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Authors

Goldsmith, William W.

Wilson, Robert

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William W. Goldsmith
Professor
Department of City and Regional Planning
Cornell University

and

Robert Wilson
Associate Professor
LBJ School of Public Affairs
University of Texas at Austin

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About the authors:

William Goldsmith is a visiting professor in City and Regional Planning at the University of California at Berkeley and he is a professor with the Department of City and Regional Planning at Cornell University. His work in Brazil has been supported by grants from CAPES, the Fulbright program, and the Latin American Studies Program at Cornell. He is particularly grateful for discussions and comments to Pierre Clavel, Assuero Ferreira, Linda Gondim, Porus Olpadwala, and Roger Shrimpton.

Robert Wilson is an associate professor at the LBJ School of Public Affairs at the University of Texas at Austin. He received support from the University Research Institute, a Tinker Travel Grant from the Institute of Latin American Studies, and the Elspeth Rostow Centennial Fellowship. Ms. Anne Hall, a graduate student at the LBJ School, provided excellent research support.

Regional Policy and Distorted Industrialization

in the Brazilian Northeast

by

William W. Goldsmith and Robert Wilson

* * *

"O Nordeste é, na verdade, a face do Brasil em que transparece com brutal nitidez o sofrimento do seu povo."

("The Northeast is, truly, the face of Brazil on which appears, with brutal detail, the suffering of its people.")

Celso Furtado, CEBRAP, December 1981

* * *

Twenty-five years ago Albert Hirschman characterized the Northeast of Brazil as a thoroughly dependent "poor relative" whose good treatment was a "luxury." It was a stagnant place, change to be expected only with substantial regional growth "or when the promotion of such growth has become a matter of paramount national urgency."[1] This view of the severely backward Northeast region with then some 30 million inhabitants, as a partially

[1] Albert O. Hirschman, Journeys Toward Progress, (New York: Norton Library, W.W. Norton and Co., 1973), pp. 59-60.

separate entity in need of decisive national public policy, had merit. But it had at the same time three liabilities: it underestimated the extent to which the region was important to the rest of Brazil's economy; it optimistically overstated the potential for public intervention in a primitive market economy of commerce and barter; and it failed to anticipate that national leaders in pursuit of development would cooperate with regional ruling classes to maintain dependency and backwardness.

In the Northeast we can observe several things at the same time: contrasts in productivity, increasing integration of the region with the nation, urban-rural disparities, a transition from pre-capitalism, and conflicts among ruling classes, workers, peasants, and the middle class. In the face of these things Brazil has developed a program of public intervention that makes the Northeast one of the most important examples of large scale regional planning in the world. Beginning nearly a century ago public agencies have planned water storage and irrigation programs, employed public-works labor gangs, built roads and electric plants, promoted and subsidized industry, encouraged migration, and called for land reform. The state has designed and sometimes implemented a series of far-reaching proposals, capped by the extraordinary industrial investment program of the Superintendency of the the Development of the Northeast, known as SUDENE. Nevertheless, the development of the region's economy is mainly determined by events in the marketplace, manipulated by separate industrialists, landholders, and politicians both from the region and from the more developed centers of Brazil.

Living conditions for most of the people have not improved under these development programs. The programs have been but one element of a complex pattern of social, political and economic development. Workers and citizens have acted individually and in groups to seek higher wages, more (or some) land, better social services, and lower taxes. They would have enjoyed the fruits of progress, but their interests have been overwhelmed by influential elites, corporations, and public agencies working with the ongoing forces of the economy. There is a long history of near-feudal domination, poverty and low productivity. The development of the Northeast, especially in the last 30 years, illustrates both the power of the capitalist logic of growth and the limits on reform. The result is a sort of distorted industrialization that mimics among Brazil's disparate regions a similar process that has taken place among countries.[2]

Like most very large countries, Brazil is extremely complex. Its largest cities are tightly woven in the web of global capitalism, yet backward regions remain enmeshed in a *clientelism* dominated by regional elites. Dozens of cities are ultra-modern, but some landholders in the vast interior still exercise almost baronial power. Brazil has a market economy whose bearings

[2]These "distortions" come about "when the accumulation and expansion of capital cannot find its essential dynamic component inside the system," i.e., within the nation or the region. Fernando Henrique Cardoso and Enzo Faletto, Dependency and Development in Latin America (Berkeley: U.C. Press, 1979).

are set by businessmen seeking profits, yet the government plays a major role. It is by now conventional to rank the public, semi-autonomous corporations first among the three main economic forces (next comes foreign business, and, finally, Brazilian business).[3] During the 20 years of military dictatorship after the 1964 right-wing coup, even as state enterprise thrived, formal democracy was denied Brazilian citizens, and no one today denies that the Army, although sequestered in its barracks, still poses a threat against reform.

There are now about 40 million inhabitants in the Northeast, many living in its three big coastal cities, Salvador, Recife and Fortaleza,[4] each with well over a million people, each tied to the global economy, and each resembling other so-called world cities in form.[5] More than 20 other Northeastern cities have more than 100,000 inhabitants. In contrast, the vast semi-arid interior of the Northeast, subject to severe, prolonged droughts, contains perhaps 20 million isolated rural and town people relegated to positions at the very bottom of modern society, but forming an essential

[3]Peter Evans, Dependent Development: The Alliance of Multinational, State, and Local Capital in Brazil (Princeton: Princeton Univ Press, 1979). For 1980 it is estimated that 29 of the 30 largest business firms in Brazil were among the 250 federal government enterprises. There were then some 700 public business firms, which operated very much as independent, usually profitable, businesses. Thomas J. Trebat, Brazil's State-Owned Enterprises: A Case Study of the State as Entrepreneur (New York: Cambridge Univ. Press, 1983) p.35, cited in Frederick S. Weaver, "Recent Scholarship on Industrial Growth in Latin America," Latin American Research Review 11 (1), 1986, p. 181. Also see Latin American Perspectives VII (1980), special issue: "Brazil: Class Interests and the State."

[4]The metropolitan areas of Recife, Salvador, and Fortaleza in 1980 had populations of 2.4, 1.8, and 1.6 million, and the cities proper had 1.2, 1.5 and 1.3 million, respectively.

[5]See H. Amirahmadi and W. Goldsmith, eds., special issue of Journal of Planning Education and Research (1987).

component of the economy.[6]

Modern economic activity in the Northeast tends to be run from outside, especially by corporations headquartered in São Paulo. Even locally owned or controlled businesses sell goods and buy new machinery almost exclusively in the Center-South. Recently the nine Northeast state governments, dependent on the national purse, which is often empty, have been frequently without resources even to pay salaries. Brasília buys votes by currying the favor of governors of the Northeast, and many Brasília bureaucrats are Northeasterners, but neither the governors nor the bureaucrats have (nor perhaps want) much autonomy in important regional matters. Soldiers and police take their orders from the national command. Regional agencies, including SUDENE, suffer from the usual ambiguities and weaknesses of multi-jurisdictional bodies in federal systems.

What is perhaps most remarkable is that for all these years and regardless of political regime, the traditional oligarchs have maintained considerable power in the Northeast and the social structure has changed so little, even as the economy has evolved and diversified. There has been an evolution of intervention by national authorities which has abetted rapid

[6]"The Brazilian Northeast stands out in the Western Hemisphere as the most extended and populous zone where income per capita is below 100 dollars. The average income of the Northeasterner is less than one-third that of the inhabitant of the Center-South. Since income is far more concentrated in the Northeast, the disparity in living levels of the mass of the population is even greater." Report of Celso Furtado's GTDN (Working Group on the Development of the Northeast), "Uma Politica de Desenvolvimento Economico para o Nordeste," ("A Policy for Economic Development of the Northeast", Rio,1959), p.7, quoted in Hirschman, Journeys, p. 108-9. Things for the majority are little different today. In a special advertising section of the Wall Street Journal, March 21, 1986, the government itself reported that its "social deficit" included 40 million people who live in "a state of absolute misery."

urban growth and even industrialization, with all the trappings of progress. But there has also been striking continuity of regressive politics, an oppressive internal social structure, low productivity, and inequality of income and wealth, all adding up to widespread impoverishment.

Portugal's colonial settlement originally emanated from the port cities of Olinda, now part of Recife, and Salvador. Sugar was grown by slaves on the humid coastal lands, with food crops inter-planted; more food was grown in the intermediate _agreste_ hills, and cattle ranching rapidly spread through the semi-arid interior, called the _sertão_, also to provide meat for the sugar workers and city residents. Each principle coastal city -- Recife, Salvador and, later, Fortaleza -- remained highly isolated from all but its own hinterland until the middle of the 20th century, connected to each other and the rest of Brazil only by coastal shipping routes. Each sub-region had its own enclave economy and government geared to the needs of the export business.

Perhaps the most tangible material obstacle to development was the loss of profits from exports that followed a drastic long-term deterioration in international sugar prices and the establishment of more efficient foreign competitors beginning in the 17th century.[7] Long-fiber cotton had a similar history. First exported to England, cotton expanded slowly but steadily

[7]A long term fall in sugar prices was accompanied by increased competition from other, more modern sugar producers (the price fell from £120 per ton in 1700 to £9 per ton in 1900, and annual exports fell from an average of 30,000 tons in the 17th century, to only 20,000 in the 18th, the combined effect, estimated crudely, being a reduction in annual foreign exchange receipts of 95%). Robert M. Levine, _Pernambuco in the Brazilian Federation, 1889-1937_ (Stanford, CA: Stanford University Press, 1978), P. 29-31.

throughout the 19th century, eventually losing its share of sales to more efficient foreign and national competitors. Much of the growth and decline of all Brazilian regions is a result of boom and bust -- in sugar, cotton, rubber, gold, and coffee. This is hardly surprising. Regional growth and decline are frequently explained in sequences correlated directly with the exploitation of different primary products for export to the world economy.[8] What is unusual in the Brazilian case is the severity of the busts and their longevity. The explanation is found in the patterns of society and economy that dominate the region. These mightily influence the process of regional economic diversification. The ways surpluses are invested, how innovation is undertaken, and the way political life develops are important. Internal changes in structure occur not simply in response to distant demand for regional products, but perhaps even moreso in response to a local, self-contained demand.

Prior to the last 30 years -- during the centuries of sugar and cotton exports -- there was very little internal economic diversification in the Northeast. Profits were not invested creatively, if at all. In the colonial era, the use of surplus from sugar exports for regional economic growth was doubly reduced. Slaves had little or no money to buy things, so the internal

[8] See Douglas North, "Location Theory and Regional Economic Growth," Journal of Political Economy 64 (1956), pp. 160-169. Celso Furtado, Economic Growth of Brazil (Westport, CN: Greenwood, 1984). For a recent assessment of the geographical effect of intervention by the state see Pedro P. Geiger and Fany R. Davidovich, "The Spatial Strategies of the State in the Political-Economic Development of Brazil," in Production, Work, and Territory, eds., Scott and Storper (Boston: Allen and Unwin, 1986), pp. 281-298.

market was very small, and much of the surplus was in any case destined for aristocrats or royalty in Portugal. Even when slavery officially ended, and after colonial exactions to the crown stopped, the picture did not brighten. At a time when profits might have been turned toward an internally generated and organized process of local economic growth, several factors reduced the possibilities for the emergence of a modern industry.

The greatest restraints were the severe social, economic, and racial inequality of the sugar plantation system. The class relations symbolized by big house and slave quarters, a familiar arrangement from Virginia in the north to Rio in the south, left a permanent mark. The social structure patterned after sugar plantations expanded throughout the Northeast via giant cattle and cotton landholdings called <u>latifundia</u>, inhabited by wealthy, almost feudal landholding families and their miserably poor tenants and workers. The poverty of the many led to an emasculated commerce, which left only tiny local markets for basic consumer products; it also discouraged invention and technical innovation, and it geared exports entirely to developments in other countries and, later, to growth in the distant Brazilian cities of Rio de Janeiro and São Paulo. Thus a process of self-sustained and regionally integrated economic growth never took hold in the Northeast. Until World War II, agriculture dominated the economy of the region. As late as 1940 three of every four workers were employed in agriculture.

Brazil as a nation has now joined the ranks of the newly industrialized countries. It has substituted local products for things that were previously imported and has developed internal markets. Its fortunes are constrained by foreign debt and changes in the world economy. But massive regional disparities persist. Although the economy of the Northeast has diversified and even developed some sophistication in its industrial structure, this has produced little change in the political structure of the region and provided few improvements for living standards of the vast majority. A new social contract, to use Lipietz's expression, has not been needed. There has developed no new pattern of agreement yielding to at least some of the aspirations of the region's people, no new form of cooperation for progress involving workers, residents, the state and private business.

The drama of recent industrial change and social stagnation in the Northeast is best displayed in two phases: 1930 through 1960; and the SUDENE era, 1960 through 1985. Study of these periods allows speculation on what may follow from the political transition and economic crises of the late 1980s in Brazil.

I. Early Patterns of Economic Integration: 1930-1960

In the 1930s national conditions began to change that would later effect the Northeast.[9] President (and dictator) Getulio Vargas, whose governments dominated politics from 1930 until after the end of World War II, strengthened the federal government and eliminated inter-state tariffs. This allowed his São Paulo supporters to flood their lower-cost industrial goods over the rest of the country, forming Brazil's first truly national market.[10]

Following the Second World War the Northeast served as a source of funds and rapidly became an important source of labor for the Center-South.[11] Two severe droughts and a scarcity of work drove out some 1.4 million Northeasterners, perhaps a fifth of the region's labor force, with the majority migrating to São Paulo and Rio de Janeiro.[12] In these years the

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[9]Octavio Ianni, Estado e Planejamento Economico no Brasil, 1930-1970 (Rio de Janeiro: Editora Civilização Brasileira, 1971), ch. 2; Caio Prado Junior, Historia Economica do Brasil (Sao Paulo: Brasiliense, 20th ed, 1977), Chap. 26. Ianni, Estado e Planejamento Economico, Chap. II; Thomas E. Skidmore, Politics in Brazil 1930-1964 (New York: Oxford University Press, 1973), Chap. 1.

[10]This is not an argument that Brazilian industrialization began only after 1930, simply that Northeastern integration into the Brazilian industrial economy was extremely limited until then.

[11]Hans W. Singer, Economic Development of Northeast Brazil (New York: United Nations, Report Number Taa/Bra/2), 1956; ; Paul Singer, A Crise do Milagre - Interpretacao Critica da Economia Brasileira (Rio de Janeiro: Editora Paz e Terra, 1976) p. 20. Grupo de Trabalho para o Desenvolvimento do Nordeste (GTDN), Uma Politica de Desenvolvimento Economico para o Nordeste (Rio de Janeiro: Departamento de Imprensa Nacional, 1959), pp. 32-39. Foreign currency earned by Northeast exports was transferred, through the overvalued exchange from 1947 to 1953, to the Center-South and used to import capital goods. Internal Brazilian prices increased more rapidly than the export prices, already made lower by the exchange policy, thereby reducing further the relative purchasing power of the Northeast. This caused about half the potential savings of the Northeast to be transferred to the Center-South between 1948 and 1953. Even though the Center-South absorbed about 75 percent of the exports of the Northeast, a significant quantity of goods was sold on the international market. During this period, around 65 percent of all northeastern imports originated in the Center-South.

[12]Helio A. de Moura, "Nordeste: Migracoes Internais e Desequilibrios Regionais",

Northeast was integrated with the national economy as a source of sugar and cotton, of foreign exchange, and of labor power. These three essential resources -- raw materials, capital and labor -- served mostly the rapidly growing São Paulo economy.[13] Between 1947 and 1953, the annual growth in real net product of the Northeast was only 2.5 percent, while in the Center-South, it was 6.6 percent.[14] The difference in growth of industrial production was even greater: 2.5 percent per year in the Northeast as opposed to 10 percent in the Center-South.[15]

In the mid-1950s the Kubitschek government, with its "Plano de Metas," pursued rapid industrialization through import substitution, opening a new phase of national development.[16] In particular, the government encouraged multinational corporations to form a Brazilian automobile industry by and made sizeable complementary investments in highways, energy and other critical areas. The Northeast received a good share of Kubitschek's public investments.[17]

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presented at the International Geography Union in Recife, Brazil, 1982; Helio A. de Moura, "As Variações Migratorias do Nordeste: 1940-1970," Revista Economia do Nordeste, 4, no. 14 (October/December 1972), p. 33.

[13]Gunner Mrydal identifies a similar effect on the poorer regions of Southern Italy when political unification and the elimination of internal tariffs occurred in the nineteenth century. See Economic Theory and Underdeveloped Regions (New York: Harper and Row, 1971), p. 28. Many analysts and politicians were similarly anxious about the deleterious effects of European economic integration on the poorest sub-national regions, and various protective measures have been legislated.

[14]Roberto Cavalcanti de Albuquerque and Clovis de Vasconcelos Cavalcanti, Desenvolvimento Regional No Brasil (Rio de Janeiro, IPEA/INPES, Serie Estudos para Planejamento, no. 16, 1976), p. 10.

[15]Ibid., p. 10.

[16]Skidmore, Politics, Chap. 5; Ianni, Estado, Chap. 5; Werner Baer, A Industrialização e o Desenvolvimento Economico do Brasil (Rio de Janeiro: Editora Fundação Getulio Vargas, 1975) pp. 55-57.

[17]The paved highways in the Northeast nearly quadrupled from 505 kilometers in 1955

Until the middle of the 1950s, most goods within the region traveled by rail or water. The railroad systems, linking Salvador and Recife with their hinterlands, had been in decline for several decades. Commerce with the rest of the country was still dominated by ocean and river transport. With the "Plano de Metas," a transformation began. By 1960 commerce with the rest of the country by highways had surpassed transport by sea.[18]

Among the numerous effects of the expansion of the highway network, three have particular importance for this study. Construction activity provided a short-term solution to the problem of surplus labor.[19] The new roads increased access from the agricultural interior and from southern farms to the densely populated coast.[20] And the improved network facilitated the sale of manufactured goods from the Center-South, which led to decline in some Northeastern traditional, noncompetitive industries, especially textiles. The interregional division of labor was reinforced and redefined: the Center-South dominated in manufacturing; and peripheral regions, including the Northeast, supplied raw materials and labor and provided places to sell products from the industrial heartland.[21]

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to 1,978 kilometers in 1960. Anuario Estatistico do Brasil, 1956 and 1961.

[18]David E. Goodman and Roberto Cavalcanti de Albuquerque, Incentivos a Industrialização e Desenvolvimento do Nordeste (Rio de Janeiro: IPEA/INPES, Relatorio de Pesquisa, no. 20, 1974), pp., 109-110. In the following years, shipping continued to decline.

[19]Hirschman, Journeys, pp. 68-70.

[20]Bernard Marchand, et al, "Subsidios para o Estudo dos Sistema Urbano do Nordeste: Evolucao de Acessibilidade dos Centros Urbanos entre 1930 e 1974", Revista Brasileira do Geografia, year 38, no. 4 (October/December 1976), pp. 70-105.

[21]Francisco Oliveira, A Economic da Dependencia Imperfeita, 3rd ed., (Rio: Grall, 1980), ch 2. Lucia Cony Faria Cidade, "Peripheral Fordism and Regional Wage Differentials in Brazil," unpubl PhD thesis, Cornell Univ., 1987.

Major investments in the São Francisco Hydroelectric Company, which initiated operations in 1955, quadrupled energy production of the Northeast in its first six years of operation.[22] Proposed in the preceding decade as part of a long tradition of drought relief programs, the SFHC dam at Paulo Afonso was designed to meet electricity needs for the expanding economies of the cities of Recife and Salvador and later Fortaleza.

Other factors also contributed to regional economic expansion coupled with loss of jobs. Foreign exchange rate modifications made exports cheaper and therefore more competitive beginning in 1953, and agriculture responded rapidly to the end of the drought in the same year. Between 1953 and 1961 annual growth in agriculture was a high 5.7 percent. Manufacturing grew even more rapidly, 10 percent annually, led by nonmetallic minerals and chemical products.[23] Services, trade, government and the like (the tertiary sector) grew 8.7 percent annually. In spite of the rapid growth, however, employment in manufacturing decreased net by 26,300 jobs during the decade; in textiles and food products manufacturing it decreased by 40,000 jobs.[24] The growing industries were capital intensive and geographically concentrated, and their employment did not balance declines in traditional industry.[25]

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[22]Hirschman, Journeys, pp. 55-58. Castro, Sete Ensaios, p. 187.

[23]Figures are discounted for inflation. Albuquerque and Cavalcanti, Desenvolvimento Regional, p. 10. George F. Patrick, Desenvolvimento Agrícola do Nordeste (Rio de Janeiro: IPEA/INPES, 1972, ch 3. Goodman and Cavalcanti, Incentivos.

[24]David E. Goodman, "Industrial Development in The Brazilian Northeast; An Interim Assessment of the Tax Credit Scheme of Article 34/18," in Brazil in the Sixties, ed. Riordan Roett (Nashville, TN: Vanderbilt University Press, 1972), p. 250.

[25]Agricultural production and commercialization required support, particularly from banking and transportation. The Bank of Northeast Brazil (BNB), established in 1953 as the first development agency with its headquarters in the Northeast, in Fortaleza,

One factor inhibiting regional economic expansion was further transfer of private savings, in the form of foreign exchange, from the Northeast to the Center-South,[26] compensated in part by federal expenditures for roads, dams and other infrastructure projects, drought relief, and normal governmental operations.

The situation at the end of the 1950s was complex. In 1958 about half of Northeastern manufacture was exported from the region, with refined sugar still constituting a significant part.[27] Textiles and food product firms used only simple techniques to process raw materials. Even nonmetallic minerals and chemical installations, which produced intermediate goods, for use by other businesses, had such extremely weak interindustry linkages that their development stimulated little ancillary activity in the region.

All these changes had major effects on the cities of the region. In 1940, when the Northeast was dominated by agriculture, Recife and Salvador had populations of about 350,000 and 300,000, respectively, and Fortaleza only 180,000. The regional population was less than one-quarter urban. In Recife, 9.9 percent of the total population was employed in (mostly traditional) manufacturing and commerce; it was only 7.1 percent in Salvador, as compared

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was concerned with agricultural credit. Its expansion, from 289 branches in 1955 to 811 in 1965, was partly responsible for an almost three-fold increase in the number of commercial banks. Additionally, the rapid urbanization of the 1950s contributed significantly to the growth of employment in commerce, personal services, and education. Hirschman, Journeys, pp. 91-96. Castro, Sete Ensaios, p. 214.

[26]Baer, Industrializacao, pp. 154-60; Albuquerque and Cavalcanti, Desenvolvimento Regional, pp. 48-50.

[27]Castro, Sete Ensaios, p. 184.

to 16.8 percent in São Paulo, 12.7 percent in the Federal District of Rio de Janeiro and 12.3 percent in Porto Alegre. Most of the changes in the regional economy and virtually all the industrialization were urban-based after 1940.

In all cities, there was an early and rapid growth in urban services, mainly in health and education, a consequence of the social patterns in the rest of the country, expressed through public expenditures that accompanied economic integration. Migration to cities from the sertão was extensive, especially following severe droughts, and near the coast rural out-migration resulted from the proletarianization of farm workers, who lost their rights to the land. This led to urban growth and increases in service employment, much of it unregulated and unlicensed. Finally, it appears that the industrialization promoted an increased hierarchy in the region's urban network of firms, one which is probably underestimated by available statistics, which ignore many small firms, which are often called "informal" or non-capitalist enterprises.[28]

In 1940 and 1950 the small cities had a much larger share of their labor force in manufacturing than did the larger ones, with labor usually working in small-scale, traditional shops to make artisan goods and process food (see Table 1). The decline of employment in manufacturing in the 1950s was severe in smaller cities, as local production was replaced by imports from the

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[28] On small ("informal") firms, see Hubert Schmitz, Manufacturing in the Backyard: Case Studies on Accumulation and Employment in Small-Scale Brazilian Industry (Totowa, N.J.: Allanheld, Osmun, 1982) and a paper presented by Johanna W. Looye, at the ANPEC meetings, Bahia, December, 1987, to be reported more fully in her forthcoming PhD thesis, Cornell University. See also Liana Maria Carleial de Casimiro, "Acumulação Capitalista, Emprego e Crise: um Estudo de Caso," unpubl PhD thesis, Univ of São Paulo, 1985.

Center-South, but the drop in textile employment as a share of the economy was felt everywhere.

Any summary of events over thirty years and for such a large region is bound to be oversimplified. With that caution in mind, we observe that rapid industrial growth in the rest of the country dominated events in the Northeast, and that national (read "principally São Paulo and Rio") industrialists and politicians, following market forces, sought from the Northeast region a supplier of raw materials, funds, and labor as well as a buyer of goods. The federal government eliminated internal tariffs, manipulated foreign exchange policy, and constructed a transportation network, all of which served to tie the Northeast to the rest of the country. Easier shipping, increased migration, and investment funds for the region facilitated the industrialization of the Center-South directly and also indirectly by encouraging sales of Center-South manufactured products in the Northeast, thereby inhibiting growth or actually destroying much regional industry. This is an almost classic case of distorted development, in which economic flows -- of investment funds, intermediate products, savings, etc. -- are channeled through other regions (or nations), re-entering the regional (or national) economy only after transformation by production and politics elsewhere.

As part of its efforts to govern Brazil more directly, the federal government undertook to protect and provide for the rural elite, by providing funds and programs of the anti-drought agencies and the national sugar agency, by maintaining the national police, and by supporting governors' budgets.[29] These dual policies, of integrating and modernizing markets, on the one hand, and maintaining the political structure, on the other, were rather straight-forward, even complimentary in this earlier time, and they remain key to our understanding of the Northeast until today.[30]

Although superficially it may seem so, there really is no paradox: the local and national scenes of power cooperate with and reinforce each other. Local producers have always been dependent on the national government, because of the importance of tariff policy, and in the Northeast especially because sugar producers were barely a third as productive as their British colonial competitors from the 19th century onwards. Local politicians have been just as dependent, mainly on receipts from the municipal tax system, which is arranged and collected by the federal government, and which can make or break local leaders.[31]

But beyond the simple dictates of central power, "In spite of the growing importance of centralization, where some few become really *owners of power*, still there persists the political weight represented locally by the *power of*

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[29]As Bursztyn points out, beginning sometime early this century, then greatly accelerating with Vargas and then the GTDN, the Brazilian state shifted from being *authoritarian by omission* to being *active authoritarian*, whereby they greatly increased their direct intervention in local affairs. Marcel Bursztyn, O Poder Dos Donos: Planejamento e Clientelismo no Nordeste (Petrópolis: Voces, 1944; 2nd ed, 1985) The literature on clientelism is reviewed by Luis Roniger, "Caciquismo and Coronelismo: Contextual Dimensions of Patron Brokerage in Mexico and Brazil," Latin American Research Review 12 (2), 1987, pp. 71-100.

[30]Francisco De Oliveira, Elegia para uma Re(li)gião: Sudene, Nordeste, Planejamento e Conflito de Classes, 3rd ed., Rio: Paz e Terra, 1981,

[31]Bursztyn, Poder, p. 23 The tax system is the Fundo de Participação dos Municípios.

the owners." Measures intended explicitly to benefit small farms instead guaranteed the survival of giant latifundias, and measures intended to modernize agriculture have preserved archaic forms.[32]

At the beginning of the 20th century, timid measures for planned intervention began, but they were quickly seized by powerful local groups, as in the anti-drought agencies, first set up in 1906, and the sugar agency, set up in the 1930s under Vargas. Neither was a transforming mechanism: each preserved the local arrangements of domination, though the sugar agency also transferred the center of sugar power to São Paulo.[33] The enormous concentration of subsidies in the infamous "drought industry" of Brazil knew few bounds. Public funds were used to make water storage and irrigation improvements on private land, or on public land but to benefit giant private livestock holdings. Public wages that provided for bare subsistence enabled labor gangs, called work fronts, to build roads and other facilities for big landlords, often on private land.[34] These payments, by allowing families to stay on the land without starving, restrained out-migration and insured that workers would be available to landlords when the rains returned.

The nature of this "cooperation" between locality and national center may

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[32]Bursztyn, Poder, quoted from p. 12.

[33]Bursztyn, Poder, p. 23

[34]One example: although DNOCS had dammed up 6.7 billion cubic meters of water by the 1957 drought, bureaucrats' avoidance of conflicts with landholding elites meant that only 1.000 downstream hectares were then irrigated in the entire Northeast. (See Peter H. May, "Northeast Brazilian Water Development," Report fort the Ford Foundation, December, 1986 p. 6) On concentration of landholdings, misdirection of subsidies, and related matters see Hirschman, Journeys,, Bursztyn, Poder, and William S. Saint and William W. Goldsmith, "Cropping Systems, Structural Change and Rural-Urban Migration in Brazil," World Development 8 (1980), pp. 259-272.

be explained by centuries of association during which conflicts were worked out in very particular ways. The vast Brazilian colonial territory was ungovernable by Portuguese agencies, so power was ceded to local landlords. When the economic center shifted from the Northeast to Minas Gerais and the capital to from Bahía to Rio, attempts to centralize control were successfully resisted by these landlords, and a deal was made that gave rise to coronelismo, a local system of governance in which very little formal law is exercised, if any at all, and power resides in the person, family, and network of the giant landholders. The presence of coronelismo "in the political life of the country goes beyond the colonial period, the Empire, and, in spite of the apparent golpe delivered by the Revolution of 1930, persists until our day. We find, side by side, throughout the political history of Brazil, the centralizing state and the local *caciques*."[35] The first is authoritarian-paternalist; so is the second, with a form of patriarchy, focused on the family of the "man of the lands."[36] "The generation of public goods is considered to be a favor to particular groups, rather than being treated as rights owed to the society from whose consent the government's legitimacy derives."[37]

This pattern of social relations provided the mold into which external stimuli for economic growth were poured. Local markets stayed highly

[35]Bursztyn, Poder, p. 20. Bursztyn claims that this central-local deal held the Portuguese territories together, in contrast to Hispanic America.
[36]Bursztyn, Poder, p. 20
[37]P. May, "Water," p. 4

restricted. Most workers and their agricultural and industrial enterprises stayed unproductive.[38] The regional economy remained stagnant. Going into 1960, the Northeast of Brazil, in many respects, was hardly different from its 200 year old reflection. Small seeds of industrialization had been planted, but there was a preponderant, impoverished, and unproductive agriculture. In spite of revolutionary stirrings and numerous grass-roots attempts at reform, there was little realistic hope for change.

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[38]Assuero Ferreira, "O Erro É o Fetichismo das Secas," Jornal do Brasil, 27 Nov 1983, and "Migraçoes Internas no Ceará - a Aventura da Sobrevivéncia," CAEN *informe Economico*, Fortaleza, Nov, 1983.

II. Distorted Industrialization: 1960 to the Present

Industrial and urban change have progressed rapidly in the last 25 years. To fully understand the context of this change, we need briefly to consider two topics: agriculture and the income distribution.[39] In spite of quite different rates of growth for subperiods, from 1960 to 1980 agriculture grew substantially (see Table 2), even though traditional production techniques were maintained throughout.[40] This is consistent with the overwhelming poverty of the interior and the highly unequal land tenure pattern, both of which are major impediments to productivity increases and to improvements in the income distribution.[41]

For example, land ownership even today remains greatly skewed. Nearly three-quarters of the agricultural land in 1980 was owned by rich farmers, who constituted only 6.2 percent of the owners. The poorest farmers, some 60 percent, had an average farm size of only 7 acres.[42] In 1972, the bottom third of the farmers taken together held only 1.8 percent of the land. The

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[39]A well-known study of the agricultural structure in the Northeast of Brazil is Manoel Correia de Andrade, The Land and People of Northeast Brazil (Alburquerque, NM, Univ of New Mexico Press, 1980), original A Terra O Homen no Nordeste (Sao Paulo: Brasiliense, 1963); see also Manuel Figueroa, O Problema Agrario no Nordeste do Brasil (Sao Paulo: Hucitec Ltda, 1977); Patrick, Desenvolvimento Agricola; Francisco Sa Junior, "O Desenvolvimento da Agricultura Nordestina e a Funcao das Atividades de Subsistencia," Estudos CEBRAP 1, January 1973, pp. 87-147; David E. Goodman, "Estrutura Rural, Excendente Agricola e Modos de Producao no Nordeste Brasileiro," Pesquisa e Planejamento Economico 6, no. 2 (August 1976): 489-534; Levine, Pernambuco, pp. 1-9.

[40]As in earlier years, production levels, even in the decline from 1965 through 1975, correspond to the amount of land in cultivation, which suggests that traditional production techniques were maintained. See Patrick, Desenvolvimento Agricola, Chap. 3; Albuquerque and Cavalcanti, Desenvolvimento Regional, p. 119.

[41]Albuquerque and Cavalcanti, Desenvolvimento Regional, p. 120. On land concentrations see Saint and Goldsmith, "Cropping Systems."

[42]P. May, "Water," p. 3. The figure is 2.7 ha.

bottom four-fifths of the rural population owned only 3 percent.[43] Today there are almost no middle class farmers. Some estimates show the concentration to be growing still worse, as small properties are divided among owners' children and as commercial agriculture -- mostly citrus orchards and cattle ranches -- displaces still more subsistence farmers.[44] Even these statistics underestimate the extent of concentration of wealth in the countryside because they leave out roughly half the population, who are landless, and they ignore concentration among the wealthy. The average rich farmer owns an enormously disproportionate share of land.

Family income and other measures of well-being in the Northeast today are as skewed as land ownership. Brazil as a country is widely known to have a bad income distribution, one of the most unfair in the world, and it is worse in the Northeast. Most economists agree that the 20 years of military rule after the coup in 1964 aggravated an already unequal distribution. In the census of 1980 the bottom 40 percent of the economically active population (10 years and older) received less than a tenth (9.7 percent) of the income. In contrast, the top tenth received about half (48 percent). For the country as a whole, city incomes are -- on average -- more than twice rural incomes, and city distributions are less skewed. Predictably, however, overall Brazilian

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[43] Andrade, Land, p. 38.

[44] Saint and Goldsmith, "Cropping Systems." Small landowners utilize 70-80% of their land for production, whereas those with 200 hectares or more utilize only 14% (Marco Antonio de Almeida Torres, "Estado Nutricional e Aspectos Socioeconomicos de Familias Rurais do Tropico Semi-arido," MS thesis in Nutrition and Public Health at the Federal U. Pernambuco (Recife, 1982)

inequality was due not to this urban-rural difference, but instead to the large inequalities within each city and in the countryside itself.[45]

In the Northeast, the situation is only worse. In 1980, in all nine states fewer than half the workforce earned even the legal minimum wage, often much less. Except for Bahia, Pernambuco and Sergipe, half of the workforce earned less than 75 percent of the minimum. For comparison, median wages in São Paulo and Brasília were two minimums; the national average was 1.6.

No single overall set of measures suffices to describe the situation, but all special studies point in the same direction. As Andrade writes, the Northeast population "is diseased, undernourished, and illiterate."[46] Take food consumption, for example. The modal family in metropolitan Fortaleza (with six members, judged to be equivalent to four adult appetites) needed a little over four minimum wages in 1983 just for the minimum food levels set by federal law 45 years earlier, in 1938. Poor families in the city (those earning up to 3.1 minimum wages) need twice that much money, about nine minimum wages each month, to buy food and other necessities. However, in October 1983 only about 10 percent of the household heads earned this much, leaving 90 percent without minimal support for their families.[47] Because of known variations in living standards -- food, climate, housing, etc. -- such

[45]Rodolfo Hoffman, Revista de Economia Politica 9 (Jan 1983). Helga Hoffman, "Pobreza e Propriedade no Brazil: O Que Esta Mudado?" in A Transicao Incompleta: Brasil desde 1945, vol 2. Guy Pfeffermann and Richard Webb, "Poverty and Income Distribution in Brazil," The Review of Income and Wealth 29, 2 (June 1983), pp. 101-24.

[46]Andrade, Land, p. 192

[47]Statistics are not available for secondary household earners, but it is certain they did not make up the difference.

statistics are not fully reliable and need to be supported by other inquiries, such as surveys.

In 1973, a relatively good year economically, with no drought, food consumption was measured in a comparatively well off county[48] in the sertão in the interior of Ceará. It was found that 60 percent of the population consumed less than half the minimum daily requirement of protein and calories established by the United Nations. At that low level, as is known, such deficiencies cause illness and death for many people.[49] Another survey done in 1983, about five years into an almost total drought, showed that workers on public relief in the interior of Ceará received only a half minimum wage, or 10,000 cruzeiros -- not enough to buy even bread for a family, not to mention other food, water (sold during droughts), rent, transportation, medicine, or other necessities.[50] Work crews began early, about 6 a.m., to avoid the worst heat of the day. Many had to walk long distances to and from work. SUDENE civil engineers, who travelled by truck, sadly described seeing some of the workers, especially those who had to walk long distances, fainting on the job; others, getting home after work and hearing their children begging for food, would break down and cry.

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[48] municipio

[49] John O. Ward and John H. Sanders, "Nutritional Determinants and Migration in the Brazilian Northeast: A Case Study of Rural and Urban Ceará," Economic Development and Cultural Change 29 (1980), pp. 141-163.

[50] At that time a small loaf of bread, a pão of about a half pound (larger than the pãozinho known in the Center-South), cost 50 cruzeiros. For a typical rural family of eight persons, the monthly expenditure for one small loaf for each person each day would have been 12,000 cruzeiros.

Meanwhile, some of the Northeast has been visibly transformed in the last 30 years. In a few coastal cities there is a sometimes thriving domestic and international tourism. There are new downtown office towers, shopping centers, houses for the middle class, and luxury apartment buildings. And there is a small new manufacturing sector including a petro-chemical complex, the giant Carajas minerals project and the resultant processing plants for iron and aluminum in São Luis, Maranhão (not yet in published statistics), and even some modern agriculture. Since about 1960 the Northeast economy has grown considerably. Alongside the impoverishment, this urban, industrial economy and the politics that nurture it need to be examined.

Beginning in the late 1960s, a few spots in the Northeast started to develop as major centers for the manufacture of intermediate products, stimulated or accompanied by the SUDENE industrialization program.[51] The ambitious goal of this regional planning agency, formed in 1961 under the tutelage of economist Celso Furtado, was to restructure the regional economy to break the persistence of poverty through land reform, migration, rapid industrialization, and infrastructure investments.[52] In the end SUDENE's success has been to attract industrial investment, but limited mostly to Salvador and Recife, accelerating the changes that began in the 1950s.[53]

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[51]The Superintendency for Development of the North East. Raimundo Moreira, Una Politica Regional de Industrializacion: El Nordeste Brasileno (Buenos Aires: Ediciones SIAP-Plenteos, 1976), Chap. 5; Goodman and Albuquerque, Incentivos, Chap. 8; Albert O. Hirschman, "Desenvolvimento Industrial no Nordeste Brasileiro e o Mecanismo de Credito Fiscal do Artigo 34/18," Revista Brasileira de Economia, year 21, no. 4 (December 1967), pp. 5-7.

[52]GTDN, Politica See below for discussion of the undermining of SUDENE's pursuit of these objectives.

[53]See Moreira, Politica Regional, chap. 5; Goodman and Albuquerque, Incentivos, chap.

From 1965 to 1970, Northeast manufacturing grew faster than previously, and the regional industrial structure changed considerably (see Tables 2 and 3). Traditional manufacturing continued to decline while other small activities expanded. The leading group of growth sectors (metallurgy, machinery, electrical and transport equipment), which we call the metallurgy group, substantially increased its share in total value added, as did nonmetallic mineral products.[54]

The pattern of SUDENE-supported investments across industries (see Table 4) bears some relation to overall changes in the region, suggesting that SUDENE's effort to diversify the economic base may have had considerable influence.[55] SUDENE statistics are detailed and in spite of their bias toward large and formal establishments, they give a useful general picture. The largest SUDENE investments were in metallurgy and chemicals. Nonmetallic minerals also received a relatively large share, at least during the 1960s.[56] The textile group was also strongly supported by SUDENE modernization investments.

In the four major SUDENE industrial groups and in other projects, too, investments tended to be made in large projects concentrated in very few

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[54]In Leonardo Guimares Neto and Aldemir do Vale Souza, "A Dinamica do Economia e do mercado de Trablaho no Nordeste," Recife, Fundacão Joaquim Nabuco, mimeo, n.d., manufacturing is disaggregated in a different fashion, but with the same conclusion; substantial expansion in intermediate goods production and a relative decline in consumer nondurables. See Table 7.

[55]Or else it anticipated remarkably the market pressures.

[56]Moreira, Politica, p. 141. See Table 9 for a sectoral distribution of SUDENE investments for 1960-78.

places, at least during the 1960s (see Table 5). Of 526 approved projects, the three largest accounted for 12.3 percent, and the 32 largest for 45.2 percent of all subsidies.[57] During the 1960s, projects were concentrated in two states. Bahia received 32.7 percent and Pernambuco, 32.4 percent, of all subsidies,[58] mostly in their capital cities. In Salvador, most investment was in plant and equipment to produce capital goods and intermediate goods, largely in the petrochemical complex there.[59] In Recife, the concentration was in consumer goods. The number three city, Fortaleza, is hardly marked by SUDENE industrialization.[60]

An original goal of SUDENE's policy was the formation of a strong industrial base, using regional raw materials and creating strong linkages of trade and supply among industries in the region. This goal has not been achieved, even in the two centers of growth, Salvador and Recife. About two-thirds of fixed investment in SUDENE projects of the 1960s consisted of imported capital equipment, equally from the Center-South and abroad.[61] The results were not much better for intermediate goods used as industrial inputs -- only half of these originated in the region.[62] The level of imported

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[57]Oliveira, Economia da Dependencia, p. 117. It is unusual to refer to SUDENE "incentives" as subsidies.

[58]Goodman and Albuquerque, Incentivos, p. 284.

[59]The growth of the chemical industry (see Tables 3 and 6) was even more highly concentrated, principally in the Camacari petro-chemical complex in the city of Salvador, but much investment in this sector was evidently not within city boundaries, not surprising given the need for extensive acreage combined with negligible employment needs of the sector.

[60]Liana Maria Carleial de Casimiro, "Seca: Momento para Repensar a Pobreza do Nordeste," Instituto Euvaldo Lodi (IEL/CE), Fortaleza, 1984, 61 pp., "Seca."

[61]Goodman and Albuquerque, Incentivos, p. 247.

[62]Goodman and Albuquerque, Incentivos, p. 309.

intermediate goods in firms producing intermediate goods was even higher, suggesting that interindustry linkages in the "modern" sector of the regional economy were particularly weak.[63]

Although the growth of manufacturing and increases in industrial diversity happened mainly in Recife and Salvador, and somewhat in Fortaleza, the employment declines (mainly in textiles, also in clothing and food products) were most pronounced in smaller cities (see Table 6). There was a spurt of growth in metallurgy especially in the largest cities, supported by SUDENE. During the late 1960s, when the Northeast began production of semi-manufactured goods for export, the relative share of manufacturing employment over-all grew, so that already by 1970 it had surpassed its 1940 level in the big cities, and value-added in textiles had begun a recovery even in medium and small ones.

There has been very little development in small, interior cities even to date. In the Cariri, for example, the three cities in Ceará -- Barbalha, Juazeiro do Norte, and Misão Velha -- have grown and expanded, but the internal structure of their economies remains primitive. Metal-working firms, for example, should develop ideally by producing farm implements, tractors and other tools for agricultural modernization and a plethora of small items for

[63](This is not a direct indicator of weak internal linkages, but it is consistent with the fact that in 1976 imports from the rest of Brazil were 2.3 times greater than exports from the Northeast). This also indicates the continuation of a very large commercial deficit with the rest of the country, although somewhat less than that found a decade earlier. Coordenadoria de Assistencia Técnica aos Estados, da Secretaria de Economia e Financas, "A Balanca Commercial Interestadual, Trienio 74/76," Revista de Financas Publicas, year 38, no. 336 (October-December 1978), p. 11. The earlier figure is for 1968.

consumers in town. A close examination in the mid-1980s, however, shows the complete absence of such development and integration, a total dependence on imported machinery, only tiny increases in productivity, and very little prospect for growth.[64] We suspect this lack of development is typical for the vast majority of interior cities.

At least in theory, SUDENE's promotion of metallurgy,[65] especially in the larger cities, has the potential for a long-lasting effect on the economy, because of the possibility of high interindustry linkages and multiplier effects. Unfortunately, this potential has not been realized in medium sized cities, and not even in Fortaleza, where there are virtually no linkages among the various metallurgy firms. The reasons for lack of integration and semi-autonomous growth are many and complex, but fundamentally they relate to the inability of the region to break with its past, to upset the centuries old pattern of relations between worker and boss, peasant and landlord. There has thus been a failure to create markets through higher wages paid to workers, which is a sine qua non for non-dependent industrial growth. Thus the potential for industrial growth of the Northeast has remained limited, as it has stayed tightly connected to an economy whose main circuits are elsewhere and whose switches are controlled from the outside.

In spite of rapid industrial growth throughout the 1970s, urban unemployment in the Northeast remained widespread.[66] In 1972, unemployment

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[64] Looye

[65] in which we include machinery and electrical and transportation equipment

[66] Leonardo Guimaraes Neto, O Emprego Urbano no Nordeste: Situacao Atual e Evolucao

was estimated to be about 30 percent. In 1978, 55 percent of the urban labor force earned no more than the minimum salary.[67] Just as in the earlier period, the expansion in industrial capacity in the 1970s resulted in some new employment, but there were even larger declines. For one thing, SUDENE subsidies diminished the price of capital relative to labor, possibly encouraging the production of intermediate goods, normally capital intensive, in comparison with consumer goods. As a result, those industries that expanded rapidly generated relatively little employment. On the other hand, the modernization projects, predominantly in textiles, probably reduced employment. While it can be argued that without the SUDENE investments manufacturing employment would have been lower still, it is clear that few net jobs were provided. During this same period, growth of employment in services and other tertiary activities exceeded that of manufacturing, and there was virtual stagnation in agricultural employment.[68]

Although these industrial developments, even with the many limitations we have noted, indicate a real break with the past, this is at most barely the case with the politics of industrialization, where the Northeast has changed

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Recente 1950-1970 (Fortaleza: Ministerio do Interior, Banco do Nordeste do Brasil, 1976), p. 21. In the 1960s and 1970s a steady increase in social services employment occurred in cities of all sizes. The declines in shares of employment in trade, transportation, and communication are likely due to economies of scale and more capital intensive delivery of services such as warehousing and telecommunications, that have been noted in more industrialized countries. In consumer services, conflicting trends are likely to be at work.

[67]Neto and Vale Souza, p. 8.

[68]The limited ability of modern manufacturing to absorb labor in developing countries is certainly not unique to Northeast Brazil. See Hazel Moir, "Relationships between Urbanization Levels and the Industrial Structure of the Labor Force," Economic Development and Cultural Change, vol. 25, No. 1, October, 1979, pp. 123-135.

much less. In the rural areas, although it may be correct to say that the oligarchy has finally been broken, the power of large landholders remains immense. There is evidence of the political assention of a modern, urban "bourgeoisie," e.g., in the election of "progressive" governors in Pernambuco, Ceará and Bahia, but still even in the cities, especially excluding the largest three, the enormous gulf between the tiny middle and upper class, on the one hand, and the proletariat and sub-proletariat, on the other, has been maintained. The lack of a true industrial economy, which would be well-rooted and widely distributed throughout the region, is paralleled by the lack of a responsive politics that would put control of change more in the hands of those most in need.

SUDENE was originally conceived as an agency that would reduce underdevelopment in the Northeast by integrated and planned development of industry, migration to open lands that could be colonized, and agricultural reform, with land and irrigation going to the multitude of small farmers, who would produce cheaper food for themselves and the urban workers. There was to be a raising of the productivity of the region, an eradication of backwardness, and a self-sustained process of internal growth.

There is controversy over the nature of the changes really expected by Celso Furtado and his team, over the degree to which SUDENE would have been free to make changes under the best of circumstances, and over the restraints put on reform by Northeastern reactionaries in the early 1960s.[69] There would seem to be no doubt, however, that after the 1964 military coup, all radical change was off: Furtado himself was arrested in Recife and later spent many years in exile, the orientation of the agency shifted, and grass-roots organizations were suppressed along with formal democracy.[70] All this is well known and has been widely published in Brazil since the liberalization of the mid-1980s.

What is most interesting is how the industrial change was accompanied by programs that maintained or even resurrected conservative power in the region, and how this pattern of change limited the growth of integrated Northeastern markets and maintained the external orientation of the most dynamic parts of the economy, thereby scuttling any impulse for autonomous development. Perhaps the best indication of how change has been tied to stability is revealed in the nature of SUDENE's key mechanism for financing industrial growth, the 34/18 law, now known as FINOR. So-called 34/18 funds, available for investment in SUDENE approved projects, are raised from tax give-backs: corporations or individuals may set aside 50 percent of their federal income tax liability, investing the money themselves or putting it in a loanable fund for investment in the Northeast. There is zero opportunity cost to these legal tax-dodgers.

Especially in light of the fact that investment was moving toward the

[69]Oliveira, Elegia, documents these things in his theoretically seminal analysis of the Northeast economy. Amelia Cohen, SUDENE.

[70]Joseph A. Page, The Revolution that Never Was: Northeast Brazil, 1955-1964 (NY: Grossman, 1972). Andrade, Land, pp. 205-218.

Northeast before 34/18,[71] the new law can be seen as an inducement to wealthy Center-South and multinational capitalists to maintain (or increase) their dominance in the region.[72] In the abstract, FINOR amounts to the equivalent of gigantic government grants from the Treasury to industrialists, in direct proportion to their profits, and thereby amplifies inequality and inhibits forces for reform. These funds are then used to purchase or build Northeast production facilities. Imagine, in contrast, the results of transferring the same funds to community and neighborhood production cooperatives in Northeastern cities, simply as a normal expenditure of tax funds. Nothing of the sort happened, of course, and the actual transfers, and the many agricultural subsidies that accompanied them, worked to inhibit real reform, to slow or stop land expropriation, and to transfer large sums to urban real estate development.

One test of the success of a geographically concentrated industrialization program over the long-term is the extent to which it promotes change elsewhere in the region. Success in mitigating the harsh effects of droughts would be one such indication. Recent history is not encouraging. During the extensive and severe 1979-83 drought, more than three million *flagelados*

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[71] "Even before this extraordinary privilege came into force, industrialization made considerable strides in the Northeast during 1960-61. This development must be credited not only to SUDENE but also to the activities of the Bank of the Northeast and to the promotional efforts of special development agencies which were operating at the state level . . . " Hirschman, *Journeys*, p. 127.

[72] Of the one hundred largest Brazilian firms, twenty-four had SUDENE supported industrial projects in the Northeast by 1970; four were state enterprises, six were of predominately national capital and fourteen were of foreign capital. All twenty-four projects were included in the sixty-seven largest SUDENE projects which, while accounting for only 12.9 percent of the survey of 526 projects, received 59.4 percent of total incentives.

(beaten ones) had to be employed on labor gangs. Paid with public funds, workers constructed and repaired private water works, disproportionately so on large private land holdings.[73] Although it was required by law that members of these "emergency work fronts" be provided access to reservoirs, "in a large number of cases landowners have barred such access, by fencing" and threatening violence. Other discrepancies in the intended policy included hiring of "ghost workers," public relief wages again as low as half the legal minimum, "prohibition against hiring of women, single males, minors or aged persons," and poor construction work causing many small dams to be washed away with the floods of 1984-86.[74] "Clearly, the numerous programs which had been in operation had not had a noticeable effect on the region's resistance to drought,"[75] and they have "principally benefited the large landowner, who has retained *de facto* control over lands and associated water rights even where these were expropriated . . ."[76]

Rural society remains severely stratified. On the top are the patrons -- owners of large properties who can pass on risk and capture benefits. They ranch and harvest mainly cattle and mocó cotton, both of which resist or adapt to drought. On the bottom are tenants, share croppers, and wage laborers, who have virtually no mechanisms of defense against poverty, and whose subsistence

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[73]Bursztyn, *Poder*

[74]D. Pessoa, "Drought in Northeast Brazil: Impact and Government Response," cited in Peter H. May, "Irrigation and/or Agrarian Reform in Northeast Brazil?" prepared for the Economics Department, Funcação Joaquim Nabuco, n.d., mimeo, 29 pp., at pp. 18-19.

[75]P. May, "Irrigation," p. 18.

[76]P. May, "Irrigation."

crops, particularly corn, are highly vulnerable to drought. In the middle are the direct producers and small owners, who may set aside small stores, who have limited reservoirs, and who are vulnerable and rapidly joining the poorest stratum.[77] In 1979, among the registered members of emergency fronts, 18.5 percent were owners of mostly very small properties (up to 250 acres) and 75 percent had no land at all.[78] "Paternalism is so deeply ingrained in Brazilian society that . . . the system that is reproduced remains paternalist and control over resources remains highly concentrated."[79] The situation in the cities is different, but not too much better.

Long-term objectives of national policy toward the Northeast continued throughout this period. The Northeast became further integrated into the national economy as it moved from being supplier of raw materials, funds, and labor, and source of markets, to become supplier of intermediate goods to the Center-South. We can see this redefinition and expansion of the role of the Northeast in the national economy displayed in export/import data between the Northeast and the rest of Brazil. From 1965 to 1968, Northeastern exports to the Center-South trebled while imports increased more than four-fold.[80] With

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[77]Dirceu Pessoa, "Estratificação Social e Vulnerabilidade â Seca," Boletim sobre População, Emprego e Renda na Nordeste Ano II no. 1, Nan/Apr 1983 (Fundação Jaoquim Nabuco)., cited in Casimiro, "Seca,"at p. 42.

[78]Casimiro, "Seca," p. 44.

[79]P. May, "Water," p. 4

[80]The exact figures are 2.95 & 4.19. Coordenadoria de Assistencia Tecnica aos Estados, da Secretaria de Economia e Financas, "A Balanca Commercial Interestadual, Trienio 74/76," Revista de Financas Publicas, year 38, no. 336 (October-December 1978), p. 11.

the Northeastern economy tied to the rest of the country, then regional industry could be promoted to take advantage of especially cheap labor, mainly to benefit the Center-South.[81] Throughout this process, as before, the state kept the rural ruling class on its side, this time through various subsidies to farmers, real estate developers, and industrialists, and, not least of all, through military intervention to stem insurrection before and (indirectly, after) the 1964 coup.[82]

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[81]For an important correlary argument about wage supression in Sao Paulo, see Michael Storper, "Who Benefits from Industrial Decentralization? Social Power in the Labor Market, Income Distribution and Spatial Policy in Brazil," Regional Studies 18 (1984), pp. 143-164 and the debate in Regional Studies.
[82]Page, Revolution.

III. Planning, Public Policy and the Limits of Distorted Development

The transition to a political democracy in Brazil commenced in the mid-1970s under the auspices of the military regime. They focused on import substitution and the internal market; economic growth was seen as a way to retain political legitimacy. An effective export promotion policy, based largely on subsidies, was also adopted. Effective for a period, these policies led in the early 1980s to enormous foreign and domestic debt, high inflation and rising unemployment. When the international debt crisis reduced Brazil's ability to borrow, the military regime was forced to turn to the IMF and its medicine of austerity and economic recession.[83]

After experimenting with the Cruzado Plan of price and wage controls in 1985 and a moratorium on the repayment of its foreign debt, the country finds itself once again in crisis and in conversations with the IMF. Since the dizzying multiplication of foreign debt, following the first oil price hike in 1973, Brazil's exports have grown at an average of 15.3 percent per year.[84] A large share of the exports are high value-added, industrial goods, including the products of a thriving armaments industry. Nevertheless, Brazil has relied principally upon its internal market for growth, exports even today representing only around 12 percent of gross national product. In this

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[83]Werner Baer, "Brazil's Rocky Economic Road to Democracy" in Lawrence Graham and Robert Wilson, eds., The Political Economy of Public Policy in Brazil (forthcoming).
[84]from 1975 to 1985. Benedict J. Clements and J. Scott McClain, "Export Promotion Policy and Export Growth in Brazil," ibid.

respect, Brazil is more like the United States than other export-dependent Third-World countries. Exports are important, but the prospects that they will lead to national economic growth are limited. International bankers have forced Brazil to reduce its export subsidies, but they have been less successful in forcing reduced import barriers. Given the dependence of foreign, national, and state enterprises on internal growth, an export-led development policy is not likely to be adopted, regardless of protestations by the IMF and the international bankers.

To the extent that a so-called free-market export policy is thrust upon Brazil, the prospects for the Northeast are not good. Most of the region's exports are destined for the Center-South and other places in Brazil. Redirecting the country's internal production for sales abroad will not benefit the region to any significant extent, and, worse still, the indirect effect of limiting the domestic economy would be particularly painful for the region. Preliminary evidence suggests that the 1982 recession and austerity program caused malnutrition and infant mortality rates in the Northeast to rise sufficiently to worsen the rates for all Brazil.[85]

The Northeast still lags far behind the industrial core of Brazil. Segments of the regional economy, particularly most of its agriculture, remain dominated by elites who organize in traditional ways and are therefore

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[85]Per Pinstrup Anderson, lecture to Program on International Studies in Planning, Cornell University, fall 1988, and "Macroeconomic Adjustment Policies and Human Nutrition," Food and Nutrition Bul 9, 1 (March 1987), pp 69-86; also Roberto Augusto Becker and Aaron Lechtig, Ministry of Health, "Brasil: Evolucao da Mortalidade Infantil no Periodo 1977-1984," Brasilia: 1986, pp. 23, 33, 39.

exceedingly unproductive and harsh on labor. On the other hand, the Northeast's urban economy has been partially modernized. In both cases the pattern of development has been determined jointly by the evolving role of the region in the nation and by the structure of internal markets and politics in the region itself. The core economy first demanded factors of production from the Northeast -- export earnings, raw materials, and a migrants to perform cheap labor. Later, the core had need for new buyers for its manufactured products. Finally, added to these, it had need for cheap labor in the Northeast itself, working to produce semi-manufactured inputs for core factories.

The Northeast has been able to satisfy these demands and thereby develop unevenly, but in doing so it has undermined its hopes for a more authentic and equitable development. Dramatic changes were brought about by public investments in Northeast infrastructure, particularly energy and roads, and by private investments subsidized by SUDENE. Throughout, however, national leaders cooperated with the regional ruling classes, and the needs of both were satisfied by the maintenance of a dependent, mostly backward Northeast. As others have pointed out, within relatively stable states different regimes can enact reforms with varying intensity. In Brazil, in spite of dramatic changes in governing regime, there has been considerable long-term stability in its fundamentally capitalist state.[86]

[86]James Petras,"Newsletter," Latin American Studies Association, 1988.

For the interests of the nation, the region was re-organized, but still as an appendage to the core of the national economy, directed by capitalists in the Center-South. The Northeast provides a seemingly endless source of subsidy and stability to the core economy, useful not only to provide markets and cheap raw materials and products, but also to keep core wages repressed. In this way, taking a full turn, we can see in Northeastern underdevelopment a major restraint on true development and modernization for all of Brazil. As long as the alternative of cheap wages exists, and demands for higher industrial wages in the growing Center-South can be restrained by the Northeast's army of potential workers, then change in the core will be limited and distorted, too. It will push less hard on the periphery, and it will be less likely therefore to spawn true industrial change in the Northeast itself.

The original SUDENE philosophy called for the formation of a regional industry that would be competitive with the rest of Brazil. This industrial complex did not form. Instead, the most important projects were often just branch plants, subsidiaries of large industrial firms based in the Center-South, or specialized enclave operations, such as the petrochemical plant, and predominantly under the control of foreign capitalists. These projects represent the vanguard of modest decentralization of the national industrial structure, oligopolistic in nature, being imposed on the Northeast. They are highly linked to the core economy centered in the Center-South, but disconnected from the regional economy of the Northeast.

The political mobilization of the early 1980s led many people to believe that more democratic and equitable social and economic policies would be forthcoming. When the military adopted an austerity program, there was greatly increased opposition and rapid political transition toward democracy. It was thought that the large urban lower class would finally be able to bring pressure to bear on the government, that a new, more equitable social contract would be required in order to secure political stability. This has not occurred.[87] Rather, old patterns of political nepotism have re-emerged. The fragmentation of the political opposition, under President Sarney, and the realignment of conservative forces in the Congress, suggest that progressive forces will have limited influence in national politics. Right wing populists have been very effective, especially in halting proposed legislation on land reform. Progressive proposals for the proposed constitution are not surviving.

Although the regime has changed, much has stayed the same and the near future holds little prospect for improvement. Most Northeast politicians will continue to deliver elections and electoral votes in favor of reactionary politics, and the national government will continue to intervene in the region in a way that does not displace its privileged classes. There are no forces on the horizon that suggest economic and social improvement for the great majority of Northeasterners.

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[87]See various papers in Graham and Wilson.

The regional economy is distorted: it is not integrated, does not call forth its own growth, and is highly dependent on signals, demand, and supply from outside. Its workers are denied access to good wages, and its small farmers are denied access to land and water. They cannot demand goods and services for themselves, so the economy grows only insofar as it responds to growth in the Center-South. But the Center-South accepts the Northeast precisely because of its weaknesses, which is why it has not grown and does not threaten to grow -- its strength is thus in its failures. As long as it is attractive because it is backward, it denies its own potential and restrains development in the Center-South as well. The knot is tight. It will take real struggle to untie it.

APPENDIX A -- TABLES

Table 1
Labor Force by Industrial Sector and City Size: 1940-1980
(in percent)

Year	Manufac-turing	Trade	Transpor-tation & Communi-cation	Consumer Services	Social Services	All Services	Govern-ment
Large Cities (N=3)							
1940	26.4	20.6	11.4	NA	NA	29.7	12.0
1950	28.6	16.7	10.2	29.8	6.3	36.1	8.4
1960	25.7	17.6	9.6	30.5	7.4	38.0	9.2
1970	28.2	17.0	8.1	27.1	10.2	37.3	9.3
1980	31.6	16.1	6.1	27.7	11.1	38.8	7.4
Middle Cities (N=7)							
1940	31.9	18.9	9.2	NA	NA	25.2	14.7
1950	28.9	15.2	10.1	27.5	7.2	34.8	10.9
1960	22.4	16.0	9.8	31.4	8.2	39.6	12.0
1970	24.9	17.2	7.9	25.7	11.8	37.6	12.5
1980	26.9	16.2	5.8	25.6	15.0	40.6	10.5
Small Cities (N=30)							
1940	41.2	17.	8.0	NA	NA	29.2	4.6
1950	38.0	17.1	9.1	28.4	3.0	32.5	3.2
1960	28.2	17.5	10.4	35.8	4.6	40.4	3.4
1970	30.0	21.2	8.4	27.1	8.4	35.4	4.9
1980	32.7	20.5	6.9	25.1	9.9	34.9	4.9

Sources: Censo Demografico, 1940, 1950, 1960, 1970, and 1980.

TABLE 2

RATES OF GROWTH IN NORTHEASTERN INCOME
BY SECTOR--1960-80
(percent per year)

Period	Agriculture	Industry	Service
1960-65	5.3	5.2	5.3
1965-70	-0.2	10.5	8.9
1970-74	7.2	11.5	10.3
1975-80	4.2	10.5	-
1960-80	3.6	8.4	8.7

Source: Robero Cavalcanti de Albuquerque and Clovis de Vasconcelos Cavalcanti, Desenvolvimento Regional no Brasil (Rio de Janeiro: IPEA/INPES, Serie Estudos para Planejamento, 1976), p. 115; "Economia Nordestina: Estructura e Evolucao," Gedyr Lirio de Almeida, Revista Economica do Nordeste, v. 14, n. 3, p. 413-442, Jul/Set. 1983.

Table 3

Northeast Brazil: Sectoral Distribution of Manufacturing Value Added
and Employment - 1949, 1959, 1970, 1975, 1980
(in percent)

	Non-metallic Mineral Products	Metallurgy, Machinery, Electrical and Transportation Equipment	Wood Products, Furniture, Paper Products	Chemicals, Pharmaceuticals, etc.	Growth Sectors	Textiles, Clothing, Leather Products	Food Products, Beverages, Tobacco	Traditional Sectors	Others
Value Added									
1949	5.3	2.0	2.2	5.7	(15.2)	39.1	43.4	(82.5)	2.3
1959	8.1	3.3	5.0	17.0	(30.4)	28.6	36.7	(65.3)	2.3
1970	11.2	10.4	4.3	16.8	(42.7)	17.4	37.0	(54.4)	2.8
1975	9.8	15.2	5.1	21.1	(51.2)	18.6	27.4	(46.0)	2.8
1980	8.9	14.6	5.5	30.3	(59.3)	18.2	20.4	(38.6)	1.9
Employment									
1949	9.3	1.9	2.6	4.0	(17.8)	42.7	36.7	(79.4)	2.8
1959	12.5	2.1	5.9	6.0	(26.5)	34.5	35.0	(69.5)	3.1
1970	15.4	10.9	8.1	6.2	(40.6)	20.8	36.5	(57.3)	5.7
1975	15.4	13.0	8.2	6.4	(43.0)	20.7	33.0	(53.7)	3.3
1980	17.7	13.1	9.5	6.5	(46.8)	22.1	29.5	(51.6)	2.6

Source: Censo Industrial - 1950, 1960, 1970, 1975, and 1980.

Table 4
Sectoral Distribution of Investments
and Employment in SUDENE Investments: 1960-78
(in percent)

	Nonmetallic Mineral Products	Metallurgy, Machinery, Electrical and Trans-portation Equipment	Wood Products, Furniture, and Paper Products	Chemicals, Pharma-ceuticals, etc.	Textiles, Clothing, Leather products	Food Products, Beverages, Tobacco	Other
Investment							
1960-1970	10.3	25.5	5.0	28.4	20.8	5.5	.9
1960-1978	7.5	26.0	4.8	33.9	21.0	5.9	.9
Employment							
1960-1970	11.0	24.6	6.4	13.0	27.4	13.0	6.0
1960-1978	8.3	23.7	4.7	14.2	34.8	12.8	1.8

Source: Raimundo Moreira, Una Politica Regional de Industrializacion: El Nordeste Brasileno (Buenos Aires: Ediciones SIAP-Planteos, 1976), p. 141; Minter SUDENE Assessorid de Industria e Comercio Posicao dos Projetos Aprovados Industriais e Agropecuarios Situagao em 1978 (FHC/190/153/B77b/LAC/1978).

Table 5

Importance of the Largest Eight Industrial Projects in
The Sudene Program in Selected Sectors Until 1970
(in percent)

Sector	Percentage of Total Number of Projects Represented by the Eight Projects	Share of Total Value Added of the Sector	Share of Total Gross Product of the Sector
Nonmetallic mineral products	14	58.7	47.7
Metallurgy	18	61.4	53.6
Chemicals	11	46.4	50.8
Textiles, Clothing, Footwear	13	42.3	47.8

Source: Taken from data in David Goodman and Roberto Cavalcanti, Incentivos a Industrializacao e Desenvolvimento do Nordeste (Rio de Janeiro; IPEA/INPES, Relatorio de Pesquisa, 1974), p. 227.

Table 6

Industrial Distribution of Employment and Value Added
by Size Class in 22 Northeastern Cities: 1960-1980
(in percent)

	Nonmetallic Mineral Products	Metallurgy, Machinery, Electrical and Transportation Equipment	Wood Products, Furniture, and Paper Products	Chemicals, Pharmaceuticals, etc.	Textiles, Clothing, Leather Products	Food Products, Beverages, Tobacco	Other
Value Added							
Large Cities (N=3)							
1960	9.6	5.6	9.3	18.7	22.9	30.9	2.9
1970	14.1	16.7	5.7	11.4	16.0	30.8	5.2
1975	9.6	24.9	4.6	23.7	13.9	20.5	2.8
1980	8.5	27.2	4.6	12.7	21.5	21.3	4.2
Middle Cities (N=7)							
1960	9.6	1.9	6.3	9.6	39.8	28.6	4.2
1970	13.6	7.3	3.5	12.7	28.9	28.9	5.2
1975	13.8	9.9	3.3	8.2	33.9	23.2	7.6
1980	13.7	7.4	4.8	15.7	34.2	17.6	6.6
Small Cities (N=12)							
1960	10.2	4.7	9.3	13.0	26.7	32.1	3.8
1970	13.8	10.1	8.1	8.7	16.9	39.0	3.2
1975	16.5	7.4	7.2	11.9	25.1	29.0	4.6
1980	16.1	15.4	11.8	8.7	16.4	26.2	5.3
Employment							
Large Cities (N=3)							
1960	8.6	5.7	7.3	9.4	38.5	23.9	6.5
1970	12.6	16.3	8.7	6.9	23.0	26.2	6.3
1975	10.0	24.0	7.5	8.6	20.6	21.5	7.7
1980	9.4	24.2	6.6	7.4	25.1	21.9	5.2
Middle Cities (N=7)							
1960	6.9	3.0	7.4	5.2	50.5	21.0	5.9
1970	11.7	9.0	6.9	5.1	34.0	24.7	8.7
1975	11.1	11.4	5.8	4.1	33.3	24.4	9.8
1980	13.4	9.5	6.5	7.5	34.4	20.0	8.9
Small Cities (N=12)							
1960	14.9	5.5	11.2	6.6	22.1	34.8	5.0
1970	20.6	7.9	12.3	4.3	17.0	32.6	5.1
1975	18.8	6.8	10.9	3.8	22.9	30.4	6.4
1980	21.9	10.2	13.9	3.6	15.7	31.6	4.8

Source: Censo Economico 1960, 1970, 1975, and 1980.