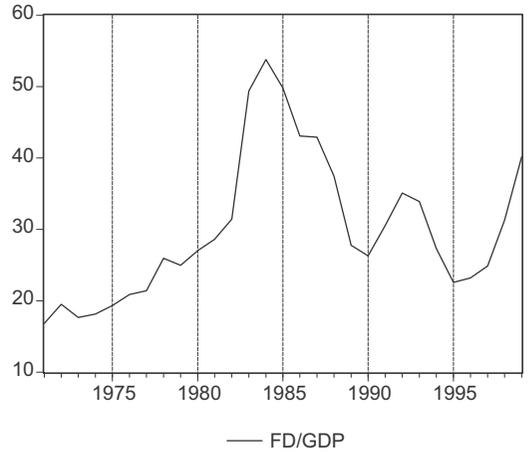


FIGURE 2.7 Foreign Debt Instability

Source: IPEA and FGV Dados (n.d.).

with an exchange rate-based stabilization program and the consequent appreciation of the domestic currency led to a perverse structural change and the persistence of relatively high trade deficits during the second half of the 1990s.

As is well known, current account deficits imply the need to attract capital flows to finance the deficit. In other words, the deficit country becomes a debtor. The increase in foreign debt (FD) to GDP ratio can be seen in figure 2.7. The foreign debt to GDP ratio started growing after the Real Plan and reached 40 percent in 1999 (that corresponds to the debt crisis). Since the depreciation, with the reduction in the current account deficit and the higher rates of growth of GDP, one can see that foreign debt to GDP ratios are stabilizing.

Two important conclusions may be derived from the Brazilian experience that shed light on the growth and openness debate. On the one hand, it is clear that a relatively depreciated—more depreciated than before the reforms—currency is essential to maintain growth and a balanced current account. The main consequence of the need for a depreciated currency is a rate of inflation higher than the rest of the world. In fact, in 2000 the Consumer Price Index was 6 percent, and the GDP deflator was 7.4 percent. These rates will pose difficulties for the Central Bank that is adopting a strategy of inflation targeting (Bogdanski, Tombini, and Werlang 2000). In fact, the accumulated inflation in the first quarter of 2001 already encompasses half of the total target for the year.

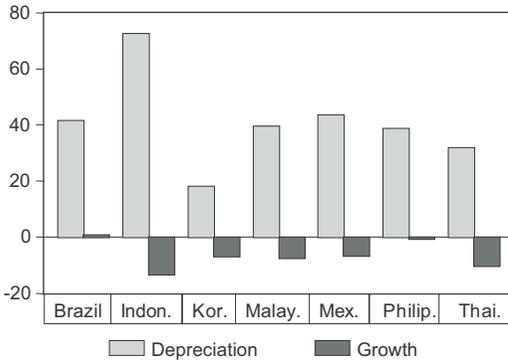


FIGURE 2.8 Contractionary Devaluation

On the other hand, the Brazilian experience is peculiar, since depreciation did not lead to a considerable contraction as in most developing countries. In general, depreciation leads to a contractionary adjustment if the economy has a trade deficit or if it redistributes income to capitalists (Krugman and Taylor 1978). That is, if the volume of imports is high and its value increases, the contraction of output may be the only way to reduce the trade deficit. Also, if the redistributive effect of depreciation increases the income of low spending groups, then, too, a contraction of output follows. The evidence on nominal exchange rate depreciation and real growth presented in figure 2.8 shows that in all cases, a steep recession follows depreciation.

This raises the question of what is different about the Brazilian case that accounts for the relatively painless depreciation. If one looks at balance of payment (BoP) crises through the perspective of the so-called Frenkel-Neffcti (N-F) cycles described by Taylor (2004), one obtains some insight. In particular, according to the N-F logic, a BoP crisis depends on a relatively fixed and appreciated exchange rate, a deregulated domestic financial system, and a liberalized capital account. Furthermore, high interest rates in the domestic market vis-à-vis returns to foreign assets and the consequent capital inflows lead to portfolio positions that are usually long on domestic assets and short on foreign holdings. The mismatch is twofold. Maturities are different and revenues and debts are denominated in different currencies, carrying foreign exchange risk.

In this environment, depreciation occurs when no local interest rate is high enough to attract more capital inflows. The effects are magnified beyond the

usual contractionary effects, since liability dollarization leads to widespread defaults, which, in turn, lead to a debt-deflation spiral. Additionally, this has negative effects on the finance, insurance, and real estate (FIRE) sector, leading to costly bailouts with negative fiscal consequences.

Although the Brazilian economy presented almost all of the above-mentioned characteristics of the N-F cycle, there were some conspicuous differences. First, the bailout of the banking sector preceded the 1999 depreciation. Most banks profited from the high inflation years, since indexation meant that the use of checking deposits was widespread despite high inflation. But banks could maintain interest on a large part of demand deposits below inflation, since most people would accept some compensation rather than none. Further, the federal government compensated the banking sector for holding public debt with extremely high rates of interest. Stabilization wiped out these profitable opportunities, and as a result the banking sector share of GDP fell from 12.7 percent in the 1990–1994 period to 6.9 percent in 1995 (Carvalho 1998).

Additionally, in the midst of the stabilization plan, the central bank drastically increased reserve requirements to reduce credit and contain demand pressures. The collapse of *Economico* and *Nacional*, two of the largest national banks, and the fears of a systemic banking crisis led the government to launch the *Programa de Estímulo à Reestruturação e ao Sistema Financeiro Nacional (PROER)*. The program promotes the financing of the bad loans of problem banks by imposing the absorption of them by healthy institutions along the lines that the Federal Reserve Board used later in the case of long-term capital management (LTCM).

Second, Brazilian regulations do not allow deposits in foreign currency (dollars) in domestic institutions. That measure and the widespread use of indexation during the high-inflation period imply that Brazil has a relatively small degree of liability dollarization. As a result of these two characteristics, debt-deflation processes were relatively weak in Brazil.<sup>23</sup> However, if it is true that Brazil did not suffer a major recession after devaluing, it is also true that the economy was growing relatively slowly before. All in all, the effects of openness have been lower rates of growth and persistent current account deficits.

Furthermore, the incipient recovery of 2000 may be less robust than is usually assumed, since investments

in infrastructure have been minimal in the last decade. The 4.5 percent growth of real GDP in 2000 put on display the limitations of the policies pursued in the last decade. Investment in energy production and distribution has been below the level needed to maintain potential growth. As a result, the federal government is imposing severe restrictions on energy consumption. On average, industrial users will reduce their energy consumption by 20 percent in 2001. In some sectors (e.g., aluminum and cement), the reduction will be as much as 25 percent.

In sum, both the persistent current account deficits and the supply-side constraints associated with the lack of investment in infrastructure during the last decade imply that the economy is stuck in a low-level equilibrium trap. This poor macroeconomic performance has had, as one would expect, a negative impact on the labor market performance, as I discuss in the following section.

#### 4. Unemployment, Income Distribution, and Poverty

Note that when discussing the effects of liberalization and stabilization on the labor market, most economists tend to agree that the elimination of the inflation tax and the redistribution toward wages would cause demand pressures to build up. In the absence of a negotiable social pact, contractionary demand policies were then seen as the only alternative. In other words, in a wage-led economy, if stability leads to higher wages, then contractionary fiscal and monetary policies are advisable.<sup>24</sup>

Yet, when we look at the long-term evolution of the real minimum wage (see figure 2.9) or the average wage for workers in the formal labor market (see figure 2.10), we find that real wages are lower in the 1990s than in the high-inflation period of the 1980s. Furthermore, real wages were higher in the import-substitution period. Hence, real wages were compressed both in the period of inflation acceleration and in the stabilization phase. There is no clear relation between increasing real wages and higher inflation, although there is a clear relation between higher real wages and a higher growth of real output in the import-substitution period.<sup>25</sup>

In the 1980s, real wages fluctuated a great deal—as a result of the stabilization shocks and inflation resumption—but they fell overall, since indexation

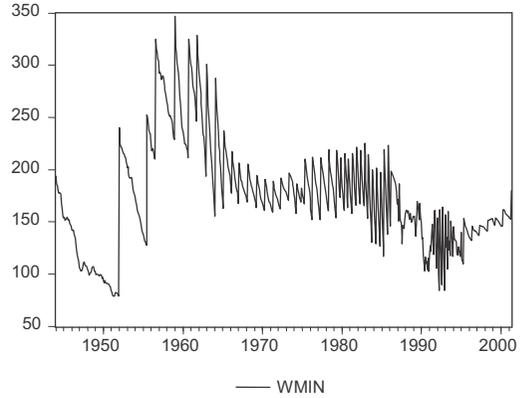


FIGURE 2.9 Minimum Wage

Source: IPEA Data (n.d.).

was less than perfect. In the 1990s, the average real income of workers, as represented in figure 2.10, increased until the middle of the decade and then fell to roughly the same level as at the beginning of the decade. However, the minimum wage, as seen in figure 2.9, displays the exact opposite behavior. It was cut down in the first part of the decade, and it grew back to its initial level during the second half of the decade.

A second set of questions may be asked about the behavior of relative wages in the post-liberalization period. The effects of liberalization on the relative wage structure may be understood with the help of a simple structuralist model with a fix-price/flex-price market distinction (Taylor 1991a, 2001). The fix-price

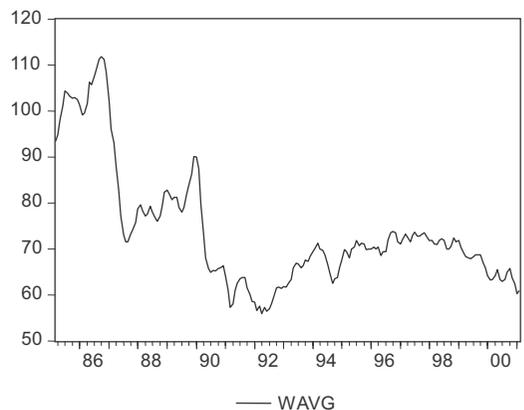


FIGURE 2.10 Average Wage

Source: IPEA Data (n.d.).

sector corresponds to the tradable sector, where markups are assumed to be relatively constant and output and employment are determined by effective demand. In the non-tradable sector, the flex-price market, the labor market works as a buffer absorbing excess supply or demand for labor in the tradable sector. Productivity in the non-tradable sector is considerably lower than in the tradable sector.

Liberalization switches demand toward imports leading to trade deficits and reducing output in the tradable sector. In addition, real appreciation weakens the tradable sector even more. Workers are then absorbed in the non-tradable sector, so that the overall rate of unemployment, at least initially, does not increase much. Assuming for simplicity's sake that the tradable sector corresponds to the industrial sector, and that services are the non-tradable sector, one may conclude that liberalization leads to a process of deindustrialization. Using the data on the metropolitan area of São Paulo, Brazil's industrial core, we find that in 1990 48.7 percent of all workers in the private sector were employed in the industrial sector, whereas in 1999 only 32 percent were employed in the industrial sector. The reverse is true in the case of services, with an increase from 32.9 to 48.8 percent of total employed workers. This tends to confirm Pieper's (2000) argument that Brazil is an acute case of output deindustrialization.

In addition, the increasing exposure to foreign competition implies that there is a change in relative prices against the tradable sector. According to conventional wisdom, the rise in the price of non-tradable goods relative to tradable goods might lead to a fall in the real wage in the non-tradable sector and hence to an increase in the demand for labor in that sector. In other words, the fall in real wages allows labor demand to increase and reduces unemployment. According to the structuralist view, the level of employment in the non-tradable sector also depends on effective demand. If effective demand is increasing in the non-tradable sector, then the capacity to increase employment is enhanced. To the extent that wages are able to keep pace with prices, wages in the non-tradable sector may or may not rise relative to wages in the tradable sector.

Once again, if we use the data for the metropolitan area of São Paulo, we can see in figure 2.11 that the average income of the non-tradable sector (WNT) is rising against the average income of the industrial sector (WT). The data contradict the conventional

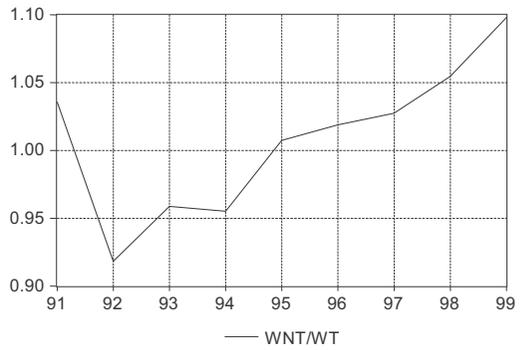


FIGURE 2.11 Relative Wages

Source: SEADE.

view, since there seems to be a positive correlation between employment and wages. That is, the relative increase in the level of employment in the services sector is accompanied by a relative increase in wages.

Furthermore, according to the conventional view based on the factor price equalization theorem of the Hecksher-Ohlin (H-O) model, it is commonly argued that liberalization would narrow the skilled-unskilled wage ratio in the South, and widen it in the North. Figure 2.12 shows the relative wages of workers with a college degree or more (skilled, WSK) relative to workers with unfinished primary school (unskilled, WNSK). As can be seen, the result contradicts the H-O model. This result confirms what Wood calls the Latin American challenge to the East Asian conventional wisdom, that is, greater trade openness in Latin America has been accompanied by rising wage inequality.

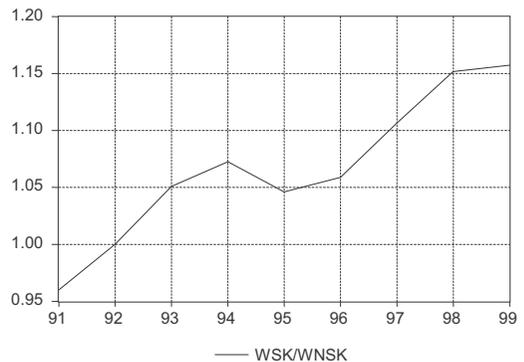


FIGURE 2.12 Relative Wages

Source: DIEESE (n.d.).

The structural change caused by liberalization led to a rising wage gap between skilled and non-skilled workers. One possible explanation is that by introducing new technologies, the process of liberalization increases the bargaining power of skilled workers (Amadeo 1996). Another possible explanation, put forward by Wood (1997), is that the entry of low-wage Asian countries (e.g., Bangladesh, China, India, Indonesia, and Pakistan) altered the competitive advantage of middle-income countries like Brazil.

In addition to the wage gap, it must be noted that the quality of jobs created in different sectors diverges greatly. Amadeo and Pero (2000) argue that the quality of jobs created in the services sector is worse than that in the industrial sector. In that sense, they suggest that unemployment is not a good measure of labor market conditions. Table 2.7 shows that even unemployment, a relatively poor indicator of the labor market, considerably worsens in the latter half of the 1990s. Open unemployment increased more than 80 percent from 1995 to 1999 from 4.6 to 8.4 percent, before falling in 2000.

Furthermore, when we look at the data on hidden or disguised unemployment for the metropolitan region of São Paulo we find a similar pattern, with rates of unemployment soaring in the second part of the decade.<sup>26</sup> In other words, in the first part of the decade, when unemployment rates were increasing and decreasing as part of the cycle, the rate of unemployment was, at best, a poor indicator of the labor market performance. However, in the second

part of the decade, it is clear that the economy has accommodated to a situation with higher rates of unemployment.

The higher rates of unemployment reflect the relatively poor performance of the economy in the post-Asian crisis period. However, it is important to note that the increase in unemployment cannot be completely blamed on cyclical or short-run factors. In the first half of the 1990s, unemployment was, on average, lower despite the negative effects of the recession of 1990. One possible explanation is that in the post-stabilization period, the intensification of the liberalization process led to higher rates of unemployment in the long run. If this is the case, the recovery from the 1998–1999 crisis will not be sufficient to reduce unemployment to pre-reform levels.

Figure 2.13 shows that the participation in São Paulo had a slight increase from around 60 percent to 62.5 percent. Hence, the increase in unemployment throughout the 1990s from around 10 to almost 18 percent has to be blamed on the fall of the employed share of population.

The increase in unemployment in the second half of the 1990s, in particular after 1997, masks the different sectoral evolution of employment. Figure 2.14 shows the indexes for employment levels in the economy as a whole (*L*), the industrial sector (*LI*), the commerce sector (*LC*), and the service sector (*LS*). It is clear that industrial employment has been falling all through the liberalization period, starting in the late 1980s. Employment in the commerce and service sectors, on the other hand, has followed a cyclical pattern. It recovered from the early 1980s recession and fell as much as industrial employment

TABLE 2.7 Unemployment

Year	Open Unemployment <sup>a</sup>	Hidden Unemployment <sup>b</sup>	Total Unemployment <sup>b</sup>
1990	4.3	2.9	10.3
1991	4.5	3.1	10.9
1992	5.8	6.0	15.2
1993	5.3	6.0	14.6
1994	5.5	5.3	14.2
1995	4.6	4.2	13.2
1996	5.4	5.1	15.1
1997	5.7	5.7	16.0
1998	8.1	6.5	18.2
1999	8.4	7.2	19.3
2000	7.8	6.6	17.7

Source: IBGE and DIEESE (n.d.).

a. Data for the six metropolitan regions of Recife, Salvador, Rio de Janeiro, Belo Horizonte, São Paulo, and Porto Alegre.

b. Data for the metropolitan region of São Paulo.

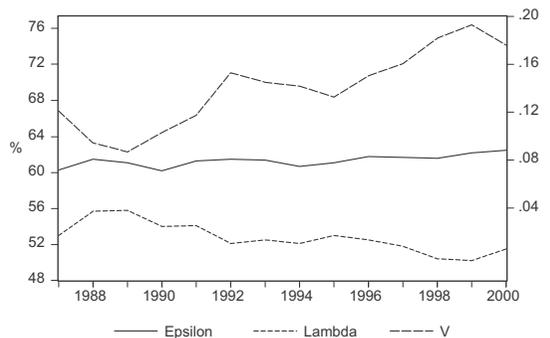


FIGURE 2.13 Labor Decomposition

Source: DIEESE (n.d.).

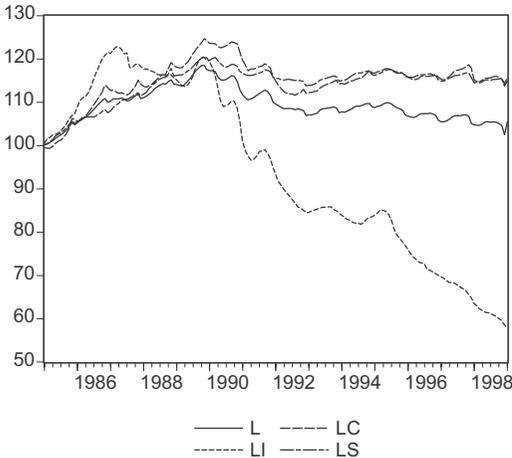


FIGURE 2.14 Employment

Source: DIEESE (n.d.).

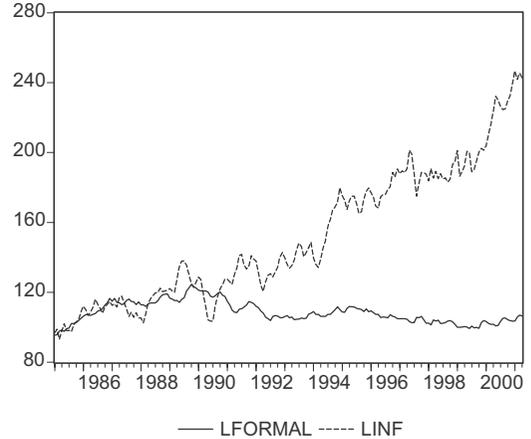


FIGURE 2.15 Formal and Informal Employment

Source: DIEESE (n.d.).

during the recession of the early 1990s. Yet, in contrast with industrial employment, during the 1990s non-industrial employment also fluctuated with the cycle, increasing after the recession in the mid-1990s and falling after the external shocks of the Tequila and Asian crises.

The 1995 to 1997 period, between the Tequila and the Asian crises, is particularly interesting. Industrial employment fell in these two years, but the increased employment in the commerce and service sectors was more than enough to compensate for that fall. As a result, employment in the economy as a whole was relatively constant. This explains why, in contrast with the Argentine experience of exchange rate-based stabilization, unemployment did not immediately increase in Brazil.

Notice that liberalization was marked by another clear trend in the labor market, namely, an increase in the degree of informality of labor relations. Figure 2.15 shows the indexes of workers employed in the formal and informal sectors. According to Amadeo and Pero (2000, 127), the reduction in the share of formal wage earners is associated with the downsizing strategies pursued in the industrial sector after the liberalization process.

In summary, the process of liberalization led to a pronounced decrease in industrial employment and a shift toward the service sector. Also, the increase in informality signals the deterioration of employment conditions. In particular, increasing informality has led some authors to conclude that institutional

reforms are needed in order to improve the quality of the jobs created. In this view, the costs imposed by the payment of benefits on formal contracts are too high and force many firms into hiring in the informal market. Benefits may add 25–30 percent to the costs of manufacturing employment, a range that is within international standards and that cannot justify the massive increase in informality. In short, the main reason for the increase in precarious jobs is the lack of good jobs, and this, in turn, is partially explained by the process of liberalization.

In addition, the effects of the stabilization plan and the reforms in labor markets had repercussions on income distribution. In fact, the improvement in income distribution with the reduction of the inflation tax was considered one of the most important features of stabilization by several government officials (Franco 1999).

In fact, looking at the Gini or Theil T coefficients in the post-stabilization period, one notices a slight improvement with respect to the pre-stabilization period (see table 2.8). Interestingly enough, this trend precedes the Real Plan and dates back to the early 1990s.

This might indicate that the stabilization plan has not contributed significantly to the improvement of income distribution as measured by the Gini coefficient. On the other hand, some authors associate the reduction of almost 25 percent of the poverty rate with the stabilization (Amadeo and Neri 1999).

TABLE 2.8 Income Distribution and Poverty

	1990	1993	1995	1996	1997	1998	1999
Gini	0.62 <sup>a</sup>	0.58	0.57	0.57	0.57	0.56	0.58
Theil T	0.78	0.77	0.73	0.73	0.74	0.74	0.72
Poverty	44.2	44.1	33.2	34.1	34.1	33.4	34.9

Source: IBGE (2000).

a. Figure for 1989.

Two factors relating to the evolution of income distribution in the last decade must be emphasized. First, the improvement in income distribution was relatively small, since progress in the base of the distribution is insufficient to improve the Gini coefficient, which is driven by the behavior of the middle quintiles (Rocha 2000, 3). Second, when we look at alternative measures, it is not clear that income distribution did in fact improve during the 1990s.<sup>27</sup> For instance, the share of wages in total income was approximately 51.4 percent in 1993 and only 40.7 percent in 1999. The flip side of the reduction in the share of wages is the increase in the net operational surplus (interest, profits, rents, etc.) from 35.4 to almost 46 percent in the same period.

The reduction in the share of wages in total income indicates that liberalization and increased unemployment dramatically reduced the bargaining power of workers. Furthermore, the maintenance of high interest rates (as part of the exchange rate-based stabilization program) allowed an increase in the remuneration of capital, despite increasing competition from abroad. These results show a considerable worsening in income distribution, in contrast with the picture presented by the Gini coefficient. Part of the explanation for this apparent ambiguity is that both the Gini and the Theil indexes are calculated on the basis of wage income. Hence, the relatively small reduction in inequality in the 1990s reflects a reduction in overall wage inequality, while the share of wages in total income has been compressed. It must also be emphasized that real wages in the 1990s are lower in comparison to the 1980s and the import-substitution period.

A second type of question not directly connected to the discussion of whether the Real Plan improved income distribution is about the relationship between income distribution and poverty. The effects of reduced inequality, as measured by the Gini coefficient, have had negligible effects on poverty reduction. In

fact, Rocha (2000, 6) shows that poverty also fell considerably after the short-lived period of stability during the Cruzado Plan in the mid-1980s, a period in which income distribution was deteriorating. One may conclude that price stability was the main explanatory variable in poverty reduction.

Poverty rates, however, have been falling since the 1970s, according to Rocha (2000). Hence, sources other than price stability are also important for poverty reduction. Output growth is the obvious candidate, but it cannot explain all poverty reduction, since poverty also fell in the first part of the 1980s, a period in which the economy stagnated as a result of the debt crisis. In retrospect, the reduction of poverty was a consequence of industrialization and the consequent migration from rural to urban areas.<sup>28</sup> All in all, cities provide greater access to electricity, treated water, medical care, and public schools. In that respect, Amadeo and Neri (1999) argue that the increases in the minimum wage in the post-stabilization period, that is, after 1994, were sufficient to substantially reduce urban poverty. In short, the increase of the minimum wage in an environment of price stability proved to be an important factor in the reduction of poverty.

The argument, however, is not completely convincing from a long-run perspective, since real minimum wages were constant in the 1970s and falling in the 1980s while poverty was decreasing throughout that period. Hence, a higher real minimum wage is only part of the explanation.

The minimum wage increased by almost 55 percent in real terms from its lowest point in 1994 to 2000, but it is still below the level of the pre-debt crisis period and well below the level of the import-substitution period. The question, then, is why increases in the minimum wage have not been higher. According to the conventional view, the limits imposed on the federal government by social security payments are the main reason for not increasing the minimum wage (Giambiagi and Além 1999). It must be noted that high interest rates and low rates of growth also worsen the fiscal stance, and yet that has not prevented the current administration from pursuing both in its attempt to achieve external equilibrium. This shows that there is a double standard, according to which the increase in the minimum wage is tied to fiscal stability, but interest rate increases are only conditional upon external accounts, irrespective of the fiscal stance. One may conjecture

that social policies are relegated to a secondary position, and that the liberalization policy is the priority of the current administration. Not surprisingly, the results on employment and income distribution reflect the government priorities.

## 5. Policy Alternatives

Brazil's relatively poor performance in terms of growth rates, unemployment, and income distribution begs the question of why the government pursued the current strategy. The consensus to pursue liberalization has foreign and domestic sources. On the foreign front, the recurring balance of payments problems that were intensified with the development of the euro-dollar market and the oil and interest shocks of the 1970s led to an increasing consensus that outward-oriented strategies were the only solution. In fact, the United States used the debt crisis of the early 1980s to impose liberalization as part of the conditionality agreements to reschedule the debts of developing countries.

Also, mainstream defenders of outward orientation tended to argue that export-led growth was behind the successful experience of the Asian countries. Export-led growth was equated with greater integration into the world economy and a *laissez-faire* approach to trade policy that would lead to a better allocation of resources and higher rates of growth.<sup>29</sup> (This argument reached its high point with the World Bank's [1993] East Asian report, according to which East Asian economies implemented market-friendly policies. Several authors have shown the limitations of the World Bank position.)

On the domestic front, the inability to tame the inflationary pressures during the 1980s and the failure of the heterodox plans led to the notion that only orthodox stabilization strategies would work. Thus, fiscal conservatism complemented outward orientation as part of the lessons of the lost decade.

With respect to outward orientation, despite their strong export orientation, the East Asian economies were not fully integrated with the world economy. Import substitution was an integral part of the East Asian strategy in the 1950s and 1960s. The equalization of export orientation with free trade is also misleading. At least in the Korean case, the state heavily intervened in the economy. Besides, the East Asian financial markets were relatively closed compared to other underdeveloped regions such as Latin America.

The difference between East Asian and Latin American economies is of particular interest, since the former are normally associated with export-led growth strategies, while the latter are connected with inward-oriented strategies. While it is true that the East Asian trade regime was more open than that of Latin America, the opposite is true when one looks at the financial regime.<sup>30</sup> Capital flows were much more heavily regulated in Asian economies at least until the 1990s. This is the primary reason for the greater resistance to financial crises displayed by the Asian economies until the late 1990s, when financial liberalization was well underway.

One possible implication of the above discussion is that the nature of the financial regime rather than the trade regime is more relevant to understanding the perils of development. In other words, it is not the difference between inward- and outward-looking development strategies that matters, but the difference between closed and open financial regimes. Opening the capital account is supposed to bring financial inflows that will stimulate investment and productivity growth. This part of the liberal credo remains wishful thinking in Brazil's case. On the contrary, liberalization has led to the need to maintain low rates of growth to keep (or at least try to keep) the current account under control. One of the consequences of low growth rates has been an increase in unemployment rates since 1997. The improvement after the depreciation of 1999 may be short-lived, as has been dramatically shown by the constraints in energy supply and the persistent current account deficit.

Additionally, rising capital inflows following liberalization led to real exchange rate appreciation, offsetting liberalization's incentives for traded goods production and increasing the inequality between the wages of workers in the tradable and non-tradable sectors. Appreciation, in turn, was linked to high real interest rates that added to production costs and to the financial costs of the public debt.

Policy alternatives in an increasingly interdependent world are difficult to implement. It is true that the current account liberalization has been consolidated in a series of multilateral and bilateral trade agreements, in particular the Mercosul, in accordance with the World Trade Organization (WTO). Thus, the scope for changes in trade policies, even when desirable, is limited. However, the recent discussions on the Brazilian AIDS policies, and the favorable

ruling by the WTO on the Brazilian dispute with Canada over subsidies to EMBRAER, the Brazilian aerospace company, show that there is some room for alternative policies. In addition, capital account liberalization has been incomplete in Brazil, and the possibilities for change are open, in particular, after the wave of criticism that the Asian and Russian crises engendered. In our view, the main advantage of a relatively more closed financial regime would be the ability to control interest rates for domestic purposes.

Lower interest rates would reduce the financial components of fiscal deficits and would free resources for social policies. A reduction in the share of interest, profits, and rents in total income and an increase in the share of wages may lead to an increase in effective demand and higher rates of growth and employment. Furthermore, higher rates of growth tend to stimulate productivity growth, leading to virtuous circles of cumulative growth. No change in the direction of the economic policy under the current administration has occurred. Low levels of growth, relatively high unemployment, and stagnant or worsening income distribution continue.

**6. Summary of the Results**

In the last twenty-five years, Brazil has suffered a debt crisis and a long period of stagnation and high inflation. As a result, parts of the Belindia model were abandoned, in particular the process of state-led industrialization. On the other hand, wage inequality continued to increase through the 1990s, and income distribution remains one of the hallmarks of Brazilian society. Table 2.9, below, summarizes the results of the reforms pursued during the 1990s, and also of the post-Real plan period when reforms were intensified. Reforms are compared to the ISI (1950–1980) and the crisis (1981–1989) periods.

The results show that the reforms and the Real Plan only led to increases in domestic investment and

productivity when compared to the crisis period. Worse than that is the fact that rates of growth and employment were even better during the so-called lost decade. The ISI period stands as the Golden Age of Brazilian development. The effects on income distribution are ambiguous and depend on the measure that one emphasizes. It is clear, however, that Brazil remains a highly unequal society.

All in all, if Belindia stood for a model of industrialization concomitant with increasing inequality, the Washington Consensus reforms have been associated with deindustrialization and have been accompanied by the maintenance of high levels of inequality. In Brazil, “Belgium” is not doing well, and “India” perseveres and survives.

**Notes**

1. “Belindia” refers to the duality of the Brazilian economy: the modern or industrial sector being “Belgium” and the backward or rural sector being “India.”

2. To a certain extent, the Belindia model formalizes ideas developed in Furtado (1972) and Tavares (1972). According to this view, the concentration of income in the upper middle class generated a demand for consumer durables that allowed the economy to continue to grow after the recession of the early 1960s.

3. Many Latin American countries such as Argentina and Chile initiated the reforms in the 1970s, only to revoke them temporarily. Others, like Mexico, started in the mid-1980s. However, in almost all the other countries, reforms were well underway by the early 1990s. According to Stallings and Peres (2000), Brazil may be classified, along with Colombia, Costa Rica, Jamaica, and Mexico, as a cautious reformer, while Argentina, Bolivia, Chile, and Peru are aggressive reformers. The main source of the difference, according to the authors, is related to the country’s previous economic performance. That is, countries that did well in previous periods were more reluctant to adopt the reforms.

4. According to Franco (1999, 53), the higher productivity of the Brazilian economy in the early 1990s

TABLE 2.9 Effects of the Reforms and the Real Plan

	<i>Growth</i>		<i>Investment</i>		<i>Productivity</i>		<i>Employment</i>		<i>Equity</i>	
	<i>1990s</i>	<i>Real</i>	<i>1990s</i>	<i>Real</i>	<i>1990s</i>	<i>Real</i>	<i>1990s</i>	<i>Real</i>	<i>1990s</i>	<i>Real</i>
1950–1980	~	~	~	~	~	~	n.a.	n.a.	~	~
1981–1989	~	~	+	+	+	+	~	~	~	~

Source: Author’s calculations.

meant that a certain degree of appreciation was desirable. In contrast, other pro-reform authors disagree on the role of exchange rate policy. Other authors claim that trade liberalization calls for real depreciation and a fall of the wage in dollars. See Rodrik (1999).

5. In fact, according to Rodrik (1999, 2), “the talk in Washington turned towards ‘second-generation reforms,’ ‘governance,’ and ‘reinvigorating the state’s capability.’” The reason for this change is, according to Rodrick, the widespread dissatisfaction with market-oriented reforms.

6. Several authors, such as Bonelli (1994) and Franco (1999), refer to this as the Verdoorn Law or effect. In fact, the Kaldor-Verdoorn effect was related to a long-term correlation between productivity and growth. The majority of empirical studies on the Kaldor-Verdoorn effect use cross-section analysis, thus smoothing out cyclical variations. The time series analysis, however, picks up both cyclical and long-term effects. The simple regression below shows the cyclical effect of output growth (G) on productivity growth ( $\lambda$ ).

$\lambda = -3.87 + 0.53G + T^2$		<i>Twenty-eight Observations</i>	
<i>Independent Variable</i>	<i>Coefficient</i>	<i>Standard Deviation</i>	<i>T Statistics</i>
Constant	-3.87	1.68	-2.29
G	0.53	0.11	4.63
T <sup>2</sup>	0.002	0.0008	2.37
$R^2 = 0.46$		Adj. $R^2 = 0.42$	

The regression shows that an increase in output growth of 1 percent would have an impact of 0.53 in labor productivity growth. Labor productivity is defined as output per employed worker, hence the above result implies that employment would increase around 2.13 percent, with the same increase of 1 percent in output growth. This cyclical result is in fact what is generally known as the Okun Law. Interestingly enough, the Okun effect in Brazil is similar to that of the United States and other developed nations.

7. The Collor Plan is more difficult to classify. Prices were frozen for only one month, but the main measure of the plan was the blocking of all financial assets for eighteen months, reducing the holdings of M4 by almost 70 percent.

8. In contrast with the Brazilian government, economists in general viewed stability as a pre-condition for the implementation of the reforms. Rodrik (1995) argues that high and variable inflation distorts the signals transmitted by relative prices, and notes that the

devaluation that should accompany the liberalization would have an inflationary effect.

9. The case of Mexico, where a social pact was crucial for stability, also contains some heterodox features. Argentina and Chile, on the other hand, represent the typical orthodox stabilization programs.

10. The Real Plan created a parallel currency—the unidade real de valor (URV)—that was indexed to three widely used inflation indexes. While prices in cruzeiros reais changed, absolute price in URVs was relatively constant, and relative prices were allowed to change. Finally, the monetary reform of July 1, 1994, fixed the parity between cruzeiros reais, URVs, and reais—the new currency—at CR\$2,750 = 1 URV = 00R\$1. As prices in URVs were already stable, prices in reais were also stable.

11. Latin American structuralists developed the notion that fiscal deficits are endogenous in a high-inflation environment. For a description of structuralist views on the role of fiscal deficits, see Câmara and Vernengo (2000).

12. In general, the terms “outward orientation” and “openness” are used without distinction. Note, however, that openness refers to the absence of restrictions to trade and capital flows, whereas outward orientation means emphasizing the role of foreign markets as an outlet for domestic production.

13. Rodrik (1999, 71) argues along similar lines. For him, “contrary to received wisdom, ISI-driven growth did not produce tremendous inefficiencies on an economy-wide scale. The inescapable conclusion is that most countries in Latin America and the Middle East had productivity growth records prior to 1973 that look quite favorable in comparison with those in East Asia.” This result stands by itself, and does not depend on Rodrik’s view on the importance of the domestic institutions of conflict management.

14. From 1967 onwards, Brazil promoted a reduction in tariffs and a crawling peg system that maintained the relatively depreciated exchange rate. This liberalizing experience was partially successful in increasing the levels of manufacturing exports.

15. This decomposition is based on the notion that growth is demand led, as in many structuralist models, rather than supply constrained, as in neoclassical theory.

16. Aggregate supply ( $X$ ) is defined as the sum of total consumption ( $C$ ), total investment ( $I$ ), and exports ( $E_X$ ):

$$X = C + I + E_X$$

In the absence of reliable data on government and private investment, the leakage parameters relative to aggregate output are defined for national rather than private savings. The national savings rate is defined as

$s = (Y - C)/X$ , and the import propensity is given by  $m = M/X$ . The fiscal and foreign stances are then given by

$$X = \frac{s}{(s+m)} \cdot \frac{I}{s} + \frac{m}{(s+m)} \cdot \frac{E_X}{m}$$

The own multipliers depict the effects of the different components of aggregate demand on output.

17. Amadeo (1997) seems to imply that *BT* moves to the southeast without rotating. In my view, that would be the case only if the liberalization process had no impact on the income and price elasticities of *BT*. In fact if we define *BT* in logs as:

$$\ln(BT) = \alpha - \beta_1 \ln(G) + \beta_2 \ln(E)$$

if liberalization leads to an increase in the income elasticity,  $\beta_1$ , and/or a decrease in the price elasticity,  $\beta_2$ , then the *BT* line would become more flat, as shown in graph 1.

18. Regressions used quarterly data on exports, imports, domestic GDP growth, consumer prices as a proxy for domestic prices and industrial prices as a proxy for international prices, and a weighted average of GDP for ten Brazilian trading partners.

19. Chow's breakpoint test ( $F_{18,6} = 4.22$ ) rejects the null hypothesis that the coefficients are the same in the two subsamples.

20. Note that during most of the 1990s Brazil maintained a tax on financial operation levied on capital flows. However, the motivation was less to put sand in the wheels of the international financial system than to obtain fiscal revenues.

21. Some authors argue that foreign capital inflows decrease domestic savings and investment. Their critique was, however, directed to all types of capital inflows. The dependency school criticism of multinational enterprises (MNEs) is more directed to FDI inflows. In this sense the maligned model of FDI can be traced back to the dependency school criticism of the role MNEs, according to which profit remittances by MNEs weakened the balance of payments position of the host country.

22. The effects of macroeconomic shocks may be crucial in explaining the variance in growth performance across countries. It has now become conventional wisdom to include measures of shocks or instability in the investment functions. Yet the results are mixed at best.

23. Note that the argument pursued here suggests that devaluations were contractionary in Asia because of their effects on the banking sector and the subsequent debt-deflation processes that resulted from banking crises.

24. This section is based on Vernengo (2002).

25. The rate of inflation is clearly related to the re-adjustment period of the minimum wage as described by the inertialist theories of inflation (Taylor 1991a).

26. The 'open unemployed' refers to those workers who were unable to find a job in the last week. The 'hidden unemployed' includes workers that have irregular and discontinuous jobs as well as those who, discouraged, dropped out of the labor force. Total unemployment in table 6 is the sum of hidden unemployment and open unemployment in the metropolitan region of São Paulo, which is not shown in the table.

27. Barros and Corseuil (2001, 288) also argue that trade liberalization had a smaller impact than capital account liberalization on income inequality. Their conclusion that continued external liberalization would not create greater benefits or costs for social welfare, however, is more difficult to support, in particular, given the dismal performance in terms of job creation. Unless one believes that unemployment does not hurt social welfare, their conclusion is incorrect.

28. The problem of rural poverty was associated with uneven regional development. Furtado (1958) describes the problems created by the decay of the export oriented plantation system and the development of a subsistence system in the Brazilian northeast.

29. Some mainstream authors have toned down this view. Rodrik (1999, 1) admits, "the relationship between growth rates and indicators of openness... is weak at best."

30. Arguably, some Asian countries—notably, Indonesia, Malaysia, and Thailand—did open their capital accounts as early as Latin America. The second-tier tigers were less successful than the more financially closed among the first-tier tigers (South Korea and Taiwan).

## References

- Agosin, M., and R. French-Davis. 1996. Managing capital inflows in Latin America. *Office of Development Studies Discussion Paper* no 8.
- Agosin, M., and R. Mayer. 2000. Foreign investment in developing countries: Does it crowd in domestic investment? *UNCTAD Discussion Papers* no 146.
- Amadeo, E. 1994. *Institutions, inflation and unemployment*. Aldershot, UK: Edward Elgar.
- . 1996. The knife-edge of exchange rate based stabilization. *UNCTAD Review* 1–25.
- Amadeo, E., and M. Neri. 1999. Política macroeconómica y Pobreza en Brasil. In *Política Macroeconómica y Pobreza en América Latina y el Caribe*, edited by E. Ganuza, L. Taylor, and S. Morley. New York: PNUD.

- Amadeo, E., and V. Pero. 2000. Adjustment, stabilization and the structure of employment in Brazil. *Journal of Development Studies* 36 (4): 120–48.
- Arida, P., and A. Lara-Resende. 1985. Inertial inflation and monetary reform in Brazil. In *Inflation and indexation*, edited by J. Williamson. Washington, D.C.: Institute for International Economics.
- Bacha, E. 1994. O Fisco e a Inflação. *Revista de Economia Política* 14 (1).
- Banco Central do Brasil. n.d. Selected data. [www.bcb.gov.br/](http://www.bcb.gov.br/).
- Barros, R. P., and C. Corseuil. 2001. Apertura Económica y Distribución en Brasil. In *Liberalización Desigualda y Pobreza*, edited by E. Ganuza, R. P. Barros, L. Taylor, and R. Vos. Buenos Aires: Eudeba.
- Berg, J., and L. Taylor. 2000. External liberalization, economic performance, and social policy. CEPA Working Paper, no. 12, February.
- Bogdanski, J., A. Tombini, and S. Werlang. 2000. Implementation of inflation targeting in Brazil. Banco Central do Brasil, Working Paper no 1.
- Bonelli, R. 1994. Productivity growth and industrial exports in Brazil. *CEPAL Review* 52 (April): 71–89.
- Bruno, M. 1993. *Crisis, stabilization, and economic reform: Therapy by consensus*. Oxford: Clarendon Press.
- Calvo, G., L. Leiderman, and C. Reinhart. 1993. Capital inflows and real exchange rate appreciation in Latin America. *IMF Staff Papers* 40 (1).
- Câmara, A., and M. Vernengo. 2000. The German balance of payments school and the Latin American neo-structuralists. In *Credit, interest rates and the open economy*, edited by L-P. Rochon and M. Vernengo. Cheltenham, UK: Edward Elgar.
- Cardoso, E., and A. Fishlow. 1988. *The macroeconomics of the Brazilian external debt* (in Portuguese). São Paulo: Brasiliense, 1989.
- Carneiro, D., and R. Werneck. 1993. Obstacles to investment resumption in Brazil. In *Savings and investment requirements for the resumption of growth in Latin America*, edited by E. Bacha. Washington, D.C.: IADB and Johns Hopkins University Press.
- Carvalho, F. 1998. The real stabilization plan and the banking sector in Brazil. *Banca Nazionale del Lavoro Quarterly Review*: 291–326.
- Delfim Netto, A. 1998. *Cronica do Debate Interditado*. Rio de Janeiro: Topbooks.
- DIEESE. n.d. Departamento Intersindical de Estatística e Estudos Sócio-Econômicos. [www.dieese.org.br/ped/ped.html](http://www.dieese.org.br/ped/ped.html).
- Dornbusch, R. 1997. Brazil's incomplete stabilization and reform. *Brookings Papers on Economic Activity* 1 (1997): 367–94.
- Dutt, A. 1998. Direct foreign investment and North-South trade. In *Development Economics and Policy*, edited by D. Sapsford and J. Chen. London: Macmillan.
- Edwards, S. 1995. *Crisis and reform in Latin America: From despair to hope*. Washington, D.C.: World Bank.
- FGV Dados. n.d. Fundação Getúlio Vargas. <http://fgvdados.fgv.br/>.
- Franco, G. 1999. *O Desafio Brasileiro*. São Paulo: Editora 34.
- Furtado, C. 1958. *The economic growth of Brazil*. Berkeley: University of California Press.
- . 1972. *Análise do 'Modelo' Brasileiro*. Rio de Janeiro: Civilização Brasileira.
- Giambiagi, F., and A. Além. 1999. O Ajuste do Governo Central. In *A Economia Brasileira nos Anos 90*, edited by F. Giambiagi and M. Moreira. Rio de Janeiro: BNDES.
- IPEA Data. n.d. Instituto de Pesquisa Econômica Aplicada. <http://ipeadata.gov.br/ipeaweb.dll>.
- Krugman, P., and L. Taylor. 1978. Contractionary effects of devaluation. *Journal of International Economics* 8: 445–56.
- Macedo, R. 2000. Privatization, asset and income distribution in Brazil. Mimeo. São Paulo.
- Moran, T. 1998. *Foreign direct investment and development*. Washington, D.C.: Institute for International Economics.
- Moreira, M. 1999. Estrangeiros em uma Economia Aberta. In *A Economia Brasileira nos Anos 90*, edited by M. Giambiagi and M. Moreira. Rio de Janeiro: BNDES.
- Pieper, U. 2000. Deindustrialization and the social and economic sustainability nexus in developing countries. *Journal of Development Studies* 36 (4).
- Pinheiro, A., F. Giambiagi, and J. Gostkorszewicz. 1999. O Desempenho Macroeconômico do Brasil nos anos 90. In *A Economia Brasileira nos Anos 90*, edited by F. Giambiagi and M. Moreira. Rio de Janeiro: BNDES.
- Pritchett, L. 1996. Measuring outward orientation in LDCs: Can it be done? *Journal of Developing Economics* 49: 307–35.
- Resende, M. 2000. Crescimento Econômico, Disponibilidade de Divisas e Importação Total por Categoria de Uso no Brasil. *Texto para Discussão* no. 714. Brasília: IPEA.
- Rocha, S. 2000. Pobreza e Desigualdade no Brasil. *Texto para Discussão* no. 721. Rio de Janeiro: IPEA.
- Rodriguez, F., and D. Rodrik. 1999. Trade policy and economic growth: A skeptic's guide to the cross-national evidence. *NBER Working Paper* no. 7081. Cambridge, Mass.: NBER.

- Rodrik, D. 1999. The new global economy and developing countries: Making openness work. *Overseas Development Council Policy Essay* no. 24. Washington, D.C. SECEX. n.d. Ministério do Desenvolvimento, Indústria e Comércio Exterior. [www.mdic.gov.br/indicadores/default.htm](http://www.mdic.gov.br/indicadores/default.htm).
- Stallings, B., and W. Peres. 2000. *Growth, employment and equity*. Washington, D.C.: Brookings.
- Tavares, M. C. 1972. *Da Substituição de Importações ao Capitalismo Financeiro*. Rio de Janeiro: Zahar.
- . 1999. *A Destruição Não Criadora*. Rio de Janeiro: Record.
- Taylor, L. 1991a. *Income distribution, inflation and growth: Lectures on structuralist macroeconomic theory*. Cambridge, Mass.: MIT Press.
- . 1991b. Economic openness: Problems to the century's end. In *Economic liberalization: No panacea*, edited by T. Banuri. Oxford: Clarendon Press.
- . 2001. Outcomes of external liberalization and policy implications. In *External liberalization, economic performance, and social policy*, edited by L. Taylor. New York: Oxford University Press.
- . 2004. *Restructuring macroeconomics*. Cambridge, Mass.: Harvard University Press.
- Taylor, L., and E. Bacha. 1976. The unequalizing spiral: A first growth model for Belindia. *Quarterly Journal of Economics* 90: 197–218.
- Vernengo, M. 2002. External liberalization, macroeconomic instability and the labor market in Brazil. Working paper. Geneva: International Labor Office.
- World Bank. 1993. *The East Asian miracle*. Policy research report. New York: Oxford.