The regional impact of neo-liberal policies in Brazil

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RESUMO

Este artigo analisa a dimensão regional do tradicional dilema "equidade vs. eficiência" no caso brasileiro. A principal questão discutida é se numa economia aberta e dominada pelo mercado há uma maior ou menor concentração regional da renda, e se há um efeito natural de "trickle down" quando as forças do mercado aumentam a concentração regional do crescimento. Na primeira parte do artigo estas perguntas são examinadas de um ponto de vista histórico, e a segunda parte concentra-se no impacto regional das políticas de mercado aberto na década de 90.

Palavras-chave: equidade regional, eficiência, renda regional, Nordeste.

ABSTRACT

This article focuses on the regional dimension of the traditional dilemma of "equity vs. efficiency" as exemplified by the case of Brazil. The main question addressed is whether a more market-oriented and open economy leads to an increased or decreased concentration of income, and whether there is a natural regional "trickle down" effect when unfettered market forces increase regional concentration of economic growth. In the first part of the article these questions are examined from an historical perspective, while the second part concentrates on the regional impact of the open market policies of 1990s.

Key words: regional equity, efficiency, regional income, Northeast.

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One of the most important dimensions of change in the context of Brazilian development has been in the external environment. When regional development policies were proposed in the 1960s, the Brazilian economy had a larger number of policy instruments that could be applied to redress problems of spatial inequity. However, by the 1990s, the external environment had changed dramatically; as a member of MERCOSUL and signatory to the WTO, the degree of freedom for policy manipulation were significantly reduced. Accordingly, there has been a change in the type of policies that have been enacted with a greater focus of what Hirschman would refer to as indirect (or infrastructure) investment. With a greater commitment to market forces, as manifested in the neo-liberal policies of the 1990s, the Federal Government is left with fewer options to manipulate the growth and development of the less developed regions of the country.

As neo-liberal market-oriented policies have spread around the developing world and protection has dramatically declined, there has been concern about the impact of these policies on the distribution of income. It seemed that considerations of efficiency outweighed concerns about equity. This was justified on the grounds that greater efficiency would lead to rapid growth which would ultimately benefit the population in the lower income groups. There is a growing literature dealing with various aspects of this question.¹

In this article we focus on the regional dimension of the traditional dilemma of "equity vs. efficiency" as exemplified by the case of Brazil. The basic question is: does a more marketoriented and open Brazilian economy lead to an increased or decreased regional concentration of income, i.e., what are the relative strengths of centripetal and centrifugal forces? And, is there a natural regional "trickle down" effect when unfettered market forces result increased regional concentration of economic growth? We shall first briefly examine the Brazilian experience in historical perspective and see how the regional distribution of income was determined when the country's economy was relatively open in the years prior to the 1930s, and how regional distribution fared during the period of Import Substitution Industrialization (ISI). We shall then concentrate on the regional impact of the open policies of the 1990s.

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¹ See, for instance, Baer and Maloney (1997), Altimir (1994), Berry (1997).

1 A brief historical overview

1.1 Regional growth distribution during the primary export cycles

Prior to Import Substitution Industrialization (ISI), when Brazil's economy was relatively open, the dynamic center of the economy was located in those regions which gave the country a comparative advantage in the production of a small number of primary products (minerals or food).

Until the 20th century, Brazil's economic history was characterized by a series of export cycles, each benefiting a specific region. The sugar export cycle of the 16th and early 17th centuries favored the Northeast, while the gold export cycle of the late 17th and 18th centuries shifted the economy's dynamism to the state of Minas Gerais and the regions supplying it in Southeast Brazil. When these cycles came to an end, the respective regions' economies stagnated. The coffee export boom of the 19th century at first favored the interior of Rio de Janeiro and later the state of Sao Paulo. By the 20th century, however, the historic shifting of favored economic regions came to an end. The coffee export economy had lasted much longer than the other cycles and had resulted in huge infrastructure investments and also investments in ancillary activities in the Sao Paulo region. Thus, when the industrialization process began, it was natural that it became located in this part of the country. The problem often was that other regions of the country, which contained a large part of the population and which had not benefited from the long coffee export cycle, would only have a minor share of growth based on industrialization.²

1.2 The regional impact of ISI

When Brazil closed its economy to promote ISI, most of the benefits accrued to the Southeast of the country, while the Northeast of the country became increasingly marginalized. While the Southeast accounted for about 42% of the population, its share of the national income hovered around 64% from the 1950s to the 1970s, and its share of the industrial product was close to 80% in the 1960s and 1970s; the Northeast's share of the population has hovered close to 30% in the 1960s and 1970s, while its share of the national income was

² For more details see Baer (1995), chs. 2 and 12.

about 12% and of industrial product around 7%. Over the period 1960-75, the Northeast's per capita income fluctuated between 38 and 42% of the national per capita income average.³

The increased regional concentration of economic activity resulting from ISI is easy to explain. As ISI is already a short-term inefficient process – i.e. high cost industries are promoted behind a protective barrier – it stands to reason that investors in new industries would choose to locate themselves in the most dynamic and cheapest region. Since at the time that ISI was promoted, the Southeast (especially the state of Sao Paulo) had the best available infrastructure in the country, the largest supply of skilled labor, and the largest market, it was not surprising that domestic, multinational and state firms chose this region for their investment location.

Once the industrialization process took off in the Southeast, its dynamism was strong enough to counter any movement of capital or skilled labor to the stagnant region (Northeast) where it was scarce. In fact, the Southeast attracted capital, skilled labor, and the more dynamic part of the unskilled labor force from the Northeast. It also became clear that the backward regions (especially the Northeast) were in fact subsidizing the Southeast's industrialization process. Since these regions continued to export primary goods (e.g. sugar), but were forced to buy many of their consumer durable and capital goods from the Southeast instead of from abroad, their terms of trade declined. That is, these regions had to give up more of their resources to buy industrial goods from the more highly priced Southeast instead of cheaper goods from abroad.⁴

2 Attempts at redressing regional imbalances within the closed economy

Regional equity has not always been a major concern of Brazil's policymakers. It was usually an explicit objective in times of regional calamities (like the periodic droughts in the Northeast) or when it was politically imperative to counterbalance programs that blatantly favored the more advanced regions of the country (the most obvious example being ISI).

After World War II, the formulation of "explicit" regional policies became more frequent, especially from the 1950s on. The objective of these policies was to redistribute income and investment resources from the richer to the poorer regions. Regional equity, however, was

³ For more detailed tables, see Baer (1995, p. 276-77).

⁴ This is demonstrated in Baer (1995, p. 286-91).

usually just one of a number of objectives of the government. Other goals, such as rapid growth of certain industrial sectors, the control of inflation, or the attempt to combat a balance of payments deficit, were not necessarily in consonance with regional equity. Programs for the attainment of each goal have usually been formulated with little attention to their effects on other goals. This has often led to contradictory policies, especially with regard to regional equity.

The best-known regional policies were developed in the 1960s, after the creation of the SUDENE (Superintendency for the Development of the Northeast).⁵ This agency was supposed to direct and coordinate all activities of the Federal Government in the region. Its basic aim was to promote industrial investments in the region through tax incentives, changing the agrariam structure and increasing agricultural productivity and shifting the agricultural frontier, so as to integrate land with higher rainfall. Little was accomplished in modernizing the Northeast agrarian economy in the 1960s and 1970s. The agrarian structure did not undergo significant changes and the promotion of industry through tax incentives resulted in investments located in mainly in two cities, Salvador and Recife, and their activities generated little employment and few linkages within the region. It will be noted in Table 1 that in the 1960s the Northeastern GDP's growth rate was substantially below that of the country even though the share of industry in the Northeastern GDP (Table 2) expanded, although it remained substantially below the national average.

During the 1970s, the Northeast's growth rate was about the same as that of the country as a whole, although the growth of the share of industry from the Northeast in the GDP was smaller than at the national level. The higher growth rate in this decade was the result of the calamitous drought of 1970, which spurred the government on to make renewed efforts towards a more active regional policy. Special resources were used to modernize agriculture and develop the São Francisco River area through irrigation projects. In the second half of the decade, emphasis was placed on "development poles", such as the petrochemical pole in the state of Bahia, a fertilizer pole, a metal and electrical machinery complex, and the strengthening of more traditional industries.⁶ As a result of the higher growth rates in the 1970s, the region's share in the country's GDP rose from 12.3% in 1970 to 13.1% in 1980, while the Northeast's per capita income rose from 40.9% of the national average in 1970 to 44.8% in 1980. Also of note is the fact that the Northeast's share in the country's industrial product rose from 7% in 1970 to 12.1% in 1985.⁷

⁵ For greater details, see Baer (1995, p. 292-4).

⁶ Baer (1995, p. 294-5).

⁷ In a recent empirical study, Azzoni (1997, p. 372) noted a negative association between the rate of regional convergence and the overall GDP growth rate. And thus "... it is not possible to reject the hypothesis that periods of rapid growth are associated with slower rates of (regional) convergence."

It is clear from Table 4 that the central government acted as a re-distributor of resources between regions. Throughout the period 1970 - 1992 the Northeast's share of government expenditure was greater than its share of government revenue. The difference ranged between 1.3 and 5.4 percentage points.

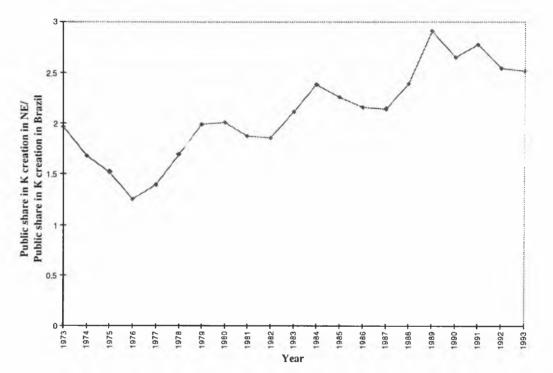
A more complete analysis of interregional flows was made by Rolim *et alii* (1996), using data on the trade balance, government accounts, investment by the public sector and savings. Table 5 presents their results for 1985, which confirm the regional transfer mechanism noted above. Although their analysis covers only one year, they give us a rough idea on how interregional flows took place. It will be noted that the Northeast's interregional trade deficit was partially compensated by its international trade surplus, indicating a transfer of foreign exchange earnings to other regions (mainly the Center-South) of the country. The continual overall interregional trade deficits of the Northeast had to be financed by public and/or private savings, so that the conditions for the macroeconomic balance were met.⁸

The conjecture, taking 1985 as a typical year, is that the transfers of federal resources to the Northeast had to be greater than the trade gaps in order to compensate for the interregional flows of private capital to other regions. Even though the data show a net outflow of private capital from the Center-South, aggregated figures for 1985 show a tendency of net private capital gains to the states of São Paulo and Rio de Janeiro, as well as to the Center-West. The flow of public capital to the Northeast has often been offset by the flight of private capital. Rolim et alii (1996) thus argue that this represents an inefficient allocation of government funds from a regional point of view. One might argue, however, that government transfers to the Northeast during the 1970s and 1980s were necessary to build an infrastructure which could in the future strengthen the spread effects from the Center-South. In other words, government transfers to the less developed region creates an infrastructure which will in the future attract private investments from other regions. This hypothesis could be tested by examining the types of investments made in each region. The relation between the share of public investments in the target region to the share of public investments in the country as a whole should show an increasing trend in the 1970s, with an inflection point after the necessary time for infrastructure investments to have matured. From the estimates of the Northeast, however, an increasing share of public investment in the region, compared to the national average, is apparent from 1973 to

⁸ This condition establishes that income inflows should equal outflows, in equilibrium. Thus, if a region presents a trade deficit with the rest of the country and the rest of the world, in equilitrium, it has to be compensated by net inflows of resources from government expenditures and/or private investments (see Rolim *et alii*, 1996).

1989 (see Figure 1). Even though there seems to be a declining tendency towards the national average in the first years of the 1990s, empirical evidence to support the conjecture on the existence of a change of rhythm is very weak.

Figure 1 Northeast: Ratio of the Public Share in Regional Investment to the Public Share in National Investment for Capital Creation: 1973-1993



Source: SUDENE, Agregados Econômicos Regionais, 1996 and FIBGE, Anuário Estatístico, several years.

3. Regional impact of the 1980s crisis

The various crises of the 1980s (the debt crisis of the early part of the decade and the impact of the runaway inflation and the various failed stabilization plans in the second half the decade) had a much milder effect on the Northeast than on the country as a whole. It will be noted that although the yearly national and regional growth rates fell substantially, they declined less in the Northeast than for the country as a whole (Table 1). The Northeast's growth rate was more than double that of the country. Subdividing this decade, it was noted that in the debt-crisis years 1981-83, while Brazil's GDP was declining at a rate of 2.2% a year, the Northeast's GDP was growing at 2.6% a year. This was mainly the result of government expenditures in the region as a result of a severe drought. When the economy recovered in the mid-1980s and the country's GDP was growing at 7% a year in the years 1984-86, the Northeast's GDP was growing at 10.1% a year.⁹

⁹ Cavalcanti de Albuquerque and Maia Gomes (1996, p. 156).

After the collapse of the various stabilization plans and the return of economic stagnation, the Northeast once again fell behind the rest of the country. While in the period 1987-93 the national GDP was growing at an annual rate of 0.5%, the Northeast's GDP declined at a yearly rate of 0.5%.¹⁰

The best explanation of this phenomenon was developed by Maia Gomes (1987) and Cavalcanti de Albuquerque and Maia Gomes (1996). In the former article Maia Gomes concentrated on the importance of the service sector in the Northeast. He noted that in this sector the Northeast's growth was notably greater than that of the country[.] 8.4% per year in the years 1980-86 versus 3.1% per year for the country as a whole. Furthermore, while in the crisis years 1980-83 employment in the country's formal sector declined, it increased in public administration, and this was most pronounced in the Northeast. This is clearly shown in Table 2, which explains why overall employment growth in that region was positive during the period. Also, in the Northeastern urban sector, only manufacturing and commerce declined in the period: -21% and -0.5% respectively. The negative growth of the former is explained by the fact that the Northeast's industry was established as a tightly integrated unit of the national industrial structure. Thus, a large proportion of Northeastern industrial products were sold outside the region, and the decline of the national market for industrial products therefore had a negative impact on both Northeastern industry and commerce.

The conclusion one reaches is that the Northeast performed better than the rest of the country due to compensatory investments by the government and state enterprises. Maia Gomes found that in 1980-83 public sector investments decreased by 0.7% for the country as a whole, whereas they increased by 21.4% in the Northeast; private investment declined by 29.4% in the country, but by only 9.2% in the Northeast. Thus, although overall investment in the country dropped by 27.8%, it increased by 4.7% in the Northeast. The share of the public sector in total investments in the Northeast was 45.3% in 1980, rising to 52.5% in 1983. The problem with these trends was that increased public employment and investments in the Northeast did little to increase the region's productive capacity and only increased its dependence on transfers from the rest of the country.¹¹

The asymmetry of fiscal policies between regions which manifested itself in the early 1980s appeared again in the late 1980s, but this time to the disadvantage of the Northeast. In the late 1980s and early 1990s there was a notable decline of government investment in capital

¹⁰ Cavalcanti de Albuquerque and Maia Gomes (1996, p.156).

¹¹ Maia Gomes (1987, p. 40-41).

formation in the Northeast: the yearly growth rate of such capital formation declined from 3.1% in the period 1980-90 to –9.9% in the period 1990-93.¹² Thus, the greater dependence of the Northeastern economy on government expenditures, compared to the rest of the country, has made the region quite vulnerable to downturns in government spending, either for investment or for assistential transfer purposes. Thus, one reaches the conclusion that in the 20th century the Northeast was never able to develop permanent endogenous sources of economic growth.

4 The Northeast in an increasingly open economy

At the beginning of the 1990s, Brazil began to liberalize its economy. The average import tariff declined from 41% in 1989 to 14.2% in 1994. There resulted a dramatic rise of imports from US\$ 18.3 billion in 1989 to US\$ 33.1 billion in 1994 and US\$ 53.3 billion in 1996. At the same time, Brazil loosened its control of the activities of foreign capital in the country and through the privatization process initiated in 1990 allowed foreign investors to participate in sectors from which they had been excluded for a long time, especially public utilities. Direct foreign investment rose from US\$ 510 million in 1990 to US\$ 1.3 billion in 1992, US\$ 2.4 billion in 1994, US\$ 4.7 billion in 1995, US\$ 9.6 billion in 1996; they were expected to reach over US\$ 16 billion in 1997

Much of this direct investment represented investments by multinationals in such key industries as transport equipment. Many which were already located in Brazil expanded their facilities, while other firms set up production facilities in the country for the first time. Besides wanting to participate in a growing and stable Brazilian market, companies wanted to use of Brazil as an export platform for the regional common market, Mercosul, and for the rest of the world. Since the mid-1990s, as Brazil's privatization program began to accelerate and includeed the sale of public utilities, there has been a growing participation of foreign groups in the program. This was also represented in the large influx of foreign investment.

What is the likely impact of these events – the opening of the economy to trade and investments, and the privatization process – on the regional distribution of economic activities? Let us first consider their possible negative and positive impact.

¹² SUDENE/DPO/ Contas Regionais.

Negative Regional Impact. Left to market forces, the allocation of resources will probably favor the Southeast and South of Brazil. This is due not only to the higher per capita income of these regions, but also due to the importance of the trade strategy of the country, emphasizing the growing Mercosul region and the adaptation of the country to the process of globalization. By 1996 Mercosul countries' share of Brazil's total exports had reached 15.3%, while the share of the Northeast in these exports was about 7%; and 68% of the Northeast's exports to Mercosul came from the state of Bahia.¹³ As a large proportion of exports to Mercosul consisted of manufactured products, and the Northeast's exports consisted mainly of primary and semi-manufactured products based on local raw materials, its future share of this dynamic market looked weak.

Given these trends, there will be a natural tendency for multinationals to locate their investments in the Center-South and South, which are regions closer to the Mercosul markets and which have better infrastructure facilities and skilled labor. This, in turn, will place pressure on the government to increase infrastructure investments in these regions, which, given resource constraints, will make it difficult for less developed regions like the Northeast.

Simulation exercises based on the structure of the Brazilian economy in the mid-1980s reveal that the Northeast will be at a disadvantage in a more open economy. This is shown in Table 10. Assuming a 25% across-the-board tariff reduction, the Northeast will feel a negative impact in both employment and output, *ceteris paribus*. This is revealed in either a decline in the Northeast, with a gain in the Center-South and Brazil as a whole, in such sectors as steel, electrical equipment; or a larger decline in the Northeast than in the Center South (such as chemicals and pharmaceuticals), or a smaller growth in the Northeast than in the Center-South. These calculations assume no counter measures, such as tax incentives.

The 1988 Constitution had a two-fold regional impact. First, it included an automatic transfer of federal tax receipts to the poor regions of the country. That is, 3% of all federal receipts were to be handed over to the states of the Northeast, Center-West and North through their financial institutions in order to strengthen the productive sector. Secondly, the constitution obliged the central government to transfer 21.5% of its tax receipts to the states and 22.5% to municipalities.¹⁴ The degree to which the latter two imply a regional redistribution depends on

¹³ Data from: SUDENE, Boletim Conjuntural, Agosto 1996; and Boletim do Banco Central do Brasil, Relatorio_1996.

¹⁴ Republica Federative do Brasil, 1988, Constituição, Artigo 159.

what basis funds are distributed between states. If it were done according to the proportion of the population in each region, the Northeast would gain much more than if it were distributed according to each region's share in the GDP.

Table 4, which shows the share of each region in the central government's receipts and expenditures, reveals that the budgetary system favors the Northeast, which consistently has had a larger share of government expenditures than receipts. It will be noted, however, that the share differences declined from 1970 to early 1991. By 1992, however, they were larger than ever before, which may possibly be due to the effects of the 1988 Constitution.

Events since the introduction of the Plano Real and the crisis of 1997, which in November of that year resulted in the elimination of many fiscal incentive programs, will diminish this regional redistributive mechanism.

Possible Positive Trends. A combination of circumstances – the opening-up of the economy, the interregional communications network which has been built up since the 1960s, and fiscal decentralization -could possibly result in an flow of investments to the Northeast. The opening of the economy has resulted in a massive inflow of consumer goods (especially textiles and footwear) from Asian countries with substantially lower costs (especially labor costs). There were pressures on the Brazilian government to control these imports (under the justification of alleged dumping practices and/or the "illegality" of paying slave wages in such countries as China).

A more interesting development was the move of a number of firms in the textile and footwear industries to the Northeast, attracted, in part, by the lower wages existing in the region and various types of fiscal incentives. This resembled the movement observed in the United States since the 1950s, when the textile and related industries moved from the Northeast and Midwest to Southern states, where wages were lower (because of the lack of labor unions) and states were willing to offer various types of attractive fiscal incentives.

5 Structural weaknesses of the Northeastern economy

A basic structural weakness of Brazil's Northeast (and other peripheral regions, like the North) is the fact that its internal regional linkages are much weaker than those of the Center-South. This will be noted in Table 11. In the Center-South, the high share of sales to intermediate production within the region suggest a high degree of intra-regional linkages, which might generate potentially high internal multipliers. The lower values for the Northeast suggest a less integrated regional structure. The share of total extra-regional sales (intermediate, capital

creation and household) reflects the degree of interregional dependency of each region, from the point of view of demand from other regions: as can be seen, the values show a much higher degree of dependence for the Northeast (12.4%) than for the Center-South (3.7%).

An interregional dependency pattern also appears in the use of inputs from intra-regional and extra-regional sources. As can be seen in Table 11, 88.6% of total intermediate input used by industries in the Center-South is provided by regional industries and only 3.6% comes from the rest of the country; while in the Northeast slightly less than 80% come of intermediate inputs used by Northeastern industries come from the region and 18.5% come from other regions. Finally, the Center-South purchases a relatively small share of its household consumption and total consumption from outside the region (3.3 and 3.1% respectively), while the Northeast purchases 21.9% and 16.7% respectively from outside the region.

The greater degree of self-sufficiency of the Center-South can also be perceived in Table 12, which shows the direct and indirect effects of a unit change in final demand in each region net of the initial injection, i.e., the output multiplier effect net of the initial change. The entries are shown in percentage terms, providing insights into the degree of dependence of each region on the other regions. The Center-South is by far the most self-sufficient region; the flow-on effects from a unit change in sectoral final demand are in excess of 93%. For the Northeast, there is a lower degree of intra-regional self-sufficiency, and the dominant interregional flows generated by the region usually end up in the Center-South.

The greater degree of self-sufficiency of the Center-South region means that under present structural conditions there will be little impact on the Northeast from increased amounts of economic activities in the Center-South which may result from a more open economy subject to market forces, with a continuously smaller amount of government programs to redress regional inequities. One thus comes to the conclusion that regional equity can only be achieved by going beyond market forces.

6 The market, the state and regional equity

The evidence presented in our analysis leads us to the conclusion that, *ceteris paribus*, the opening of Brazil's economy, the retreat of the state and the full play of market forces favors the more developed region of the country. In other words, the trickle-down effects generated by market forces are still very unlikely to overtake the polarization effects from the Center-South. If regional equity is part of the country's development agenda, an active regional policy by the central government is needed in order to reduce regional economic disparities.

An examination of other countries' experiences lends credence to our interpretation of Brazil's experience. In most advanced industrial countries the unfettered forces of the market have mostly resulted in regional imbalances and it was left to the state, in one form or another, to attempt to achieve some equity in the development of various regions. Let us look at a few examples.

The United States. After the Civil War, the U.S. economy experienced many decades of rapid industrialization. Most of the industrial growth was at first located in the Northeast, gradually spreading to the Midwest. The South, however, remained an economically stagnant area, relatively unaffected by the industrialization process. The thrust towards a more equitable distribution of economic activities came through governmental action. The well-known TVA (Tennessee Valley Authority) project was an attempt to stimulate both agricultural and industrial activities through a government-owned investment project – a series of dams designed to regulate the rivers of the region and thus stimulate agriculture, and the provision of cheap electricity to both rural areas and the cities of the region. After World War II, the South gained a large proportion of defense contracts, which was the result of the influence of Southern politicians, who had gained substantial power through perennial re-election. Similarly, the location of the space programs in Alabama and Houston (Texas) was also the result of political lobbying. Also, the combination of the construction of the inter-state highway system, which substantially reduced interregional transportation costs, together with the politically-influenced reduced level of union activities in the South, made the lower-wages of the region attractive to many industries. Finally, the Southern states increasingly used tax incentives to attract domestic and foreign investments. With fewer commitments than Northern and Midwestern states towards educational and other social expenditures, these states were in a more fiscally competitive situation to attract investments.¹⁵

The combination of these factors resulted in a rapid industrialization of the South. It is important to note that it was the actions of the state (both in terms of direct expenditures and fiscal incentives) which was responsible for decreasing the regional disparities in the U.S.

Germany. The reunification of Germany automatically resulted in a regional problem, the West part being one of the world's richest regions, and the Eastern states (Länder), which formerly

¹⁵ There exists a vast literature on the topic. See, for instance: Wright (1986,,p. 257 - 264).

made up the German Democratic Republic, being a second-rate industrial region. It was the state which had to step in to carry out a policy leading to greater regional equity. The government invested huge sums (mostly raised by a special tax in Western Germany) to rebuild the delapidated regional infrastructure. A major economic mistake was made, however, in rapidly allowing wages of the Eastern states to rise to the level of the West without a compensatory rise in Eastern labor productivity. The latter lagged dramatically behind the West. The net result has been a rapid improvement in infrastructure, but with labor costs being totally out of line with productivity, there has been relatively little private investment in the Eastern states, resulting in very high levels of unemployment. Once again, it was the state which had to step in to build up the necessary infrastructure to set the stage for more regional equity. However, it was also the state that established a wage policy, which was incompatible with greater private investment equity.¹⁶

Italy. Ever since the unification of Italy there has been a geographic duality in its economy, the North industrializing at a rapid pace, while the south has lagged behind. Although market forces resulted in a huge migration from the South to the North, this did very little to establish a greater equality between the two regions. As a result of political pressures, the Cassa Per II Mezzogiorno was established by the government to try to help redress the imbalance. State companies were made to locate some of their operations in the South. The net results were disappointing, as the state enterprises located in the backward region were inefficient and had little forward or backward linkage impacts within the region.

7 Conclusion

In a 1995 study of the macroeconomic evolution of the Northeast of Brazil, Maia Gomes and Vergolino showed the fundamental importance of the state in maintaining some degree of regional equity between the Northeast and the Southeast. They found that employment in the public sector as a proportion of total formal employment in the late 1980s was about 36% in the Northeast, compared to a little over 21% in the country as a whole; and that the state and its enterprises accounted for about half of investments in the region, and that considering that a large proportion of *private* investment in the region was made with public resources which were lent at subsidized rates by public development banks, it becomes evident that a retreat of the state in the Northeast could have severe negative repercussions on the region's development.¹⁷

¹⁶ For more details, see: Heimsoeth (1996); Holthus (1996); Krüsselberg (1994).

¹⁷ Maia Gomes and Vergolino (1995, p. 62-64).

As we have seen, the regional policies of the Federal Government consisted of isolated subsidies and industrial incentives to growth centers. In the context of the fiscal adjustment process of the mid-1990s, the role of the central government directly stimulating productive activities and enhancing social overhead capital in lagging regions is being neglected. In the Real stabilization plan, introduced in mid-1994, there was no explicit concern about the formulation of a regional development policy. The plan was conceived as a stabilization plan, which included economic reforms (privatization, deregulation) and institutional reforms (tax system, social security and administrative), without proposing any strategy for medium and long-term development. However, with the benefits from stabilization and other reforms, a new cycle of private investments emerged. Most of these were concentrated in the South and Southeast, which provided a full range of non-traditional (e.g., technical skills and urban agglomeration) and traditional (e.g. friction of distance – MERCOSUL) locational factors to attract incoming capital. The lack of investment by the Federal Government which would complement the spurt of private investment led regional governments to engage in strong competition for private capital through fiscal mechanisms. In some cases, political pressures by the representatives of the backward regions produced elements of compensatory regional policies, as was the case of the special automotive regime promoted by the Federal Government for the less developed regions, which resulted in plans for transportation equipment investment in the Northeast. However, with the Asian crisis of the second half of 1997. there were doubts that these would be carried out.¹⁸ In fact, the austerity program to deal with the Asian crisis, introduced in late 1997, cut the regional tax incentive program in half. This again revealed that regional equity is frequently sacrificed to resolve general macroeconomic problems.

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¹⁸ Among the announced investment intentions of transnational automobile firms in 1997, one Korean firm was planning to invest over US\$ 1 billion in an assembly plant to be located in the Northeastern state of Bahia. However, given the Asian crisis of that year, there was doubt whether this would be carried out.

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	Northeast	Brazil
1950-60		
1960-70	3.5	6.1
1970-80	8.7	8.6
1980-1990	3.3	1.6
1990-1995	2.6	2.7

Table 1Average Yearly Real Rate of Growth of GDP

Source: SUDENE, Boletim Conjuntural. Agosto 1996, p. 384.

17.3

13.3

12.6

	Sectoral Shares	Table 2 s in GDP: Brazi	l and Northeast	
		Brazil		
	Agriculture	Industry	Services	Total
1960	19.2	32.6	48.2	100.0
1970	11.6	35.8	52.6	100.0
1980	10.2	41.0	48.8	100.0
1990	9.3	34.2	56.5	100.0
1995	12.3	32.0	55.7	100.0
		Northeast		
	Agriculture	Industry	Services	Total
1960	30.5	22.1	47.4	100.0
19 70	21.0	27.4	51.6	100.0

29.3

28.5

23.8

53.4

58.2

63.6

100.0

100.0

100.0

Source: same as Table 1, p. 386-7.

1980

1990

1995

Table 3
a) Share of Northeast in GDP of Brazil and Per Capita Northeast
GDP as Percent of National Average

	Share in GDP	Per Capita Northeast GDP as % of National Average
1960	13.2	41.8
1970	12.3	40.9
1980	13.1	44.8
1990	13.6	59.1
1995	13.4	55.2

a) Share of Northeast in Industrial Product

1949	9.4	
1959	8.3	
1970	7.0	
1985	12.1	
 1994	7.9	

Source: Same as Table 1, p. 374-75.

Table 4
a) Regional Shares of Central Government Receipts

	1970	1975	1980	1985	1991	1992
North	1.4	1.5	1.7	2.2	2.3	2.1
Northeast	10.0	8.2	7.2	8.3	9.9	9.3
Southeast	74.8	75.2	74.5	72.0	62.4	58.2
South	11.3	10.3	7.9	9.6	12.7	12.6
Center-West	2.5	4.8	8.7	7.9	12.7	17.8
Total	100.0	100.0	100.0	100.0	100.0	100.0

	1970	1975	1980	1985	1991	1992
North	3.2	2.5	3.0	3.5	3.6	5.0
Northeast	13.4	10.9	10.3	10.4	11.2	14.7
Southeast	64.6	67.9	66.2	63.9	54.3	63.5
South	10.5	8.8	8.5	9.5	11.2	9.1
Center-West	8.3	9.9	12.0	12.7	19.7	7.7
Total	100.0	100.0	100.0	100.0	100.0	100.0

b) Regional Shares of Central Government Expenditures

Source: same as Table 1, p. 397 and 400.

Table 5Interregional Flows by Regions, 1985*(in Cr\$ 1,000,000,000)

	Northeast	Center-South
1. Interregional trade		
balance	-13,071	15,088
2. International trade		
balance	4,383	56,573
3. Government current account balance	13,651	-117,273
4. Government capital account balance	16,874	80,470
5. Allocation of government resources		
(3+4) 6. Private Capital Flows	30,525	-36,803
(1+2+5)	21,873	34,898

* Since we did not include the Northern region of Brazil, the data presented here do not show the entire balance of interregional flows.

Source: Rolim et alii (1996).

	Brazil	Northeast	Northeast/Brazil
1980	20.1	2.3	11.4
1985	25.6	2.5	9.8
1990	31.4	3.0	9.5
1995	46.5	4.2	9.0
1996			

Table 6 Total Exports of Brazil and Northeast (billions of US\$)

Source: same as Table 1, p. 221.

Table 7a) Brazil: Commodity Composition of Exports

	Basic Products	Semi-Manufactures	Manufactures	Other	Total
1980	42.2	11.4	44,8	1.6	100.0
1985	33.2	10.9	55.1	0.8	100.0
1990	27.7	16.2	54.8	1.3	100.0
1995	23.7	19.6	55.5	1.2	100.0

b) Northeast: Commodity Composition of Exports

	Basic Products	Semi-Manufactures	Manufactures	Other	Total
1980	54.3	21.5	23.7	0.5	100.0
1985	32.8	20.6	46.0	0.6	100.0
1 99 0	24.7	30.0	44.9	0.4	100.0
1995	21.0	35.4	42.9	0.7	100.0

Source: same as Table 1, p. 227-228.

Table 8						
a) Brazilian and Northeastern Exports to Mercosul						
(millions of US\$)						

	Brazil	NE	Brazil	NE	Brazil	NE	Brazil	NE
1980	1,091.5	43.7		3.0		6.4		53.1
1985	548.2	64.3		4.7		7.3		76.3
1990	639.0	73.5	379.0	11.3	295.0	11.7	1,313.0	96.5
1995	4,041.0	349.3	1,301.0	41.4	812.0	30.1	6154.0	420.8

Source: same as Table 1, p. 275; Banco Central do Brasil, Boletim.

b) Brazilian and Northeastern Imports from Mercosul (millions of US\$)

	Brazil	NE	Brazil	NE	Brazil	NE	Brazil	NE
1980	840.7	58.4		1.2		0.8		60.4
1985	493.2	31.1				1.8		32.9
1990	1,412.0	192.2	330.0	25.0	585.0	29.7	2,327.0	246.9
1995	5,588.0	447.1	515.0	3.5	737.0	27.5	6,840.0	478.1

Source: same as Table 1, p. 280; Banco Central do Brasil, Boletim.

Table 9 a) Destinations of Sales of Total Output (1985) (Percent) Northeast

Interme	ediate	Investi	nents	House	hold	Exports	Gover	nment
Regio-	Rest of	Regio-	Rest of	Regio-	Rest of	Ex-	Regio-	Federal
nal	Brazil	nal	Brazil	nal	Brazil	ports	nal	
37.6	8.2	11.3	0.2	26.4	4.0	4.5	5.4	2.4

Center South

Interme	ediate	Investi	ments	House	ehold	Exports	Gove	mment
Regio-	Rest of	Regio-	Rest of	Regio-	Rest of	Ex-	Regio-	Rest of
nal	Brazil	nal	Brazil	nal	Brazil	ports	nal	Brazil
49.7	2.0	8.4	1.8	24.5	1.5	6.9	3.2	3.8

		Nort	heast		
Inte	ermediate Go	ods		Investments	
Regional	Rest of Brazil	Rest of the World	Regional	Rest of Brazil	Rest of the World
79.9	18.5	1.6	93.8	6.0	0.2
Inte	rmediate Goo	ods		Investments	
Regional	Rest of Brazil	Rest of the World	Regional	Rest of Brazil	Rest of the World
88.6	3.6	7.8	94.8	1.6	3.6

Selected Sectors		1	Employmer	nt		Output			
		NE	CS	Brazil	NE	CS	Brazil		
Steel	SR	0.935	0.709	0.716	0.435	0.360	0.362		
	LR	-0.801	0.157	0.125	-0.683	0.293	0.258		
Machinery	SR	0.075	0.071	0.071	0.062	0.061	0.061		
	LR	-0.600	0.153	0.131	-0.578	0.195	0.171		
Electric Equipment	SR	-0.064	0.053	0.055	-0.065	0.045	0.047		
	LR	-0.453	0.207	0.194	-0.477	0.243	0.226		
Electronic Equipment	SR	-0.142	-0.012	0.014	-0.008	-0.008	0.010		
	LR	-0.646	-0.009	0.038	-0.560	0.118	0.163		
Transportation Equipment	SR	0.295	0.565	0.560	0.210	0.339	0.336		
	LR	-0.240	0.262	0.253	-0.257	0.371	0.361		
Wood Products and Furniture	SR	0.042	0.169	0.180	0.035	0.137	0.149		
	LR	-0.513	0.284	0.178	-0.497	0.335	0.231		
Paper Products and Printing	SR	0.091	0.282	0.282	0.042	0.157	0.157		
	LR	-0.772	0.096	0.046	-0.632	0.264	0.211		
Chemicals	SR	-0.640	-0.239	-0.284	-0.433	-0.183	-0.214		
	LR	-1.207	-0.205	-0.314	-1.054	-0.084	-0.201		
Petroleum Refining	SR	0.008	-0.011	-0.008	0.004	-0.006	-0.005		
	LR	-1.087	-0.195	-0.318	-0.884	0.024	-0.117		
Pharmaceuticals and Veterinary	SR	-0.858	-0.321	-0.342	-0.668	-0.274	-0.292		
	LR	-1.571	-0.225	-0.272	-1.426	-0.150	-0.199		
Textiles	SR	0.169	0.262	0.248	0.088	0.158	0.147		
	LR	-1.052	0.135	0.005	-0.867	0.262	0.123		
Clothing	SR	0.077	0.202	0.190	-0.761	0.337	0.123		
5	LR	-0.846	0.249	0.143	0.319	0.458	0.236		
Footwear	SR	0.544	0.632	0.629	0.319	0.458	0.452		
	LR	-0.609	0.343	0.305	-0.558	0.394	0.348		

Note: NE = Northeast; CS = Center-South (includes South, Southeast, and Center-West, except the State of Mato Grosso); SR = short-run; LR = long-run.

* The results were generated in comparative-static simulations using an interregional CGE model for the Brazilian economy (see Haddad, 1997). The figures refer to the percentage change in employment and output, showing how these variables would be affected, in the short-run and long-run, by the tariff-cut alone.

Table 11						
Sales, Cost, and Consumption Structure						
(%)						
Center-South						

Sales	Regional	Rest of Brazil	Rest of World	Regional	Rest of Brazil	Rest of World
Intermed-iate Pds.	49.4	2.0		37.6	8.2	
Capital Creation	8.4	0.2		11.3	0.2	
House-hold	24.5	1.5		26.4	4.0	
Cost Structure: Purchases						
Intermediate	88.6	3.6	7.8	79.9	18.5	1.6
Capital Creation	94.8	1.6	3.6	93.8	6.0	0.2
House-hold Consumption	94.8	3.3	1.9	77.7	21.9	0.4
Total Consumption	91.6	3.1	5.3	82.4	16.7	0.9

Source: Haddad (1997).

Table 12a) Regional Percentage Distribution of Output Multiplier EffectsNet of the Initial Injection: Brazil, 1985

	Northeast	Center-South
Intra-regional Effects	65.7%	93.7%
Interregional Effects	34.3%	6.3%

Note: Calculations from the interregional input-output table developed by Haddad (1997).

