State capacity and economic development – the advances and limits of import substitution industrialisation in Brazil.
Alexandre Queiroz Guimarães

Abstract
The paper is a study about the process of import substitution industrialisation in Brazil (1930-1980). Given the central role played by the state, the concepts of state capacity and developmental state are employed to understand why the process was not able to produce more consistent results. The paper shows how the state increased its involvement in the economy after 1930, improving its capacity to promote economic development. It also emphasises the obstacles that constrained the action of the state and impeded that its intervention produced a more balanced and self-sustained process of development. In this sense, the paper is also a study about the difficulties to replicate the positive results obtained by the developmental states in Japan and Korea. The paper concentrates special attention in the period 1974-1978, in which the military government implemented an ambitious program of industrial restructuring.

Resumo:
O artigo é um estudo sobre o processo de substituição de importações no Brasil (1930-1980). Dado o papel central desempenhado pelo estado, os conceitos de state capacity e developmental state são utilizados para entender por que o processo não foi capaz de produzir resultados mais consistentes. O artigo mostra como o estado aumentou seu envolvimento na economia depois de 1930, aumentando sua capacidade de promover desenvolvimento econômico. O paper também enfatiza os obstáculos que limitaram a ação do estado e impediram que o processo de intervenção produzisse um processo de desenvolvimento mais balanceado e auto-sustentado. Nesse sentido, o paper é um estudo sobre as dificuldades de replicar os resultados favoráveis obtidos pelos developmental states no Japão e na Coréia. Uma atenção especial é dada ao período 1974-1978, quando o governo militar implementou um ambicioso programa de reestruturação industrial.

Key words: import substitution; state capacity; developmental state;

Palavras Chaves: substituição de importações; capacidade do estado; estado desenvolvimentista.

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* Professor da PUC-MG e Pesquisador da Fundação João Pinheiro.
Introduction

From 1930 to 1980, Brazil adopted a model of import substitution industrialization in which the state played the central role. Many instruments of industrial policy were employed and the state had high discretionary power to influence many variables and prices in the economy. In addition, it was an active investor in infrastructure and basic industry, reaching, in certain periods, a figure of almost 50% of the total investment of the economy. This strategy produced significant results, permitting Brazil to develop an advanced and complex industrial structure. Nevertheless, the process was also marked by serious limits. Inflation and difficulties in the balance of payments were permanent problems, many difficulties typical of underdeveloped countries persisted and the projects to develop a modern capital goods industry and to promote significant advances in technological capacity failed.

The objective of this paper is to employ the concepts of state capacity and developmental state\textsuperscript{1} in order to understand certain vicissitudes of the process of import substitution in Brazil. Given the central role played by the state, the two concepts are key to understanding why the process of industrialization was not able to produce more favorable and consistent results. Although certain economic and technical variables, such as the fragility of the financial system or technological backwardness, played a very relevant role, I believe that they are related to the concept of state capacity; given the high degree of state interventionism, the adoption of adequate policies could have promoted the development of those areas.

The paper is centered on the decades from the 1930s to the 1970s, a period in which the national states had large discretionary power to promote development strategies. The main paradigm is the experiences of the developmental states in Japan and Korea, experiences in which strong states played the central role in promoting advanced industrial structures. The fact that Japan faces nowadays serious problems and that Korea has substantially reformed its governance structures are not problems for this argument. Although the context substantially changed since the 1970s and the respective countries adjusted to the new parameters, the experiences of these developmental states offer many lessons about the involvement of the state in the promotion of development and, thus, provide a very useful reference in understanding the vicissitudes of the path of economic development followed in Brazil.

The paper has thus two very inter-related objectives. Firstly, it is an analysis of the Brazilian experience in the period 1930-1980, focusing on a central factor for the understanding of certain limits of the industrialization process. Secondly, it is an analysis about developmental states in general and the challenges that these states face when they assume a very prominent role in the promotion of development. In other words, the Brazilian experience is a case study about the difficulties of replicating the highly successful experiences of state-led development that took place in East Asia.

The analysis is organized in the following way. In the next section, I emphasize, very briefly, several factors responsible for the successful experiences of state intervention in Japan and Korea. In section 3, I show how a model of development centered on state intervention emerged in Brazil in the 1930s. Section 4 deals with the consolidation of this pattern in the 1950s, emphasizing the increase in state capacity and the obstacles that the state faced in promoting economic development. Section 5 deals with obstacles to state coherence in the military period and section 6 summarizes the policies for the development of the capital goods sector in the Geisel government (1974-1978). Sections 7 and 8 deal with key sources of limits in state capacity in the Geisel industrial program, while section 9 concludes.

\textsuperscript{1} Johnson 1982; Woo-Cumings 1999a; “author”.
The Developmental State in Japan and Korea

A strong state, with high capacity of intervention in the economy, was a key variable for the success of Japanese and Korean development after the Second World War. Among its functions, the state protected the national industry, stimulated exports, controlled the process of import of technology, regulated the entrance of foreign capital, enforced competition among business groups and promoted the necessary restructuring of declining sectors. In brief, the state influenced the distribution of investment and played an important role in the development of a technologically intensive industry with a high capacity to compete in international markets².

A first important point is to understand how those countries produced well-prepared and strong bureaucracies, with a high degree of autonomy in relation to economic groups. In both Japan and Korea, the production of strong and cohesive bureaucracies was the result of a long process, influenced by cultural values and by remote historical events and external shocks. In addition, the power of the respective states was favored by the weakening of the social groups, a result of the war, of the American occupation and of the imposition of agrarian reforms.

In Japan, the creation of a strong and well prepared bureaucracy was initially favored by old practices which isolated the administrative class from the economic groups and provided a rigorous process of training and discipline³. This bureaucracy played a key role in the reforms of the Japanese state and economy in response to the foreign threat in the second half of the nineteenth century. Another important step was the creation, after the Meiji restoration, of a ‘meritocratic non – political bureaucracy’⁴, in response to the accusation that the incumbent bureaucracy was favoring the Satsuma and Choshu domains⁵. Thirdly, the Meiji oligarchs adopted a constitution which increased the power of the bureaucracy, motivated by the belief that, staffing the bureaucracy with their supporters, they could conserve power. In all this process, the influence of the bureaucracy was strengthened by the political culture, which viewed the bureaucrats as the representatives of the national interest and the political parties as representatives of particular interests.

Later, the power of the bureaucracy was strengthened by the American occupation, which dismantled the Zaibatsu, eliminated the military but preserved the structure of the economic bureaucratic agencies. Consequently, the economic bureaucracy, which had accumulated vast experience of intervention during the war, was very well positioned to influence the strategy of economic development. The existence of very strict entrance examinations, which attracted the most qualified people in the country, reinforced the insulation of the bureaucracy and its claims to talk in the name of the national interest⁶.

In Korea, the creation of a meritocratic bureaucracy was a product of the Japanese colonization, which dismantled the old Korean state and replaced it with a modern administrative machine⁶. In the post war period, the economic bureaucracy was strengthened by the weakening of the social groups, especially the

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² It is necessary, nevertheless, not to overestimate the role played by the developmental state, since the Japanese and Korean success was also favored by other factors, such as the organization of capital, the shop floor structure and the capacity of innovation of certain enterprises. Similarly, it is important to recognize difficulties in state intervention, such as failure to restructure certain industries and the artificial protection of certain sectors. Despite these considerations, it is widely accepted that the developmental state was a key player in the process of catching up and in the construction of strong and competitive industrial structures. See Coates 2000.
³ See Skocpol 1979, 101-02.
⁵ Johnson 1982.
⁶ Kohli 1999.
landowners and the labor movement, and by the reforms implemented by the military, which created the Economic Planning Board (EPB) with high autonomy and control of many instruments.

The high capacity of action of these bureaucracies is also explained by the ties and channels that connected them with businesspeople and other social groups, facilitating the exchange of information, the communication and the production of a similar world view among the members of the elite. In Japan, an important role was played by the ties developed among the graduates of the Todai Law School, by the practices of retirement and by the existence of many councils and discussion forums involving representatives of the government and of the business sector. In Korea, the practices of retirement, the nomination of ex-bureaucrats to business associations, the wide range of informal ties between public and private sector and the role of councils and associations facilitated the exchange of information and the monitoring of the business groups by the economic bureaucracy.

Another key component of state capacity is the degree of control over instruments of industrial policy. As Johnson shows, the Japanese process of industrialization in the post war period was only possible because of the Ministry of International Trade and Industry - MITI’s control of a range of instruments. MITI used its monopoly over the operations of foreign currency and control of import of raw materials to force the firms to follow its directions. Furthermore, control over foreign investment operations and imports of technology allowed the MITI to pursue a coherent and integrated policy with regard to foreign capital. Moreover, the MITI used the control of a critical source of credit to promote the objectives of industrial policy. Similarly, in Korea, control of the financial system, the autonomy to allocate import licenses, tax exemptions and foreign loans and control over foreign investments enabled the Economic Planning Board (EPB) to shape the national distribution of investment, to promote national champions and to enforce competitiveness.

It is important to emphasize that the positive results in state intervention were achieved through a strict process of monitoring, which guaranteed that the incentives and subsidies produced the results desired by policy makers. In order to enforce compliance with performance goals, the governments set targets for production quality, for innovation and for a favorable export performance. In addition, the policy-makers adopted timetables for the reduction and elimination of tariffs.

It is also necessary to emphasize the political dimension of state capacity, related to legitimacy and to the government’s capacity to obtain support. In Japan, the parliament was very important in accommodating interests and in legitimizing the action of the bureaucracy. It acted as a mediator between state and society, preventing the bureaucracy from disregarding relevant social issues. As Johnson emphasizes, the capacity of the Japanese political system to give legitimacy to the bureaucracy was a key advantage of the Japanese developmental state over authoritarian regimes, which were dependent on high rates of economic growth to achieve legitimacy. This second situation is illustrated by the Korean authoritarian regime, in which the dependence on big business for electoral funds and on their economic performance for legitimacy reduced the government’s capacity to promote the necessary reforms.

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7 See Evans 1992
8 Johnson 1982.
10 See Johnson 1982.
12 Johnson 1982.
13 Woo-Cumings 1999b
In brief, the high capacity of the developmental states in Japan and Korea is related to the existence of autonomous, meritocratic and powerful bureaucracies, insulated from interest groups, embedded in society and controlling a wide range of policy instruments. Nevertheless, the success of such experiences depended also on other factors that transcended the concept of a developmental state. These included the characteristics of the population, marked by the lack of ethnic conflicts and by the sharing of values such as nationalism and unity, the geopolitical position and the special relationship that developed with the United States. Unites States aid provided the foreign exchange necessary during very critical periods. In addition, the American market was opened to Japanese and Korean products, while the United States permitted these countries to apply discriminatory policies against American exports and foreign investment.

Finally, it is necessary to emphasize problems that tend to emerge when the state increases its role in the economy. Every state is marked by divisions between the bureaucratic agencies, divisions which tend to increase when the state expands its role in the economy. Similarly, increasing contacts with the social groups favor the penetration of private interests into the state apparatus. There are many examples of these difficulties in the Japanese and Korean experiences, marked by inter-bureaucratic conflict and fierce business opposition to certain state initiatives. Despite these difficulties, some characteristics of the bureaucracy, such as a strong esprit de corps and the coherence of the bureaucratic corporation, may act as countervailing factors. In the period investigated in this paper, these and other factors permitted the action of the Japanese and Korean bureaucracies to produce the positive results emphasized above.

1930 to 1945 – the emergence of the developmentalist state in Brazil

Before 1930, the Brazilian economy was very dependent on the export of agricultural products, especially coffee. The state had a limited role in the economy, its organization was very fragile and the bureaucracy was appointed and directed by patronage criteria. This significantly changed after 1930, given the crisis of export activity and the emergence of a different political coalition. The new political elite promoted profound changes, increasing the instruments and the role of the state in the economy. In this sense, the period 1930-1945 sowed the seeds of a new economic model, marked by the consolidation of a strong state which assumed a central role in the promotion of national industrialization.

The Brazilian response to the international crisis reflected the domestic configuration of forces and the role of the political culture. The disputes between the oligarchies, the influence of the military and the strengthening of the industrialists produced a balance of power that increased the autonomy of the political elite. This resulted in an important role being given to the ideology of the political elite, greatly influenced by positivism and favorable to state intervention in the economy.

Brazil had inherited from Portugal a very centralized and patrimonialist state apparatus and a highly homogeneous political elite which, formed in the mercantilist tradition, supported an active role for the state

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14 See Pempel 1999, 160; 169-71
15 See Rueschemeyer and Evans 1985; Loriaux 1999.
16 See Johnson 1982; “author”.
17 Rueschemeyer and Evans 1985
18 Developmentalism (desenvolvimentismo) is the term used to characterize the experiences of development in Latin America marked by strong state intervention in the economy. I employ developmentalist state to refer to a state that, although very active, was not as strong and coherent as in the classical experiences of developmental states.
19 See “author”.
in the regulation of economic and social issues. This led to the emergence of an interventionist state in the nineteenth century and to the solidification of a political culture favorable to state intervention in the economy. In the 1920s, a conservative movement, defending the strengthening of the state, emerged in response to the distortions of a regime in which the state had been captured by the regional oligarchies. This conservative thought, echoing the features of the national political culture, was very influential in the process of strengthening the state in response to the international crisis.

The new government that took power in 1930 undertook a range of reforms. The tax structure was reformed and the fiscal basis was increased. In addition, various organs and instruments were created to enable the state to organize and centralize the budget, to supervise public services and to regulate prices, wages and the exchange rate. In the 1930s, two councils were created to elaborate studies and give advice in the elaboration of economic policy. Likewise, the creation of institutes of statistics increased the government’s capacity for intervention. In 1945, the creation of the Superintendência da Moeda e do Crédito (SUMOC) substantially expanded the government’s capacity for coordination of and control over the monetary system. In addition, the period was marked by the creation of a range of organs and agencies aimed at increasing the coordination of the economy and the regulation of the economic sectors. This gave the government greater involvement in the affairs of the economic sectors and increased its capacity to co-opt the economic groups.

The government gradually intensified the measures to stimulate industrial development. In response to the international crisis, licenses were employed to guarantee the import of essential items. The monetary policy was also employed to stimulate industrialization. In 1937, the government created the Carteira de Crédito Agrícola e Industrial do Banco do Brasil, responsible for supplying short and long term loans to agriculture and industry. The involvement to promote industrial development was deepened in the period 1937-45, when the authoritarian regime created a range of public enterprises to invest in steel, electrical energy, heavy chemistry, mining and automobile engines.

The period was also marked by a substantial increase in bureaucratic capacity. In the first years of his government, president Vargas (1930-1945) implemented a bureaucratic reform, introducing public exams and meritocratic criteria for segments of the bureaucracy. In 1938, the Departamento Administrativo do Setor Público (DASP) was created with the objective of rationalizing and upgrading the public bureaucracy through the establishment of a career civil service, the adoption of training programs and the introduction of meritocratic criteria for both the selection and promotion of civil servants. Although a large part of the bureaucracy remained subjected to patronage criteria, the DASP achieved significant success. The modernization of certain bureaucratic agencies created the conditions for the formation of a body of competent technicians, who would prove very important for the future capacity of the state to intervene in the economy.

Nevertheless, the expansion of the state was marked by many deficiencies, which included limited administrative capacity, overlapping of authority, lack of coordination and intra-bureaucratic disputes. In an

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20 Carvalho 1981.
21 Superintendence of Money and Credit.
22 Examples of these organs included the Ministry of Labor, Industry and Trade, the National Oil Council and the National Coffee Department. See Ianni 1977, 23-24.
23 Bureau of Agrarian and Industrial Credit of the Bank of Brazil
24 See Draibe 1985, 125.
25 Administrative Department of Public Sector.
26 Draibe 1985, 85.
27 Sikkink 1991 emphasizes that this was a key difference between Brazil and Argentina, permitting the Brazilian state to play a much more active role in the process of industrialization.
attempt to address these issues, the DASP pioneered initiatives to discipline and coordinate the programs of public investment. Nevertheless, these attempts were significantly limited, since DASP lacked mechanisms to set targets and monitor their achievement. According to DASP technicians, these difficulties could have been solved through the establishment of a central organ of coordination and control, but economic groups’ opposition to this alternative was substantial.28

The relationship between the government and the social groups was strongly influenced by the introduction of a corporatist system. This system, which tied the trade unions to the state and thus eliminated their autonomy, had a very different impact on business groups. The business associations gained the rights to voice their opinions on issues which concerned their class and to appoint representatives to the main councils responsible for economic policy.29 As a consequence, corporatism opened channels for the business groups to introduce their demands and exert clientelistic pressures. Given the weakness of the political parties, those councils became the principal arena of accommodation of interests and of conflict negotiation. This substantially reduced the autonomy of the state and its capacity to promote coherent programs.

This leads to the obstacles faced by the Brazilian state to promote development in certain directions. Although the events of the 1930s increased the autonomy of the political elite to shape a different economic model, the groups present in the very broad coalition that supported Vargas delimited the borders in which the state could move.30 The difficulties were aggravated by the lack of political parties able to aggregating demands and achieving negotiated solutions. Consequently, the demands went straight to the state apparatus, contributing to the increase of inter-bureaucratic conflict and the reduction in the efficiency of state action.

**Strengthening of state capacity in the 1950s**

The election of Dutra government (1946-1950) and the elaboration of a new constitution marked the return to democracy. Congress assumed important attributes, including the approval of the budget, which substantially constrained the autonomy of the executive. In the democratic regime, which lasted until 1964, Brazilian politics was dominated by three main parties: the Partido Social Democrata (PSD), which attracted the states’ and municipalities’ administrators from the previous dictatorship; the Partido Trabalhista Brasileiro (PTB), created with the objective of co-opting the workers and trade unions; and the União Democrática Nacional (UDN), which provided a haven for the opponents of Vargas under the dictatorship. As the UDN and the PSD had much in common, including a strong base in the countryside, the principal dividing factor was the position occupied during the previous regime. This polarization around Vargas, combined with the characteristics of the presidential system introduced by the constitution, became a significant source of instability.31

After the liberal setback (in this restricted sense) of the Dutra period32, the second Vargas government (1951-1954) was characterized by efforts to address the problems of a state which lacked the institutional capacity to address the challenges required in the process of economic development. The creation of the Assessoria Econômica, responsible for elaborating studies and projects and for supplying direct advice to

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29 See Leopoldi 2000.
30 See Draibe 1985, 118. As an example, the presence of the agrarian groups made impossible the implementation of an agrarian reform.
32 Dutra marked a discontinuity with two key lines pursued during the previous Vargas government: the attempts to improve coordination in state intervention and to promote an integrated project of industrialization.
the president, permitted the improvement in the coordination of state action. Similarly, the creation of the Comissão de Desenvolvimento Industrial, bringing together businessmen and representatives of the relevant public agencies, improved coordination in industrial policy.

A landmark was the creation of the Banco Nacional de Desenvolvimento Econômico (BNDE) which, granted the function of supplying long term loans, obtained significant influence over the allocation of investments in the economy. The BNDE had an internal statute that insulated the organ from external influence and was composed of a group of technicians subjected to meritocratic criteria. These mechanisms provided a high degree of insularity, autonomy and coherence to the action of the BNDE, which became a central agent for the coordination and promotion of the process of economic development.

In brief, the Assessoria Econômica and the BNDE illustrate the government’s effort to create an insulated and qualified segment of the bureaucracy. Given the political obstacles to undertaking a deep civil service reform, the government opted for improving sectors of the administration through the creation of ‘pockets of efficiency’. In addition, the Vargas government was also marked by an intensification of state action to promote economic development. Public investments in infrastructure and heavy industry were substantially increased. In 1953, the government adopted a multiple exchange rate regime, creating five categories of exchange rate. This allowed the government to discriminate imports, protect national industries, promote certain exports and increase its fiscal resources.

The Kubitschek government (1956-1960) strongly benefited from the institutional reforms introduced by Vargas and allocated technicians from SUMOC, BNDE, Assessoria Econômica and Comissão Mista Brasil Estados Unidos (CMBEU) to central posts of its administration. This was a very prosperous period of Brazilian economic development: from 1956 to 1961, GDP grew at the annual average rate of 8.1% and the industrial structure was radically transformed and diversified. At constant prices, industrial production grew by 80% during the five years of government. In this major industrialization effort, a central role was played by the state, whose participation in national investment increased from 27.5% in 1950-56 to 37.1% in the period 1956-60. In addition, the government, through BNDE loans, incentives via the exchange rate system, tariff exemptions and other forms of incentives, transferred a substantial amount of resources to the private sector in an effort to shape investment according to the priorities of the Target Plan.

In spite of the high degree of improvisation, the Target Plan constituted a substantial effort to reduce areas of uncertainty and to bestow rationality on economic policy-making. The BNDE had key influence in the allocation of investment flows and in the coordination of the Program. SUMOC administered the exchange

33 Commission for Industrial Development.
34 See Draibe 1985, 230.
35 National Bank of Economic Development.
37 The period was marked by substantial growth of investment in electrical energy, transports and telecommunications. The steel industry made significant advances and the creation of the Brazilian Oil Company, Petrobrás, gave considerable impulse to the oil industry.
38 The CMBEU (Brazil-United States Mixed Commission) elaborated, from 1951 to 1953, careful analyses of the problems of the national economy and substantially improved the diagnostics of the Brazilian economy.
39 Kubitschek implemented the Plano de Metas (Target Plan), which changed Brazil’s economic face. As examples, the capacity of production and distribution of electrical energy was increased by 47% and the production of oil expanded 600%. Mechanical industry grew by 125% and production of steel almost doubled. And last but not least, the automotive industry was introduced in the country with huge success. See Lessa 1981, 34-55; Orenstein and Sochaczewski 1990.
40 Adding to these numbers the investments of the state enterprises, the direct state contribution to the investment effort was equivalent to 47.8%. See Lessa 1981, 70.
rate system and the policy of foreign capital, while the Conselho de Política Aduaneira (CPA) provided greater coherence, agility and flexibility in the tariff policy. In addition, a very ingenious innovation was the creation of the Grupos de Trabalho (Working Groups) and Grupos Executivos (Executive Groups). The Working Groups were consultative organs which, bringing together representatives of the public and private sectors, elaborated sectoral studies aimed at increasing the efficiency of the policy of incentives. The executive groups worked as forums of consultation, exchange of information and negotiation between the government and the business class. They played a key role in the reduction of uncertainty and in the increase of agility in the implementation of the sectoral policies.

The Vargas and Kubitschek governments provided significant increase in state capacity: improvement in bureaucracy and growth in state participation were key components of the substantial process of industrial development that took place in the 1950s. Nevertheless, the achievements of the strategy were marked by significant constraints. The conservative structure of Congress blocked a tax reform and the government was not able to produce a substantial reorganization of the financial system. These difficulties are very well illustrated by the lack of an adequate structure of funding for the investments of the Target Plan, forcing the government to use the printing of money to finance its expenditure. In addition, the government had no institutional capacity to control the money supply: the autonomy of the Banco do Brasil, which combined the functions of commercial bank and monetary authority, prevented SUMOC from controlling the liquidity of the economy. And finally, another problem came from the fact that a significant part of the bureaucracy remained subject to the traditional practices of patronage, significantly reducing the efficacy of state action in certain areas. This is illustrated by the investments in education which, in comparison to the targets envisaged by the Target Plan, showed much poorer results than in other areas.

The limits in improving state capacity are closely related to the political difficulties faced by these governments. Vargas faced hard political problems, fruit of the political coalition that brought him to power and of the strong opposition exerted by the UDN, which showed itself to be very destabilizing in a political system in which the democratic institutions were not yet strongly consolidated. Kubitschek, although also elected in a PSD-PTB coalition, was much more successful in accommodating social forces and obtaining political support for his program. The alliance permitted the approval of most of the projects of interest in the Target Plan, while the support of the PTB was fundamental for keeping the labor movement under control. The coalition, nevertheless, was helpless in the government’s attempts to approve a program of monetary stabilization, in 1958-1959. In addition, the PTB substantially strengthened and came to threaten the conservative interests of the PSD, making the coalition impossible to sustain. Serious difficulties emerged also from the strengthening of the labor movement, which increased the number of strikes and became an important source of instability.

It is necessary to emphasize the roots of these political difficulties faced by Vargas and Kubitschek. They transcended the specifics of each government, indicating the existence of structural factors related to the timing of industrialization and to the structure of the state which emerged in the 1930s. This conclusion is reinforced by other experiences in Latin America, in which similar crises led to the fall of democratic governments and to the installation of military dictatorships. The difficulties are related to the challenge of accommodating very broad coalitions, in a stage of development which precluded the adoption of wide compensatory policies. The social polarization became very serious in moments of economic difficulty,

41 Council of Tariff Policy.
43 As the Banco do Brasil was a strategic instrument of patronage, Congress was ready to block every measure that attempted to reduce its autonomy. See Orenstein and Sochaczewski 1990.
44 See Lafer 2002.
marked by the necessity to stabilize, to increase savings and to solve the problems in the balance of payments.

In Latin America, the tensions were very intense in Argentina, Chile and Uruguay, countries which had a strong and organized civil society. In Mexico, by contrast, the institutionalization of corporatist mechanisms of labor control and a dominant party structure gave the regime substantial capacity to resist social pressures.\(^{46}\) This allowed Mexico to adopt successful stabilization plans and to intensify the process of import substitution without a break in the democratic regime. In Brazil, the labor movement managed to release itself from the corporatist mechanisms of state control, while the return to democracy increased the influence of the traditional groups. In contrast to Mexico, the nature of the political system did not help the government to achieve stability. The political coalition worked under Kubitschek, but in a very special context marked by rapid economic growth and intense entry of foreign capital. Such stability was achieved at the cost of intensifying the contradictions and transmitting a very complicated legacy to subsequent governments.\(^{47}\)

In conclusion, state capacity was substantially increased in the period 1950-1960. Pockets of efficiency were created to run key areas and qualified technicians increased their role in the economic policy process. The capacity of articulation between private and public sectors was improved by the creation of councils and by the institutionalization of consultation. In addition, the instrumental capacity of the state was significantly increased by the creation of BNDE, by the exchange rate regime and by the rationalization of tariff policy. Nevertheless, in contrast to Japan and Korea, the pressure of industrialists was intense and governments were unable to monitor the process and to condition the supply of incentives to growth in competitiveness and to other performance criteria.\(^{48}\) In addition, other important limits remained, including the only partial modernization of the bureaucracy and the difficulties of consistently financing public spending.

**State capacity under the military regime**

The seizure of power by the military, in 1964, was marked by the tackling of several factors that had provoked instability during the previous democratic regime: the labor movement was repressed and Congress was emasculated. The Castelo Branco government (1964-1967) stabilized the economy and adopted the measures necessary to stimulate a new cycle of productive investment. Wages were strictly controlled, public prices and tariffs were readjusted, several tax rates were increased and new forms of tax were created, permitting the reduction in public deficit from 5% in 1963 to 1.1% in 1966.\(^ {49}\) The financial system was re-organized, a central bank was created and investment capacity of the state enterprises was significantly expanded. Furthermore, the government stimulated the development of the capital market and different forms of compulsory saving were created.\(^ {50}\) And last but not least, important achievements were obtained in the administrative area, marked by reforms and by a substantial process of training of civil servants.\(^ {51}\)

Despite this capacity to undertake reforms that struck at the roots of previous difficulties, the military regime faced another set of difficulties, which critically affected the capacity of the state-led model of

\(^{46}\) See Kaufman 1982.
\(^{47}\) See Benevides 1979.
\(^{48}\) For the determinants of the pattern of economic policy in the period, see “author”.
\(^{49}\) Inflation, which had been above 80% in 1964, fell to less than 22% in 1967.
\(^{50}\) As a result, those reforms permitted an expansion in the country’s capacity of investment from 15.3% of GDP in 1967 to 21% in 1973.
\(^{51}\) See Campos 1993, 697-709.
economic development to produce more consistent results. Firstly, the military suffered from internal divergences and from a lack of mechanisms to deal with them. Several topics, such as the duration of the military rule, the participation of foreign capital and the degree of state intervention were very polemical and tended to amplify the divisions. The difficulties were aggravated by the refusal to tolerate different political positions. In brief, political decisions involve conflicts of interest and the military were not prepared to deal with them.

Another obstacle arose from the difficulties in obtaining legitimacy. The regime emerged in a context of economic crisis and adopted very unpopular measures, which hindered its association with the interests of the nation. Another significant problem was the difficulty of reconciling the requirements of economic recovery with the interests of the social forces which supported the regime. The program of stabilization included recession and severe credit restrictions, policies that condemned many of the weaker enterprises to bankruptcy, while others were incorporated by foreign groups. Consequently, the policies provoked protests from the middle class and from sections of the national bourgeoisie, while the increase in foreign control of the economy strongly outraged segments of the military.

Another fragility came from the non-development of efficient channels of contact with civil society. The regime lacked a political party able to obtain support and increase legitimacy. Similarly, it did not stimulate the formation of encompassing class associations able to channel and discipline the demands of social groups. As a result, in spite of the measures adopted to increase the power of the executive, the absence of institutionalized links with civil society substantially reduced the strength of the regime.

These difficulties are highly relevant to understanding the direction followed by the military regime in Brazil. Initially, economic policy demonstrated high concern with curbing inflation, attracting foreign capital and producing a balanced process of economic development. From 1967, however, the credit policy became very expansionist, subsidies were raised markedly and protection of national industry was increased. In the period 1967-73, the average annual rate of economic growth reached 11.2%, bringing back inflationary pressures and problems in the balance of payments. In brief, the conflicts inside the military, the pressures of the economic groups and the need to achieve legitimacy favored the change in economic policy. The project to sustain a balanced and self-sustained process of economic growth was thus frustrated.

Industrial policy under the military

In the period 1967-73, the government benefited from the previous reforms and from the favorable international context and promoted high rates of economic growth. Exports were stimulated and the government conceded a huge amount of credit and fiscal incentives to encourage private investment. State enterprises’ investments also substantially increased. Nevertheless, the process of growth was marked by many imbalances; in 1973, imports of capital goods and basic inputs substantially grew, both indicative and cause of structural fragility in the balance of payments.

The Geisel government (1974-1978) decided to utilize the abundant supply of international credit to promote an ambitious program of industrial restructuring. A huge program of investment in energy, basic inputs and capital goods, the Segundo Plano Nacional de Desenvolvimento (PND II), was then adopted. The

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52 The divisions, fruit of divergences in background, career and educational experience, increased when the military expanded its role beyond the traditional functions. See Stepan 1971.
54 Cardoso 1979, 37.
55 This is a point explored by Hagopian 1994, who shows how the lack of mediation between state and society constituted a substantial obstacle to the capacity of the Brazilian military regime to transform the structure of Brazilian politics.
state enterprises assumed the responsibility for investments in energy and basic inputs, while the government employed a wide range of policies to stimulate the development of the capital goods sector.

The resources of BNDE were substantially increased and three subsidiaries were created to supply long term loans, to stimulate the capitalization of enterprises and to strengthen the position of Brazilian capital. In addition, the government created very favorable conditions for financing the acquisition of capital goods, a measure that played a key role in directing the demands of the state enterprises and other investors towards the domestic market. An important role was also played by the policy of incentives, since the incentives conceded by the Council of Industrial Development (CDI) became concentrated on the sectors considered strategic by the industrial program. In addition, the government, in order to stimulate investment in the capital goods sector, provided long term loans at large negative interest rates.

Both tariff and non tariff measures were utilized to protect the capital goods sector. Reduction in tariff exemptions permitted substantial increase in effective protection. Meanwhile, the government forbade the concession of any incentives and tariff exemptions to the import of capital goods which had a ‘similar’ product manufactured by Brazilian firms. Similarly, the Department of Foreign Trade of Banco do Brasil (CACEX) arbitrated an intense process of negotiation between the investors and the Brazilian producers of non-serial capital goods, in which it used its power of sanction to increase this participation in the supply of capital goods.

A central instrument of the PND II was the purchasing policy of the state enterprises. In 1975, the government created the Núcleos de Articulação com a Indústria (NAIs) which, installed inside the state enterprises, had the objective of coordinating the relationship with the producers of capital goods. The NAIs organized a catalogue systematically describing the present and potential producers of capital goods in each production niche, a measure which allowed the state enterprises to choose the producers in accordance with the objectives of industrial policy. Likewise, the state enterprises designed a long term program of equipment acquisition, allowing the producers to elaborate their expansion plans. In addition, the engineers of the state enterprises were engaged in a careful monitoring program in support of the capital goods producers. They accompanied the process of technological transfer, kept the producers informed about the performance of the equipment and made suggestions concerning upgrading.

Several measures were adopted to stimulate the development of technology. The technological budget and the resources destined to finance investments in science and technology were substantially increased. Secondly, the Instituto Nacional de Propriedade Intelectual (INPI) exerted a strict regulation and was committed to supporting Brazilian firms in the negotiation of contracts for the purchase of technology. Thirdly, the technological effort was complemented by investments in the creation of R&D institutes and research laboratories, in which the state enterprises played a key role.

56 A Brazilian product was considered ‘similar’ if it was a good substitute for the product to be imported in price, quality and period of delivery. The efficacy of this measure demanded a high commitment of the agency responsible for its execution.
57 Interview with Fábio Erber, Rio de Janeiro, February 2000.
58 Centers of Articulation with the Industry.
60 The NAIs constituted an ingenious instrument of economic policy and produced very positive results in the development of the capital goods sector. The results, nevertheless, varied considerably according to the enterprise. The government had no legal or financial mechanisms to force a state enterprise to follow a certain orientation; consequently, the performance of the NAIs were dependent on the personal orientation given by the director of the enterprise. See Souza 1997, 62.
61 Consequently, a huge amount of resources, subjected to negative interest rates and very favorable conditions, were made available to stimulate investment in technology.
63 These measures, nevertheless, were insufficient. A great difficulty was how to convince the capital goods producers to change
The results of the industrial policy were very positive and permitted a substantial process of import substitution in basic inputs and capital goods. In basic inputs, comparative advantage was created and Brazil became, at the beginning of the 1980s, a liquid exporter of these goods. In capital goods, although production grew from US$ 5.8 billion in 1973 to US$ 19.9 billion in 1981, the process had significant limits and the industry did not resist the subsequent economic crisis and substantial reduction in public investment. As the industrial policy was not maintained by the next government, a large part of the effort expended by the Geisel government, both in capital goods and in technology, was lost.64

The Geisel government marked the end of a phase of Brazilian industrialization. Despite the high degree of coherence and the significant advances, this government illustrates very well the difficulties faced by the developmentalist state to transform the industrial structure and promote economic development. In the next sections, I explore a set of factors, related to state capacity, which limited the achievements of the development program. In the face of the complicated international context, these obstacles proved critical for the results of the development program.

Divisions inside the state

After 1964, the Brazilian state expanded in a very centrifugal way, marked by the growth of agencies and state enterprises which possessed financial and technical autonomy and were not controlled by the central government. As these agencies wanted to strengthen their position, the process was marked by the amplification of the conflicts of jurisdiction and by the multiplication of different conceptions inside the state apparatus.65 This process was favored by the characteristics of the decision making structure which, in the period 1967-1973, was characterised by a high degree of improvisation. The role of co-ordination of the economic policy was played by the National Monetary Council (CMN) which, although accumulating a range of attributions, was not originally prepared for that function. Consequently, the organizational structure favored overlapping of attributions and problems of co-ordination, while the excess of attributions of certain agencies reduced the quality of the decisions.

In 1974, the Geisel government promoted a significant reform in the decision making structure. The ambitious objectives of this government required the tackling of the intense fragmentation inside the state apparatus and the closure of many channels of private influence. This led to centralization in the decision making process, concentrating the main decisions in the Council of Economic Development (CDE), headed by the President of the Republic. As the main economic ministers participated in the CDE and these ministers had a prominent position in the main sectoral councils, this structure gave the CDE a high capacity of co-ordination in the key areas of economic policy. As a result, rationality of the economic decisions was substantially increased.66

Despite these advances, certain difficulties persisted and limited the coherence of industrial policy. Firstly, the Council of Industrial Development (CDI), responsible for the concession of key incentives for industrial projects, possessed deficiencies that negatively affected its capacity to play the role required in the co-ordination of industrial policy. The organ paid low salaries and did not have a technical staff able to their established practices and invest in the development and absorption of technology. The high costs of investment in R&D, the considerable risks and uncertainty over the future of economic policy were critical disincentives to investments in technology. Another critical obstacle came from the exigencies of customers, which tended to favor a tested and reliable foreign technology. Thirdly, the government was not able to fit the multinational corporations into the objectives of the strategy. See “author”.

64 See Amann 1996. For an evaluation of the limits of the industrial policy under Geisel government, see “author”.
65 See Martins 1985, 51-56.
competently carry out its functions. In addition, its autonomy was challenged by the action of other councils and by the state enterprises.\textsuperscript{67} As a result, despite the substantial improvement under Geisel, these difficulties reduced the reliability of its decisions, which became subjected to a high degree of personal arbitrariness. The CDI was marked by a high degree of fragmentation and was described as a “patchwork quilt”\textsuperscript{68} and as a forum towards which the conflicts inherent in the Brazilian state converged.\textsuperscript{69}

Another difficulty came from the low institutionalization and high degree of political appointments which marked the Brazilian bureaucracy. As Schneider\textsuperscript{70} argues, the military governments were marked by the large number of personal appointments which, on average, amounted to about fifty thousand posts. This high incidence of political appointments reduced the insulation of the bureaucracy and made economic policy highly dependent on personal networks. This was a very important divergence from the classical model of a developmental state, marked by strong bureaucracies with high ‘esprit de corps’ and channels of penetration into civil society.

This dependence on personal networks, without the constitution of a solid institutional arrangement, had very negative effects for the pursuit of long term development projects, since the “personal characteristics of one president (or of one ‘strong’ minister) are able to re-organize (or disorganize) all the internal relations of an administration which intends to be efficient and modern: technocratic”.\textsuperscript{71} This is very well illustrated by the two ministerial terms of Delfim Netto, which brought about a radical transformation in the direction of economic policy. In his first participation, from 1967 to 1973, monetary policy became highly expansionist and the emphasis on a balanced process of growth was abandoned. When he came back to power, in 1979, Delfim also rejected the directions which had been given by the previous finance minister. He adopted a heterodox program to combat inflation and accelerated the growth of the economy.\textsuperscript{72}

A third source of obstacles came from the refusal of several state enterprises, especially those of the steel and hydroelectric sectors, to comply with the directions of the government and to concentrate the purchase of capital goods on the domestic market. Those enterprises, not convinced of the reliability of the national producers, continued to import a substantial proportion of capital goods. This substantially reduced the impact of the strategy and the chances of development of Brazilian industry.

Fourthly, another source of opposition to the industrial policy came from the interests of the governors of certain states, immediately concerned with the increase in investment and employment in their respective states. These governors, keen to attract foreign investment, pressured for projects in niches already occupied by Brazilian producers, thus disregarding the objectives of the industrial policy. Despite the resistance of the developmentalist alliance, composed of BNDE, CACEX and the producers of capital goods, the governors were successful in attracting foreign projects. As a consequence, the capital goods industry, which was already facing a fall in demand, also had its market invaded by foreign producers.\textsuperscript{73}

In brief, the state, in general, is not an unified whole and its agencies share different conceptions and interests. In Brazil, this was aggravated by the decentralized expansion of the state and by the way in which private interests exerted pressure on the bureaucratic agencies. The difficulties were also increased by the high dependence on personal networks, which reduced the cohesion of the bureaucratic agencies, facilitated

\textsuperscript{67} See Martins 1985, 137.
\textsuperscript{68} Interview with Marcos Vianna, president of BNDE during the Geisel Government, Rio de Janeiro, February 2000.
\textsuperscript{69} See Klein 1985, 219.
\textsuperscript{70} Schneider 1991, 06.
\textsuperscript{71} See Martins 1985, 209.
\textsuperscript{72} See “author”.
\textsuperscript{73} Klein 1985. In other projects, the dependence on foreign supply credits led to substantial import of capital goods.
the penetration of external influences and hindered the preservation of long term economic programs. These sources of divisions negatively impacted the Geisel government’s industrial program. Given the magnitude of the task and the very difficult international context, the success of the industrial policy demanded a certain coherence which was beyond the capacity of the Brazilian state.

State capacity in face of business opposition

Resistance from business groups was another important obstacle faced by the Geisel government. The previous process of import substitution had produced groups which, having privileged channels of access to the state apparatus, were ready to oppose measures that hurt their interests. In the post-1964 period, the creation of new organs with private sector representatives, as well as the multiplication of agencies not strictly controlled by central government, intensified the permeability of the state to private interests. The period 1967-73 was marked by the intense and indiscriminate expansion of credit and incentives, an indication of the government’s disposition to comply with business requests.

The Geisel government reduced the autonomy of many agencies and concentrated the main decisions on the CDE, a council which excluded private representation. This centralization, nevertheless, provoked significant reaction from the business groups, which mobilized in a fierce ‘campaign against strong state intervention’. This campaign reveals a dimension that is critical to understanding the limits in the capacity of the Geisel government to transform the pattern of industrialization. It uncovered the role of the bureaucratic apparatus as a field of interest accommodation, essential in an authoritarian regime which had emasculated the traditional mechanisms of political representation. In this sense, the increase in state capacity to promote and regulate the process of accumulation, achieved by the Geisel government, was accompanied by a reduction in its capacity to accommodate, inside the state apparatus, multiple and heterogeneous interests.

The government suffered the effects of the ‘campaign against strong state intervention’. In an authoritarian regime, characterized by the employment of censorship and other mechanisms of repression, support from the business class assumed critical importance. In this sense, protests from the business groups were very disturbing, constituting a strong blow against the government’s claim to represent the national interest. Although the government did not substantially alter the directives of the investment program, the business protests limited its degree of freedom and constrained its capacity to adopt hard and unpopular decisions.

In conclusion, one important source of difficulties faced by the Geisel program originated from the business class opposition and from the lack of a solid social coalition in favor of the strategy. Although the President and several government agencies were committed to the program of industrialization, this

74 Codato 1997, 247
75 See Cruz 1995.
76 In other words, the Geisel government disturbed a function which had been an important characteristic of the Brazilian state since the 1930s: its capacity to “balance, inside its structures, potentially unbalanced social interests”. See Draibe 1985, 43; Codato 1997, 240. The next government, with the intention of increasing support, substantially modified the organizational structure of the state and re-opened the channels to business participation.
77 This is very well illustrated by the resistance in adopting a policy of mergers, as emphasized by the minister of Planning, Reis Velloso. Velloso argued that “as business people already complained of ‘strong state intervention’ without it existing, such a direction could have provoked strong reaction” (Interview with João Paulo dos Reis Velloso, Rio de Janeiro, February 2000). The lack of political support also reduced the capacity of the government to stabilize the economy.
commitment was not shared by certain segments inside the state nor by a large part of the business class. In this sense, the government could have obtained much better results if it had had mechanisms to obtain political support for the measures of the PND II. Since the conflicts of interest were intense and the government was not strong enough to ignore them, the chances of successfully implementing such an ambitious industrial program would have been substantially increased if the government had been elected and authorized to execute it.

Conclusion

The main aim of this paper was to explore the difficulties that the Brazilian state faced in the task of leading the process of industrialization. There are many challenges and difficulties that tend to emerge when the state considerably increases its role in the economy, including difficulties in coordinating state intervention and the penetration of private interests inside the state apparatus. The capacity to counteract these obstacles requires a strong and coherent bureaucracy and a state able to impose and sustain certain directions, despite the pressures and opposition from social groups.

In Japan and Korea, a strong and well-prepared bureaucracy, embedded in society and with high legitimacy, conducted the process of industrialization in the post-war period, playing a critical role in the shaping of a competitive and technologically intensive industrial structure. Although the success of such experiences depended also on other factors, such as cultural values and the geopolitical position, the developmental state was a critical variable for the success of such strategies.

In Brazil, the developmentalist state faced fierce opposition from social groups, which constrained its capacity to adopt the reforms and policies needed to promote a more balanced process of development. The difficulties were related to the timing of industrialization and to the characteristics of the state that was consolidated in the 1930s, supported by a very broad and heterogeneous coalition. In this process, the political system and the political parties failed to act as an effective channel of conflict negotiation and as a mechanism to insulate the political elite and increase political support for the strategy. As a consequence, political instability was intense until 1964. Similarly, after 1964, the lack of effective political mechanisms linking state and society was a key liability of the military regime.

Important limits also marked the capacity of the Brazilian bureaucracy. Despite the advances, modernization was only partial and a significant part of the bureaucracy remained an instrument of patronage. In addition, the bureaucracy played an important role of interest intermediation, which reduced its autonomy and coherence. Furthermore, in strong contrast to the classical examples of developmental states, the Brazilian bureaucracy was marked by a high number of political appointments, which substantially reduced its insulation and cohesiveness and its capacity to sustain long-term programs of development.

In brief, the Brazilian state was not able to replicate the positive results of state intervention attained in Japan and Korea. The process was marked by serious imbalances and failed to achieve objectives such as the development of a competitive capital goods industry and improvement in technological capacity. The imbalances became very serious at the beginning of the 1980s, in an international environment marked by shortage of credit and high interest rates. In that context, the incapacity to adjust provoked the dismantling of the developmentalist state and a very severe crisis, which lasted for many years and affected adversely to a high degree segments of the Brazilian industry. As a consequence, the legacy of import substitution industrialization was greatly inferior than it should have been. The transition was highly traumatic and Brazil missed the chance to engage in a new model of economic development starting from a more favorable position.
Bibliographical References


