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Brazil 1950-1980: Three decades of growth-oriented economic policies

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Pedro Malan Regis Bonelli



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Brasília, January 2015

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Pedro Malan Regis Bonelli

Federal Government of Brazil

Secretariat of Strategic Affairs of the Presidency of the Republic

Minister Roberto Mangabeira Unger



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DISCUSSION PAPER

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BRAZIL 1950 - 1980 THREE DECADES OF GROWTH-ORIENTED ECONOMIC POLICIES

Pedro Malan Regis Bonelli

Development depends not so much on finding optimal combinations for given resources and factors of production as on calling forth and enlisting for development purposes, resources and abilities that are hidden, scattered or badly utilized.

A. O. Hirschman

Paper prepared for the International Symposium "Hirschman's Work and a New Development Strategy for Latin America", organized by the Inter American Development Bank and the Instituto Torcuato di Tella, Buenos Aires, November 8-11, 1989. Pedro S. Malan is currently Alternate Executive Director for Brazil at the World Bank. Regis Bonelli is Director of INPES/IPEA, the Research Institute of the Brazilian Ministry of Planning. The authors acknowledge the valuable comments on an earlier draft by Paulo Vieira da Cunha, Eustáquio Reis, Newton de Castro, Flavio Versiani, Simon Teitel, and the computational work done by Henrique Correia da Silva. Extremely helpful comments at the Conference were made in both oral and written form by Nathaniel Leff, José Delfino, Joel Bergsman, José Serra and, especially, Simon Teitel. The deficiencies that remain are the authors' sole responsibility.

ABSTRACT

This paper, written as a tribute to Albert Hirschman's work and thought, deals with the patterns of structural change and financing economic growth in Brazil from 1950 to 1980. Special attention in given to the role of external finance and to the evolving forms of public sector intervention. Intersectoral income shifts provoked both by inflation and economic policy measures are recognized as a key element in a growth process frequently constrained by unfavorable external events. The paper shows that concerns with the disappearance of the external and internal financing capacity of the public sector were recurrent in our economic history. The result has often been that the government lost the capability of being a coordinating element for a new growth strategy. This challenge has been faced and overcome more than once in the past, something which will have to be tried again if the Brazilian society wishes to consolidate both democracy and a just and healthy economic system.

BRAZIL 1950 - 1980

THREE DECADES OF GROWTH-ORIENTED ECONOMIC POLICIES

- I. From Backwardness to an Urban and Industrial Society.
- II. The Record of Three Decades: An Overall View.
- III. Economic Policy, Growth and Structural Change:
 - 1. Post-War Uncertainties (1946-1950)
 - 2. Growth and Disequilibrium (1951-1962)
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 - 5. Rise and Fall of Debt-led Structural Adjustment (1974-1980)
- IV. Legacies of the Past, Challenges for the Future: A Summing Up.
 Bibliographical References

Introduction

This paper is organized as follows: Section I, with an introductory character, presents a brief illustrative comparison between the Brazil of 1950 and the Brazil of 1980 and explains the analytical focus and unifying theme of the paper. Section II presents a brief overview of the patterns of growth and structural change which marked the period. Section III covers each of the sub-periods selected, with focus on the main thrust and results of the economic policies pursued. Section IV concludes with a summary of major arguments, comments on implications for the future and prospects for overcoming the current quandary.

I. From Backwardness to an Urban and Industrial Society

In 1980 the size of the Brazilian economy, measured by its GDP, was nearly ten times larger than its size in 1947, the first year for which modern national accounts figures are available. Its industrial sector increased sixteen-fold in size during the same period. Yet, in terms of per capita income, Brazil still ranked around 44th in the world by 1980, and despite remarkable improvements in a wide array of social indicators it still had a long way to go in order to attain levels of social development and patterns of income and wealth distribution similar to other semi-industrialized countries at roughly similar or even lower stages of economic and technological development.

In fact, the Brazilian pattern of income distribution is the worst among the twenty five or so developing countries for which the World Bank publishes such statistics. Life expectancy at birth is higher in some countries with a fraction of Brazil's average income per head. Infant mortality rates in Brazil are similar to those prevailing in India and China and close to the average rate for lower-middle-income economies. Enrollment in secondary education in terms of percentage of the relevant age group is far lower in Brazil than in the average of countries with roughly similar levels of income per capita. 1

As noted by Bacha and Klein "... the overwhelming force of the change [since the late forties] has obscured serious problems within the country. Only now are Brazilians realizing [the extent to which] the process of growth and change inevitably leaves discontinuities and disjunctions". 2

Albert Hirschman has been drawing attention for over thirty years to the dynamics of these trade offs, as well as to some hidden rationalities and mixed blessings involved in these imbalances, discontinuities and

^{1/} See World Development Indicators, a set of tables published as Statistical Annex to the Annual World Development Report.

^{2/} Bacha and Klein (1987), p.1.

disjunctions. His work is a permanent source of inspiration and insight to those trying to come to grips with the vexing stop-go problems of the political economy of growth and social change in developing countries.

This paper is written as a modest tribute to Hirschman's work and thought. At the request of the organizers of this conference, it covers just the period from the late forties up to 1980. There are reasons for this choice. In the early 1980's the process of rapid and sustained growth with significant diversification of the productive structure which marked the previous thirty years or so was abruptly interrupted. Although there were growth spurts in 1984, 1985 and 1986, they were not sustained nor perceived to be sustainable. The fact is that the Brazilian society is entering the last decade of the century in a state of uncertainty about its economic future which is unmatched since the 1930's.

In fact, the dismal experience of the 1980's has badly shaken the idea widely held in many countries of the region - in Brazil perhaps more than in any other - that continuous economic growth at relatively high rates was a sort of taken-for-granted natural phenomenon, always likely to prevail - at the end - over so-called temporary difficulties, either self-imposed by domestic policies, brought by unfavorable external events, or by any combination thereof.

The paradox is that, in terms of its size and diversified economic base, the Brazilian economy is now much stronger than it was in the fifties and sixties. At that time it was able to cope with the constraints on its development, often generating future problems in the very process of overcoming existing ones. This paper attempts to address these issues in perspective, not dwelling in the past for the sake of it but in order to see what lessons could be drawn from the three decades of policy making which transformed the Brazilian economy and its society in a remarkable manner, but left it unable to avoid stalled economic growth in the 1980's.

The interest in reassessing the period covered in this paper is further enhanced by the fact that it is roughly split in two equal periods: an experiment in democracy (1946 to 1964) and a sequence of military

governments (1964 to the eighties). Although the international conditions were remarkably different (and, on balance, clearly more favorable to the military regimes up to 1980), the more democratic years have not fared badly by comparison, in terms of growth and development.

There is an increasing awareness that the current structural imbalances and institutional weaknesses facing Brazil could not be addressed solely through short-term stabilization policies, absolutely required as The Brazilian society will have to consider much more seriously its longer-term objectives - and policies to attain them. sense, something which, despite all shortcomings and contradictions, was attempted in the three decades covered in this paper. A deeper understanding of the long-run processes leading to the current situation seems to be required for understanding current challenges and for reaching a workable consensus on possible solutions. Experience shows that whether the policies are predominantly of an heterodox or orthodox bent, a naive belief in their "permanent" adequacy is sooner or later betrayed by events, either internal or external to the country. Success is, in great measure, the ability to adapt policies to changing conditions - without losing sight of the evolving world economy and, particularly, of the longer term social and economic development objectives of the country.

When not purely words, these objectives require hard choices involving explicit or implicit trade-offs. The experience of the 1950-1980 period is full of Hirschmanian examples of successes and failures in terms of coping with hard choices and facing trade-offs. Fortunately for Brazil, up to 1980 at least, when exogenous shocks hit the economy, the balance was favorable to overall economic growth. Both policy failures and exogenous shocks thwarted growth during the 1980s. Given the stock of accumulated imbalances, this legacy continues, as we enter a new decade, to negatively affect expectations about the future.

The analytical focus of the paper is on the patterns of structural change and financing economic growth during these three decades, with special attention to the role of external finance and to the evolving forms

of public sector intervention which marked each of the sub-periods discussed.

The underlying, unifying theme of the paper is a concern with the intersectoral income shifts jointly provoked by inflation and by public sector intervention, which often favored one group of property holders and entrepreneurs at the expense of another. As recognized by Hirschman, Brazilian economists were probably among the first in Latin America to emphasize that inflation could have profound effects on the intersectoral income distribution, no less than on the traditional division of income between profits and wages. Depending on the nature of public sector intervention, these intersectoral shifts have sometimes stimulated growth and structural change by making extra resources available to sectors with a leading role in development. At other times these shifts have been quite erratic and needlessly disruptive. The role of the public sector and of inflation in these shifts have been fundamental in Brazil.

The paper shows that concerns with the virtual disappearance of the internal and external financing capacity of the public sector, as experienced currently, were recurrent in the past - and have been faced without seriously undermining long-term growth prospects. The current situation seems more serious since the legacy of unresolved problems runs much deeper - but so, one hopes, does the legacy of the achievements of the past, partly reflected in the country's current productive structure and ability to invest in its future.

A brief comparison between the Brazil of 1950 and the Brazil of 1980 will illustrate the extent of the accomplishments and shortcomings. These are especially acute in the social and educational areas, crucial to develop the human resource capability needed to face the impressive technological challenges of the next century.

The Brazil of 1950 and the Brazil of 1980

Tables 1, 2 and 3 present some basic indicators of structural change in Brazil, comparing 1950 with 1980. The characteristics of a still predominantly agrarian society in 1950 are clear from the figures. Nearly 2/3 of the population lived in rural areas. The primary sector (mostly agriculture) was responsible for approximately a fourth of GDP and employed 60% of the labor force. Primary products represented nearly 90% of the total exports, with coffee accounting for 64% of the total. Gross Domestic Product was around \$11 billion dollars of 1950 with total exports at US\$1.3 billion. Only one out of five Brazilians lived in cities with over 20,000 people.

By 1980, less than one-third of a Brazilian population (at 119 million, nearly two-and-a-half times larger than in 1950) lived in rural areas. The primary sector was responsible for 10% of GDP and employed 30% of a labor force which had increased faster than population, to nearly 44 million. Primary products represented slightly over 40% of total exports (coffee around 12%). Gross Domestic Product reached \$252 billion of 1980 with total exports at over \$20 billion. One out of two Brazilians lived in cities with over 20,000 people.

While rural population increased at an average annual rate of less than 0.5%, urban population increased at over 5% (in cities over 20,000 at 5.9%). Labor force in the primary sector increased by only 0.8% a year, while in the secondary sector it grew at over 5%, a similar rate to employment in services. The number of contributors to social security increased from 2.8 million to 23.8 million.

The secondary sector grew at more than double the average rate in agriculture (8.4% against 4.1%). As a result, it employed one-fourth of the labor force in 1980 against 14% in 1950. Exports of manufactured goods represented nearly 60% of the total in 1980, against 12% in 1950. The stock

of foreign investment in the Brazilian economy, estimated at around US\$1 billion in 1950, had reached nearly US\$18 billion by 1980. The flow of such investment in 1950 was about US\$3 million, and in 1980 it reached over \$1.5 billion.

GDP per head in 1950 was slightly above \$200 (some \$570 in 1980 dollars). In 1980, it reached \$2,080. Broad indicators of social change are also available. The number of women in the labor force increased from 2.5 million to 11.5 million, an average rate of increase of 5.2% per annum. The birth rate per thousand declined from 44 to 31. The death rate from 15 to 8. Most telling, infant mortality rates declined from 130 to 86 and life expectancy at birth increased from less than 49 years to nearly 63 years in 1980. Health-care spending as percent of GDP, estimated at around 1% in 1950, increased to 5.6% in 1980.

The regional disparities in Brazil show their ugly face in a simple breakdown of these statistics. In terms of infant mortality rates and life expectancy at birth, despite remarkable progress in the North-Eastern States (164 to 116 and 41 to 54 years respectively), the figures attained in 1980 are still worse than the levels that Southern States had already reached in 1950! In fact, for the Southern States, life expectancy at birth (68 years in 1980) and infant mortality (63) compare reasonably well with any other developing country. But North and North-Eastern States still represented over one-third of the Brazilian population in 1980 (against 38% in 1950).

Likewise, literacy rates (among persons 10 years of age or older) in Brazil as a whole increased from 48.4% in 1950 to 74.5% in 1980, but the aggregate figures surely hide a wide difference between Northern and Southern Brazil, as well as between urban and rural areas. There is no reliable data for 1950 on enrollment in elementary education, but in 1980, there were 22.5 million youngsters enrolled. Those under age 15 represented 38% of the total population.

One impressive feature of the Brazilian educational system is the rate of "drop-out after" and during primary education. In 1980, the

enrollment in secondary education, at 2.8 million, was <u>nine</u> times less than the enrollment in primary education. On the other hand, those enrolled in universities, nearly 1.4 million, numbered about half of those enrolled in secondary education. Few countries in the world, developed and developing, present such structure of enrollment by levels of education.

The phenomenon noted above is partly linked to Brazil's extremely unequal pattern of income distribution. Unfortunately, there are no data for 1950, but Table 2 presents the figures for 1960, 1970 and 1980. The figures refer to income distribution of economically active persons over 10 years old who receive some income, and are based on the Demographic Census.

The pattern reveals not only a high but an increasing degree of inequality from 1960 to 1980, particularly marked in the 1960s. From 1960 to 1980, the top 5% (and the top 10%) increased their share in income by full 10 percentage points. ³ There is no developed country nor a successful developing one, in which the top 10% of the population appropriates half the total income, while the bottom half takes less than 15%. Any serious discussion about the longer-term growth prospects and strategies for Brazil will have to address this vexing issue, given its importance for patterns of production, consumption and factor use, not to mention the prospects for dealing with what Okun called "The Big Trade-Off" between equity and efficiency. ⁴ Albert Hirschman's well known "Tunnel Effect" brings the essential issues to the fore:

It is interesting to note that while there was a very lively debate over the <u>causes</u> of the observed increased inequality in the 1960s, immediately after the publication of the 1970 census results, there was no similar debate in the early 1980s, despite the continuing trend, albeit not as marked as in the 1970s. For the official interpretation see Langoni (1973). For critical comments and alternative interpretations, see Fishlow (1973a), Malan (1974 and 1978), and Malan and Wells (1973).

^{4/ &}quot;...for the conflict between equality and economic efficiency is inescapable...maybe that is why capitalism and democracy need each other - to put some rationality into equality and some humanity into efficiency". See Okun (1975) pp. 120.

"If growth and equity in income distribution are considered the two principal economic tasks facing a country, then these two tasks can be solved sequentially if the country is well-supplied with the tunnel effect. If, because of existing social, political or psychological structures, the tunnel effect is weak or non-existent, then the two tasks will have to be solved simultaneously, a difficult enterprise, and one that probably requires institutions wholly different from those appropriate to the sequential case. To make matters worse, it may be impossible to tell in advance whether a given country is or is not adequately supplied with the tunnel effect....it is conceivable that only development itself will tell".

It could be argued that Brazil from 1950 to 1980 was "adequately supplied with the tunnel effect" in the sense that given the rates of growth actually being achieved, tolerance for existing disparities was significant, based on the expectation that eventually disparities would narrow. What is worrisome about the future is that the dismal 1980s seem to have sharply reduced the supply of such tolerance, after more than two decades of incomeconcentrating growth. 6

^{5/} See Hirschman (1981) p.57.

^{6/} See Bonelli and Sedlacek (1989).

Table 1: <u>BRAZIL 1950 and 1980</u>

Some Basic Indicators of Structural Change

	<u>1950</u>	<u>1980</u>	Average Annual Rate of Growth
GDP (US\$ billion, Current) GDP (US\$ billion of 1980) Composition (Factor Cost)	11 30	252 252	7.4
Primary Sector (%) Secondary Sector (%) Terciary Sector (%)	24.3	10.0	4.1
	24.1	38.1	8.4
	51.6	51.9	7.4
Population (million) Rural (%) Urban (%) (Cities over 20,000) GDP per capita (U\$ Current) (U\$ of 1980)	51.9	119.1	2.8
	64	32	0.5
	36	68	5.0
	21	51	5.9
	214	2,080	-
	570	2,080	4.5
Labor force (million) Primary Sector % Secondary Sector % Terciary Sector % Men (million) Women (million) Number of Contributors to Social Security (1,000)	17.1	43.8	3.8
	60	30	0.8
	14	24	5.1
	26	46	5.1
	14.6	30.7	2.5
	2.5	11.5	5.2
Energy Installed Capacity (Mw) Hydro Electric Production (Gwh)	1,883 5,850	31,147 133,767	9.8
Trucks (stock at year-end) Automobiles (" " ")	10,966	932,589	16.0
	200,744	8,155,707	13.1

Sources: Estatísticas Históricas do Brasil, (IBGE), Anuários Estatísticos ((IBGE)

Table 2: Brazil 1950 and 1980

Some Basic Indicators of Social Change

	1950		1980
Birth Rate (per 1,000 pop.) Death Rate (per 1,000 pop.)	44 15		31 8
Life Expectancy at Birth Rate (years) Southern States Northeastern States	48.9 56.8 40.8		62.6 68.1 53.9
Infant Mortality Rates Southern States Northeastern States	130 100 164		86 63 116
Youth (Under age 15 as % of total)	42		38
School Enrollment (1,000) Primary Secondary University	n.a. n.a. n.a.	2	,522 ,812 ,383
Literacy Rate (defined as 10 yrs. or over)	48.4		74.5
Population per Physician Daily Calorie Supply per Capita	2,210 (1960) n.a.		,200 ,529
Income Distribution	1960 %	1970 %	1980 %
Income Distribution			
Top 5% Top 10%	27.7 39.7	34.9 47.8	37.0 49.6
Bottom 40% Bottom 50%	11.6 17.7	10.0 14.9	9.5 13.4
Gini Coefficient	. 50	.568	. 592

Sources: Estatísticas Históricas do Brasil (IBGE); Anuários Estatísticos Bacha and Klein (eds.) Social Change in Brazil: 1945-1985.

TABLE 3: Brazil 1950 and 1980

Some Basic Indicators of	Change in the E	xternal Sector
	1950	1980
Export (U\$ million Current) Quantum Index Price Index	1,335 100 100	20,100 441 324
Primary Products % Coffee %	87.4 63.9	42.6 12.5
Manufactures (plus semi)%	12.6	57.3
Imports (U\$ million Current) Quantum Index Price Index	942 100 100	22,955 447 536
Oil and Oil Products % Consumer Goods % Intermediate Goods % Capital Goods %	14.8 13.7 40.7 30.8	42.1 5.6 33.6 18.7
Terms of Trade	100	60.5
Purchasing Power of Exports	100	267

Direction of Trade %	195	50	1980	
birection of fines	Exports	Imports	Exports	Imports
	to	from	to	from
	%	%	%	%
United States	54.5	34.5	17.5	18.6
Europe	32.2	39.0	40.4	20.5
Latin America	5.2	23.6	17.8	11.7
Japan	1.0	.1	6.1	4.8
Middle East & other				0/ 5
Asia	1.0	. 6	8.9	34.5
Others	3.4	2.2	9.3	9.9
		1950	1980	
Foreign Direct				
Investment (U\$ millio	ons)	1,000	17,500	
Stock at year-end Flow in year		3	1,532	

Sources: IBGE, Banco Central

II. The Record of Three Decades: An Overall View

The overall performance of the Brazilian economy from 1950 to 1980 was rather impressive, having the trend GDP growth rate reached 7.4% annually; in per capita terms, it equalled almost 4.5% yearly. Deviations from this average reflect differences in both economic policy and performance, allowing us to characterize six periods from the post-war years to the recession of the 1980s. Figure 1 shows, in its upper part, the overall GDP growth trend. There is a clear deceleration beginning in 1963 that lasted until 1967, after a long period of fast growth since the immediate post-war years. followed by a noticeable upward change from 1968 to 1974, and a mild deceleration, on average, after that year, characterized by variability of the growth rate. Finally, a recession period began in 1981. lower part of Figure 1 presents yearly and average growth rates according to the periods chosen, while Table 4 shows the corresponding sectoral output growth rates.

TABLE 4

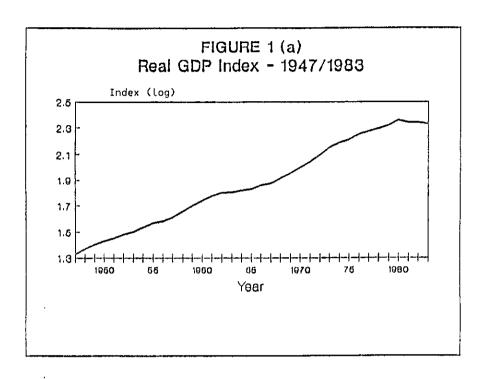
GDP, Agriculture and Manufacturing Growth Rates According to Sub-Periods: 1947-1983

(In % per year)

	1948-50	1951-62	1963-67	1968-74	1975-80	<u> 1981-83</u>
GDP	<u>8.0</u>	7.4	3.5	<u>10.7</u>	<u>6.8</u>	<u>-2.4</u>
Agriculture	4.3	4.6	2.1	3.6	5.3	2.3
Manufacturing	12.0	9.2	2.6	12.6	7.0	-4.9

- -

Source: IBGE (1987).



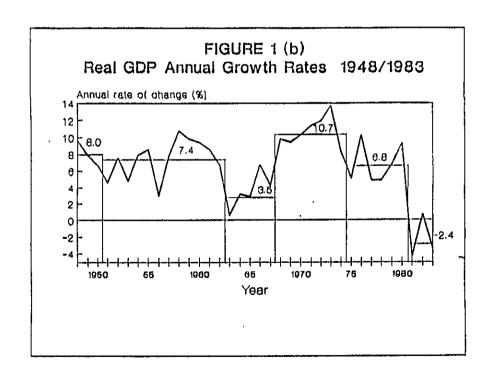


Table 5 presents the change in the structure of value-added according to Census data, highlighting the extent of structural change and, particularly, manufacturing development.

Brazilian development up to the sixties is often presented as a paradigm case of "inward-looking" development through import substitution industrialization (ISI). From then on it is considered a relatively successful story of "outward-looking" growth (see Figure 2). In both phases, however, the pattern was reliance on a large domestic market, a prominent role of the state - both directly as investor and indirectly as promoter of specific activities - and, except for short sub-periods, a successful policy of attracting foreign capital.

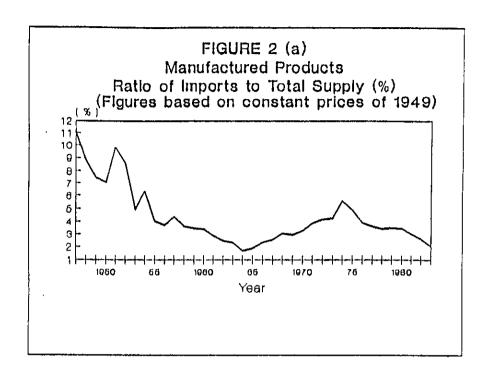
TABLE 5

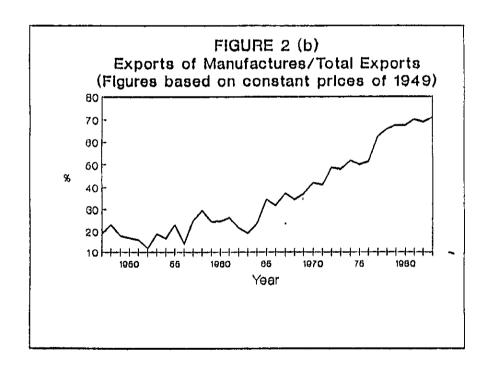
Structure of Value Added (GDP at factor cost)

(In %)

Sectors	1950	1960	1970	1980	
Primary	24.3	17.8	11.6	10.0	
Secundary	24.1	32.2	35.9	38.1	
(Manufacturing)	(18.7)	(25.6)	(27.4)	(29.2)	
Tertiary	51.3	50.0	52.6	51.9	

Source: IBGE (1987)





Import substitution was at the very heart of Brazil's early industrialization efforts - with heavy protection, subsidies and incentives as key instruments - and resulted in pronounced changes in the structure of output within the manufacturing industries as well. Tables 6(a) and 6(b) provide evidence of the extent of the transformation which took place.

Table 6(a) presents the structure of output at the two-digit level of aggregation and grouped into three classes: traditional (basically producers of non-durable goods), producers of intermediate goods, and metal The direction of change conforms to a normal (or standard) pattern of development, with the progressive loss of importance of "traditional" industries at the expense of the other two groups. the figures make it clear where the industrial dynamism came from: activities within the metal-mechanic group, whose share of industrial output (measured in current terms) more than tripled between 1949 and 1970. then on the leading segments are to be found in the chemical industry. Table 6 (b) presents estimates of the structure of output at constant prices of 1970, according to the end-use of products. Here it can be seen that growth was led by the durable consumer goods group, whose share in total industrial output rose from 2.5% (1949) to 13.3 (1980). The performance of the capital goods producers was almost equally impressive, particularly in the 1950s and 1970s: from 4.3% of total output in 1949 to 15.4% in 1980.

The supply of investment goods also grew substantially, as gauged by the investment rates shown in Figure 3, in spite of the fact that imports of capital goods displayed a declining trend throughout most of the period (with the exception of 1951-52 and 1968-74). Excluding the Figure for 1947 - an atypical year due to previous repressed demand - the nominal investment rate rose from 12.8% of GDP (1948-50) to 15.3% (1951-54), and to 16.0% during the Kubitschek years (1956-60). Nearly the same rate was maintained during the transition years of 1963-67, after which the nominal investment rate increased continuously up to its all-time record of 23.3% (1975), to be repeated again four years later. Except for a minor drop in 1977, the investment rate was kept at a very high level from 1975 to 1981 (22.8% of GDP, both investment and GDP measured in current terms).

TABLE 6 (a)
Structure of Output: Manufacturing Industries (%)

INDUSTRIES	% Structure of output			
	1950*		1970	1980
Traditional	73.69	56.20	48.08	35.17
Wood	3.38	2.64	2.29	2,05
Furniture	1.66	1.84	1.78	1.49
Leather, furs and similar products	1.52	1.08	0.66	0.49
Pharmaceutical Products	1.93	1.95	2.14	1.11
Perfumery, soap and candles	1.73	1.52	1.39	0.82
Textiles	18.64	12.54	9.29	6.50
Garments, hosiery and knits	4.33	3.41	3,38	3,90
Food products	31.93	24.15	20.21	14.05
Drinks	3.16	2.37	1.88	1.07
Tobacco products	1.37	1.12	0.96	0.55
Publishing and graphics	2.82	2,28	2.52	1,63
Miscellaneous	1.22	1.29	1.59	1.49
Raw Materials/Intermediate goods	21.01	30.19	33.32	43.95
Non metallic mineral products	4.47	4.52	4.17	4.25
Metallurgy	7.57	10.53	12.47	13.90
Paper and Derivatives	1,98	2.97	2.44	2.72
Rubber	1.60	2.53	1.70	1.52
Chemicals	5.18	8.96	10.89	19.51
Plastics	0.20	0.68	1.65	2.05
Capital Goods	5.30	13.61	18.60	20.88
Mechanics	1.60	2.85	5.70	7.69
Electrical and communications prod.	1.40	3.98	4.71	5.26
Transport material	2.30	6,79	8.20	7.94
Cotal	100.00	100.00	100.00	100.00

Source: IBGE (1987) P. 346

*Data refer to previous year

TABLE 6 (b)

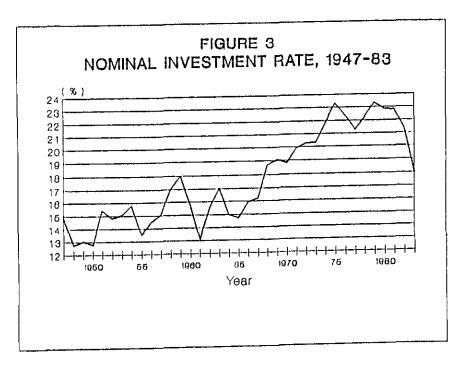
Manufacturing Industries

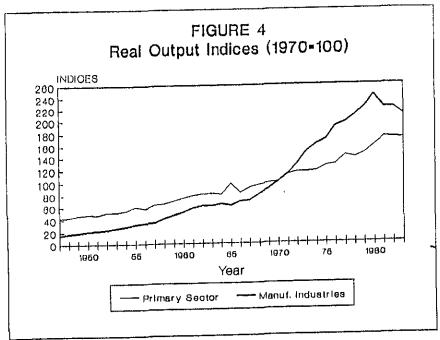
Structure of Output According to End-use of Products

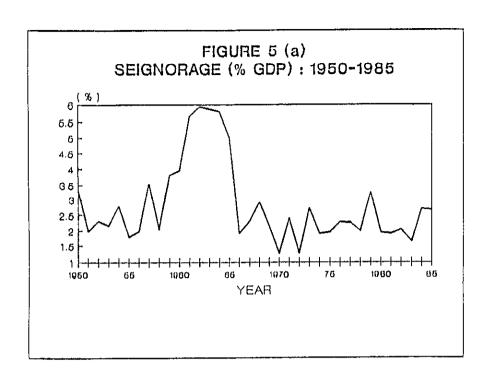
(Constant prices of 1970)

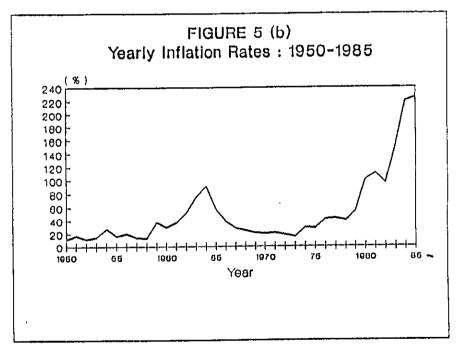
	٠ %		
1950	1960	1970	1980
78.8	56.7	45.0	36.8
20.4	24.6	34.4	34.6
2.5	5.1	9.3	13.3
4.3	13.5	11.3	15.4
	78.8 20.4 2.5	78.8 56.7 20.4 24.6 2.5 5.1	78.8 56.7 45.0 20.4 24.6 34.4 2.5 5.1 9.3

Source: Serra (1982) p. 9, % based on real output.









Source: Barbosa(1987)

Agricultural growth, in turn, took place mainly through expansion of the frontier and, more recently, introduction of new crops. In general, policies which promoted industrialization did not have significant negative effects on agriculture, with one non-negligible exception: the maintenance of an overvalued exchange rate in some periods (see discussion below). From Figure 4 it is possible to conclude that the trend in agricultural output was not much affected by growth rate changes in manufacturing (see also Table 4). The trend rate for agriculture is on the order of 4.0% yearly (1947-83).

Another prominent feature of Brazilian development has been the ingenious use of different mechanisms of resource transfers which allowed for the financing of the growth process. Indeed, the understanding of this aspect - to be dealt with in more detail later - is crucial to the analysis of the Brazilian experience since the 1950s. Due to the conspicuous lack of an adequate tax system and of appropriate financial intermediation instruments, a shortcoming typical of underdeveloped countries, Brazil has long relied on intervention in the foreign exchange system, on foreign sources of finance and, very often, inflationary finance. The recurrent inability to expand the tax base, raise taxes and/or cut government expenditures partly explains why money creation has been so important, together with cost pressures and relative price changes accommodated by upward pressures on the general price level.

Actually, two-digit yearly inflation has been the norm in Brazil since the 1950s. What characterizes the post-war period is the upward inflationary trend up to the mid-1960s and, again, from 1973 onwards. Table 7 presents data on the course of inflation according to selected periods, while Figure 5 shows in its upper part seignorage as per cent of GDP (i.e., government's revenue from primary money creation as a proportion of current GDP), while the lower part presents yearly inflation rates.

TABLE 7

Yearly Average Inflation Rates (GDP implicit deflator)

	<u>Periods</u>	_%_
	1947-49	7.7
	50 - 54	15.4
	55-59	18.7
	60-64	53.7
	65-69	33.2
	70-74	23.8
	75-79	42.5
	<u>80 - 84</u>	<u>128.2</u>
Total	50-79	30.5%

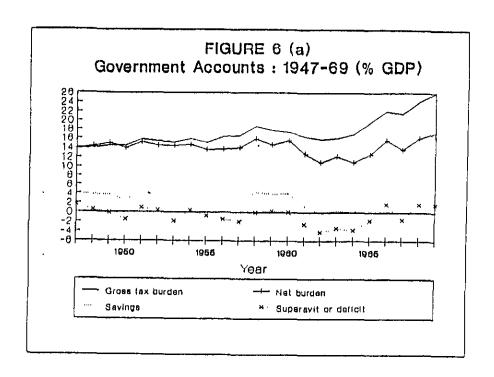
Source: IBGE (1989)

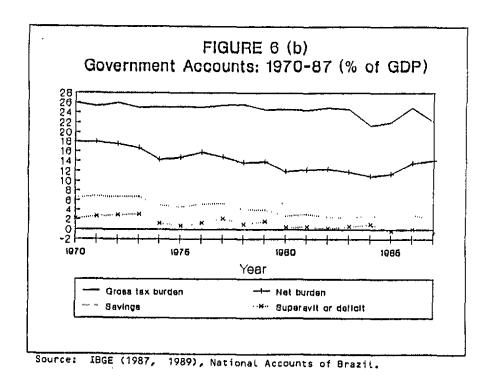
What is interesting to note is that, despite fast output growth throughout the 1950s, the inflation rate showed only a mild upward increase. The upper part of Figure 5 shows that after 1956 there occurred a substantial increase in the rate of money creation. This was certainly associated with Kubitschek's ambitious development plan - which promised 50 years of development in only five years of government - and can be understood as the closer determinant of the strong inflation acceleration which occurred after 1958. The second great wave of inflation acceleration, which occurred after 1972 and, with added emphasis, after 1978, is associated with a completely different set of phenomena: supply-side-shocks in the presence of widespread indexing and peculiar policy responses adopted to deal with them, which led to the virtual disappearance of public savings and greatly expanded the public sector deficit, thereby feeding a vicious circle.

This can be seen in Figure 6(a) and (b), which show a summary of Government accounts. 7 Notice that the tax burden displays a mild upward trend from the immediate post-war years until the end of the 1950s. Since transfers and interests on public debt increased somewhat, the net tax burden remained fairly stable relative to GDP. As government consumption was also stable, the result in current account showed no noticeable trend either up or down. Indeed, one finds below average figures in 1953 and 1955-57; but in 1958-60 Government savings still represented some 4% of GDP. Since investment grew over the decade, deficits occurred in some years. In the beginning of the 1960s inflation acceleration and the Olivera-Tanzi effect made for a sudden drop in the ratio of tax revenues to GDP. The net tax burden decreased from 15.6% in 1960 to 11.% in 1964, leading to the virtual disappearance of public savings.

The authoritarian regime brought about a relief to this problem through a substantial tax reform. The tax burden, which had reached 15.7% in 1962, grew to an impressive 26% of GDP ten years later. temporarily solved the problem of how to finance development. Towards the end of the 1970s, however, the real tax burden started to decrease due to In addition, the sum of subsidies and the acceleration of inflation. transfers (including interest on public debt) began to show a noticeable increase (from approximately 8% in 1971-74 to nearly 12% in 1980). Public sector savings once again virtually disappeared, and the public sector deficit increased, thereby contributing to the growing difficulties which characterized the 1980s. Thus, towards the end of the 1970s, the central issue of how to finance growth had to be addressed again. This time, with the added urgency posed by the virtual disappearance of foreign savings which took place after 1982 - and well beyond, in marked contrast with a conspicuous feature of post-war Brazilian development which had been the utilization of foreign savings. A measure of this aspect is shown in Figure 7 as the ratio of balance of payments current account deficits to

Note that state enterprises are not included within the Government sector.

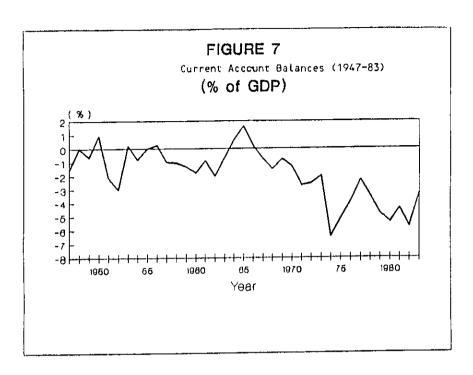


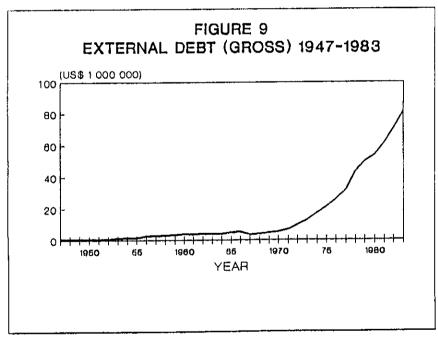


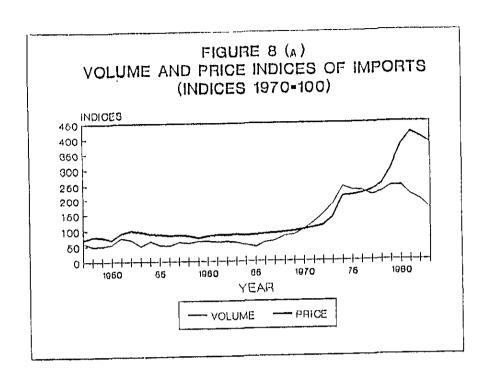
GDP. The relative and absolute importance of foreign savings since the mid-1960s stand out clearly from the figure.

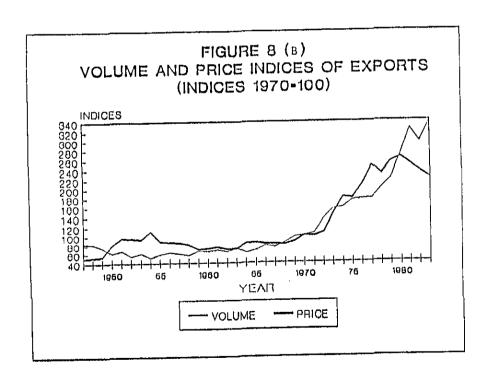
A picture of long-run changes in the balance of payments trade account is shown in Figure 8. It is remarkable that growth could have been achieved with virtually constant real imports for nearly 20 years (1947-67) - a chief characteristic of import substitution processes. Since import prices remained approximately constant from 1951-53 to 1967-69, the average value of nominal imports rose only 17% (from US\$1,507 million to US\$1,763 million) - a little less than 1% per year. This situation changed dramatically after 1970.

The behavior of exports was somewhat different. Beginning in the immediate post-war years, prices soared up to 1954: 121% since 1947. A downward trend follows, with the bottom ocurring in 1962-63. of exports behaved in the opposite fashion. Increases between 1954 and the From then on, however, one observes a mid-1960s were very modest. continuous upward trend, reflecting a substantial change in economic policy towards the external sector. Even so, growth of exports in current terms was largely surpassed by import growth, particularly after 1970 when The recourse to foreign current account deficits began to increase. indebtedness represented a "temporary" solution for nearly one decade - but the legacy of the external debt \underline{boom} of the late 1970s and early 1980s (so vividly described by Figure 9) represented a mortal blow to the previous growth model when international interest rates and oil prices soared after 1979, contributing to the unprecedented external and internal disequilibria which marked the entire decade of the 1980s.









III. ECONOMIC POLICY, GROWTH AND STRUCTURAL CHANGE

1. Post-War Uncertainties: (1946-50)

Brazilian economic policy in the immediate post-war years was deeply influenced by balance of payments considerations, especially those related to the exchange rate. Indeed, for nearly fifteen years (1938-52) the official cruzeiro/dollar rate was maintained in the 17-19 range, while domestic prices increased at close to 13% yearly, a rate more than double that of the US, Brazil's main trading partner, absorbing around 50% of the country's exports. A brief analysis of the effects of such a policy, why it could be implemented and its influence on future events, is important to set the stage for the discussion to follow.

During World War II, Brazil suffered losses of foreign markets which required both a reorientation of its exports and a curbing of imports. The war effort led to an expansion of exports of strategic raw materials and manufactured products, as well as the support of coffee prices by the U.S. The results were significant surpluses on trade account and accumulation of international reserves: the trade surplus accumulated during the war reached almost US\$1.4 billion, while reserves increased tenfold (from US\$ 65-70 million in 1939 to US\$650 million in 1945). Even with a fixed exchange rate, the monetization of the surplus helped to fuel an inflationary process already being fed by both cost and demand pressures.

Concerns about reserves valuation due to high inflation in the US, and expectations of an increase in the price of gold after the war, led the Brazilian authorities to convert more than half of the international reserves into gold. In addition to that, nearly one-third was in the form of British-blocked sterling balances and inconvertible currencies. The convertibility issue is crucial to the understanding of the heterodox policies followed until the late 1950s. The authorities were aware of the fact that there was a significant repressed demand for imports (the 1928)

level was only surpassed in 1946) and that Brazilian exports' rate of growth would be adversely affected by the return of competitive suppliers to international markets after the war.

In 1946, the combination of repressed demand for imports, an overvalued exchange rate, a high level of reserves, and relatively low protective tariffs, resulted in a 35% quantity growth of imports. Favorable external demand pushed export prices faster than import prices, leading to a sharp increase in the terms of trade and to the highest trade surplus Brazil experienced since the beginning of the war: 400 million dollars. The crucial issue was that up to 1948 Brazil was earning "soft" (inconvertible) and spending "hard" (convertible) currencies. The illusion of the 1946 data was that more than US\$300 million of the dollar export surplus was due to inconvertible currency areas - while already in the first half of 1947 a deficit of nearly US\$200 million was obtained in hard currencies, when the first controls were imposed. By the end of that year, reserves in convertible currencies had almost vanished.

Given the importance of coffee and the fact that more than 40% of exports went to inconvertible currency areas, devaluation was not considered to be desirable. Even assuming a high price elasticity of supply, it would make little sense to accumulate surpluses in inconvertible currencies, thereby transferring real resources to such areas. Import controls were widely perceived to be a more effective alternative.

In defense of the cautious attitude with respect to the exchange rate, it should be said that in the immediate post-war period Brazil did not benefit from US Government "development" loans - as it thought it deserved - since US efforts were entirely concentrated on European reconstruction. The lack of access to external (i.e. US) financing reinforced the cautious attitude in the management of the exchange rate. Advice from the United States related mainly to policies to curb inflation and suggestions to rely on private foreign capital. This situation prevailed until 1949 when, due to the intensification of the Cold War, the Truman Administration began a program of cooperation. The hostilities in

Korea a year later contributed to increase these efforts, as well as to a boom in commodity markets which further increased coffee prices.

The crucial role of coffee policy in Brazil up to the early sixties has been widely recognized. By 1949, in particular, coffee stocks were nearly depleted. After the expiration of the Pan American Agreement on Coffee (1948) it became clear that the <u>cruzeiro</u> was not going to be devalued and coffee prices went up very quickly; 125% between 1948 and 1950. At the same time, the valorization schemes of the beginning of the century were restored as the Government decided to support prices by buying coffee from domestic producers at the ceiling price. As a result, coffee accounted for 73.7% of total exports in 1952.

The fixed exchange rate regime under inflationary conditions progressively eroded the competitiveness of other exports. The result was a 64% fall in the quantum of non-coffee exports between 1946 and 1952. Part of the fall, however, was due to increased international competition, as traditional suppliers re-entered the market. Moreover, potential exports to inconvertible areas were frequently denied export licenses. Until 1951 the balance of payments situation did not appear to be threatening, given rising coffee prices. No one suggested at the time that Brazil should devalue the exchange rate for reasons of commercial policy. Rather, contemporary discussions centered around: (i) the allocative implications of the system of import controls implemented in mid-1947; (ii) the effect of the overvalued exchange rate on the capital account of the balance of payments.

The rationing of imports was instrumental to industrialization by restricting imports of final consumer goods, which fell from 24.4% to 15.8% of the total import bill. It has been suggested, however, that the driving forces behind the unusually high rates of industrial growth achieved were mainly booming demand conditions, supply incentives ranking second. This brings in the question of inflation and the role of monetary and fiscal policies in this period.

Short-term balance of payments difficulties were not concern during the Dutra government (1946-1950): the authorities were also worried with inflationary pressures arising from the monetization of the balance of payments surpluses and of financing government expenditures. The budget deficit in 1946 represented 1.6% of GDP and was entirely financed by newly issued money. Central Government investment expenditures were reduced in 1947 and 1948 so as to obtain a budgetary surplus. However, the increased autonomy given to State governments by the new Constitution resulted in a more than proportional increase in public expenditures of States and Municipalities. The central government had to finance state deficits through an accomodating monetary policy. It should be recognized, however, inadequate tax revenues were at the root of the problem. The political difficulties to increase the effectiveness of taxation left inflationary finance as the only alternative.

In terms of the balance of payments, the overvaluation of the cruzeiro had increasingly negative effects since it stimulated growing outflows through the capital account. In addition, the Dutra government liberalized the regulations on remittances abroad, in the hope that this action would eventually stimulate net inflows of private foreign capital. A realistic assessment of the prevailing conditions in international private capital markets would have shown that this hope was vain: from 1947 to 1950 Brazil experienced a net outflow of nearly US\$600 million.

Nonetheless, on balance, the growth record of the immediate postwar years is rather impressive. Operating at levels close to full utilization, GDP grew at 7.2% per annum (1946-50), led by the expansion of manufacturing activities producing mainly for the domestic market. The investment rate, albeit low (13.3% of GDP over 1947-50), began to increase in the beginning of the fifties. A favorable evolution of the terms of trade helped in shaping these results: between 1945 and 1950 the index of terms of trade increased 107%, while import capacity grew some 58%.

The end of the forties is, thus, a transition phase between the difficulties of the war period and the pains of the foreign exchange crises of the fifties. It saw the beginning of a new and long period of capital-

intensive import substitution industrialization which would last until the beginning of the sixties.

2. Growth and Disequilibrium (1951-1962)

The second Vargas administration (1951-54) was much less committed to "liberal", open policies with regard to the foreign sector than the previous Government. One of its first measures was to order a downward revision of the book-value estimates of foreign capital, in the belief that these estimates were inflated for purposes of legal remittances. Even so, the balance of factor services was negative in US\$209 million (1951) falling to half that value in the following year. The restrictive decisions generated strong reactions from both the State Department and the World Bank - the latter having decided not to make any new loans to Brazil before a solution to the problem of remittances be found. 8

In 1951, the fear of a world-wide extension of the conflict led to a relaxation of the import controls and to an 82% increase of imports, to 1,703 million dollars. Since coffee prices were still high, and cotton prices soared in that year, export receipts increased 30%, to 1771 million dollars - a level which, in nominal dollars, would only be surpassed in 1968. The trade balance, however, fell substantially, to US\$68 million; at the same time, the current account deficit reached US\$400 million, the largest ever registered up to then. In 1952 the value of imports was the same as in 1951, but exports fell 20% due to a similar reduction in the quantity exported - partly a result of what was then an extremely overvalued exchange rate. The current account deficit reached US\$624 million and Brazil accumulated a backlog of commercial arrears of more than US\$560 million in 1951-52. These events created a problem of short-term external indebtedness which marked the rest of the decade.

^{8/} World Bank loans to Brazil declined in 1953 and 1954, and were nil in 1955-57. Except for a small loan in 1958, from 1955 to 1965 the Bank did not extend any loans to Brazil. See Malan (1977), pg. 116

Financing the commercial arrears meant a protracted process of negotiations involving the Eximbank and a consortium of London banks, in which short-maturity loans were negotiated under the assumption that export prices (mainly coffee) would continue to rise in the future. As we now know, this hope did not materialize. At the end of 1954, when coffee prices began their decline, foreign public debt was US\$1.3 billion. The increasing priority to debt-servicing in the allocation of scarce foreign exchange came to compound the critical growth problem of the fifties and early sixties, which required ingenious and original solutions for financing growth.

At issue was the pattern of import substitution industrialization and its financing. Import substitution accelerated in the fifties partly as a response to rapidly changing international conditions, partly as a way to cope with an also rapidly changing domestic and political economic environment.

Apparently, judging by the rate of industrial growth actually achieved (10.2% between 1952 and 1961), Brazil has fared admirably well under adverse external conditions. However, as it had happened before and would happen again - the success was partly due to stretching Brazil's ability to draw upon the future, in a sort of a political cycle in which the incumbent authorities leave to their successors the task of facing the hard choices involved in deciding who is going to bear the burden of the required adjustment.

The fifties are worth studying because the decisions taken during the decade were - perhaps more than in any other decade - crucial in shaping the long-run pattern of capital accumulation in Brazil, from then on dependent upon public sector intervention, investment in infrastructure and some key basic industries, and upon an increasing role of foreign capital.

Note that the accumulated current account deficit in 1953-54 was only US\$140 million, to be compared with US\$1,027 million in 1951-52; i.e., some adjustment had been made.

One cannot hope to understand this process without a discussion of the external conditions which marked the period and the causes and consequences of the foreign exchange regime adopted after 1953. The measures taken were not typically Brazilian. As the official history of the IMF puts it:

"World economic conditions in 1953-54 reflected three major factors: the continuing recovery of Europe, a slackening of activity in the United States in the second half of 1953 and a fall in the price of primary products as output, which has expanded in response to the Korean hostilities, encountered diminished demand. The first of these factors encouraged the hope of a speedy return to convertibility... the second and the third created difficulties for a number of primary producing countries and resulted in a series of changes in their exchange system. 10

As to the system itself, the same observer concludes:

"....few exchange systems were as complicated or as rapidly changing as that of Brazil. Its progressive liberalization, however, would have to wait for liberalization and convertibility being achieved in the advanced industrial world".11

By 1954, the completion of European recovery had important implications for the semi-industrializing world since trade credits (supplier's credits) were part and parcel of European much needed export drive. Indeed, by the mid-fifties, the United States was becoming increasingly concerned with European competition since both Europe and Japan were offering extended terms of payment to potential foreign customers. Although of relatively short maturities and high interest costs, these credits were a sort of development finance to the importing countries because they were tied to purchases of foreign machinery and equipment. Brazil figured conspicuously among these countries, especially after the break with the World Bank in 1952, the attitude of benign neglect

^{10/} Horseffeld, (1969) p. 378. Indeed, Bolivia devalued its currency by 68% in May '53; Chile by 72% in October 1953, Mexico by 31% in April 1954, Nicaragua by 29% in June 1955; Pakistan by 30.5% in July 1955.

^{11/} Horsefield, (1969) p. 382.

of the Eisenhower administration after 1953, and the dramatic fall of coffee prices after 1954.

In response to stagnating export earnings and facing an increasingly inflexible import structure, a near exhaustion of bilateral lines of credit for balance of payments assistance and increasing debt service claims, Brazil altered radically its foreign exchange system in 1953. Despite its heterodoxy, the new system did meet exceedingly well the balance of payments constraint up to the late fifties, when problems surrounding coffee policy and excess demand made inflation rates accelerate and the growing pains of disequilibrium began to assert themselves with special force.

The increasingly high administrative costs of non-reliance on market signals were clearly recognized by 1953 as the amount of foreign exchange to be allocated was much higher than at the inception of the system in 1947 and the import list was much more diversified. To meet this challenge, an auction system was introduced in October. It represented a fundamental change in the form of appropriation of the scarcity rents involved in the import control system. From then on, the government would become the major recipient of the implicit tax involved in the wide differential between the export and the import exchange rates.

Cumbersome as it may seem, the system represented a vast improvement over the previous one since it allowed for some market forces to determine the effective exchange rate in each import category. The excess of auction premia collected from importers over the bonuses paid to exporters was soon to become one of the most important factors behind variations in high powered money - and a most welcome source of government revenues (the more so, the larger the differential between the average import and export rates).

The domestic money collected for the foreign exchange sold was to be largely offset by government deficits which, in the absence of an adequate tax system, were financed through the banking system, and significant government borrowing, domestically and abroad. While from 1946

to 1952 credit to the private sector increased on average by approximately 12% yearly in real terms, from 1952 up to 1964 real credit to the private sector was virtually constant.

This transfer of resources to the government and to favored industrial sectors, although seemingly operating through the well-known principles of inflationary financing of government expenditures, had its real basis on the foreign exchange system. Coupled with the multiple rate auction system, this allowed both a taxation of exports and a selective import policy which assured the essential intermediate and capital goods required by the industrialization effort under way. In a system of import controls, or a differentiated tariff structure such as Brazil had after 1957 (where most imports of consumer goods are kept out and most intermediate and capital goods entered almost freely at a vastly overvalued exchange rate) there is a temporary discrimination not only against exports but also against domestic producers of intermediate and capital goods.

Hirschman's insightful remarks about the political economy of this arrangement aptly tackle the issues involved:

"Viewed in this way, the inability to export manufactures appears as the price which had to be paid for building up an industrial sector under adverse socio-political conditions. As industrialization proceeded, the desirability of the overvaluation devices becomes increasingly questionable from the point of view of industry itself, for overvaluation not only impeded exports but interfered...with the vigorous exploitation of the backward linkage dynamic. 12

This "vigorous exploitation" was helped by the substantial inflows of foreign capital which Brazil utilized to compensate for an inelastic supply of foreign exchange, which accentuated the protective effects of import controls and of a differentiated tariff structure. Since the inflows tend to drive down the real price of foreign exchange, the profitability of exporting may also have declined as a

^{12/} See Hirschman (1968) p. 118.

result of the inflows (unless foreign capital flowed into export activities, which it did not).

It is true that if it were not for these inflows, the spectacular fall in export prices after 1954 would have jeopardized the industrialization effort of the Kubitschek years (1956-60). But it is also true that what avoided a serious balance of payments crisis (and, consequently, the abandonment of the drive towards industrialization) was the permission to import equipment without exchange cover made possible by Instruction 113 of SUMOC. Such imports came to represent more than one-third of total imports in 1959 and 1961, entering the country in the form of equity capital in existing or newly established enterprises. Such capital was converted into domestic currency at an exchange rate close to the "free" market rate. Since amortization and interest payments for most of these externally financed equipment imports could be made at the lower average exchange rate for exports, the foreign investor was given a substantial subsidy. Foreign capital was especially attracted to explore the highly protected markets for durable consumer goods. The automobile industry represented nearly seventy percent of total foreign direct investment in the period 1955-1961. Supply incentives, perhaps more than demand prospects, were the driving force behind the birth of this important industrial segment.

Heavy reliance on foreign capital was a mixed blessing. On the one hand, it really allowed the industrialization effort to continue - and to accelerate, under Kubitschek - in conditions of stagnating or even declining capacity to import; on the other hand, it generated serious problems for the future. In fact, around three-fourths of the gross autonomous capital in 1956-61 entered Brazil in the form of credit operations carrying contractual terms of amortization and interest. Medium-term suppliers' credits became the major form of inflow. They rose from US\$97 million at the end of 1954 to US\$987 million at the end of 1961, and accounted for more than two-thirds of the gross inflows of autonomous capital over the period 1954-1961.

The basic problem was not so much the <u>level</u> of the debt, but the progressively hard terms in which new debt was obtained. By the end of 1960, Brazil was the largest international debtor among less developed countries. Total debt (US\$3.9 billion) had been increasing at a rate (21.5% yearly, from 1950 to 1960) nearly three times the growth rate of GDP and was equal to three times the annual value of export receipts by the end of 1960. Seventy per cent of the total debt was scheduled to be paid in the next three years.

The alternative would have been a more aggressive export policy. It should be noted, however, that in 1960 nearly 30 per cent of Brazilian export revenues came from inconvertible currency areas. But the crucial issue was related to coffee. By 1958, international overproduction was such that prices of Brazilian coffee declined by more than 20%. The government had not only to increase bonuses given to exporters, but also spent 24.5 billion cruzeiros (roughly equivalent to US200 million) buying coffee from growers. Coffee exports in that year, at US\$688 million, were more than 50 per cent lower than the 1956 level and even less so in real terms, given dollar inflation. As a result, there was a sharp reduction in the amount of foreign exchange actually brought to the auctions, more than doubling the auction premia and fueling inflation. As Fishlow rightly observed:

"Commercial policy could extend significant and even increasing subsidies to industry... but after 1958 it could not longer simultaneously provide for internal transfer of real resources to pay for them" 13

After the break with the IMF in mid 1959, due to a failure to implement an anti-inflationary package, the economy was drifting up to the end of Kubitschek's term. Quadros' brief tenure of seven months was marked by a classic devaluation cum stabilization program which, thanks to the Kennedy administration's unconditional support, appeared to signal a new phase of successful orthodox economic policy-making with respect to the foreign sector.

13/ Fishlow: (1975), p.26.

As a matter of fact, internal imbalances, mostly aparent in the rate of inflation, had profound roots in the Brazilian newly established and highly unbalanced economic structure. The legacy of Kubitschek's ambitious goals, in terms of inflation and balance of payments disequilibria, required some hard choices which the Goulart government was not prepared to make. Military intervention in April 1964 decided in favor of orthodoxy.

3. Institutional Change, Structural Continuity (1963-1967)

The beginning of the sixties witnessed a loss of dynamism in the level of economic activity. This was particularly true in the manufacturing industries where growth rates, after having averaged almost 13% yearly between 1957 and 1961, fell to 8% in 1962 and stagnated in the following year. Stimuli from domestic demand seemed to have failed as inflation, in itself a serious problem in the previous period, accelerated to rates unkown until then (50% in 1962 and 78% in 1963). political instability had a strong influence on a set of economic policy measures which lacked coherence. The Plano Trienal, supposedly to be implemented over 1963-65, proposed strong stabilization measures, the initial implementation of which had an impact much greater than envisaged by the Plan itself. 14 It has been argued that the stabilization policy attempts of 1963 triggered the recession in that year, given the sharp monetary and credit restrictions suddenly imposed. 15 In fact, vacillations and inconsistencies in the conduct of economic policy, as well as budget constraints, are reflected in the diminishing priority of growth and

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^{14/} Money supply was planned to increase by Cr\$25.1 billion in the first quarter of 1963 - but grew only Cr\$3.7 billion, denoting a strong liquidity contraction. In the second quarter the planned expansion was Cr\$74.1 billion. Actually it reached 179.4 billion, meaning that the Plano had been abandoned by then.

^{15/} See J. Wells (1977) and A. Lara Rezende (1982), for forceful arguments in this direction.

industrialization during both the Quadros and Goulart governments, as compared to that of Kubitschek. Public investment was sharply cut as a counter-inflationary measure, but current expenditures were allowed to rise even more rapidly than before. The budget deficit increased substantially and was financed mainly by money creation. In addition to that, inflationary pressures were strengthened by attempts at real wage increases. Therefore, uncertainties over the future could also be blamed for the sharp fall in investment and years of reduced industrial growth. In fact, in real terms, the overall average growth in manufacturing between 1963 and 1965 was close to zero.

Many contemporary analysts, emphasizing limited domestic market sizes and unequal patterns of income distribution, tended to view this loss of dynamism in terms of a stagnation which followed the exhaustion of the import substitution process. Hirschman and Fishlow have convincingly shown that the type of import substitution industrialization which has occurred, with initially large, indivisible and complementary capital expenditures, was inherently cyclical rather than stagnation-prone. 19 At the outset,

^{16/} In 1961 the Federal budget showed its first current account deficit in many years, of some 0,6% of GDP. In 1962 and 1963 the deficit reached 2.8% and 0.9%. The overall deficit, in the same years, was of 1.9%, 4.3%, and 1.7% of GDP. See Sochaczewski (1980).

^{17/} In 1962 the Government instituted the payment of a 13th salary to be paid in December of every year.

^{18/} One should note another reason contributing for the growth slowdown and inflation acceleration: agricultural output stagnated in 1963 after many years of above average growth rates.

^{19/} See Hirschman (1968) and Fishlow (1972). Hirschman's analysis, in fact, noted that the sharper decline in investment than in income ultimately leads demand to grow up to previous capacity and motivates a new cycle of capital formation - as it did start to occur in Brazil shortly after his article was published.

production and investment grew rapidly, at rates clearly superior to those which could be sustained over the longer term. 20 The deceleration of the rate of growth in output and investment implied by the substitution process is inevitable and - as Fishlow has shown - inherently destabilizing, since entrepreneurial expectations do not exactly move opposite, but rather tend to follow, production statistics. Therefore, they not only fail to restrain early euphoria, but also to sustain optimism as the rate of growth diminishes. In fact, the opposite occurred, contributing to the marked slowdown of output and to the associated exacerbation of distributive conflicts and political instability which led to the fall of Goulart in March, 1964.

The military intervention of 1964, which acquired a dynamic of its own and led to 21 years of military governments, is, from a political point of view, a crucial benchmark in Brazil's recent history. From a strictly economic and structural perspective, however, it is important to note that the military governments continued to explore all the possibilities of the capital-intensive pattern of development associated with foreign investment which Kubitschek had so successfully promoted during his Administration. It is in this sense that the sub-period after 1964 could be characterized as political change <u>cum</u> structural continuity.

In addition to the cyclical factors, there are two additional reasons explaining the crisis of the early 1960s. Both of these were, in a sense, dealt with in the immediate post-1964 period. One has already been referred to: the temporary exhaustion of the capacity of the public sector to either finance directly the investments in infrastructure or to continue the indirect transfer of resources through intervention in the foreign

^{20/} Fishlow (1972) has described the process in the following terms: "In the case of actual substitutes, such rates are due to displacement. In the case of new goods, which had neither been imported nor produced, the reason is the response to lowered price. Effectively, due to prohibition or licensing, the price of the imported equivalent was extraordinarily high, while the domestic substitute was available at a cost within the relevant range. After this initial reduction in price and the response to it have occurred, growth is governed subsequently by income elasticity." p.347.

exchange-system. The other was the balance of payments crisis of the early 1960s. In fact, between 1959 and 1962 the outflow of interest payments and profit remittances almost doubled. In 1962, debt service amounted to one-third of exports. Legislation curtailing profit remittances was passed in 1962 and foreign investment declined sharply after 1961 (from an annual average of almost \$120 million in 1957-61 to \$30 million in 1963).

The post-64 regime was able to design reasonable solutions to both problems. The fiscal crisis and the financial disequilibrium of the public sector were tackled by a revised tax system and improved collection, including indexing of back taxes, increases in the prices of public utilities and, for the first time in the country, the institution of monetary correction for Government paper in order to have them voluntarily held by the public so as to allow a non-inflationary financing of a deficit. Several actions to increase the efficiency and modernize the state apparatus were undertaken. The balance of payments crisis was solved partly with the enthusiastic support of the US administration for the new regime, a quick restructuring of the debt to official creditors, a reopening of World Bank loans, a surge in exports and a very sharp fall in imports (of over 30% between 1963 and 1965), both partly due to the sharp deceleration in output and domestic incomes in 1964 and, particularly, in 1965.

The stabilization program of 1964-66 was not as orthodox as it has often been described. The program was partly based on an explicit incomes policy and continued to rely on nominal anchors such as the exchange rate and key public prices. Its relative success in curbing inflation from an annualized 100% in the first trimester of 1964 to around 30% in 1966 was obtained at the expense of certain groups, especially low-wage earners, since the wage formula adopted in 1965 granted increases partly based on governmental expectations of future inflation -- as expected, consistently

underestimated. 21 But it should be noted that the "modernizing" and income concentrating reforms of the 1964-66 period laid the basis for a resumption of growth without immediate additional investment, given the idle capacity generated by the large investments of the 1956-62 period.

In authoritarian Brazil from 1964 to around 1970, the more regressive distribution of income against low-wage earners and the opening on a large scale of consumer credit facilities for purchases of consumer durables made possible the sustained boom of the automobile and appliances industries somewhat at the expense of both the traditional consumer goods industries and the industries producing capital goods and basic inputs. In fact, the fall in real wages at the bottom came together with a widening of the wage spectrum, with large increases in real wages at the top of the distribution. This phenomenon partly accounts for the observed change in consumption patterns which was strongly reinforced by the introduction of consumer credit, and indexed financial instruments.

It is worth noting that throughout the 1964-73 period, the real function of indexation was to avoid some undesirable intersectorial transfers or repercussions of inflation, which was widely expected to continue around the average of the 1950s. In fact, inflation never fell below 15% in the period. In this respect - and with the crucial exception of wages - indexation was effective in the sense that it safeguarded the real income of exporters (through frequent devaluations of the exchange rate after August 1968), the assets of creditors and savers (through indexing of interest rates on loans, treasury bills and savings deposits), and fiscal revenues through indexing of back taxes.

^{21/} As noted by a leading analyst: "Due to the underestimate of the inflationary residual, this criterion (the formula of readjusting wage by the average and not by the peak and incorporating an estimate of next-period inflation called the residual) seems to have provoked a certain decline of real wages between 1965 and 1967 which, after all was the counterpart to the improved position that was intended for landlords, owners of public utilities concessions, holders of financial instruments and other beneficiaries of corrective inflation" (emphasis added). See Simonsen, (1970), p. 184 (our translation).

The important point to retain is that governmental intervention increased and the system, despite all the so-called "liberal" rhetoric of the 1964-67 period, continued to be a highly administered one. It could be used, and as time went on, it was actually used to award special favors to economic activities newly considered essential, by exempting them from the indexing mechanism, just as the 1950s' combination of inflation, overvaluation and foreign exchange auctions had shifted resources towards favored sectors. 22

4. Growing Euphoria (1968-1973)

The performance of the Brazilian economy during this period has been rather impressive when viewed through the lenses of conventional indicators. Indeed, the so-called "Brazilian Miracle" was characterized by: (a) a yearly average real GDP growth rate of 10.7% over a seven-year period; (b) a relatively low rate of inflation, as compared to the previous (1963-67) and next (1975-80) periods (23.6% yearly versus 56.4% and 49.6%, respectively), its effects being partially neutralized by widespread indexing; (c) an overall surplus in the balance of payments in every year from 1968 to 1973, leading to a rise in both foreign exchange reserves and foreign debt, which increased from US\$3.3 billion to US\$17.2 billion from 1967 to 1974, nearly three-fourths of the increase being due to currency loans.

The military government's political legitimacy during this period rested largely upon these achievements: in many interpretations, an authoritarian and centralized regime, and its associated 'rational and

 $[\]frac{22}{}$ For a brilliant discussion of these possibilities, see Hirschman (1981).

^{23/} International reserves were \$200 million at year-end 1967, barely enough to cover one-month-and-a-half of imports. In December 1973, they reached \$6.4 billion, more than half of the total Brazilian external debt (\$12.6 billion) and roughly equivalent to one year of (pre-oil-increase) imports. See Bonelli and Malan (1976).

pragmatic' economic policies, have been presented as the main factors beneath these rather favorable results. However, a clear understanding of the Brazilian 'boom' should necessarily take into account, in addition to the role of a pragmatic domestic policy able to seize the opportunity, the simultaneity of a domestic cyclical upswing and the very favorable international conditions of the period.

At the outset, it should be noted that it was an industrial 'boom': agricultural output grew only 3.6% per year over the period, while manufacturing industries output expanded at 12.6% yearly in real terms. From the supply side, the beginning of the boom was made possible by the existence of substantial idle capacity in manufacturing, which made the 'boom' relatively costless in its initial years. Notice that the aggregate investment rate, which had been in the order of 16% in 1966-67, reached only 20% in 1972-73. Output growth, therefore, was based on capacity built years before. After 1970 manufacturing investment began to accelerate in response to both expectations of prosperity and decreasing idle capacity. New investments were granted an extensive system of incentives which included value added and sales tax exemptions and credits, custom tariff exemptions for capital equipment, and preferential credit support from official entities.

In addition, favorable balance of payments conditions allowed increasing imports of industrial raw materials and capital goods. From the demand side, a broad range of expansionist fiscal and monetary policies was implemented. Expanded consumer credit for the acquisition of durable consumer goods (the leading segment during the 'boom'), increased incomes, and the concentration of earnings in the top-income group, were responsible for a 22.8% yearly growth rate of real output of durables between 1967 and 1974. The booming domestic demand was reinforced by schemes of export promotion via incentives and subsidies; exports of manufactured products rose by 16.8% yearly in real terms. Imports, on the other hand, rose almost 26.0% per year - thereby almost doubling their share in total supply (from 9.2% to 17.3% when measured in 1970 prices).24

^{24/} For a detailed discussion, see Malan and Bonelli (1977)

The success in opening up the Brazilian economy in the late sixties and early seventies has to be seen against the background of the deep changes then under way in the international economy - in terms of trade as well as of international capital movements. Both received important stimuli from the European return to full convertibility after 1959 (followed by Japan in 1964). In nominal dollar terms, world trade grew at an amazing rate of 18% a year from 1967 to 1973. Fueled by US balance of payments deficits, the late 1960s were marked by the increased importance of deposits denominated in the national currencies of the major industrial countries, especially deposits denominated in dollars held outside the United States. Voluntary private international capital flows, absent since the 1930s, returned with special vigor. These developments set the 1960s, especially its second half, distinctively apart from the 1950s.²⁵ In fact. the revival of international trade and investment in the 1960s, though benefiting essentially the more advanced economies, spilled over to the periphery of the system, particularly to countries whose exportable production was complementary to the centre, and semi-industrialized countries with relatively high levels of per capita income, relatively cheap labour supplies, relatively stable economic policies, and large, growing and protected domestic markets.

Brazil has traditionally benefitted from the attraction that the size of her domestic market, her westernized urban consumption patterns, and protective practices have exercised on foreign investment. Indeed, partly due to a favorable legislation with respect to foreign capital, since World War II direct investments have grown faster in Brazil than in any other country in Latin America except Venezuela. By the end of 1956,

^{25/} Professor Robert Triffin has noted that while world reserves increased at an average rate of 2.75% per year between 1949 and 1969, the average rate of increase from 1969 to 1974 was 22.7% per annum! Triffin notes that this system of credit reserve creation undoubtedly contributed to the ability of the advanced countries to expand their loans and investments in the developing world. In fact, he rightly notes that the increase in the overall surplus in the balance of payments of developing countries was not derived from current account surpluses, but rather from the over-financing of their current account deficits by capital flows from the developed countries, especially the U.S. See Triffin (1975).

US direct investment in Brazil was exceeded only by investments in Canada, UK and Venezuela'. ²⁶ The economic ministers of the regime which came to power in 1964 were keenly aware of the crucial role that foreign capital had played in the structural changes that were taking place in the Brazilian economy. They were accordingly deeply committed to assuring the continuance of this role by pursuing an overtly open capitalistic development. ²⁷

With respect to trade, the bias against exports ²⁸ began to be reversed. This was achieved through bureaucratic simplifications of the licensing system, by the introduction of a complex system of credit and tax incentives, and particularly by the adoption of the mini-devaluations policy in August 1968. From 1967 to 1973, Brazilian exports increased at a rate of 24.8% a year, while world exports increased by 18.3% a year, both in nominal dollar terms.

Since export prices increased more than import prices (an average 9.4% a year as opposed to 6.2% for import prices), the terms of trade increased by 20% from 1967 to 1973, allowing for a higher rate of income growth than product growth. Due to the 13% a year increase in the volume

^{26/} See US Department of Commerce (1957). p.64. It should be noted that Venezuela appears as third in the list due to oil investments. Over half of the US\$1.2 billion invested in Brazil was in the manufacturing sector (US\$701 million). The comparable figure for Venezuela was US\$114 million.

^{27/} Public sector intervention in economic life, both as policy-maker and as direct producer through state enterprises, increased after 1964 in spite of all the privatist rhetoric of the successive governments. This is one of the most interesting areas for research in the political economy field in Brazil.

^{28/} Brazilian exports, from 1947 to 1964 have fluctuated in nominal dollars between US\$1.100 million (1949) and US\$1.771 million (1951, the highest level up to 1968), with an average of US\$1.448 million. One of the most remarkable aspects of the Brazilian experience with economic development was the attainment of a 7% average rate of growth of GDP in real terms for two decades (1947-67), with exports almost stagnant (the yearly rate of increase in dollar terms was only 2.1% between 1947/48 and 1967/68, less than the rate of population increase). Import capacity was stagnant as well, since import prices did not fall during the period.

of exports, the current capacity to import increased by 150% from 1967 to 1973, the sharpest sustained increase Brazil has experienced since the 1920s.

The increased import capacity was more than fully utilized. This is expected, since in a growing industrialized economy imports have to grow at a slightly faster rate than exports in order to assure the much-needed transfer of real resources from the rest of the world. In fact, Brazilian imports (CIF) showed an increase of 27% a year from 1967 to 1973, while world imports increased by 17.5% a year. The breakdown of this increase in its price and quantity components shows that the volume imported rose by 18.5% per year in the period, while import prices increased at a rate three times lower (6.2%). The implied income-elasticity of demand for real imports - near 2 - suggests the validity of a crucial observation by Diaz-Alejandro:

For the range of growth in which a country has developed consumer and intermediate goods industries but has not yet developed significantly its capital goods industry, the greater the (rate of growth of) per capita income, the more likely it will be that its short-run marginal propensity to import will be proportionally greater than its average propensity to import due to its dependence on imported capital goods and the cyclical nature of the demand for these items.²⁹

Indeed, capital goods imports, which represented slightly more than one-fourth of the import bill in 1965-66, reached 41% of total imports in 1971-72. This very high rate of capital accumulation (since domestic production of capital goods rose by an impressive 20.5% per year on the average between 1967 and 1973), was accomplished simultaneously with very high rates of growth of consumption expenditures. This conjunction of a high investment effort with a high propensity to consume was only made viable through a policy of rapidly expanding external indebtedness. Brazilian total foreign debt, in fact, increased almost four-fold from 1967 (US\$3.3 billion) to 1973 (US\$12.6 billion).

^{29/} Diaz Alejandro (1965) p. 509.

Partly as a result, the country developed a more permissive attitude towards inflation. Contemporary observers pointed to the fact that the excess-demand view according to which inflation should be curbed by credit restraint, discretionary wage policy, and balanced budgets 30 been abandoned in favour of a more gradualist-structuralist approach emphasizing cost-pressures and the need to learn to live with a rate of inflation of at least 12-15% a year. 31 The excess capacity of 1967 did suggest that an expansionist credit policy might have stimulated output considerably and outweighed the social costs associated with the general increase in the price level. Indeed, after 1967-68 the ratio of loans to the private sector to the money supply, which had been near one since the early 1950s, began to increase steadily and sharply, reaching 1.7 times the money supply by December 1975. On the other hand, due to the tax reform of 1967, the gross tax burden increased by almost five percentage points of Gross Domestic Product between 1967 and 1972, contributing to the surpluses of the early 1970's, maintained throughout 1973-75. 32

^{30/} For some accounts of the attempts at curbing inflation during 1964-67 along these lines, see Fishlow (1973); Morley (1971) and Kafka (1967).

^{31/} As Bacha pointed out, "Paradoxically the gradualistic approach to monetary policy eventually adopted by Brazilian policy-makers vindicates (with a vengeance!) the structuralist critique of monetarism as a means of fighting inflation in Latin America". See Bacha (1977) p.48.

^{32/} See Silva,(1976), especially Chapter III, for a discussion of these points. Note that the series on government accounts before and after 1970 are not strictly comparable.

The basic lines of the wage policy, conducted through discretionary government formulae, continued unimpaired until 1974.³³ For some critics, it was one essential domestic feature behind the boom, as well as behind the increased regressiveness in the pattern of income distribution in the 1960s.³⁴

Indexing, coupled with a wide spectrum of fiscal incentives to those able to save, gave a boost to private voluntary savings. Non-monetary assets, barely one-third of monetary assets by 1967, reached the same value by 1971 and were 55% larger than the monetary assets by 1975. Compulsory savings increased sharply after 1967 due to workers' pension funds and social security schemes which were created in the second half of the 1960s, providing sources of longer-term financing for housing and urban infrastructure.

In short, economic policy was 'successful' because it was operating in an environment potentially conducive to high levels of expenditure and output growth. The year 1974, however, would painfully show that growing euphoria has its costs, and that a given economic policy frequently outlives its utility.

^{33/} Writing in 1973 on the Brazilian contribution to anti-inflationary policies, Mario H. Simonsen noted: "...there is a considerable advantage in creating a rule for arbitrating collective wage negotiations. The great problem of these negotiations in the modern world, including wage setting at the level of governmental decision, is that they are agressively affected by the political power of unions and employers' associations, by electoral criteria and by other criteria distant from any economic efficiency theorem. A [wage-setting] formula of this type has the advantage of replacing an endless game of strikes and pressures by a simple arithmetic calculation" (emphasis added) see Simonsen (1973) p.31, (our translation).

^{34/} Fishlow, (1973a)

5. Rise and Fall of Debt-led Structural Adjustment (1974-1980)

Brazilian policy response to the sharp oil price increases of 1973/74, as formulated by the Geisel administration inaugurated in March 1974, had a clear emphasis on the need for growth-oriented structural adjustment. The strategy was explicitly formulated in the second National Development Plan, which confidently projected into the next five years the average rate of growth of the previous period. It launched an ambitious program of import-substitution investments in capital goods and basic raw materials, while continuing to pursue the long-gestation projects which had been initiated in the previous years of growing euphoria. Of course, public policy in the form of privileged access to subsidized credit was geared to the new priorities.

The perception of the need to increase <u>net</u> exports and therefore to transfer abroad real resources was there, as the only long-term solution to the lowered rate of growth of real disposable income implied by the terms of trade deterioration caused by the oil shock. However, the Government chose "rationally" to ride out the potential recession and not to experience the inevitable income loss in 1974-75. It continued to borrow abroad so as to maintain growth and domestic demand, while attempting to change the structure of production of the Brazilian economy.

The growth of external debt was thought to be a temporary price to be paid for financing this change, as well as for distributing over time the burden of the adjustment. Given OPEC countries'preferences for holding in liquid form their sizeable increases in income and the decision on the part of the major industrial countries to leave the so-called recycling of OPEC surpluses entirely to private commercial banks, there was no difficulty whatsoever in tapping external resources. These were transferred mostly in the form of currency loans to both the private and the public sectors for general balance of payments support - an option which Brazil had already exercised in the 1968-1973 period.

As a result, net medium and long term foreign debt rose fivefold between December 1973 and December 1978, from \$6,155 million (approximately equal to the value of exports in 1973) to \$31,616 millon (two-and-a-half times the value of exports in 1978).

With the exception of 1974 and 1975, when there was a loss in international reserves (of around \$950 million in each year) for the whole eleven-year period from 1968 to 1978, there was an over-financing of Brazil's current account deficit through the capital account. In 1978 alone, gross capital flows totalled nearly \$11 billion, much in excess of the current account deficit and leading to a \$4 billon increase in the Central Bank's international reserves. OPEC surplus had been reduced to virtually nil in that year, indicating an important fact, not well understood at the time: that the international private credit market was not dependent on OPEC surpluses to extend loans to developing countries.

For many optimistic observers, by 1977-78 the balance of payments adjustment in Brazil was nearly completed. The trade deficit of \$4.7 billion in 1974 had been eliminated in 1977. The current account deficit was reduced from \$7.1 billion in 1974 to \$4 billion in 1977. Imports, after rising slightly more than 100% in 1974 (to \$12.6 billion) were kept in the \$12 billion mark for the next three years. Exports rose from \$6.2 billion in 1973 to \$12.1 billion in 1977. Moreover, the economy was growing at an average annual rate equal to the historial (i.e. post-war) rate of around 7%, and inflation had stabilized at the 35-40% rate. The real investment rate as a share of GDP was around 25% in 1974-76, an historical high and nearly 5 percentage points above the average for 1968-70 (20.5%).

But could one really say that adjustment "Brazilian-style" had been accomplished by 1977-78? Could one maintain that were it not for the second oil shock and the U.S. "monetarist revolution" of 1979, Brazil -together with other forty developing (and socialist) countries- would not have reached the debt rescheduling stage in the years from 1980 to 1982?

A perceptive analyst wrote in 1979 the following passage worth quoting in full:

.... "in many semi-industrialized and in a number of the less developed countries, there is a degree of financial precariousness that is much more widespread than at any time since at least 1950. What happened was that a number of countries took conscious and, I think, rational decisions to ride out the recession. They chose not to experience it in 1974-75, but to borrow abroad instead, to maintain growth and domestic demand, and external debt rose accordingly. They took a gamble that I think was rational and that, indeed was very helpful from the point of view of the world economy as a whole, because they helped to limit the extent of the downturn. But it is a gamble that they essentially lost. The recession was much sharper and much longer than was anticipated at the time, and now these countries face serious decisions as to how much to retrench and how to accomplish it...(emphasis added) 35

It is hard to answer this counterfactual question even with the benefit of hindsight, but it is undeniable that the adjustment, as attempted, did increase the vulnerability of the Brazilian economy to further external shocks. Oil dependence was the most apparent one for a country importing more than 80% of its consumption. Oil came to represent around one-third of total imports in 1976-78 (as against 10-11% over the 1968-73 period), despite a virtual stabilization of its nominal price around \$12 per barrel between 1974 and 1977 -a sharp fall in real terms due to world inflation and the rise in the price of Brazilian exports. Other imports fell accordingly. Capital goods went down from 41% of total imports in 1971-72 to 26% in 1977-78 and intermediate goods from 39% to 33%.

However, as serious as the problem posed by oil dependency, if not more, was the increased vulnerability to upward changes in international interest rate which came to regulate nearly 70% of the long and medium term Brazilian foreign debt - \$43.5 billion by the end of 1978, of which \$29.5

^{35/} Cooper (1979), p.325.

billion consisted of currency loans. As a result, net interest payments came to represent, in 1977-78, nearly half of Brazil's current account deficit.

This fact has an important implication. With a higher interest bill, the same current account deficit implies a much lower transfer of real resources from the rest of the world. In other words, the net contribution of foreign savings to Brazilian growth was steadily declining over the period. In order to maintain the economy growing, this reduction in the contribution of foreign capital had to be matched by an increase in domestic savings expressed not in inconvertible cruzeiros but in foreign exchange terms, i.e., the adjustment required a sustained expansion of net exports.

By building up foreign debt, this real adjustment could have been postponed or distributed over time, but it could not have been avoided. In a mixed economy it would have required a substantial shift in relative prices - sustained and perceived as such - to induce substitution not only This adjustment was very in consumption, but in production as well. timidly running its course, together with its slowly working real effects (due to the higher capital ratios and long maturation periods of the big investment projects being simultaneously implemented) when a more vulnerable Brazilian economy suffered two near-fatal blows: first, second oil shock, which sent oil prices from \$12 to \$30 per barrel from late 1978 to early 1980; second, the sharp rise in international interest rates. which doubled in nominal terms from 1977 to 1979, and increased even further in 1980 before reaching their peak in 1981 (17-18%) under the impulse of a rather peculiar monetary and fiscal mix in U.S. economic policy. The game was clearly over. It took nearly three years, from 1979 to 1982, for Brazil to fully recognize it. 36

The second oil shock led to an OPEC surplus in a two-year period (1979-80) of nearly the same magnitude, in current dollar terms, as the surpluses observed in the 1974-78 period (around \$170 billion). The lower

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^{36/} See Fishlow (1986)

magnitude in real terms was more than compensated for by the higher share of oil consumption in world income, by the sharp rise in international interest rates, and by the difficulties involved in a second-round of recycling the OPEC surpluses, due to the increased vulnerability of the already highly indebted developing countries.

Brazil's trade deficit rose from \$1 billion in 1978 to \$2.7 billion in 1979, and to \$2.8 billion in 1980, despite an impressive growth of exports of more than 50 per cent in nominal terms, in the two-year period 1979-80. But imports rose by more than 70 per cent, due to sharply deteriorating terms of trade. Oil came to represent nearly 45 per cent of total imports in 1980. The apparently high level of the Central Bank reserves at year-end 1978 (\$11.8 billion) was sharply reduced by the next two years overall balance a payments deficit: \$3.2 billion in 1979 and \$3.6 billion in 1980.

A short-lived, unrealistic expansionist policy in late 1979/early 1980 was attempted by Minister Delfim Netto, who had replaced Minister Mario Simonsen in August, 1979. The rate of growth of real GDP in 1979 was 6.8% and nearly 8% in 1980. A devaluation of 30% in December 1979 helped boost exports from \$15.2 billion in 1979 to \$20.1 billion in 1980. However, imports rose from \$18.0 billion in 1979 to \$23.0 billion in 1980, practically repeating the trade deficit of 1979. The current account deficit rose from US\$10.5 billion in 1979 to \$12.8 billion in 1980, half of it represented by the interest costs on net foreign debt.

Inflation, which was kept in the 35-40% range from 1974 to 1978, rose to 77% in 1979 and to an unprecedented 110% in 1980. By mid-year, the first hints of Brazil's need for rescheduling its foreign debt started to appear in public discussion - the suggestion of the need for IMF advice being voiced by an increasing number of foreign bankers. The spreads paid by Brazil on external loans increased from 0.75 per cent to 2-1/8 per cent while short-term borrowing soared. In just two years, 1979 and 1980, Brazil lost more than \$6 billion in international reserves.

The reason was, as so often in the past, the balance of payments crisis. Compounding it were the rather precarious net reserves position, and very specially, the erosion of credibility in the Government's policy. This erosion was precipitated by the disastrous decision (in January 1980) to predetermine the rates of devaluation and monetary correction for 1980 (at 40 per cent and 45 per cent respectively) when even the more optimistic observers were expecting a rate of inflation of at least the same magnitude of 1979 (77 per cent), and probably much more, due to the second oil shock, the December 1979 maxi-devaluation, the acceleration of wage readjustments decided upon in late 1979, and the widespread use of backward-looking indexing mechanisms.

The public sector had clearly, once again, lost any capacity to exercise a minimal coordinating role. Although the <u>coup de grace</u> came in 1982, Brazil lost the decade of the 1980s for growth and development in 1980-83, when it was forced to turn to a policy-generated recession which, differently from the 1964 -66 experience, did not serve any purpose in terms of restoring external and internal balance.

The fact is that current account deficits of the magnitude experienced by the Brazilian economy during the 1974-80 period - on average roughly 5% of GDP - reflect either: (a) a current level of public and private expenditures on consumption and investment, which is too high relatively to aggregate domestic productive capacity at given prices; a level of such expenditures that was too high relatively to existing domestic productive capacity and financed by past external borrowing (payments on which were increasingly falling due); or, perhaps more relevant to the Brazilian case, (c) a composition of total expenditure between was not sustainable at the tradeable and non-tradeable sectors which current level of productive capacity in the tradeable sector. ambitious public programs in non-tradeable areas, as well as badly needed investment in the "social" sectors, a traditional non-tradeable activity, drained resources from investment in tradeables and raised fundamental questions for the growth strategy.

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The adjustment to this disequilibrium continues to be as elusive a goal in 1989 as it was in the early 1980s. As the 1980s come to an end, the experience of three-and-a-half decades of sustained high-growth run the risk of becoming a rememberance of things past. The 1980s have been marked by the problems accumulated in the previous decade plus an erratic pattern of domestic policy responses. One could only hope that the 1990s would not be held hostage of the legacies and erratic policies of the 1980s.

IV. Legacies of the Past, Challenges for the Future: A Summing-up

The decade of the 1980's draws to a close amidst unprecedented disenchantment and frustration with widespread and deep-rooted economic crisis facing the vast majority of countries in Latin America. The remarkable and welcome resurgence of civilian, democratically-elected governments, although justly raising high expectations, does not, per se, remove the dark shadow of uncertainties clouding the near-term economic future of most countries of the region, a continent lagging behind developments elsewhere (Africa excepted) in an increasingly competitive world economy.

A deep rethinking is in order. In fact, it is under way in many countries in the Region. The rethinking, as usual, takes the form of a never-ending dialogue between the past and the future. The current pessimism, largely based on the dismal performance of the 1980's, is diluting the memories of the long lasting period of economic growth which marked the experience of several countries of the region in the three decades before the early 1980's.

Brazil, in particular, experienced in about three decades one of the most rapid and extensive transformations of productive structure ever seen in semi-industrialized countries. From a still predominantly agrarian society in the forties Brazil has been transformed into a full-fledged urban and industrial society which, by 1980, ranked as the eighth largest economy in the so-called Western World and the seventh in terms of industrial sector output. The market value of goods and services produced by the Brazilian economy more than doubled in real terms every ten years from the immediate post-war years up to 1980, a broadly sustained average real rate of growth of 7.4% per annum, roughly similar to the Japanese and Korean growth records over the period.

The sustainability of this high growth performance should not be overlooked. During the 33 years from 1948 to 1980, only in four (1956 and 1963-5) the positive rate of growth was bellow 4%. In six years it was between 4 and 6%. In all the other 23 years it was over 6% being over 10% in six of these. 37

The great leap forward which Brazil managed to achieve in economic and (less so) in social terms in the three-and-a-half decades after Word War II fits admirably well in Hirschman's sailing-against-the-wind notion of an unbalanced and "antagonistic" growth process. Unbalanced, because of the discontinuities and indivisibilities which marked the process of overcoming shortages and bottlenecks. Antagonistic, because although all-around growth was, in fact, being achieved and the overall movement was clearly forward, during several sub-periods some specific sectors were gaining at the expense of others, or some specific objectives were being pursued at the expense of others. ³⁸ Sailing against the wind, notes Hirschman, is actually how Western societies have been travelling when they were moving forward at all. Brazil has been no exception.

The paper emphasized the sectoral (and intersectoral) income shifts provoked by inflation and particularly by the changing nature of public intervention. During the three decades or so covered by this paper, these

^{37/} In contrast, in the nine years from 1981 to 1989 the average rate of growth of GDP was only 2.1% a year. In six of the nine years' growth was below 4% and there was actually a decline of GDP in no less than 3 years out of these nine, something Brazil had last experienced in 1942. In half-a-century (1930-1980) Brazilian GDP declined only in four years: 1930-31, 1940 and 1942.

^{38/} Hirschman (1983).

shifts stimulated growth by making extra resources available to public sector investment in infrastructure -- and associated private contractors -- as well as to private sectors exploring new profitable opportunities by either investing in backward-linkage industries, new import-substitution activities, or expanding into export markets.

During the 1950's, the bulk of the resources required to finance these expanding investments came largely at the expense of tradeable agriculture in general, and from the coffee sector in particular, through public sector intervention in the foreign exchange system. The inflation-induced overvalued exchange rate, coupled with the required import controls operating through the auction system, functioned as a sort of indirect taxation of the coffee complex, transferring resources to the industrial and public sectors.

The effectiveness of this resource transfer mechanism began to falter in 1959 (partly due to the continuing fall in coffee prices and decreasing total exports) and disappeared with the changes in the exchange rate system of early 1961. Short-term inflows of foreign capital masked for a while the extent to which the pattern of financing development in the 1950s had reached diminishing returns by the very end of the decade and was rendered ineffective after 1961.

The growth retardation of the early mid-1960s, especially acute in 1963-65, had its roots in the cyclical nature of import substitution industrialization, with its large, indivisible and complementary investments, as well as in the effects on "animal spirits" of investors (domestic and international) of the political turmoil and uncertainties following President Quadros' resignation in August 1961. The public sector lost any capability to be even a loose coordinating element for any growth strategy. Limitations of public finances and external resources proved unsurmountable. The military intervened in March 1964.

The military intervention represented a fundamental benchmark in Brazilian recent political history. The momentum it acquired led to more than two decades of military regimes with deep-rooted political

consequences. However, from an economic, structural point of view, the first military government (Castelo Branco, 1964-1966) managed to overcome the institutional bottlenecks hindering a continuation of the associated model of development (with strong participation of foreign capital) which Kubitschek had so successfully promoted in the second half of the 1950s. Under the first military government, the limitations of public finance were overcome through tax reform, the introduction of indexed government paper and the modernization and improved self-financing capacity of public enterprises, allowed for by the increase in public sector tariffs and prices. The external resource constraint was quickly alleviated by the attainment of large trade surpluses (partly due to sharply reduced growth) and by a suddenly discovered extreme good will of official foreign creditors, which quickly rescheduled Brazilian external debt.

The burden of the adjustment to a lower inflation path was borne largely by low and middle-wage earners and the income redistribution increased the disposable income of the better-off. By 1967, domestic economic conditions were ripe for a cyclical recovery based on industrial capacity created during the previous cycle (1956-62). The convergence of a domestic cyclical upswing with an unprecedented and extremely favorable international environment in trade and finance, led to the growing economic euphoria of the so-called Brazilian Miracle of 1968-1973. The public sector continued to be the coordinating element. Growing incomes generated growing tax receipts, exports were booming and external borrowing facilities were such that development seemed to go on with an unlimited supply of foreign exchange. Brazil was accumulating both external debt and international reserves.

The first oil shock was an important signal pointing to the vulnerabilities of an imported-energy-intensive pattern of capital accumulation based on an attempt to reproduce modes of consumption which are characteristic of societies with far higher levels of income per head. The increase in the relative price of oil required a reduction in real national income (and the internal distribution of this burden) unless real output capacity could have been accelerated and externally financed. The easy (perhaps too easy) availability of external resources at very low real

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interest rates actually existed: international liquidity increased as oil exporters decided to keep their newly acquired wealth in the international financial market and as the major country governments decided to leave the "recycling" process entirely in the hands of private commercial banks.

At this juncture, in the mid-1970s the public sector tried to play its usual "coordinating role" emphasizing the need for a new phase of import-substitution in the areas of capital goods and basic raw materials. Resource transfers and privileged access to underpriced scarce resources in the form of exemptions from fully indexed credit were extended to private and public enterprises investing in these favored sectors. At the same time, the ambitious, long-gestation projects generated in the phase of growing euphoria, (mostly non-tradeable infrastructure), continued to be carried through. This represented an over-loading of the fiscal and financial capabilities of the public sector given the existing tax structure. The impressive new investment boom of the mid and late seventies was only possible, without an upsurge in inflation, through the mechanism of spiralling external indebtedness.

The sharp increase in foreign debt contracted in the form of currency loans at floating rates of interest increased remarkably the external vulnerability of the Brazilian economy, already high given its significant dependence on imported oil and on fast-growing external demand for its exportable production.

The second oil shock of 1979, the doubling of international interest rates between 1979 and 1981 and the policy-generated OECD recession of 1980-82 represented a nearly deadly set of blows to the Brazilian economy. The fall of the curtain came with the abrupt interruption of private external lending in 1982. Since then, the Brazilian economy has been barely muddling through, incapable, contrary to the experience of the 1950s, 1960s and even 1970s, to change the pattern of public sector intervention and elicit new forms of foreign financial resources to cyclically reignite a new wave of investment in favored sectors.

The public sector has lost its financial capacity. The fiscal system is in need for another round of change. The economy requires fresh inflows of net external finance, which - given the large stock of accumulated debt - remain a rather elusive goal for the foreseeable future. Such are the legacies of the past and the current predicament of the Brazilian economy. What next?

The eventual resumption of sustained growth requires: (a) the channelling of increased private savings into socially-productive investments; (b) the overcoming of the deep financial and administrative crisis of the public sector with a restoration of public savings and a rethinking of the role of the State, and (c) a significant reduction in the net transfer of resources abroad.

The three points above have become closely interrelated policy issues, generating a devilish circle of cumulative causation with damaging short- and medium-term effects both on the government's credibility (domestic and international) and on private expectations (domestic and foreign).

The net result of the prevailing uncertainties is a dramatic shortening of the time horizons of the relevant economic agents. Private productive investment is postponed, while private savings and retained earnings are applied in short-term financial instruments, are used for activities or invested in assets held purely as a hedge against inflation. Public investment is sharply curtailed because the financing capacity (internal and external) of the public sector has virtually disappeared. Within certain limits, the extraction of the inflationary tax requires a growing rate of inflation given the reduction of the base for the incidence of the tax, caused by the flight from non-interest-bearing money. The attempt to service external debt by transferring abroad unprecedented and unsustainable shares of GDP further depresses national disposable income, particularly of the public sector, which has been made responsible for virtually all foreign debt, while foreign exchange is mostly privately earned. The buying of foreign exchange by the public sector soars domestic

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public debt and keeps sustained upward pressure on domestic interest rates, always affected by the expected rate of devaluation.

A credible policy in Brazil today must focus, in the short-run, on reducing inflation and recovering the control of monetary and fiscal policy, thereby attempting to create the conditions for a resumption of investment - private and public, domestic and international. These are likely to be self-defeating exercises unless (a) Brazil manages to modernize and restore the financial health of its public sector, while increasing the efficiency and the visions of the future of the Brazilian public administration, (b) the net outward transfer of financial resources is sharply curtailed, preferably through negotiated schemes, so as to release part of these resources for investment and imports of certain capital goods and raw materials required for the resumption of sustained growth, without which there is neither hope for a reduction of social disparities, nor future for a true democracy in Brazil.

Unfortunately, when critical short-term macroeconomic problems loom so large, as in Brazil today, there is a tendency to overlook two basic inter-related issues which are crucial in defining what the country will be as an economy and as a society in the longer term. The first has been bluntly put by Arthur Lewis: "The long run engine for growth is technological change." ³⁹ Brazil might be able to face this challenge, but this depends, in a very fundamental way, on the second issue: education planning and human development ⁴⁰ - areas in which, despite many achievements, Brazil has been regrettably lagging behind even other middle

^{39/} Lewis (1978) p.245. See also Rosenberg and Birdzell Jr. (1986). Although dealing essentially with today's rich countries, their analysis suggests that few developing countries, starting from far behind, can hope to "catch up with the West's interwoven dynamics of technology, industrial production and economic growth". In their view, "Third World countries have very substantial potential for growth... before they began to press against the limits of technological knowledge, but institutional arrangements that are unsuited for innovation, are likely, sooner or later, to circumscribe future growth" (pp.328-329).

^{40/} Sen (1989) pp.41-58.

income developing countries with a clearer vision of their own future in an increasingly competitive international environment.

The <u>Bias for Hope</u> in this situation is that the pressures of an aggravating crisis are bound to concentrate the minds, energies and political sense of economic survival of the country. The record thus far might not be that reassuring. However, it is important to recognize that significant changes are already taking place as both government and society try to sort out "what went wrong" in the past, to cope with the harsher realities of the present - and to look towards the future with some broadly shared sense of purpose and direction. As we have seen, this has been attempted in the post-war period up to 1980. It will have to be tried again, if Brazil is to consolidate both democracy and an open, modern economy.

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BIBLIOGRAPHICAL REFERENCES

Arida, P. (ed.) (1983). <u>Dívida Externa, Recessão e Ajuste Estrutural: O Brasil diante da Crise,</u> Rio de Janeiro. Paz e Terra.

Arida, P. (1985). "O Déficit Público: Um Modelo Simples", in <u>Revista de Economía Politica</u>, S. Paulo, v. 5, n. 4 (out.-dez.)

Bacha, E. (1976). Os Mitos de uma Década. Paz e Terra.

Bacha, E. (1977). "Issues and Evidence on Recent Brazilian Economic Growth" World Development, Vol.5, Numbers 1 & 2.

Bacha, E. and Klein, H. (ed.) (1987). <u>The Incomplete Transition: 1945-85</u> Columbia University Press.

Bacha, E. and Malan, P. S. (1989). "Brazil's Debt: From the Miracle to the Fund" in A. Stepan (ed.) <u>Democratizing Brazil</u>. <u>Problems of Transition and Consolidation</u>, Oxford University Press.

Baer, W. (1965). <u>Industrialization and Economic Development in Brazil</u>. Illinois: R. Irwin.

Barbosa, F. de H. (1987). ""Inflação, Indexação e Orçamento do Governo, em Revista Brasileira de Economía, v. 41, No.3, jul-set.

Batista Jr., P. N. (1983).

Mito e Realidade da Dívida Externa Brasileira. Rio de Janeiro, Paz e Terra.

Batista Jr., P. N. (1988). <u>Da Crise Internacional a Moratória Brasileira</u>. Rio de Janeiro, Paz e Terra.

Bergsman, J. (1970). <u>Brazil: Industrialization and Trade Policies</u>. Oxford University Pres.

Bergsman, J. and Candal, A. (1969). "Industrialization: Past Success and Future Problems" in H. Ellis (ed.). <u>The Economy of Brazil</u>, University of California Press.

Bergsman, J. and Malan, P. (1971) "The Structure of Protection in Brazil", in B. Balassa (ed.) <u>The Structure of Protection in Developing Countries</u>. The Johns Hopkins Press.

Bonelli R. and Malan, P.S. (1976). "Os Limites do Possível: Notas sobre Balanço de Pagamentos e Indústria nos Anos 70". <u>Pesquisa e Planejamento Econômico.</u> v.3, No.2

Bonelli, R. and Malan, P.S. (1987). "Industrialization, Economic Growth, and Balance of Payments: Brazil, 1970-84", in <u>State and Society in Brazil: Continuity and Change</u>, edited by J.D. Wirth, E. de O. Nunes and T.E. Bogenschild, Westview Press.

- Bonelli, R. and Tolipan, R. (1974). <u>Industrial Policies in Brazil: A Summary of Two Decades</u>. Rio de Janeiro, FINEP (mimeo)
- Bonelli, R. and Sedlacek, G. (1989) "Distribuição de Renda: Evolução no último quarto de século", in Paes de Barros, R. and Sedlacek, G. (ed.) Mercado de Trabalho e Distribuição de Renda: Uma Colatânea, IPEA, INPES, Série Monográfica n.35
- Bontempo, H.C. (1988). "Transferências Externas e Financiamiento do Governo Federal e Autoridades Monetarias", in <u>Pesquisa e Planejamento Econômico</u>, INPES/IPEA, v. 13, n. 1 (abril).
- Bresser Pereira, L.C. (1984). "<u>Development and Crisis in Brazil</u>, 1930-1983". Westview Press.
- Cardoso, E. A. (1978)." Deficit Orçamentário e Salários Reais: A experiência brasileira no década de 60" in <u>Pesquisa e Planejamento</u> Econômico, Vol. 3, No.1
- Cardoso, E. A. (1979). "Minidesvalorizações e Indexação Salarial. Alguns aspectos de Experiência Brasileira na Década de 1970". <u>Pesquisa e Planejamento Econômico</u>, Vol.9 No.3.
- Cardoso, E. A. and Taylor, L. (1976). "Crescimento, Distribuição e Balanço de Pagamentos: Algumas simulações para a economía brasileira". <u>Pesquisa e Planejamento Econômico</u>. Vol.16,, No. 2.
- Cardoso, E.A. and Fishlow, A. (1987). The Macroeconomics of the Brazilian External Debt, Chicago, U. of Chicago Press.
- Cooper, R. (1971). "Currency Devaluation in Developing Countries" Princeton. Essays in International Finance, No.86.
- Cooper, R. (1979), p. 325 Problems and Prospects for the World Economy: Round Table" in R. Dornbusch and J. Frenkel, (eds.). <u>International Economic Policy</u>, Johns Hopkins University Press, 1979.
- Dall'Acqua, F.M. and Bresser Pereira, L.C. (1987). "A Composição Financeira do Déficit Público". in <u>Revista de Economia Política</u>. S. Paulo, V. 7, n. 2, (abr.-jun.).
- Diaz Alejandro, C. (1965a). "On the Import Intensity of Import Substitution". <u>Kyklos</u>. Vol.18, No.3.
- Diaz Alejandro, C. (1965b). "Exchange Rate Devaluation in a Semi-Industrialized Country", MIT Press.
- Diaz Alejandro, C. (1970). <u>Essays on the Economic History of the Argentine Republic</u>. Yale University Press.
- Dornousch, R. (1988). "Exchange Rates and Inflation", MIT Press
- Dornbusch, R. (1989). "From Stabilization to Growth", MIT, (mimeo).

Fishlow, A. (1972). "Origins and Consequences of Import Substitution in Brazil", in E. Di Marco (ed.). <u>Essays in Honor of Raúl Prebisch</u>. Academic Press.

Fishlow A. (1973a), "Distribuição de Renda no Brasil: Um Novo Exame" <u>Dados</u>. No.11.

Fishlow, A. (1973b). "Some Reflections on Post-1964 Brazilian Économic Policy", in Stepan, A. (ed.) <u>Authoritarian Brazil</u>. Yale University Press.

Fishlow, A. (1975). "Foreign Trade Regimes and Economic Development: Brazil", University of California, (mimeo).

Fishlow, A. (1986). "A Economia Política do Ajustamento Brasileiro aos Choques do Petróleo: Uma Nota Sobre o Período 1974/84", in <u>Pesquisa e Planejamento Econômico</u>, v. 16, No.3.

Fritsch, W.; Modiano, E.M. (1988). "A Restrição Externa ao Crescimento Econômico Brasileiro: Uma Perspectiva de Longo Prazo". in <u>Pesquisa e Planejamento Econômico</u>, INPES/IPEA, v.18, m.2 (agosto).

Fundação Getúlio Vargas (1968). <u>Estrutura de Comércio Exterior do Brasil.</u> 1920-64. Rio de Janeiro, 2 volumes (mimeo)

Furtado, C. (1964). "Dialética do Desenvolvimento". Civilização Brasileira.

Furtado, C. (1966). <u>Subdesenvolvimento e Estagnação na América-Latina</u>. Ed. Civilização Brasileira.

Furtado, C. (1968). Um Projeto para o Brasil. Ed. Saga.

Furtado, C. (1972). "Análise do Modelo Brasileiro". Civilização Brasileira.

Gordon, L. and Grommers, E. (1962). <u>US Manufacturing Investment in Brazil:</u>
<u>The Impact of Brazilian Government Policies 1946-1960</u>. Harvard University Press.

Griffin, K. (ed.) (1971). <u>Financing Development in Latin America</u>. Macmillan. St Martin's Press.

Gudin, E. (1956). "Multiple Exchange Rates: The Brazilian Experience." Economia Internazionale, Agosto.

Hirschman, A.O. (1945). <u>National Power and the Structure of Foreign Trade</u>. Berkeley: University of California Press.

Hirshman, A.O. (1958). The Strategy of Economic Development. Yale University Press.

Hirschman, A. O. (1963). Journeys Towards Progress. Yale University Press.

Hirshman, A.O. (1968). The Political Economy of Import Substitution. Quarterly Journal of Economics, v.72, No.1. Hirschman, A. O. (1971). A Bias for Hope: Essays on Development and Latin America Yale University Press.

Hirschman, A. O. (1981). <u>Essays in Trespassing</u>: <u>Economics to Politics and Beyond</u>. Oxford University Press.

Hirschman, A.O. (1983) Confissões de um disidente: a Estratégia do Desenvolvimento reconsiderada, in <u>Pesquisa e Planejamento Econômico</u>, v. 13. No. 1.

Hirschman, A. O. (1986). <u>Rival Views of Market Society and Other Essays</u>. Viking Press.

Horsefield, J. (1969). The International Monetary Fund, 1945-1965. IMF, Washington, D.C.

IBGE (1987). <u>Estatísticas Históricas do Brasil</u>. (Séries Econômicas, Demográficas e Sociais de 1550 a 1850). IBGE, Rio de Janeiro, 1987.

IBGE/DECNA (1989). Contas Nacionais Consolidadas, abril (mimeo).

Kafka, A. (1956). "The Brazilian Auction System", in <u>Review of Economics</u> and <u>Statistics</u>.

Kafka, A. (1961). "The Theoretical Interpretation of Latin American Economic Development" in H.S. Ellis (ed.). <u>Economic Development in Latin America</u>. New York, St. Martin Press.

Kafka, A. (1967). "The Brazilian Stabilization Process: 1964-1966" <u>Journal of Political Economy</u>, August

Langoni, C. (1973). <u>Distribuição de Renda e Desenvolvimento Econômico do Brasil</u> Expressão e Cultura.

Lara Rezende, A. (1982). "A Política Brasileira de Estabilização: 1963/68". in <u>Pesquisa e Planejamento Econômico</u>, INPES/IPEA, v. 12, n.3 (dezembro).

Leff, N. (1968). Economic Policy Making and Development in Brazil. New York, Wiley.

Leff, N. and Netto, A.D. (1966). "Import Substitution, Foreign Investment and International Disequilibrium in Brazil" <u>Journal of Development Studies</u>

Lerda, J.C. (1988). "Seignorage, Crescimento Real da Base Monetária e Imposto Inflacionário", (mimeo).

Lessa, C. (1964). "Quinze Anos de Política Econômica no Brasil". <u>Boletim</u> <u>Econômico da América-Latina</u> (nov.)

Lewis, A. (1969). Aspects of Tropical Trade. Wicksell Lectures.

Lewis, A. (1978). Growth and Fluctuations. 1870-1913. George Allen and Unwin.

- Macario, S. (1964). "Protection and Industrialization in Latin America". ECLA Bulletin, March.
- Malan, P. S. and Wells, J. (1973). "Distribuição de Renda e Desenvolvimento Econômico no Brasil" <u>Pesquisa e Planejamento Econômico</u>.
- Malan, P. S. (1974). "Ainda sobre a Distribuição de Renda". <u>Revista de Administração de Emprêsas</u>, FGV, São Paulo.
- Malan, P. S. (1977). "Notes on Brazilian External Debt and its International Implications". in M. Wionczek (ed.) <u>LDC External Debt and the World Economy</u>. El Colegio de Mexico.
- Malan, P.S. (1977). Foreign Exchange-constrained Growth in a Semiindustrialized Economy: Aspects of the Brazilian Experience, 1946-1976. Doctoral Dissertation, University of California - Berkeley.
- Malan, P.S. and Bonelli, R. (1977). "The Brazilian Economy in the Seventies: Old and New Developments" <u>World Development</u>, Jan-Feb.
- Malan, P.S., Bonelli, R., Abreu, M. de P., Pereira, J.E.C. (1977). <u>Política Econômica Externa e Industrialização no Brasil (1939-52)</u>. Coleção Relatórios de Pesquisa. IPEA, Rio de Janeiro.
- Malan, P. S. (1978). "Distribuição de Renda e Desenvolvimento: Novas Evidências e una Tentativa de Clarificação de Controversia. <u>DADOS</u>, No.21
- Malan, P. S. (1981). <u>Politica Econômica e Teorias de Balanço de Pagamentos:</u> <u>Relações Internacionais do Brasil no Periodo 1946-1979</u>, Rio de Janeiro.
- Malan, P. S. (1981). "The Brazilian Economy: Its Direction in the 1980s." Nordic Journal of Latin American Studies. Vol.X, Nos. 1-2.
- Malan, P. S. (1981). "O Debate sobre Estatização no Brasil" <u>Dados</u>, Vol 24. No.1.
- Malan, P. S. (1983). "Financial Integration with the World Economy: The Brazilian Case" in R. Ffrench Davis (ed.). <u>Las Relaciones Financieras Externas y su efecto en la Economía Latinoamericana</u>, Fondo de Cultura, Mexico.
- Malan, P. S. (1984). "Relações Econômicas Internacionais do Brasíl, 1945-1964" in Boris Fausto (ed.) <u>História Geral da Civilização Brasileira</u>: Brasíl Republicano, Vol.11, pp.51-106.
- Modiano, E. M. (1988). <u>Inflação: Inércia e Conflito</u>. Rio de Janeiro, Editora Campus.
- Morley, S. (1969). "Import Demand and Import Substitution in Brazil", in H.S. Ellis (ed.). <u>The Economy of Brazil</u>. Berkeley: University of California Press.
- Morley, S. (1971). "Inflation and Stagnation in Brazil". in <u>Economic Development and Cultural Change</u>, Jan.

Netto, A.D. (1959). <u>O Problema do Café no Brasil</u>. Universidade de São Paulo.

Netto, A.D. (1965). Alguns Aspectos da Inflação Brasileira. Estudos Anpes, No.1, S. Paulo.

Okun, A. (1975). Equity and Efficiency: The Big Trade-off. The Brookings Institution.

Pelaez, C.M. and Suzigan, W. (1976). <u>História Monetária do Brasil: Análise da Política, Comportamento e Instituições Monetárias</u>. INPES/IPEA. Série Monográfica, No.23.

Rangel, I. (1963). A Inflação Brasileira. Tempo Brasileiro.

Rangel, I. (1987). <u>Economía Brasileira Contemporanea</u>. Sãão Paulo, Editora Bienal.

Reis, E.J.; Bonelli, R. e Rios, S.M.P. (1988). "Dívidas e Déficits: Projeções para o médio Prazo", in <u>Pesquisa e Planejamento Econômico</u>, INPES/IPEA, v.16, n.3 (dezembro).

Rosenberg, N. and Birdzell, L. (1986). <u>How the West Grew Rich: The Economic Transformation of the Industrial World</u>. Basic Books.

Sen, A. (1989). "Development as Capability Expansion". in <u>Journal of Development Planning</u>. No.19.

Serra, J. (1982). "Ciclos e Mudanças Estruturais na Economía Brasileira do Pós-Guerra" Revista de Economía Política, v. 2/1, No.6, abr-jun.

Silva, M.C. (1976). A Dívida do Setor Público Brasileiro. INPES/IPEA.

Simonsen, M. (1969). "Inflation and the Money and Capital Markets in Brazil", in H. Ellis (ed.). <u>The Economy of Brazil</u>. University of California Press.

Simonsen, M. (1970). <u>Inflação: Gradualismo versus Tratamento de Choque</u>, Editora APEC.

Simonsen, M. (1973). "Política Anti-Inflacionaria: A Contribuição Brasileira." <u>Ensaios Econômicos da EPGE</u>, No.6

Sochaczewski, A.C. (1980). <u>Financial and Economic Development of Brazil</u>. <u>1952-68</u>. Doctoral Dissertation, London School of Economics.

Suzigan, W. (1975). "Industrialização Política Econômica: Uma Interpretação em Perspectiva Histórica". <u>Pesquisa e Planejamento Econômico</u>, v. 5, No.2.

Suzigan, W. (ed.) (1978). <u>Indústria: Política, Instituições e</u> <u>Desenvolvimento</u>. INPES/IPEA, Série Monográfica No.28.

Suzigan, W., Bonelli, R., Horta, M.H.T.T. e Lodder,, C.A. (1974). Crescimento Industrial no Brasil: Incentivos e Desempenho Recente. INPES. Tavares, M. da C. and Serra, J. (1971). "Más allá del Estancamiento: Una Discussión sobre el Estilo del Desarrollo Reciente in Brasil", in <u>Revista Latinoamericana de Ciencias Sociales</u>. Flacso, Santiago, jul-dec.

Tavares, M. da C. (1972). <u>Da Substituição de Importações ao Capitalismo</u> <u>Financeiro</u>. Rio de Janeiro: Zahar Ed.

Tavares, M. da C. (1978). <u>Ciclo de Crise: O Movimento Recente da Industrialização Brasileira</u>.

Triffin R. (1975. Euromoney, July.

United States Department of Commerce <u>U.S. Investments in the Latin American</u> <u>Economies</u>, 1957.

Wells, J. (1973). "Euro-Dólares, Dívida Externa e o Milagre Brasileiro" ESTUDOS CEBRAP. No.6

Wells, J. (1974). "Distribution of Earnings, Growth and Structure of Demand in Brazil during the 1960's". World Development, Vol.2, No.1.

Wells, J. (1977). <u>Growth and Fluctuations in Brazilian Manufacturing</u>. Doctoral Thesis, Cambridge, England.

Werneck, R.L.F. (1986). "Poupança Estatal, Dívida Externa e Crise Financeira do Setor Público, in <u>Pesquisa e Planejamento Econômico</u>, INPES/IPEA, v. 16, n. 3 (dezembro).

Werneck, R.L.F. (1987). "Retomada do Crescimento e Esforço de Poupança". Pesquisa e Planejamento Economico, Vol 17, April.

Werneck, R.L.F. (1987). "Public Sector Adjustment to External Shocks and Domestic Pressures in Brazil, 1970-1985". Dep. de Economia de PUC, <u>Texto para Discussão</u>, <u>No.163</u>.

Werneck, R.L.F. (1987). <u>Empresas Estatais e Política Macroeconômica</u>, Rio de Janeiro, Editora Campus.

Werneck, R.L.F. (1989). "Aspectos Macroeconômicos da Privatização no Brasil". Texto para Discussão. No. 223. PUC, Departamento de Economia.

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