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Constitutional Regimes, Growth and Stagnation in the Brazilian Economy: 1947-1999

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Senado Federal

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Constitutional Regimes, Growth and Stagnation in the Brazilian Economy: 1947-1999¹

Marco Antônio Campos Martins²

ABSTRACT

This paper documents the performance of the Brazilian economy from 1947 to 1999. Between 1947 and 1962 the economic order was regulated by the 1946 Constitution, which upheld the principle of independent operation of the three Branches of Power. In this period, gross product increased 7.55% on average and the population grew at an annual rate of 2.94%. Since 1964, the economic order has come under the sway of an autocratic, dictatorial economic policy regime in which the Executive Branch legislates and acts as its own judge, systematically violating the balance between the Powers. In this second period, the Brazilian economy abandons its growth trend and drifts toward stagnation. 1963 was a year of political upheaval and does not fit into either regime. Between 1964 and 1999 gross product expanded 4.73% against a population growth of 2.13% p.a. Between 1980 and 1999 these figures fell to 2% and 1.72%, respectively. It is argued that this autocratic economic policy regime has made the Brazilian economy one fraught with waste.

¹ This is a work in progress; comments are welcome. This paper was originally presented at the University of Brasilia (UnB) as Seminar 29 of the Economics Department's Academic Seminars Programme on 31st October 2001. The English translation was done by Mark Ridd. Copies in English language are available at www.infosebo.com. I heartily thank Marco Aurélio Bittencourt, Marcelo Guimarães Martins Costa, Roberto Ellery Jr., Paulo Loureiro, Denise Machado, Luciano Barreto Nogueira de Moura, Renato Portugal, Roberto Luís Olinto Ramos, Emerson Rildo, Maria Alice de Gusmão Velloso and Antônio Viana for their patience in discussing several ideas connected with this paper and for inestimable help in preparing and treating the statistical and documentary data. The author, however, assumes sole responsibility for the text of the paper.

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1 - Introduction

This paper documents the growth patterns of the Brazilian economy between 1947 — the year the Getúlio Vargas Foundation began publishing the National Accounts — and 1999. It serves as an introduction to others that aim to discuss some of the causes that have dragged the Brazilian economy into this twenty-year-long spate of stagnation, sapping its dynamism and preventing it from promoting growth in per capita income and the welfare of the population.

The prime cause, it will be demonstrated, is the style of governmental administration the Military Regime instituted in 1964 that prevails to the present day. This autocratic, dictatorial style has given rise to an economy in which inefficiency and waste are rife, a style, it should be said, that meets with the approval of the IMF.

The International Monetary Fund is a regulatory agency bent upon implementing exchange regimes alien to market mechanisms. Such regimes induce governments to run up excessive foreign debt, utterly beyond the repayment capacity of the economies adopting them. They are invariably accompanied by import controls and meddling with exports, and attended by domestic recession, designed to produce exportable surpluses. These exchange regimes have a destabilising effect that will be discussed in another paper.

The analysis will be predominantly macroeconomic. The idea is to show how this style of administration affects foreign trade, exchange policy, influx and outflow of venture capital and dollar loans (normally referred to as external savings) and gross capital formation. The aim is to demonstrate how these chain-reaction interventions hamper and continue to exert a negative influence on the performance of the Brazilian economy.

Sectorial issues will be examined to illustrate the way this interventionist style dictates the allocation of public and private gross domestic investments and fosters the wasting of public money. Examples include the huge, as yet officially unaccounted, sums squandered between 1967 and 1979 on unfinished public construction projects and subsidies for hundreds of companies that subsequently folded. They range from the direct and indirect subsidies for domestic consumption of oil and the production of fuel alcohol, following the establishment of the OPEC oil cartel in 1973, to the public works programme instituted in 1985 and the massive funds transferred to subsidise the petrochemical industry at the height of the oil crisis, despite all this being questioned by the National Congress in 1979. Examples also encompass the money liberally distributed in the form of subsidies to phantom projects under the auspices of SUDENE (the Northeast Region Development Agency) and SUDAM (the Amazon Region Development Agency). Without examining these issues it is virtually impossible to grasp what is happening to the Brazilian economy.

This set of papers will demonstrate that the impoverishment and slowing of the Brazilian economy, rather than deriving from general, unspecific causes, are a direct result of specific government actions and of the systematic economic policy shocks carried out within a framework of constitutional chaos. These actions can readily be identified and investigated. It is from this angle that matters relating to the oil crisis, foreign debt, globalisation and the presence of the IMF in Brazil will be considered. Matters relating to income distribution will be avoided.

This paper certainly does not intend to study the effects of specific economic policies on the performance of the Brazilian economy. That will be done at a later stage. However, this is not merely an introduction. Its basic aim is to argue, by means of documents and statistics, that the 1947

to 1999 period can be clearly divided in two, along the fault line of entirely different constitutional economic policy regimes.

The first period extends from 1947 to 1962. It is regulated by the Constitution promulgated on 18th September 1946, the touchstone of which was the inviolable principle of independence among the three Branches of Power: Legislative, Executive and Judiciary. This was a democratic economic policy regime. Under its aegis, the government's main legal instrument for regulating and managing the economy was bills that had to be submitted to the scrutiny and approval of both chambers of Congress (the Chamber of Deputies and the Senate) before becoming law. Under this regime, the government's actions are firmly controlled by Congress and the Judiciary. There is no room for unanticipated economic policy shocks or changes not permitted by extant juridical and economic rules. Under its sway gross domestic product (GDP) grows 7.55% a year on average with an average 16% rate of gross investment at current prices. Meanwhile, the population (almost 48 million in 1947) grows 2.94% per annum.

The second period officially begins when the Commanders-in-Chief of the Army, the Navy and the Air Force enforced Institutional Act no. 1 on 9th April 1964, shortly after toppling President João Goulart's government on March 31st. It is initially marked by explicit dictatorship and more recently by the Constitution that came into force on 5th October 1988, effectively abolishing the balance between the three Branches of Power. This is an autocratic, dictatorial economic policy regime under which the Government arbitrarily legislates and exercises control. The prime legal instruments for regulating and intervening in the economy are decree-laws and provisional acts, which do not need to be debated and passed by Congress to become effective. They confer dictatorial powers on the Executive Branch. They entitle it to dictate the rules. The sole limitation is the President's discretion.

Under this regime, government actions are no longer kept in check by Congress or the Judiciary, juridical and economic norms are continually breached and economic activity is constantly subject to adjustments, shock treatment and economic stabilisation plans. As a result, the Brazilian economy has veered away from its steady growth trend and headed toward stagnation, which has persisted for the last twenty years. Between 1964 and 1999, GDP grew 4.73% on average with an average 22% rate of gross investment at current prices while the population (almost 164 million in 1999) increased 2.13% a year on average. Between 1980 and 1999 these figures fell to 2% and 1.72%, respectively, although the rate of gross investment at current prices remained steady at 22%. This rate measures the effort of economic agents to expand the economy. In the previous period it stood at 16%.

The division of Brazil's recent economic history into these two periods is no novelty. Economists regularly refer to the pre-1964 period as the "Lawyers' Republic". Lawyers retort with the "Economists' Republic".

The next section describes the main features of the 1946 constitutional economic policy regime.

The third section, meanwhile, traces the birth, rationale and *modus operandi* of the autocratic, dictatorial regime.

The fourth portrays in graphs the performance of the Brazilian economy under these two regimes. The pictures painted make it clear that: a) the economy strays from its growth trend shortly after the establishment of the autocratic regime; b) the so-called "economic miracle" does not withstand

careful analysis of the data; c) GDP growth rates become highly erratic shortly after introduction of the new regime; d) dollarisation of the Brazilian economy has already taken place. It is associated with instability and stagnation, never with growth.

One of the most pathological instruments of economic policy to which the autocratic regime resorts is subsidies. The fifth section of this paper is devoted to the regime's penchant for subsidising, exemplified by subsidies introduced at the height of the oil crisis. While developed countries frenetically strove to economise oil, the regime in Brazil subsidised prodigal waste of this precious commodity.

Section six traces per capita GDP patterns from 1947 to 1999. The graph produced simultaneously displays the Dutra-Vargas-Kubitschek growth trend, which projects the economy of the democratic economic policy regime to present day. The result of this projection is an economy three times the present size.

Systematic subsidising was used to boost the level of private-sector investment in the economy, in order to increase the rate of GDP growth. Section seven employs the Solow (1956) model to examine the consequences of this type of policy. The result is similar to that displayed by the Brazilian economy during and after the so-called "economic miracle". The initial boost in the pace of growth is soon replaced by a slow-down. The policy adopted provokes an inter-temporal substitution of investments. This simulation, it should be said, is not part of the paper's main purpose; it is merely a rough draft the author has provided for his readers.

Section eight is devoted to closing remarks. The statistical tables are presented in Annex 1. Annex 2 illustrates the power concentrated in the hands of the autocratic regime to make its own laws. This power is not confined to the Head of the Executive Branch. It is equally wielded by public institutions like the Central Bank and the National Economic & Social Development Bank (BNDES). By way of illustration, Annex 2 quotes passages from a report produced by the Attorney-General's Office on the use of undocumented credit and on a stockholders' agreement drawn up between BNDES and Nippon Usiminas Co. Ltd. when Usinas Siderúrgicas de Minas Gerais S.A. was privatised at auction.

Annex 3 concludes the paper. It portrays a fact of the economics of waste and squandering of resources: a photograph of the Furnas hydroelectric plant reservoir — empty.

2 - The democratic economic policy regime

This section provides a brief description of the Brazilian economy under the democratic economic policy regime, a period extending from 1947 to 1962. One of the key objectives here is to explain why this regime ended in 1962 as opposed to 1963. The other is to illustrate the Brazilian Government's commitment in this period to uphold the constitutional precept of the independent operation of the three Branches of Power.

The 1947-1962 period encompasses the governments of Eurico Gaspar Dutra (10/31/46 to 01/31/51), Getúlio Dornelles Vargas (01/31/51 to 08/24/54) and Juscelino Kubitschek (01/31/56 to 01/31/61). It also covers the political and institutional crises that ensued from Vargas's suicide, Kubitschek's inauguration, the military ministers' manifesto (30/08/61) against Vice-President elect

João Goulart assuming the presidency following the renunciation of President Jânio Quadros (01/31/61 to 08/25/61), Constitutional Amendment no. 4 (09/02/61), which abolished the regime of presidential government in Brazil, and Constitutional Amendment no. 6 (01/23/63), which reinstated it following a plebiscite.

After Congress passed Amendment no. 6, the country experienced a period of political upheaval until President João Goulart (09/07/61 to 03/30/64) was ousted by the military on 31st March 1964. This prolonged upheaval undermined the country's juridical and economic order and weakened the 1946 Constitution. Institutional Act no. 1 of 9th April scrapped them for good, although the Constitution remained officially in force until the Military Regime imposed its own Constitution on 24th January 1967. As far as economic policy was concerned, however, it was already dead letter.

From the outset, the dictatorship revealed an unbridled penchant for altering the laws and norms governing the economic order in an arbitrary fashion without ever consulting Congress or bothering itself about the opinion of the Courts. So, for all intents and purposes, the democratic economic policy regime faded away in 1962. 1963 was a transition year belonging to neither regime.

The hallmark of the regime established by the 1946 Constitution from the vantage point of economic policy was the control the Legislative and Judiciary branches exercised over acts of government, precisely as occurs with the checks and controls in the mixed market economies of the developed world today. The Government is held accountable, it cannot do as it pleases with public money or alter laws at will. The costs of economic policies are decided by democratic vote. In Brazil's case, the budget was drafted in a mere governmental department attached to the President's Office - the Civil Service Administration Bureau (DASP) - by regular civil servants. It was a straightforward, transparent affair, much akin to the budget for a family or a firm. It could be readily checked and understood by Congress and the Judiciary.

Under such a regime, the Government is obliged to seek congressional authorisation to introduce any substantial change to the juridical rules of the economic game. The request is made by tabling bills in Congress. These are amply debated in full public view and become law only when they have been passed. The system prevents Government — save possible imperfections — from acting in an abrupt, unpredicted or arbitrary manner, violating rights or bestowing favours (e.g. subsidies or tax exemptions) without congressional consent. The 1946 constitutional regime makes a clear distinction between public and private interests and establishes a stable juridical framework for the development of economic activity.

In other words, the concept of an “economic policy” is not unequivocal. Expressions such as “monetary policy”, “fiscal policy”, “exchange policy”, “imports substitution policy”, “subsidies”, “gross capital formation”, “orthodoxy” and “heterodoxy” vary in meaning depending on the constitutional regime to which they apply. For instance, in a regime where public spending is not controlled by the Judiciary, terms such as “subsidy” and “gross capital formation” may actually signify diverting or wasting funds. The expression “exchange policy” may be little more than a posh name for selling dollars below market rates at the expense of the Treasury. Likewise, a reference to “independence of the Central Bank” may mean different things under different regimes. There is nothing to prevent it signifying, for example, “subordination to the IMF free from the checks and controls of Congress and the Courts.”

It is relatively easy to illustrate the restrictions the 1946 Constitution imposed on the Executive Branch. On 13th March 1961, the Superintendency of Money and Credit (SUMOC) — a regulatory

board of Banco do Brasil, subsequently replaced by the Central Bank of Brazil under the Military Regime — issued Instruction 204, altering Brazil's exchange policy. Many economic agents considered this alteration introduced by the government of Jânio Quadros — shortly to resign under suspicion of plotting a *coup d'état* — irregular and patently at odds with the principles of the 1946 Constitution. The debate on this matter between José Maria Alkimin and Tristão da Cunha in the Chamber of Deputies on 23rd March 1961 clearly testifies to the restrictions the 1946 Constitution placed on alterations to economic policy and eloquently reveals the political mentality of the day. Since the advent of the Military Regime, the Brazilian Central Bank has issued thousands of resolutions affecting public finances without the least congressional or judicial control.

Another major feature of the 1946 democratic regime is the importance ascribed to the individual votes of members of Congress during voting sessions. The 1946 Constitution secured ample freedom for dissidence. This meant that small groups of representatives from different parties across the political spectrum could band together in blocs to influence legislative procedure. In technical terms, this favours “divisibilities” and enhances the efficiency of voting. It expands the options available to each congressman and each segment of public opinion, reducing the costs of party militancy and strengthening political parties. The 1988 Constitution, by way of contrast, is a force for inefficiency. It prevents the formation of independent blocs in Congress and has created the College of Leaders, in which a handful of congressmen are empowered to decide in lieu of large majorities. This in turn has led to the creation of the so-called “under clergy”, a depreciative term used to designate groups of congressmen who take little interest in legislative business, thus shutting the door on the voicing of dissident opinion and sapping the strength of Brazil's political parties.

The economy unfolding under the aegis of the 1946 Constitution suffers all the regulatory problems prevalent in democratic countries, and many others besides. It is beset by problems that require solving. Simonsen (1995), for example, recalls that the Brazilian Labour Code (*Consolidação das Leis de Trabalho* - CLT) has many failings and could be improved. The tenancy law likewise hampers the booming of the building industry. The law governing income tax is worse still. In times of rising inflation, it taxes apparent profits and encourages tax evasion. This is all true. But from the standpoint of economic policy, what matters is that under the aegis of the 1946 Constitution the rules of the game are clear and constant. They are public knowledge. And yet they are not immutable. They can be perfected by legislative process and so adapted to the new circumstances of the economy.

Under the democratic regime of the 1946 Constitution inflation is open, perfectly predictable. There is no wholesale control of prices and wages. The laws may be unsatisfactory but they do at least exist. The Courts are not deluged with claims against economic damages. Pages 233-239 of the military government's Economic Plan of Action (PAEG) 1964-1966 provide a summary of the main economic problems on which the Military Regime focussed its attention shortly after taking power. All of them could easily have been solved within the legal and institutional framework of the 1946 Constitution.

The objective of governments under the regime of the 1946 Constitution is mainly to carry out programmes of public works and to set up irrigation systems, hydroelectric plants and the iron and steel industry with the collaboration of private enterprise and authorisation from Congress. The most famous of these programmes was Kubitschek's Target Plan. The targets were accomplished, the programmes were feasible and the budgetary resources kept under control. Domestic debt was non-existent and public sector debt was given no opportunity to snowball. Budget deficits were

monetised by Banco do Brasil's Operational Account (Conta Movimento do Banco do Brasil) producing inflation, which immediately signalled to society that the Government was overspending. The federal government's contribution to gross capital formation (public sector savings) was regularly positive, except in 1963.

The prestigious Superintendency of Money and Credit (SUMOC) was merely a normative body constantly liable to be taken to court, as in the episode of Instruction 204. Banco do Brasil was responsible for administering money supply and implementing official loans policy. The first open-market operations occurred only under the Jânio Quadros administration. The government's fiscal attitude was essentially dictated by the budget. There is no record of systematic fiscal policies in this period designed to stabilise the economy. The same applies to regular intervention in interest rates, prices and wages with a view to channelling private investments to specific sectors or obtaining current transactions surpluses. In other words, the Government did not aim to substitute market forces or to "plan" equilibrium values for these variables in the fashion inaugurated by the Military Regime. Market interest rates were low. Wages were freely negotiated between workers and employers. The CLT Labour Code worked efficiently. The level of employment increased as rapidly as did the size of the population. Indexation was unheard of. Indexation in foreign currency was explicitly proscribed.

The exchange system in this period is hybrid. In the case of the balance of goods and services, the government — with many failings — operated a fixed-rate exchange scheme of the kind envisaged by the IMF. It did, nonetheless, permit international capital transactions on the free market as exemplified by the Free Market Exchange Law (no. 1,807 of January 1953). As the current transactions account mirrors the capital movements account, the Brazilian economy never tended towards dollarisation or systematic accumulation of current transactions deficits. Most external savings entered the country in the form of direct foreign investment, as venture capital. There was no snowballing of foreign debt. At that time, the IMF advocated fixed exchange rates for all transactions. But the Fund's presence in Brazil at that point was of secondary importance. In 1959, for example, the Kubitschek Government refused a standby loan because it would not subscribe to the repayment conditions the Fund demanded.

The following section focuses on the economy under the Military Regime and the 1988 Constitution.

3. The autocratic economic policy regime

The autocratic economic policy regime began informally when Constitutional Amendment no. 4 of 2nd September 1961 abolished the presidential regime enshrined in the 1946 Constitution. It was officially established when the Military Regime issued Institutional Act no. 1 on 9th April 1964. From then on, the Executive Branch breached the balance between the Powers, legislating insatiably, taking upon itself the role of the Judiciary, abruptly and arbitrarily altering the previous economic order, and subjecting the Brazilian economy to one shock after another to suit circumstances. An atmosphere of political instability and economic uncertainty was instated.

The regime was inaugurated with a tight squeeze on nominal wages to curb rising inflation. The real value of wages was virtually halved in three years. Production geared to the domestic consumer

market was dismantled. Companies went to the wall. Recession set in and the Brazilian economy **never again** recovered its former steady growth trend.

The set of laws introduced immediately after the new regime seized power (see *Lex: Coletânea da Legislação e Jurisprudência*, 1964, vol. 28) suggests that the regime's prime objective was actually to manage the economy in an autocratic, dictatorial manner.

As stated above, the regime's main characteristic is the Executive Branch's prerogative to enforce laws beyond the checks and controls of the Judiciary and Legislative Branches. This prerogative clears the way for authoritarianism, for a monopoly of the truth, and serves as a breeding ground for the propagation and testing of "brilliant" ideas. It fosters interventionist, casuistic and experimental approaches. It produces frequent yet unpredictable shocks in economic policy, foisting the costs on society through arbitrary changes in the juridical and economic order. The laws are weakened and accountability becomes diffuse.

The regime holds sway for a long period. It encompasses the military governments of Castelo Branco (04/15/64 to 03/15/67), Costa e Silva (03/15/67 to 08/31/69), Garrastazu Médici (10/31/69 to 03/15/74), Ernesto Geisel (03/15/74 to 03/15/79) and João Batista Figueiredo (03/15/79 to 03/15/85), as well as the civilian administrations of José Sarney (03/15/85 to 03/15/90), Fernando Collor (03/15/90 to 12/21/92), Itamar Franco (12/29/92 to 12/31/93) and the two consecutive mandates of Fernando Henrique Cardoso (01/01/94 to 01/01/98 and the mandate due to end on 1st January 2003).

The regime was also marked by Institutional Act no. 3 issued on 5th February 1966, which abolished direct elections for state governors; the Constitution that came into force on 24th January 1967; Institutional Act no. 5 (12/13/68) which shut down Congress, stripped congressmen of their mandates and reaffirmed the dictatorship's powers to legislate without let or hindrance; Institutional Act 12 (08/31/69) which instated a Military Junta to govern the country, preventing Vice-President Pedro Aleixo from taking office after President Costa e Silva fell ill; the introduction of the new version of the 1967 Constitution by the publication of Constitutional Amendment no. 1 on 17th October 1969; the beginning of the "slow, gradual and steady political *détente*" announced by President Geisel in August 1974; the same president's Supplementary Act no. 102 (04/01/77) which shut down Congress for a second time; Constitutional Amendment no. 7 of 13th April 1977, known as the "April package", which arbitrarily altered norms governing the operation of the Judiciary; Supplementary Act no. 103 (04/14/77) reopening Congress; Constitutional Amendment no. 15, re-establishing direct elections for state governors and federal senators; Constitutional Amendment no. 26 (11/27/85) which convened the National Constituent Assembly; and finally promulgation of the Constitution on 5th October 1988. The period was likewise fraught with shocks to the economy.

The legal instruments empowering the Executive Branch to act as legislator were decree-laws and provisional acts, both of which confer upon it the power to dictate rules. In the case of the Military Regime's decree-laws this was achieved by dint of overt dictatorship. In the case of provisional acts, under the mantle of the 1988 Constitution's semantic imprecision and failure to establish clear-cut concepts. This imprecision has granted the Executive Branch virtually unlimited power to exercise its authority. Those in power are entitled to legislate as they deem fit. On 17th March 1990, Fernando Collor's administration confiscated 75% of the financial assets belonging to the general public, including demand deposits in bank accounts under the pretext of the pressing need to halt rampant inflation. This cast the Brazilian economy into its deepest recession. Not a word of disgruntlement came from the banks. The Courts stood by impassively.

Another glaring example is currently unfolding. Under the auspices of the “Real Plan”, the Cardoso administration increased the dollarisation of the Brazilian economy but it does not possess the dollars required for repayment. It has therefore decided to issue billions of *reais* in the form of dollar-indexed public debt and to sell them to private banks, effectively passing the buck to Cardoso’s successor. The IMF has been informed:

“The [Brazilian] authorities will continue to supply IMF technical staff the following specific data, among others (with the frequency and by the deadlines stated): (...) Stocks of exchange-indexed federal debt, discriminated by instrument, indicating the sums obtained at auction and the updated nominal values; as well as data relating to roll-over of such instruments, informing the face value at forthcoming redemption dates and new sales of this debt (after each auction, on the following day).” (See Economic Policy Memorandum forwarded by the Brazilian Government to the IMF on 23rd August 2001.)

On 20th September the same government declared, without clearly explaining why, that it was going to expurgate the “dollar effect” from Brazil’s public accounts for reasons associated with the “Brazil risk” factor and foreign investors (see *O Globo*, 09/21/2001, page 22). Lack of transparency is another characteristic feature of this regime.

As stated above, the regime has an insatiable appetite for legislating. From 9th April 1964 onwards, the 1946 Constitution was altered by four Institutional Acts and fifteen amendments. Between 17th October 1969 and 28th November 1985, the 1967 Constitution received 27 amendments. The first amendment was made to introduce its new wording. By 30th September 2001, the 1988 Constitution had already suffered 32 modifications. Between 31st March 1964 and 12th November 1965, the military regime used a mixture of decrees, laws and legislative decrees to legislate. From then on, the Government started to issue decree-laws to legislate on economic affairs, presumably authorized by Art. 30 of Institutional Act no. 2 (10/27/1965), which had authorised it to issue decree-laws for matters of national security. Between 13th November 1965 and 3rd October 1988, a total of 2,481 decree-laws were issued, the first 1,040 of them not being submitted to Congress. Of this total, 2,274 were produced by the Military Regime, the remaining 209 being issued by the regime’s successor, President José Sarney.

The 1988 Constitution replaced decree-laws by provisional acts. The former are undoubtedly a much more efficient — that is, much cheaper — legal instrument than the latter. Decree-laws are simpler and more direct. Provisional acts appear to be less authoritarian, and so were adopted by the 1988 Constitution. Article 62 of the Constitution empowers the President of the Republic “in cases of exceptional relevance and urgency” to issue “provisional acts with the binding effects of laws” which “will cease to be effective if, after issuing, they are not made law within 30 days of publication.”

In other words, provisional acts afford the Executive Branch the same legislative prerogatives the decree-laws afforded the Military Regime. The expression “in cases of exceptional relevance and urgency” is vague and may mean virtually anything, being wide open to variant interpretation. Moreover, the same provisional act can be reissued *ad infinitum* with the binding effects of law. This is a simple trick, one to which the Government often resorts: a few extra words inserted in the text of a provisional act are all that is required for a 29-day-old provisional act that has not been made law to obtain a new lease of life. The absolute lack of transparency of governmental acts and

the operational, material and human impracticability of keeping tabs on them is the hallmark of this legislative procedure.

From the point of view of economic policy, the regime legislating by provisional acts is as autocratic and dictatorial as the Military Regime. But it costs the State more and is less efficient because it unnecessarily complicates the issuing of laws. Besides the extra time this demands of members of Congress and civil servants engaged in legislative and control activities, there is additional spending on bonuses, salaries, installations and administrative material. Decree-laws were far cheaper to operate.

The number of provisional acts issued to date illustrates the cost and the inefficiency of this regime. It also lays bare the legal and economic mayhem it causes. As from 5th October 1988, the José Sarney, Fernando Collor and Itamar Franco administrations issued, respectively, 138, 160 and 505 provisional acts. The Sarney Government also issued 209 decree-laws. Moreover, the figures for the Collor and Franco administrations should be added together since they refer to a single presidential mandate (Vice-President Itamar Franco stepped in when Collor was impeached). The Fernando Henrique Cardoso administration has been even more prolific: from 1st January 1995 to 10th September 2001 no less than 5,297 of these acts were issued.

No doubt can thus remain that the 1946 constitutional economic policy regime and that officially inaugurated by Institutional Act no. 1 (08/04/1964) are entirely different.

The predicates the Military Regime ascribes itself to replace the democratic 1946 Constitution by its own, its decision to institutionalise dictatorial legislative procedure and to breach the juridical rules of the former economic order are made crystal clear in the texts of Institutional Acts 1 and 2 (27/10/1965):

“The Revolution (...) invests itself with Constitutional Powers.” “It issues juridical norms, being unrestricted by previous norms.” “It has not been said that the Revolution was but that it is and will continue to be.” “The restriction (...) it has placed upon itself by Institutional Act (no. 1) does not mean it has reneged on itself (...).”

These same Institutional Acts declared the three main objectives of the 31st March 1964 military movement:

“...[to] oust the government, which has deliberately sought to Bolshevise the country.”
 “[Alter] the 1946 Constitution ... [to] restore economic and financial order in Brazil...”
 “...eradicate corruption and subversion.”

Not a shred of evidence existed that the vigorous market economy of the 1946 Constitution was being “Bolshevised”. Nor that restoring the economic and financial order required suppressing the existing constitutional regime. Nor that accusations of corruption would become as rife in Brazil as they now are.

The immediate dumping of the juridical-economic rules established by the 1946 Constitution marks the onset of economic autocracy with the Executive Branch supplanting democratic legislative process and itself dictating the rules of the country’s economic life. This is hard and fast evidence that the Military Regime’s main objectives were not the three quoted above but rather the substitution of the 1946 constitutional economic policy regime by their new *modus operandi*.

The new regime's autocratic, dictatorial mindset is clearly reaffirmed by Simonsen (1995) who also expresses the regime's experimentalist, casuistic approach :

“... the Castelo Branco Government was as sophisticated in economic analysis as it was naïve in political science. The concept of indexation as an exceptional measure was unquestionable from a technical standpoint. It was, however, politically untenable even in a Brazilian-style military regime since monetary correction was regulated by the Government. Why not ensure wage-earners the same level of correction afforded to the owners of rented property?” (pp. 3-4). “This uneven-handed treatment was incomprehensible to the average man in the street or, more particularly, to members of Congress. It stemmed from an original sin in political science: an attempt to legislate democratically on what could only be accepted as exception” (p. 4).

“... the wage formula [of the Castelo Branco administration's Economic Plan of Action] bore the seeds of self-destruction. Firstly, because it was founded on an interventionist rationale that admitted the government could simultaneously control both nominal and real wages...” “That was a corollary of economic thinking at the time...” (pp. 58 & 59).

“Such confusion led the Labour Tribunals in many cases to grant wage rises above what was deemed compatible with the objectives of stabilisation [set forth in the Governmental Economic Plan of Action]. To counter this, the Government introduced decree-law no. 15 of 29th July 1966 and decree-law no. 17 of 22nd August 1966...” (p. 57).

From the Castelo Branco Government onwards, the Brazilian economy was literally administered in a discretionary, dictatorial manner down to nuts and bolts. It was also asymmetrically indexed in a casuistic, wholesale fashion. Scalator clauses proliferated. Thus began one of the most striking series of interventions on record. In the short span of three years, the Castelo Branco Government issued no less than 318 decree-laws — not to mention laws and decrees proper. The new regime postulates market equilibrium levels for prices, wages, interest and exchange rates, besides determining the sectors into which fixed investments should be channelled. It seeks to indicate where the private sector must invest and to help the market find these desired equilibrium levels.

The first to be targeted are wages — purportedly a source of inflation. They need to be indexed, controlled by formulae, as in Simonsen (1995, p. 61). It little matters if the real world is at odds with the formulae. It must adopt them. The formulae extract averages for past inflation rates, for variations in labour productivity indices and for expectations of future inflation. The values for the latter two elements of the formulae cannot be calculated. The bureaucrats remain undaunted and choose them by themselves. Formulae are concocted *ad infinitum* — for everything under the sun.

Alterations to wages commenced with Decree no. 53,936 (05/29/1964) which suspended the legal mechanisms regulating the operation of the Wage Policy Council. Decree no. 54,018 (07/14/1964) introduced formulae for readjusting pay in the public sector. It also inaugurated interventions in the private sector. Article 4 of the decree prohibited private public-service concessionaire companies from sealing collective pay agreements without prior consultation with the Wage Policy Council.

Law no. 4,725 of 13th July 1965 extends the use of formulae to all wages arbitrated by collective bargaining agreements and forbids the Labour Tribunals to undersign agreements between workers and employers that include clauses on wage rises during the term of the agreement. The game began

with an initial legal forecast for inflation of 25% in 1965, 10% in 1966 and 15% in 1967. Only half the “legal anticipated rates of inflation” could be incorporated into the wage adjustment formulas. The actual rates of inflation were 45% in 1965, 41% in 1966 and 25% in 1967.

The theory of asymmetric indexation was soon extended to domestic public debt. Law no. 4,357 of 17th July 1964 instituted Readjustable National Treasury Bonds (ORTNs) yielding minimal interest arbitrated at 6% per annum, calculated on the nominal value monthly (quarterly at first) corrected by inflation. The corrections of the nominal sums are not reckoned as income and are thus exempt from income tax. Moreover, the law empowers the Finance Minister to draw up agreements, adjustments or contracts for issuing and redeeming these bonds outside the market. Decree-law no. 1 of 13th November 1965, introducing the new currency (cruzeiro novo) allows the Government to issue until May 1966 ORTNs offering *a posteriori* the better of two forms of correction — monetary or exchange. Monetary correction came to 40%. Exchange-rate correction (the option made by the Finance Minister) totalled 45%. Naturally, it was not the minister but society that had to foot the bill.

The new regime’s legislative activity is fast and furious and all-embracing. It encompasses specific private interests, dispensing with congressional control. It consists of laws and decrees:

- a) empowering the Industrial Development Commission (Decree no. 53,898 of 04/19/64) to channel subsidies aimed at guiding and boosting the expansion of Brazil’s industrial park;
- b) institutionalising planning and general co-ordination of economic activity in lieu of a market economy where possible (Decree no. 53,914 of 05/11/64);
- c) creating public funds for financing the production of exportable goods (Decree no. 54,105 of 08/06/64) and the purchase and sale of industrial machinery and equipment manufactured in Brazil (Decree no. 55,275 of 12/22/64);
- d) granting benefits for imports substitution in the electro-electronic sector in the Manaus Free Zone (Decree no. 54,174 of 08/21/64);
- e) granting the automobile industry import tax exemptions (Law no. 4,492 of 11/24/64);
- f) obliging the national railway company (Rede Ferroviária Federal S.A.) to draw up contracts for transporting ore with private mining and ore-exporting companies (Decree no. 55,282 of 12/22/64);
- g) setting up the loans and fiscal incentives scheme to induce industries to move to the Northeast Region of the country (Decree no. 55,334 of 12/31/64);
- h) allowing the Brazilian Central Bank full autonomy (see Law no. 4,595 of 12/31/64) to implement policies on interest and exchange rates, indexation and public debt as it sees fit; to use public money to offer private banks hedge; to donate almost two billion dollars to private banks under the allegation that there were “systemic risks” of banks folding, as occurred in the episode of the break with the Real Plan’s system of exchange rate bands, etc.

The main theoretical underpinnings of this economic policy regime were forged in the Governmental Economic Plan of Action (PAEG) 1964-1966, mentioned above, in the Presidential Messages of the Costa e Silva administration and in Simonsen (1995). All of them confirm the regime’s vocation for economic control. They bear witness to the decision to intervene in the economy by granting subsidised interest, fixing public tariffs and providing tax exemptions. Last but not least, they announce that wages will be controlled. This is an imports substitution model: it will import machinery to manufacture imported products. It is imperative to export — export low wages.

Before describing the PAEG, it is important to outline the main features of the macroeconomic model the regime conceived. The seven most salient features are as follows:

- a) The choice of imports substitution in virtually every area as the mainspring for powering up Brazil's industrialisation. The idea is to import machines that produce imported goods and then to manufacture them in Brazil with tariff protection. The next step is to import the machines that manufacture the machines that produce the goods. Stage three is to import the technological kits that create the machinery that manufactures the machines that produce the goods. Decree-law 1,244 (10/30/72) takes this idea to extremes by granting tax incentives for the import of complete industrial packages, e.g. a General Motors, lock, stock and barrel. The same principle was to apply to products that the Northeast region imported from the more developed Southeast and South of the country to offset regional imbalances. The main body responsible for granting subsidies and financial and exchange incentives for implementing this policy was the Industrial Development Commission mentioned earlier;
- b) The widespread use of discretionary subsidising as the prime means of persuading the private sector to switch to imports substitution. That induces economic inefficiency and gigantism. The automobile industry installed in Brazil currently operates with 50% idle capacity. Moreover, it is a self-perpetuating policy. The granting of huge subsidies for domestic consumption of oil following the establishment of the OPEC cartel in 1973 led to the subsidised production of fuel alcohol to substitute subsidised oil. It has also plunged Brazil into a unprecedented electric energy crisis announced only when the reservoirs of the country's main hydroelectric plants had almost run dry;
- c) Encouragement of dollarisation of the domestic economy. Dollarisation is the result of using economic policies to induce domestic economic agents to resort systematically to deficits in current transactions. Simonsen (1995, pp. 32-33) exemplifies this feature:

“To encourage circulation of ORTNs, in November 1965 the Castelo Branco administration resorted to a bold expedient.” “... it offered those purchasing ORTNs by May 1966 two options: a monetary correction clause or a readjustment (...) based on the variation of the dollar...” As a result, “the conditions of Decree-Law no. 1 were exceptionally favourable for those bringing in external savings to invest in ORTNs.”.

Dollarisation was further encouraged by the adoption of the IMF's controlled exchange rate system as will be discussed elsewhere. The decision was extended to international capital flows. The exchange escape valve operating in the democratic regime founded on the 1946 Constitution was thus abolished. Dollarisation was induced through a snowball mechanism that distorted the private sector's perception of its costs and prevented the Brazilian economy from spontaneously generating the exports required to honour external commitments. The slogan “Exporting is a must” becomes the rage. As from 31st March 1964 the IMF began to meddle systematically in the internal affairs of the Brazilian economy. It observed, financed and fostered the dollarisation of economic activity in Brazil;

- d) The option to use domestic debt indexed to the exchange rate and the currency in order to fund public deficits. Money is raised through the sale of indexed government bonds and loaned at subsidised interest rates. From 1982 onward public sector savings turned strongly negative;
- e) The adoption of the asymmetric indexation theory to justify full monthly indexation of government debt bonds in contrast with the arbitrary, partial annual indexation of wages. This theory is expounded by Simonsen (1995, pp. 3-4). As from 31st March 1964 it was to be systematically employed against wage earners whenever the need arose to pay off the giant bills the administration's economic policy errors had incurred;

- f) The adoption of economic interventionism and statism as another mainspring for determining the allocation of investments in the Brazilian economy. A classic example of this approach is the document titled “Action for Private National Enterprises” (the so-called Geisel Law) which set out 12 commandments designed to regulate the division of domestic productive activity between private Brazilian companies, multinationals and state enterprises. The number of state owned enterprises in the Brazilian economy exploded under the autocratic economic policy regime. They covered the whole gamut from hotels to the petrochemical industry.
- g) The adoption of a budget scheme “absolutely incomprehensible to the average man in the street or, more particularly, to members of Congress.”

The Castelo Branco Government’s plan of action (PAEG) is another key document in this initial period. It was the first under the new regime to unabashedly publicise the decision to promote wholesale intervention in all sectors of the Brazilian economy without authorisation from Congress. In its wake surged a glut of other documents, each attempting to correct problems triggered by its predecessor, as stated in their respective preambles.

The aim is to institute “merely indicative” planning (p. 14). But the document is highly detailed. It offers supply and demand projections for 15 separate agricultural products based on 15-year historical series, input-output matrix for inter-sectorial food balances and income-elasticity coefficients. It concludes that the correction of future imbalances between supply and demand “...means adopting a line of conduct in agricultural policy that should concentrate on the following points:

- a) a system of export incentives for sugar, rice and oranges (...) besides cotton, cocoa, jute, castor beans in oil, mate tea and sisal;
- b) support for the production of potatoes, beans, maize and wheat as well as fruit and forest products;
- c) introduction of advanced technology in animal husbandry not only to meet rising demand but also to produce exportable surpluses, particularly of beef” (pp. 109-115).

The same rationale is to inform interventions in the iron and steel and non-ferrous metals industry, in the chemical, petrochemical, fertiliser, mechanical, textiles and cement industries, etc. The same overall solution — the granting of benefits — is to be employed to promote growth. The same goes for other areas of economic activity.

At macroeconomic level, the aim is to have Brazil growing 6% a year for the 1965-1966 period (p. 17).

“In a country where the population grows at such a high rate as in Brazil” and assuming that “the incremental capital/output ratio will rise shortly given the need to intensify investments in economic and social infrastructure” to 2.5, “the gross capital formation rates would have to rise to (...) 20% for gross domestic product to increase 6% per annum” (pp. 22-23).

For this to occur, the gross investment rate, “which, among the variables listed, is the easiest to manipulate by economic policy” (p. 2), would have to rise.

“The aim is not to reduce wage-earners’ share in Gross Product — a cruel means of encouraging savings.” This is to be achieved “by granting tax incentives (...), heavy taxation of superfluous consumption (...) creation of attractive assets instruments (...), policy for encouraging the influx of foreign capital (...), adoption of a wage policy attuned to the

objectives of the programme to curb inflation and consistent with the drive needed to increase the pace of GDP growth” (p. 26). “The reform planned for the exchange system will seek to simplify the present exchange mechanism by unifying exchange transactions in a single market governed by a free-floating exchange, reflecting domestic and external price trends as well as market conditions” (p. 48). However, the Government opted for the “Maintenance of realistic exchange rates for exports” (p. 131).

PAEG reads like the discourse of a benevolent dictator despite the ambiguous treatment it metes out to wage-earners and its asymmetrical indexation criteria working against them. The autocratic planning proposal was put into practice. The investment rate was risen, subsidies were granted for external and domestic imports substitutions, public debt was financed by issuing indexed securities. The number of state owned enterprises forged ahead and the Brazilian economy was progressively dollarised. All this was carried out in an autocratic, dictatorial manner by enlightened despots in sole possession of the truth — without congressional consent.

On 16th November 1976, President Ernesto Geisel announced to the world that the Brazilian economy could no longer sustain the high growth rates attained during the Kubitschek era, lest it should become crippled by external debt. He decreed the demise of the illusions and elated patriotism Kubitschek had inaugurated.

Thus officially commences the period of adjustments, packages of economic measures, stabilisation plans and shock treatments, one following upon the heels of the other, aimed at “administering” a vast range of artificially created problems: monetary, fiscal and exchange imbalances; deepening federal, state and municipal indebtedness; shortage of funds to complete giant public construction projects; failure of banks and firms; wholesale controls of prices and wages; maxi-devaluations and exchange rate controls; control of interest rates and indexation; stagnation. Nothing but bad news.

Until about five years ago, the problems besetting the Brazilian economy were attributed to three factors: a) unfavourable conditions in the international economy; b) the predatory wiles of speculators bent on abusive price mark-ups; c) workers’ insistence on demanding nominal wage increases. More recently, social security has also been blamed.

The next section displays a series of graphs depicting the performance of the two economies.

4 - Portraits of the Brazilian economy

This section displays a series of nine graphs. They portray the performance of the Brazilian economy under the two constitutional regimes described in sections two and three. They are straightforward, self-explanatory graphs that the reader can easily reproduce using the data in the statistical annex to this paper. They focus on GDP growth rates (Figures 1 and 2), they illustrate the dollarisation of the Brazilian economy (Figures 3.1, 3.2, 4 and 5), and they highlight the impressive “apparent” increase in the capital-output ratio under the autocratic economic policy regime (Figure 6).

Figures 3.1, 3.2, 4 and 6 document policies adopted. The remainder reflect the results of the decisions taken. These results irrefutably demonstrate that under the autocratic regime:

- a) the Brazilian economy has ceased to be dynamic and drifted toward merely vegetative growth rates;
- b) the economy has abandoned the previous steady state growth path and become extremely unstable;
- c) the “miracle” immediately turned to economic disaster;
- d) dollarisation has been taken to extremes and has ushered in the diminished dynamism and increased instability mentioned above. The costs of dollarisation need to be reckoned. Evidence suggests that, from the standpoint of the economy’s general equilibrium, its effect on domestic investment has been strongly negative, contrary to the findings of pure accountancy approaches to external savings figures;
- e) the costs of economic growth in terms of accumulating fixed capital have risen substantially. The economy is headed toward inefficiency and waste.

Figure 1 records the Brazilian economy’s average annual GDP growth rates between 1947 and 1962, 1948 and 1963, 1949 and 1964 and so on up till 1984 and 1999. These are long-term rates spanning a period of 15 years.

The economic policy regime governed by the 1946 Constitution lasted until 1962. Political unrest surged in 1963 and in 1964 the autocratic, dictatorial regime seized power.

Segment a-b of the curve in Figure 1 spans the period of political upheaval and the recession engendered by the autocratic regime to curb “spiralling inflation” in a context of open inflation.

Segment b-c in the same figure covers the so-called economic “miracle” and its long-term effects. Point c marks the onset of the two lost decades. It was at this point that the dictatorship and the IMF triggered recession as a means of paying the costs of the dollarisation engineered previously. Recession is provoked by sharp slumps in domestic consumption and imports, freeing up funds to boost exports. Figure 3.2 gives a fair idea of the policy adopted. Figure 3.1 shows that the funds released were only sufficient to pay off the interest, profits and dividends accruing on dollarised capital. The principal remained untouched.

Dollarisation distorts the perception of domestic economic agents, inducing them to absorb dollarised capital at costs that by far exceed the capacity of domestic production. The economy cannot spontaneously generate the exports required to pay the cost. The end result is external insolvency. “Exporting is a must” becomes a catch-phrase. The loss must be paid.

Segment c-d in Figure 1 is a veritable picture of economic terrorism. This is the period of packages, adjustments and “stabilisation plans”. The inverted commas are there to remind us that the “plans” do not bring about stabilisation. The Brazilian economy continues to be out of kilter, as segments c-d of Figures 1, 3.1 and 4 attest. The “plans” serve to charge society for the errors committed by the autocratic economic policy regime. This is the payback for dollarisation and the squandering of Brazil’s economic resources.

As stated above, the expression “economic policy” only becomes meaningful in the context of the constitutional regime putting it into practice. In this case, the autocratic regime uses asymmetric indexation to the detriment of wage-earners and companies geared to the domestic market, and to the benefit of the creditors of dollarisation and domestic debt.

In Figure 1, the Brazilian economy grows 7.55% a year on average between 1947 and 1962 (see Annex 1, Table 1). In 1963, it hurtles down a roller-coaster stretch, climbs again during the “miracle” and soon heads down again at the behest of packages, adjustments and “stabilisation plans”.

Until 1977, the 15-year growth rates partly reflect the growth taking place under the aegis of the 1946 Constitution. From 1977 onwards, the results in the graph reflect solely the performance of the autocratic regime. In this perspective, the economic “miracle” seems no more than a mirage or a blister in the pattern the regime established for the Brazilian economy. The sixth section, however, reveals an even worse predicament. The segment around point d coincides with the Real Plan prior to the announcement that the reservoirs of Brazil’s main hydroelectric power plants had been allowed to run nearly dry. Point e — as yet to be drawn — will be lower than point d.

Figure 2 generalises Figure 1. It displays different versions of the curve drawn in the latter. Besides the moving averages spanning 15 years, it displays averages spanning 8, 9, 10, 11, 12, 13 and 14 years. The set of curves derived categorically confirms the data in Figure 1. It also makes it patently clear that from 1964 onward the Brazilian economy became highly unstable in comparison with the preceding period. In the period covered by the 1946 Constitution the set of lines is compact, reflecting an economy with steady growth and a high degree of stability and medium and long-term predictability. In the following period, the set of lines disperses, displaying a ragged pattern. This reveals instability and unpredictability. The Brazilian economy has sheered away from its centre of gravity.

Figures 3.1, 4 and 5 document dollarisation: foreign capital being attracted by concessions exemplified by Simonsen (1995, pp. 32-33) and by the exchange policy recommended by the IMF. The significance of this has already been explained.

Figure 3.1 traces the evolution of the balance of venture capital (direct investment), of loans (public and private foreign debt) and of portfolio in the Brazilian economy. It does not include the balance carried over from 1946. This omission is irrelevant as it does not alter the growth of such capital as from 1947. Figure 4 displays the same information, this time as a percentage of gross domestic product.

Segments a-b in Figures 3.1 and 4 highlight the onset of dollarisation. Segments b-c correspond to the period of payment of interest, profits and dividends. Segments c-d cover the Real Plan. They will be accompanied by others similar to segments b-c.

The balance of foreign capital stood at US\$ 3,115 millions (10% of GDP) in 1963, falling to US\$ 2,904 millions (7.3% of GDP) in 1967. By 1976, when the Geisel Government announced that Brazil could no longer grow by absorbing external savings, it had risen to US\$ 28,577 millions (24% of GDP). It leapt further to US\$ 91,198 millions (45% of GDP) in 1982. At that point, Brazil’s creditors and the IMF demanded repayment. But the “external resources” had been dilapidated and had failed to generate exports. The solution was to slash domestic consumption and imports to generate the exports required. That policy pushed the Brazilian economy into the recessive segment c-d in Figure 1. The balance of this capital reached US\$ 101,090 millions (40% of GDP) in 1994, leaping to US\$ 231,702 millions (54% of GDP) in 1999. The IMF stepped in once again.

Figure 5 is a more detailed version of the ratio between product and foreign capital. The ordinate of each point measures the incremental ratio between balance of foreign capital and gross domestic product for a given period. It displays nine similar curves. The first shows the value of this variable for the periods 1947-1954, 1948-1955, 1949-1956 and so on. The second repeats the procedure for the periods 1947-1955, 1948-1956, 1949-1957 and so forth. The last does the same for 1947-1962, 1948-1963, 1949-1964 etc.

This figure is very revealing. Under the 1946 economic policy regime foreign capital enters the Brazilian economy in the form of direct investments, venture capital destined to contribute directly to production. These investments are profitable for both the productive sector and society at large. They themselves generate their own yields without having to resort to recession.

The pattern of this incremental variable is surprisingly stable in the short and long terms — before dollarisation, that is. This degree of stability shows that during the period in which the 1946 economic policy regime held sway Brazil's economy was open to international capital flows without any intervention. There was a state of equilibrium: the economy and the balance of foreign capital grew in tandem. The IMF was only present on the sidelines.

Figure 5 summarily condemns the model propounded by advocates of dollarisation and the IMF. The exaggerated increases in this variable under the autocratic economic policy regime are evident both in the 1972-1982 period and during the Real Plan. The balance between economic growth and foreign capital vanishes. This is a picture of instability, of chaos.

Analysis of economic growth considers two key variables: (incremental) cost of investment and (incremental) return on investment in productive activities. In the case of the Brazilian economy, the evidence presented in this paper suggests that the costs of raising funds for investment by means of dollarisation were excessive. In other words, even if these funds had been invested in competitive projects, the end result would have been a drop in long-term growth rates.

To make matters worse, they also suggest that the dictatorial regime squandered the vast resources obtained at excessive cost producing systematic deficits in current transactions. It sponsored an economy of waste in terms of both fund raising and investment.

The funds were squandered:

- a) on “unfinished construction projects”, as the Brazilian Congress termed them. The most glaring cases were the Transamazonian Highway and the Steel Railroad;
- b) on subsidies for implementing regional development and imports substitution projects in the Northeast and Amazon regions. The majority failed or disappeared when the subsidies ran out. They are currently being investigated by two congressional commissions;
- c) on subsidies channelled by the Industrial Development Council (CDI) into private imports substitution projects, especially in the capital goods sector;
- d) on subsidies for developing the petrochemical industry at the height of the oil crisis;
- e) on subsidies for domestic consumption of oil by-products and fuel alcohol at the peak of the oil crisis;
- f) on subsidies for predatory consumption of electricity;
- g) on unbridled dissemination of state owned enterprises.

The sum total of such squandering probably exceeds US\$ 50 billions.

One academic implication of this squandering is that the statistical series for gross capital formation in the National Accounts are certainly overestimated from 1964 onwards. They reflect Brazilian society's strenuous effort to accumulate capital though they fail to represent the result of such effort. Consequently, they invalidate studies incorporating them as basic variables.

The incremental capital/output ratio indicates the number of additional physical capital units required to generate an additional product unit per unit of time. The greater the ratio, the greater the effort required to obtain a given increase in gross domestic product. In Brazil's case, it is not yet possible to estimate a statistical series of this ratio for the reasons stated earlier. Nevertheless, apparent series of incremental capital/output ratios can be generated. They do not measure the economy's capital stock but they do reveal the effort expended to accumulate capital.

This has been done in Figure 6. The eleven curves depict the evolution of this variable from 1947 to 1999. They are moving averages ranging from 5 to 15 years. Computing uses only the series for gross capital formation at current prices and for gross domestic product contained in the national accounts. For the sake of exemplifying, a rate of depreciation equal to 4% was adopted. Alterations to this rate do not affect the picture.

Figure 6 looks like Figure 1 upside down. They are conceptually analogous. It should likewise be recalled that the Brazilian economy's GDP compounds the denominator of the apparent incremental capital/output ratio. The apparent stock of capital posited in it is statistically more stable than GDP. In the short run, when product falls (rises), the magnitude of this ratio increases (drops) abruptly. So, despite all its defects, Figure 6 helps to define the main periods of impact on the Brazilian economy.

What is irrefutably clear is the great effort Brazilian society made from 1973 onwards to accumulate capital. What this effort has produced is as yet veiled in uncertainty. It is likewise clear how stable was the economy of the 1946 economic policy regime, and how unstable it became under the other regime.

5 - An example of the autocratic regime's subsidising penchant

This section exemplifies the Government's penchant for subsidising under the autocratic economic policy regime during the oil crisis that broke out in late 1973.

In 1973, OPEC abruptly raised the price of crude oil on the international market. The table below records the series of hikes:

International Price of Crude Oil Price of Light Arabian Crude 1972-1980	
Dates	US\$/barrel
20/01/72	2.479
01/01/73	2.591

01/12/73	5.036
01/01/74	10.952
01/06/79	18.000
09/01/80	26.000

Source: Petrobrás-DECOM

During the crisis all the developed economies drastically cut back their domestic oil consumption. The Brazilian economy increased its consumption above the rate of its own growth. The Government decided to subsidise naphtha heavily to boost the petrochemical industry, as well as the other oil by-products, so as to keep the momentum of internal economic activity unchanged. The costs were astronomic. Martins (1980) examined part of these costs. The remainder of this section reproduces pages 94-97 of his study. The lines in Figure 7 are self-explanatory.

“Lines A and B plot the behaviour of the weighted average consumer price of the main oil by-products. Lines C and D represent estimates for Petrobrás’s weighted average revenue in view of the domestic sales figures for these by-products. Both are expressed in cruzeiros per litre duly deflated. The weighting is based on the proportional share of consumption of each by-product within the group.

Lines B and D are the result of domestic price control policy for oil by-products. Lines A and C are hypothetical. They represent what would have happened if the rises in oil prices on the international market had been transferred to domestic consumers in Brazil, as occurred in most developed economies.

Line A was estimated on the basis of international oil prices, on CIF import prices and an exchange rate adjusted to compensate the inadequacy of the Government’s exchange policy. This rate was assumed to be only 25% above the official rate in December 1973 and was kept constant in real terms from then on. The correct rate would be one that allowed for full economic exploration of the country’s energy resources.

The difference between lines A and B represents a conservative estimate of the real resources (cruzeiros per litre) transferred from the rest of the economy, via exchange policy, to subsidise the consumption of oil by-products from the end of 1973 onwards. The graph extends only to March 1980. From that point onward the situation worsened considerably because of the pre-setting of exchange devaluation at 45% per annum against an annual inflation rate of 100%.

Our preliminary estimates place the total resources transferred since 1973 exclusively for direct subsidising of oil consumption and by means of the exchange rate policy at approximately 800 billion cruzeiros at extant prices (August 1980). Moreover, however large this sum may be, one can infer that it by no means reflects the accumulated volume of funds available for investments transferred from the rest of the Brazilian economy to the oil sector.

It can likewise be observed that government intervention has provoked highly unstable patterns in the evolution of the effective average consumer price (line B) and Petrobrás’s effective average revenue (line D) in comparison with the period prior to 1974.

Line C was estimated on the basis of the official exchange rate. So the difference between lines C and D represents the real loss in cruzeiros per litre that the Government’s policy

impinged on Petrobrás - a loss that can presumably be readily verified in the company's accounts.

Until 12/30/77, Petrobrás's offer price, i.e. its revenue, was regulated by Decree-Law 61/66 (11/21/66), Article 2, subsection B, according to which: (a) the sale price of each by-product should be set in accordance with the international price of gasoline; (b) the average sale price should cover the private costs of refining (raw material, wages and social benefits, general expenses, depreciation, etc.) and secure a normal level of profit for the activity; and (c) it should cover (through a special account called line "h") losses resulting from abnormal fluctuations in the exchange rate, the cost of importing oil, etc., not reckoned when the price structure was originally determined.

As from 12/30/77, however, the formation of sale prices was regulated by Decree-Law 1,599/77, which empowered the Government to set the average sale price at the refinery to suit objectives unconnected with the internal operation of Petrobrás, regardless of any technical criteria.

Until 02/20/78, the average sale price structure continued to be determined on a "technical" basis. From 08/18/78 onwards, the Government began to allow Petrobrás price increases lower than the level required to cover rising costs resulting from inflation, from exchange devaluation and from the rise in international oil prices so as to control the evolution of the general price index."

6 - The economies of the two economic policy regimes

This section provides a panorama of the Brazilian economy in per capita terms between 1947 and 1999. It highlights the different patterns prevailing in the economy as a result of the two constitutional regimes. It also presents a simulation of the economy of the 1946 constitutional regime from 1947 to 1999.

The vertical axis of Figure 8 measures the Brazilian economy's per capita gross domestic product. The rambling curve traces its actual behaviour at constant prices from 1947 to 1999. The 1947 figure is 1. The Dutra-Vargas-Kubitschek line is a simulation of the economy under the 1946 Constitution for the same period. The methodology employed in the simulation is described in the appendix to this section. It will be developed later.

The per capita GDP curve shows firm, sustained growth from 1947 to 1962. Compared with the subsequent period, it can be claimed that the Brazilian economy operated like clockwork. It was a robust market economy. This robustness is not merely visual. It appears with even greater clarity when the period is analysed statistically. The pattern it displays can easily be "explained" by models using temporal series, moving averages, capital/output ratios, ruler and compass. All seem appropriate. The Dutra-Vargas-Kubitschek line — which satisfies theoretical equations for economic growth, as opposed to trends — is an example of the ease with which it can be explained: a prime case of predictability. It reflects an economy experiencing sustained, balanced growth. In this period, Brazil was growing 7.55% a year, its per capita GDP increasing 4.48% per annum. The IMF's presence is irrelevant. Observing this curve, it is impossible to detect any evidence that the economy was headed for Bolshevizing in 1964.

The same curve also clearly reveals a departure from the balanced growth trend in 1963, a year of political upheaval building up to the military coup on 31st March 1964. It departs from it never to resume again. From then on, the pattern is irregular and it becomes difficult to predict its behaviour using the models mentioned above. The difficulty is synonymous with unpredictability. It reflects a destructured, disorganised economy. This is the economy of waste discussed above.

In the wake of the brutal recession decreed by the PAEG in 1964, the economic management model described in section 3 began to be applied. The core of the model is widespread subsidisation and dollarisation sponsored by the IMF. Despite Brazil's economic "miracle", the economy fails to resume the growth trend of the Dutra-Vargas-Kubitschek line and in 1976 the Geisel Government decrees the demise of the cycle of high economic growth rates. Thus begins the spate of adjustments, packages and stabilisation plans. The economy grinds into a pattern of stagnation and irregular growth which has lasted 20 years.

The per capita GDP curve in Figure 8 encapsulates everything that has been done under the aegis of the two economic policy regimes.

This is the macroeconomic result of: (a) population growth, the population's health and the quality of the workforce; (b) the use of non-renewable resources; (c) the laws and control of laws in the country; (d) the way economic crises and policies have been handled; (e) labour laws; (f) fiscal, monetary and exchange policies; (g) regional development and imports substitution policies; (h) adjustments, packages and stabilisation plans; (i) the squandering of economic resources. Of everything. This curve lays bare the performance of the two economies — that regulated by bills passed in Congress and that ruled by decree-laws and provisional acts.

The average rate of investment in the Brazilian economy at current prices was 16.03% between 1947 and 1962. It rose to 21.6% between 1964 and 1999. So, from 1964 onwards the economy grew less despite a much greater accumulation effort — 1.35 times greater.

The Dutra-Vargas-Kubitschek line hypothetically extends the economy of the democratic regime until 1999. The per capita gross domestic product in 1999 is three times larger than that actually obtained by the autocratic regime. Moreover, 1999 does not yet incorporate the negative effects of the energy crisis.

The appendix explains the simulation of the Dutra-Vargas-Kubitschek line.

APPENDIX

The Dutra-Vargas-Kubitschek line implements Solow (1956) with a constant growth rate for the productivity of the workforce. "A" is the workforce productivity coefficient. The meaning of the other variables is conventional.

$$K(t+1) = (1-\text{depr}) * K(t) + s * K(t)^\alpha * (A(t) * L(t))^{(1-\alpha)} \quad (1)$$

so:

$$\left[\frac{K(t+1)}{A(t+1)L(t+1)} \right]^{1+g} (1+n) = (1-\text{depr}) \frac{K(t)}{A(t)L(t)} + s \left[\frac{K(t)}{A(t)L(t)} \right]^{\alpha}$$

Call $k = K/(A*L)$ and rewrite (1) as follows:

$$k(t+1) = \left[(1-\text{depr})k(t) + s*k(t)^{\alpha} \right] / \left[(1+g)^*(1+n) \right].$$

The equilibrium value of k is given by:

$$k*[(1+g)^*(1+n)-(1-\text{depr})] = s*k^{\alpha} \quad (2).$$

Thus, the effective capital/labour ratio is given by:

$$K/(A*L) = [s/((1+g)^*(1+n)-(1-\text{depr}))]^{\frac{1}{1-\alpha}} = k \quad (3).$$

The corresponding equilibrium capital/output ratio is:

$$K/Y = [K/(A*L)]^{\frac{1}{1-\alpha}} = k^{\frac{1}{1-\alpha}} \quad (4).$$

To run the model we need A_1, A_2, \dots, A_{53} and L_1, L_2, \dots, L_{53} . To simulate these variables we must obtain α, g, n plus A_1 and L_1 . The first three are parameters. Equation (2) resolves to k . Take $Y = 1$ and calculate K using the value of k given by (2) using (4). Now make $L = 1$ and calculate A using (3). Parameter g is the growth rate of A and n the growth rate of L . The lists of A and L can now be generated. Except for the savings rates, all the necessary data are already available. To simulate model (1) a hypothesis about s is sufficient.

The hypotheses are as follows:

$\alpha = 0.5$, as it is usually assumed in the case of the Brazilian economy; $g = 0.046$, the per capita GDP annual growth rate between 1947 and 1962; $n = 0.029$, the annual population growth rate for the same period; $s = 0.16$ from 1947 to 1966, average gross investment rate from 1947 to 1966; $s = 0.217$ from 1966 to 1999, average gross investment rate from 1966 to 1999.

These hypotheses imply $A_1 = 0.7283$ and an initial capital/output ratio equal to 1.373. The empirical value of this variable for the 1947-1962 period is 1.365.

The model was run and displayed as the Dutra-Vargas-Kubitschek line in Figure 8.

7 - Miracle and disaster in a model economy

The prescription of the PAEG and the Presidential Messages of the Costa e Silva Government for boosting Brazil's economic growth is simple, apparently logical and easy to implement: given the capital/output ratio in the economy and the way it evolves, to boost the per capita income growth rates all that is needed is to increase the rate of investment and to control population growth. Once the rate of domestic savings has been defined, additional funds for investments can be obtained through incentives for the entry of external savings.

The argument is akin to that the Government and the IMF employ today to impose reform of the social security system: it will free up the resources required to resume growth. Social security is to blame for economic stagnation. Without reform the country will not grow.

As early as 1956 — well before the PAEG and the Costa e Silva Presidential Messages — Solow had already expounded two major lessons:

- a) balanced growth rates in market economies are invariant with respect to changes in savings rates;
- b) savings rates indicate how societies intend to distribute resources between present welfare and future welfare. They cannot be altered at the whim of bureaucrats. Besides, they control capital/output relations in the economy. They indicate whether economic agents are under or over-accumulating productive capital. Over-accumulation inexorably leads to disaccumulation.

The simulation of the Dutra-Vargas-Kubitschek line is based on Solow. The same applies to the model economy in this section.

The simulation will not be calibrated specifically for the Brazilian economy. This section is merely a draft for the reader's appreciation.

The equation for capital accumulation in the model economy is:

$$k(t) = ((1 - 0.035)*k(t-1) + 0.15*k(t-1)^{0.5} + k_e)/(1 + 0.03) .$$

Here k means the same as in the previous section. Depreciation is 3.5%, population growth is 1.5% and that of the effective workforce 3.0% per period, i.e. the productivity of the workforce increases 1.5%. Society's savings rate is 15%.

The equilibrium stock of k equals 5.32. The per capita product of this economy was growing smoothly at 1.5% per period. All of a sudden, the dictatorship and the Fund take over and decide to up the pace of economic growth. The Fund and the ICBDF (Independent Central Bank Dependent on the Fund) agree to control the variable k_e (the available flow of foreign capital). The policy agreed upon is as follows: from dates 101 to 200 the Fund injects 0.5 external resources in the economy. From date 201 onwards, the ICBDF begins to pay back 0.25 per period.

Figure 9.1 displays part of the result of this policy: the pace of economic growth is fast while external funds flow into the economy; it falls below the long-run equilibrium rate of growth when time comes to repay them. Figure 9.2 displays another consequence of this authoritarian policy: earthquakes, unstable capital accumulation rates caused by inter-temporal substitution of investments.

The natural-rate hypothesis (Friedman, 1958) is one of the cornerstone concepts of macroeconomics. It can readily be extended to several other areas. The natural growth rate of the model economy examined above is 3% per period. The high growth rates achieved during its miracle can only be sustained if the influx of external funds continues indefinitely.

The next section is devoted to closing remarks.

8 - Closing Remarks

This paper has focused on the performance of the Brazilian economy from 1947 to 1999.

Between 1947 and 1962 the economic order is regulated by the 1946 Constitution, which enshrines the inviolable principle of independent operation of the three Branches of Power. Juridical-economic norms are stable and cannot be altered arbitrarily. The Judiciary and Legislative branches control the Executive. The budget is straightforward and successive governments implement target plans. The IMF attempts to dollarise the economy but it lacks any real clout, as the Kubitschek Government eloquently demonstrates. External funds enter Brazil in the form of venture capital. The economic order is consistently stable. During this period the population grows 2.9% on average while GDP expands 7.55% per annum with great regularity. Besides being firm and sustained, this impressive growth is achieved with relatively little effort: the average investment rate is only 16.03% of GDP.

1963 is marked by political unrest which progressively paves the way for the military coup on 31st March 1964, undermining the 1946 constitutional order and sapping the economy's strength.

Since 1964 the economic order in Brazil has been ruled either by overt dictatorship or by the Constitution promulgated on 5th October 1988. An autocratic, dictatorial regime holds sway. The Executive Branch legislates, acts as its own judge and systematically violates the balance between the Powers of the State. It acts arbitrarily, bestows favours as it pleases, disrespects rights, protects financial assets, punishes labour and implements "brilliant" new ideas to the detriment of the ideas of "the average man in the street or, more particularly, members of Congress."

It joins hands with the IMF. It allows this regulatory agency to meddle in the country's internal affairs, in matters such as exchange, wages, investments and social security, as stated in the Economic Policy Memorandum the Brazilian Government submitted to the Fund on 23rd August 2001.

The IMF promotes, assists and finances the dollarisation of the Brazilian economy, provoking external insolvency.

In 1963, the Brazilian economy departs from its steady, sustained growth trend and **never again** resumes it. It turns to an economy of waste. The statistical data displayed in Figures 1 to 8 and the photograph of the empty Furnas reservoir irrefutably confirm this predicament. Figures 1 and 2 show the sharp decline in growth rates and the instability that ensued after 1963. Figure 3.1 suggests that dollarisation did actually take place. Figure 3.2 indicates how imports and exports shocks were employed to generate exportable surpluses. Figure 5 demonstrates the patent superiority of the foreign capital absorption model implemented in the Dutra-Vargas-Kubitschek period, revealing, in combination with Figures 1, 2 and 8, that dollarisation was accompanied by stagnation and instability. Figure 6 discloses the tremendous effort Brazilian society was obliged to make as from 1964 to accumulate physical capital. Figures 1, 2 and 8 attest that this effort was squandered and wasted. Figure 7 exemplifies the squandering of resources, the burning up of oil when the commodity was scarce on the international market. Figure 8 encapsulates the economies of the two policy regimes, clearly depicting the two lost decades. The photograph in Annex 2 is a symptomatic portrait of the resource-squandering model.

In 1964, the autocratic regime inaugurated the experimental approach with severe recession, purportedly to tame “spiralling” inflation. The shock treatment was unexpected, taking the economy by surprise. The regime then implemented its prescription for economic growth: national and regional imports substitution; indiscriminate subsidising financed by dollarisation and the running up of public debt indexed to both the local currency and the dollar; wholesale, amplified intervention in prices, wages and financial assets.

An investment shock is engineered, the “miracle” is produced, GDP growth rates become erratic, dollarisation is accomplished, economic resources are squandered, and the Brazilian economy is plunged into stagnation that has lasted 20 years. The squandering can be observed in external fund raising, by means of forced dollarisation, and in the investment of the funds raised at such great cost.

The autocratic regime:

- a) violates rights, bestows benefits and imposes asymmetrical indexation;
- b) promotes constant intervention in pricing and provokes successive shocks to the economy in the form of adjustments, packages and stabilisation plans;
- c) monopolises information of relevant public interest, accepts undocumented credit as payment for privatisation, and disposes of public property with gay abandon, as illustrated in Annex 2;
- d) practises indiscriminate subsidising and predatory use of economic resources, exemplified by the reckless burning up of fuel and naphtha during the oil crisis and by the wasting of water resources, documented in Annex 3 with the photograph of the dried up Furnas reservoir;
- e) gives away public money, as occurred in the January 1999 exchange crisis when US\$ 2 billions were donated to insignificant private banks supposedly to avert a “systemic crisis” in the finance market;
- f) squanders funds on uncompleted construction projects and on subsidies for phantom enterprises;
- g) dollarises domestic debt and obliges the Treasury to cover the costs.

On 16th November 1976, the Geisel Government announced that the Brazilian economy could no longer sustain the high growth rates achieved in the Dutra-Vargas-Kubitschek era. The economy was literally impoverished and disorganised. It failed to produce a sufficient amount to pay the costs of dollarisation and of mounting domestic debt. The long sequence of adjustments, packages of measures and stabilisation plans, aimed at transferring the cost to society, began slightly earlier, in 1974. In the Memorandum mentioned above, the economic authorities forecast economic growth of only 2.2% a year. At the same time, they plan to increase net public sector debt by 10.3% per annum, from R\$ 680 billions (reais) in September 2001 to R\$ 750 billions a year later. No explanation is offered for this sharp increase in net domestic debt amounting to R\$ 70 billions. The sum is sufficient to build another four hydroelectric power plants the size of the gigantic Itaipu project. In the same Memorandum, the Government pledges to oblige pensioners to foot the bill — the debt is dollarised, not wages or retirement pay.

The autocratic regime’s economic policy has a telling feature, present in its two distinct phases; (a) in the “miracle,” the implementation of its own growth model, which survives until 1974; and (b) when time comes to pay up, stagnation from then onwards.

The telling feature is that one major macroeconomic variable is always elected as an anchor while another, beyond control, expands way above the growth rate in the economy. The economy of the autocratic regime is always out of kilter. The anchor may be prices, wages, the exchange rate, fiscal

or monetary targets. The expanding variable may be inflation, supply problems, domestic or external debt. That depends on the anchor selected and on the economic policy experiment being carried out. The Real Plan, for instance, elected the exchange anchor. It attempts to stabilise the exchange rate at R\$ 1.00 = US\$ 1.00. From 1994 to 1999 the economy grows 11.6%, the balance of foreign capital increases 29.2% from US\$ 101,090 to US\$ 231,702. The exchange rate leaps to R\$ 2.75 = US\$ 1.00. The autocratic regime now begins to worry about the private sector's excessive external debt. The former motto becomes "Export or die."

This regime used the cloak of the 1964 military coup to overthrow the 1946 constitutional regime — the regime based on legislative bills and parliamentary blocs — and impose a regime of decree-laws, provisional acts and a College of Leaders. Its economic project has been carried through. And it continues to be implemented. Figure 8 in section six compares the regime's performance with that of the Dutra-Vargas-Kubitschek line. The outcome is a debilitated, disoriented, faltering economy headed toward stagnation. The effort expended by Brazilian society is documented in Figure 6. It is Herculean. The full extent of the squandering and waste is not yet known; it has never been reckoned.

Another constitutional amendment has been tabled in Congress to grant the Brazilian Central Bank independence. No central bank in any civilised nation has ever been free to donate US\$ 2 billions of public money to minor private banks for implausible reasons, as occurred in Brazil in January 1999. Or to dollarise domestic debt at unthinkable levels. Or to declare that it will expurgate the "dollar effect" from public statistics. All this with full knowledge of the IMF. Law no. 4,595 (12/31/64) already grants the Brazilian Central Bank almost complete independence.

Out of context, the expression "exchange policy," or any other such term, lacks conceptual meaning. It can be construed as virtually anything. The expression only acquires real meaning when it refers to a specific constitutional regime of economic policy. In a regime in which public spending is not controlled by the Judiciary, subsidies may mean money diverted. Exchange policy may signify dollars being sold below market prices at a cost to the Treasury. Granting the Brazilian Central Bank independence in an institutional framework forged by decree-laws and provisional acts would imply consigning the Brazilian economy indefinitely to the stagnation trend displayed in Figure 8.

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Annex 1 - Statistical Tables

Table 1
GDP Growth Rates: 1947-1999
15-Year Moving Averages (annual %)

[[1947, 7.5464413], [1948, 6.9273493], [1949, 6.6372958], [1950, 6.3386242], [1951, 6.4593064], [1952, 6.2514418], [1953, 6.5888744], [1954, 6.7001181], [1955, 6.8038833], [1956, 7.3668454], [1957, 7.6436106], [1958, 7.8461513], [1959, 7.7376051], [1960, 7.4545225], [1961, 7.5630617], [1962, 7.4501883], [1963, 7.7552157], [1964, 7.9851534], [1965, 8.4508173], [1966, 7.6707620], [1967, 7.4350334], [1968, 6.5560474], [1969, 6.2852998], [1970, 6.1199757], [1971, 5.8711194], [1972, 5.3212834], [1973, 4.4030181], [1974, 4.0744968], [1975, 3.4311838], [1976, 2.8303938], [1977, 2.4634988], [1978, 2.4605613], [1979, 2.4023183], [1980, 2.0826974], [1981, 2.5579280], [1982, 2.7216088], [1983, 2.9405388], [1984, 2.6340719]]

Table 2
GDP Growth Rates: 1947-1999
Annual Rates (%)

[[1947, 9.700], [1948, 7.7000000], [1949, 6.8000000], [1950, 4.9000000], [1951, 7.3000000], [1952, 4.7000000], [1953, 7.8000000], [1954, 8.8000000], [1955, 2.9000000], [1956, 7.7000000], [1957, 10.8000000], [1958, 9.8000000], [1959, 9.4000000], [1960, 8.6000000], [1961, 6.6000000], [1962, .6000000], [1963, 3.4000000], [1964, 2.4000000], [1965, 6.7000000], [1966, 4.2000000], [1967, 9.8000000], [1968, 9.5000000], [1969, 10.3979610], [1970, 11.3429220], [1971, 11.9403481], [1972, 13.9687218], [1973, 8.1539387], [1974, 5.1666491], [1975, 10.2571295], [1976, 4.9343281], [1977, 4.9698977], [1978, 6.7595601], [1979, 9.2274134], [1980, -4.25000004], [1981, .8300000], [1982, -2.93000000], [1983, 5.4000000], [1984, 7.8500000], [1985, 7.4900000], [1986, 3.5300000], [1987, -.5999995e-1], [1988, 3.1600000], [1989, -4.17349005], [1990, 1.0314843], [1991, -.54357987], [1992, 4.9247662], [1993, 5.8528729], [1994, 4.2237937], [1995, 2.6585897], [1996, 3.2710000], [1997, .2200001], [1998, .7900000]]

Table 3
Gross Fixed Capital Formation: 1947-1999
Current Prices - % of GDP

[[1947, .147338935574], [1948, .1263259402], [1949, .1231914014], [1950, .1232682061], [1951, .1485091743], [1952, .1518771331], [1953, .1458631257], [1954, .1667163289], [1955, .1522032650], [1956, .1443288950], [1957, .1735094038], [1958, .1813504824], [1959, .2056034482], [1960, .1700188561], [1961, .1506554911], [1962, .1769994632], [1963, .1803977273], [1964, .1685740444], [1965, .1842271811], [1966, .1843619105], [1967, .1626143049], [1968, .1897448142], [1969, .2201334214], [1970, .2054290075], [1971, .2126203095], [1972, .2120890730], [1973, .2204522260], [1974, .2431139586], [1975, .2569752114], [1976, .2304219751], [1977, .2204752812], [1978, .2303310534], [1979, .2313783579], [1980, .2399878123], [1981, .2445891012], [1982, .2263113704], [1983, .1838255225], [1984, .1763192464], [1985, .2039261327], [1986, .2004164983], [1987, .2317164024], [1988, .2432483825], [1989, .2686271678], [1990, .2016770897], [1991, .1976880530], [1992, .1893453584], [1993, .2084635555], [1994, .2214556295], [1995, .2228862051], [1996, .2092133225], [1997, .2149741505], [1998, .2116976165], [1999, .2044551869]]

Table 4
Population Growth: 1947-1999
(annual %)

[[1947, 2.6513520], [1948, 2.7297472], [1949, 2.7987703], [1950, 2.8584275], [1951, 2.9088677], [1952, 2.9503572], [1953, 2.9832566], [1954, 3.0079968], [1955, 3.0250598], [1956, 3.0349602], [1957, 3.0382305], [1958, 3.0354073], [1959, 3.0270216], [1960, 3.0135895], [1961, 2.9956060], [1962, 2.9735398], [1963, 2.9478301], [1964, 2.9188833], [1965, 2.8870729], [1966, 2.8527376], [1967, 2.8161821], [1968, 2.7776773], [1969, 2.7374605], [1970, 2.6957377], [1971, 2.6526835], [1972, 2.6084429], [1973, 2.5631329], [1974, 2.5168432], [1975, 2.4696377], [1976, 2.4215561], [1977, 2.3726141], [1978, 2.3228052], [1979, 2.2721012], [1980, 2.1858589], [1981, 2.1625919], [1982, 2.1241279], [1983, 2.0744901], [1984, 2.0257185], [1985, 1.9669054], [1986, 1.9014197], [1987, 1.8273048], [1988, 1.7481408], [1989, 1.6764660], [1990, 1.6081087], [1991, 1.5547167], [1992, 1.5122301], [1993, 1.4643732], [1994, 1.4216524], [1995, 1.3917885], [1996, 1.3682532], [1997, 1.3492523], [1998, 1.3333574]]

Table 5
Balance of Foreign Capital: 1947-1999
US\$ millions

[[1947, 151.00], [1948, 153.00], [1949, 235.00], [1950, 95.00], [1951, 498.00], [1952, 1122.00], [1953, 1067.00], [1954, 1262.00], [1955, 1260.00], [1956, 1203.00], [1957, 1467.00], [1958, 1715.00], [1959, 2026.00], [1960, 2504.00], [1961, 2726.00], [1962, 3115.00], [1963, 3229.00], [1964, 3089.00], [1965, 2721.00], [1966, 2667.00], [1967, 2904.00], [1968, 3412.00], [1969, 3693.00], [1970, 4255.00], [1971, 5564.00], [1972, 7050.00], [1973, 8738.00], [1974, 15860.40], [1975, 22560.60], [1976, 28577.70], [1977, 32615.00], [1978, 39605.40], [1979, 50347.00], [1980, 63154.00], [1981, 74888.30], [1982, 91198.80], [1983, 98036.20], [1984, 97991.40], [1985, 98232.90], [1986, 103537.00], [1987, 104973.20], [1988, 100798.40], [1989, 99765.60], [1990, 103547.90], [1991, 104954.70], [1992, 98811.00], [1993, 99402.70], [1994, 101090.60], [1995, 119062.30], [1996, 142204.36], [1997, 173015.08], [1998, 206640.17], [1999, 231702.08]]

Annex 2

Privatisation Means of Payment and Use of Public Money

Transcribed below are passages from a report submitted by Federal Prosecutor Álvaro Augusto Ribeiro da Costa to the Attorney-General on proceedings nos. 1927/91-98, 2276/91-17, 2418-18 and 2091/91-11 relating to Public Bidding Notice no. PND-A/91/Usiminas concerning the “Sale of Stock for Usiminas - Siderúrgicas de Minas Gerais.”

This has to do with the use of undocumented credit for the purchase of Usiminas and sale of the company’s stock by the National Economic & Social Development Bank (BNDES) shortly before publication of the public bidding notice for the privatisation auction. The notice set the minimum sale price at Cr\$ 332.85 per batch of one thousand shares. Seven days before setting the price, BNDES sold batches of these shares to Nippon Usiminas Co. Ltd. at Cr\$ 39.79 per batch of one thousand shares. The passages read as follows:

“The Public Prosecution Service, the institution entrusted with the task of defending the legal order and public and social property ..., is responsible for verifying due observance of the principles of legal, impersonal, moral, transparent administration in the framework of the legal-constitutional order which obliges public administrators in central, associate or personnel departments...

However, this institution is not empowered to question the political and economic policy options, for which the Executive and Legislative Branches are responsible, underpinning the decision to privatise the said company.

For this reason, guided exclusively by the pertinent constitutional and legal precepts, the said representations were examined, producing the remarks and suggestions that follow.” (p. 7)

“Comparing the ‘Means of Payment’ listed in the Public Bidding Notice with the wording of Law 8,031, Art. 16 (12th April 1990), it was noted that the latter did not countenance Privatisation Certificates as means of payment nor the following stated in Resolutions CD/PND nos. 5, 6 and 7 issued by the Steering Committee: ... c) credits, whether or not they be supported by certificates, relating to the institutions referred to in Law no. 8,029, Art. 4 of 12th April 1990;” “e) matured credits, whether or not they be supported by certificates, held against institutions directly or indirectly controlled by the Union, not included in the previous item.” (p. 9)

“Consequently, the Public Bidding Notice..., under the topics mentioned above (contained in item 3.3.1.1) is manifestly illegal.” (p. 12)

“The National Economic & Social Development Bank (BNDES) and Siderurgia Brasileira S.A. (Siderbrás), under liquidation, signed on 24/04/91 a ‘Shareholders’ Agreement’ with Nippon Usiminas Co. Ltd., a Japanese company based in Tokyo, with a view to redistributing the shareholding in Usinas Siderúrgicas de Minas Gerais S.A. (Usiminas) and other stock adjustments’, by means of which part of the stock in Usiminas owned by Siderbrás, a joint stock company controlled by the Union, was transferred to the Japanese company (see pp. 166-172, case no. 2418/91-18).” (p. 21)

“In brief, it can be stated that initially Usiminas increased its capital by issuing shares at the price of Cr\$ 39.79/1,000 (thirty-nine cruzeiros and seventy-nine cents per batch of one thousand shares), a sum which, by BNDES’s own admission (item 9.1.7.2.2 of the Public Bidding Notice), reproduced conditions equivalent to those Siderbrás experienced during capital increases in 1982 and 1984...’ and which ... bears no relation to the economic value of Usiminas, representing, in conceptual terms, a compensation to minority shareholders for the unjustified dilution of stock imposed in the previous decade.” (pp. 24-25, my underlining)

“The capital increase was underwritten by BNDES — with unrestricted permission from Siderbrás — and the minority shareholders with Usiminas’s own assets derived from the accruing of cumulative dividends.” (p. 25)

“Another aspect that should be underscored at the outset: the fixing of the price of Cr\$ 332.85 per batch of one thousand shares stipulated as the minimum for the auctioning of Usiminas ordinary shares, decided on 31/05/91, in item 2.3.3 of the Public Bidding Notice for sale of the social capital of Usiminas, seven days after sealing of the agreement with Nippon.” (p. 26)

“On the other hand, by allowing Nippon the option to purchase the shares required to recover its shareholding, up to the limit of 12.884% of Usiminas’s social capital at the price of Cr\$ 39.79/1,000, BNDES illegally and without any valid juridical grounding

favoured Nippon Usiminas since there was no pending debt between BNDES and Nippon Usiminas.” “On these grounds, it is clear that the acts discussed herein ... are part of a set of illegal acts designed to bestow undue benefits on Nippon regardless of the provisions of the law alluded to in the report by the National Treasury’s Legal Department.” (p. 30)

Annex 3 and Graphics

Annex 3

**Photograph of the Furnas Reservoir – June 2001
Depicts the Waste and Squandering of a Public Real Resource under the Aegis of the
Autocratic Regime of Economic Policy**



Source : Correio Braziliense, Brasília.

The extent of the waste and of the squandering of productive real resources under the aegis of the autocratic regime of economic policy has not been reckoned yet. Nonetheless, the above photograph illustrates the magnitude of the problem. It reveals the result of the predatory use of one of the most important hydroelectric plants of the Country. The Furnas reservoir is empty. According to Correio Braziliense, at the time of the photograph the water edge was eight kilometers away from its normal position.

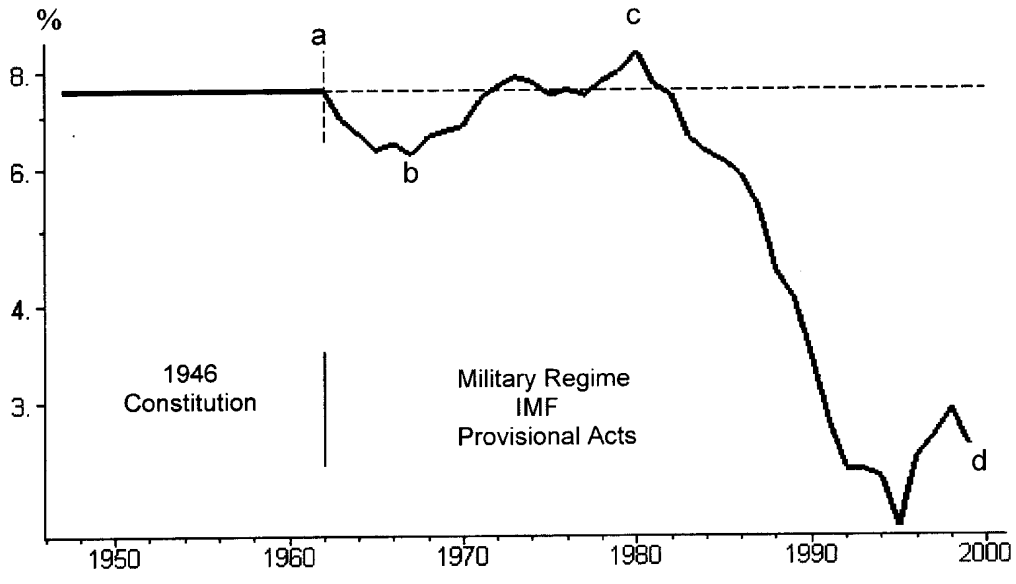


Figure 1 – Real GDP Growth Rates – 1962/1999
15 Years Moving Averages - % per annum

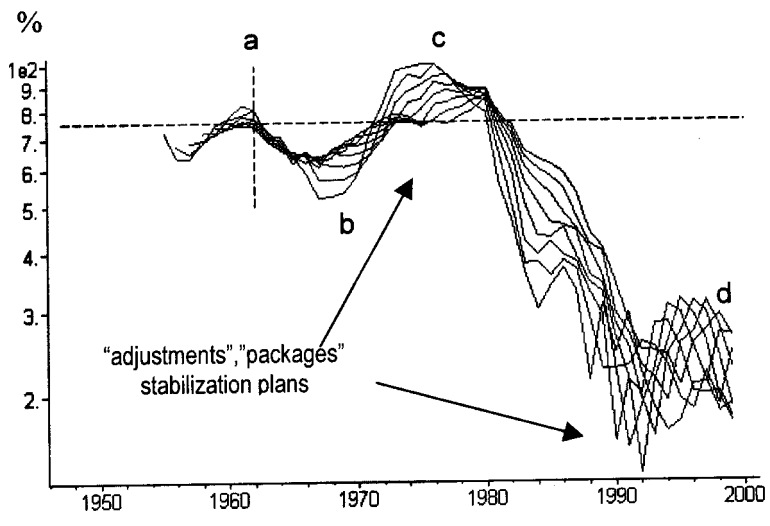


Figure 2 – Real GDP Growth Rates – 1955/1999
8 to 15 Years Moving Averages - % per annum

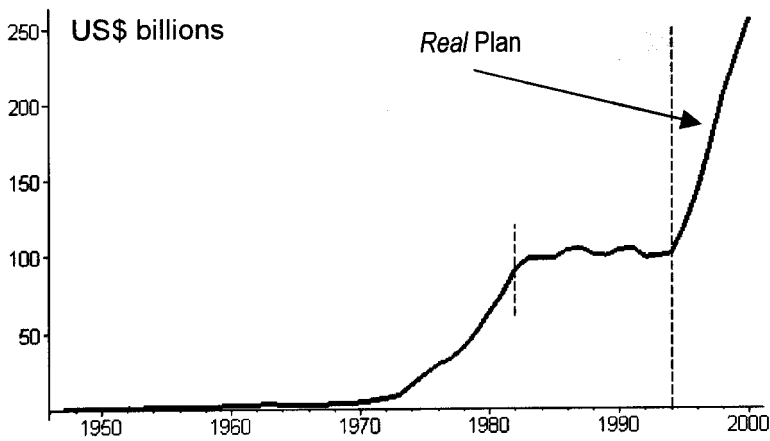


Figure 3.1
The Dollarization of the Brazilian Economy –1947/1999
 (Accumulative Sums of Current Account Deficits)

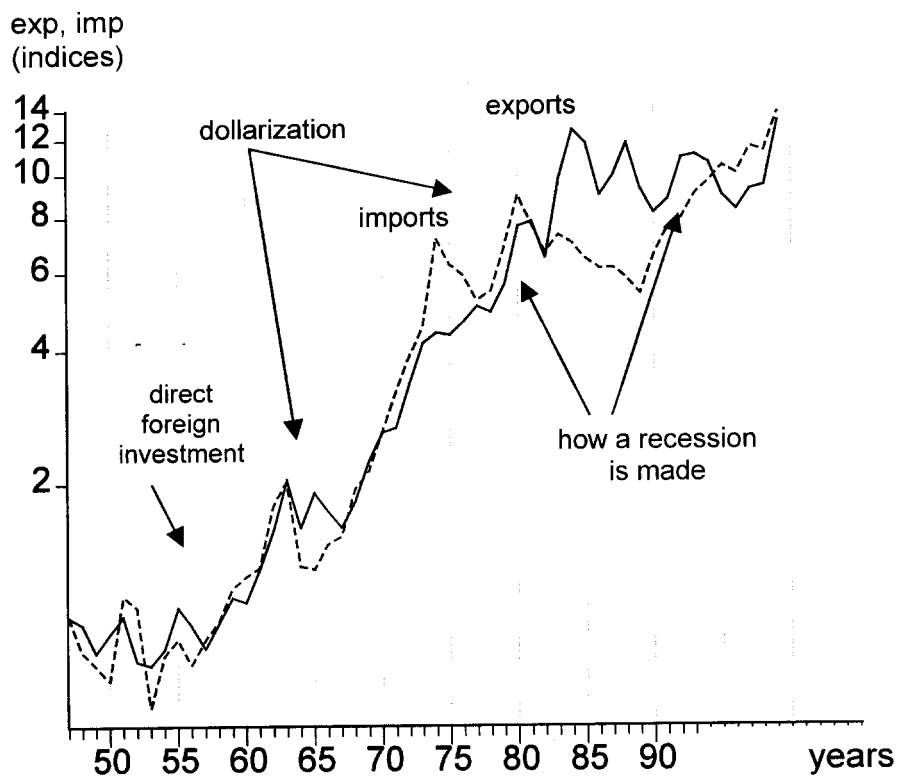


Figure 3.2
 Dollarization is followed by a recession. "Stabilization packages" drastically cut consumption and imports to increase exports.

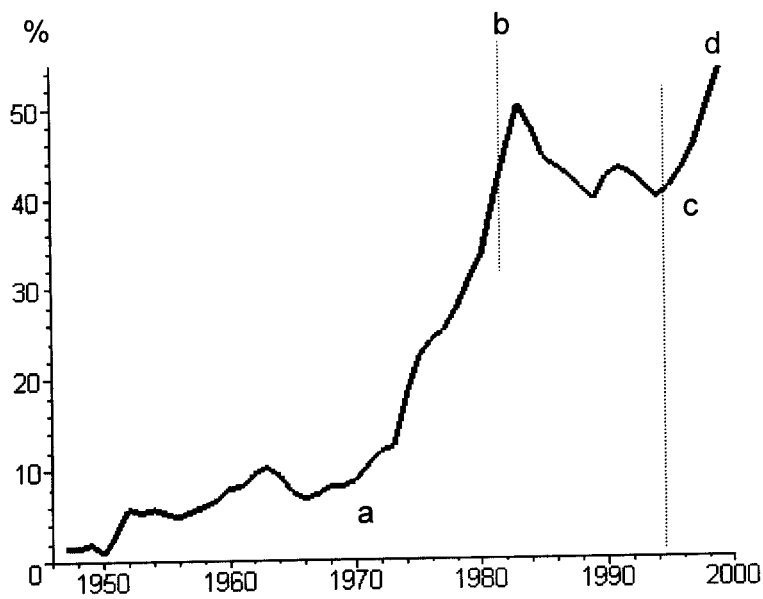


Figure 4
The Dollarization of the Brazilian Economy
Outstanding Stock of Foreign Capital as % of GDP – 1947/1999

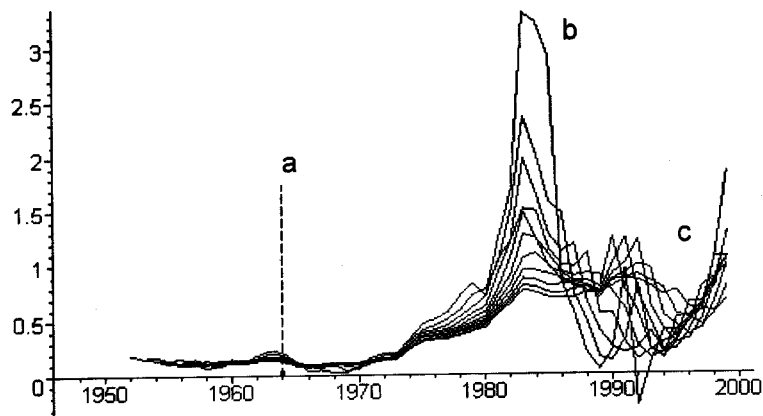
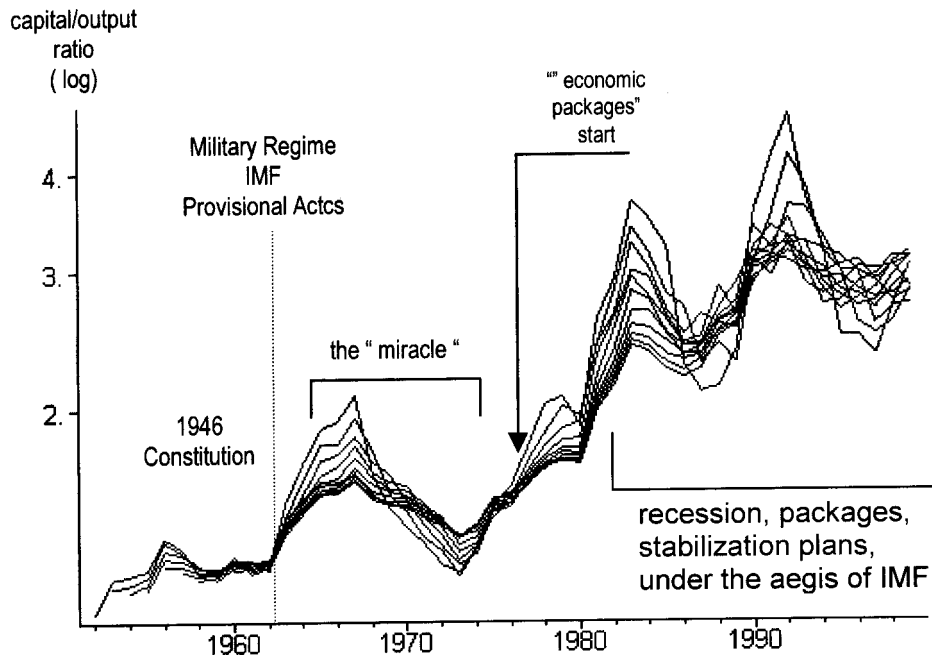


Figure 5 – Dollarization and Instability - 1947/1999



**Figure 6 – Incremental Capital/Output Ratios – 1952/1999
5 to 15 Years Moving Averages**

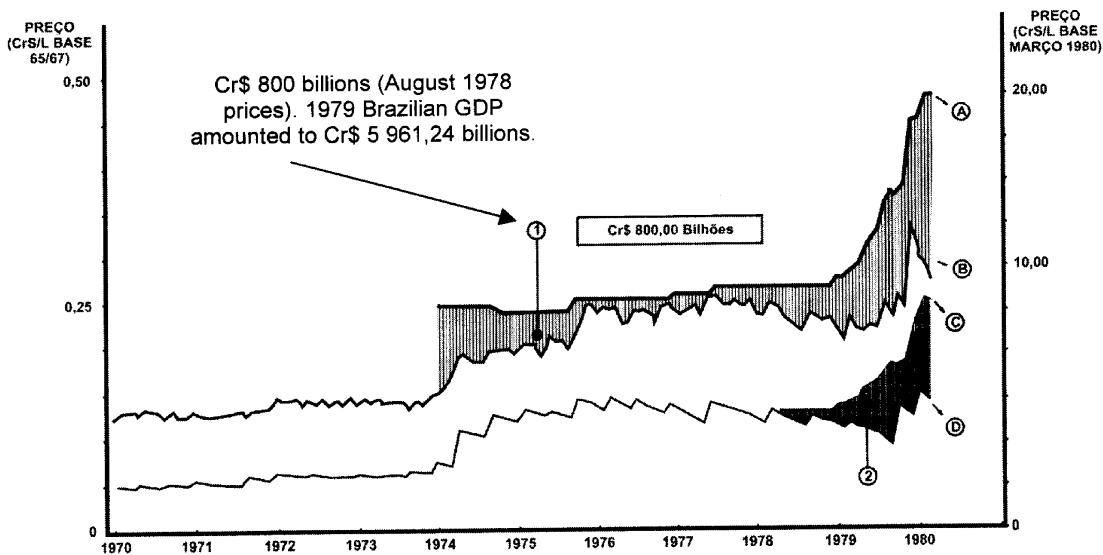


Figure 7 – Subsidies to the consumption of oil by-products during the oil crisis – 1974/1980

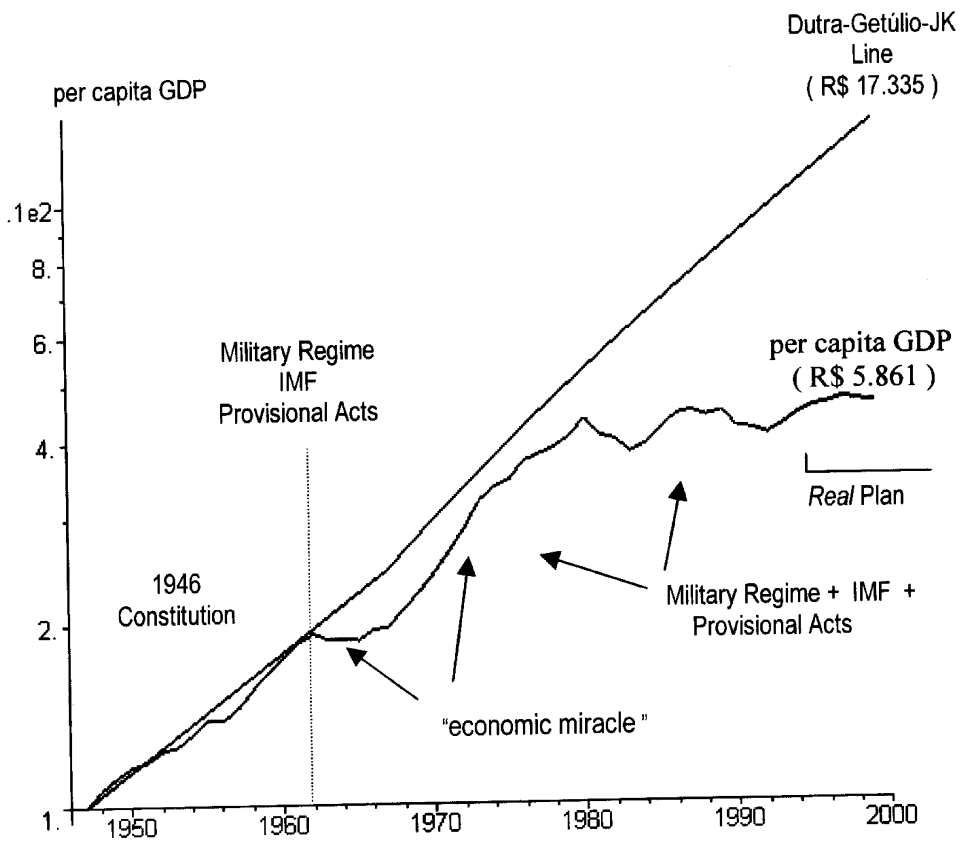


Figure 8
The Dutra-Getúlio-JK Line
The Military and Provisional Acts Regimes

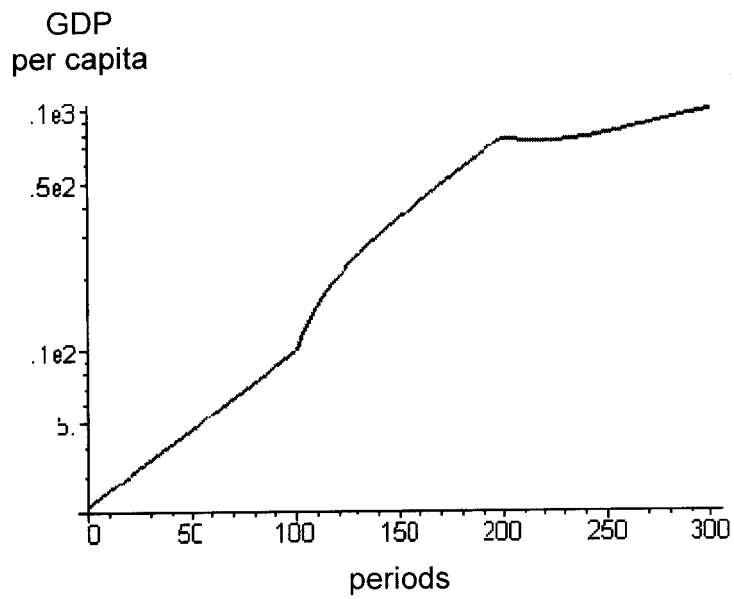


Figure 9.1
The Fund and the ICBDF's control of foreign capital and its effect on the GDP per capita of the model economy

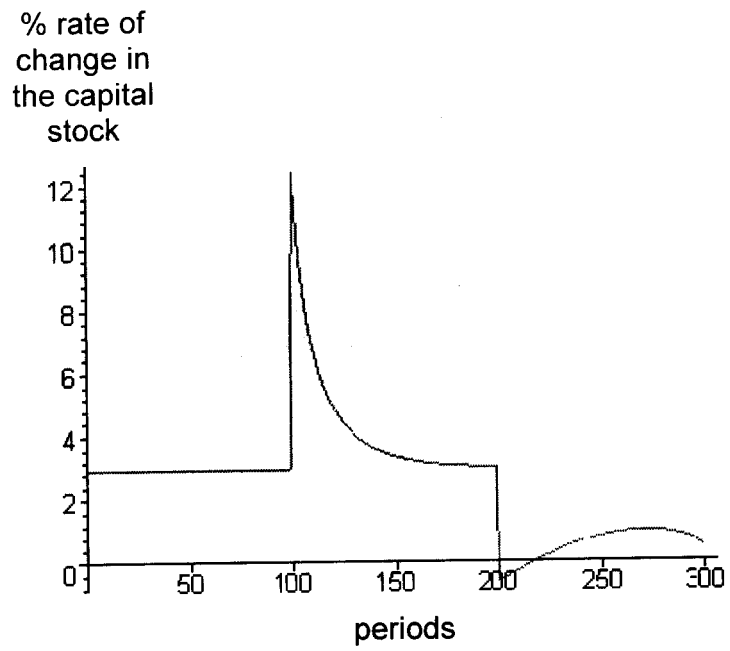


Figure 9.2
The Fund and the ICBDF's control of foreign capital and the investment shocks it causes in the model economy

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